

**UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549**

SCHEDULE 14A

**Proxy Statement Pursuant to Section 14(a) of the
Securities Exchange Act of 1934 (Amendment No.)**

Filed by the Registrant

Filed by a Party other than the Registrant

Check the appropriate box:

- Preliminary Proxy Statement
- Confidential, for Use of the Commission Only (as permitted by Rule 14a-6(e)(2))
- Definitive Proxy Statement
- Definitive Additional Materials
- Soliciting Material Under §240.14a-12

TAPIMMUNE INC.

(Name of Registrant as Specified In Its Charter)

(Name of Person(s) Filing Proxy Statement, if other than the Registrant)

Payment of Filing Fee (Check the appropriate box):

- No fee required.
- Fee computed on table below per Exchange Act Rules 14a-6(i)(1) and 0-11.

(1) Title of each class of securities to which transaction applies:

Common stock of Marker Therapeutics, Inc., par value \$0.0001 ("Marker common stock")

(2) Aggregate number of securities to which transaction applies:

11,200,002 shares

(3) Per unit price or other underlying value of transaction computed pursuant to Exchange Act Rule 0-11 (set forth the amount on which the filing fee is calculated and state how it was determined):

The maximum aggregate value of the transaction was determined based upon the aggregate value of the securities of Marker Therapeutics, Inc. ("Marker") to be acquired by TapImmune Inc. ("TapImmune") pursuant to the Agreement and Plan of Merger and Reorganization, dated as of May 15, 2018, among TapImmune, Timberwolf Merger Sub, Inc., and Marker, which value was determined by multiplying one-third of the par value of Marker common stock, \$0.0001, by 11,200,002 shares of Marker common stock outstanding on a fully-diluted as-converted to common stock basis. In accordance with Section 14(g) of the Securities Exchange Act of 1934, as amended, the filing fee was determined by multiplying the amount calculated in the preceding sentence by 0.0001245.

(4) Proposed maximum aggregate value of transaction:

\$373.33

(5) Total fee paid:

\$0.05

- Fee paid previously with preliminary materials.
- Check box if any part of the fee is offset as provided by Exchange Act Rule 0-11(a)(2) and identify the filing for which the offsetting fee was paid previously. Identify the previous filing by registration statement number, or the Form or Schedule and the date of its filing.

(1) Amount Previously Paid:

(2) Form, Schedule or Registration Statement No.:

(3) Filing Party:

(4) Date Filed:

To the Stockholders of TapImmune Inc.:

You are cordially invited to attend the 2018 annual meeting of stockholders, or the 2018 Annual Meeting, of TapImmune Inc., a Nevada corporation, which we refer to as TapImmune, which will be held at 9:00 a.m., local time, on October 16, 2018, at the Hyatt Regency Jacksonville Riverfront, 225 East Coastline Drive, Jacksonville, Florida 32202, USA, unless postponed or adjourned to a later date. This is an important meeting that affects your investment in TapImmune.

As previously announced, on May 15, 2018, TapImmune and Marker Therapeutics, Inc., or Marker, entered into an agreement and plan of merger and reorganization, which we refer to, as may be amended from time to time, as the merger agreement, pursuant to which a wholly owned subsidiary of TapImmune will merge with and into Marker with Marker surviving as a wholly owned subsidiary of TapImmune.

At the effective time of the merger, TapImmune will be renamed “Marker Therapeutics, Inc.” and expects to trade under the symbol “MRKR” on the NASDAQ Capital Market. At the effective time of the merger, the board of directors of TapImmune will be reconstituted to have six directors, three of whom will be designated by TapImmune and three of whom will be designated by Marker.

Pursuant to the terms of the merger, Marker stockholders will receive (i) shares of TapImmune’s common stock, par value \$0.001 per share, or TapImmune common stock, equal to the number of shares of TapImmune common stock issued and outstanding immediately prior to the effective time of the merger, and (ii) a number of warrants equal to the number of TapImmune warrants and stock options issued and outstanding immediately prior to the effective time of the merger.

As previously announced, on June 8, 2018, TapImmune entered into securities purchase agreements with a group of institutional investors pursuant to which TapImmune will issue and sell to the investors in a private placement transaction 17,500,000 shares of TapImmune common stock for \$4.00 per share, resulting in \$70 million of gross proceeds to TapImmune. In the private placement transaction, each investor also will receive warrants to purchase 0.75 shares of TapImmune common stock for each share of TapImmune common stock purchased, with an exercise price of \$5.00 per whole share, or warrants to purchase an aggregate of 13,125,000 shares of TapImmune common stock. TapImmune also will issue to the lead placement agent in the private placement transaction, as partial consideration for its placement agent fees, warrants to purchase 312,500 shares of TapImmune common stock with an exercise price of \$5.00 per whole share. The issuance and sale of the securities to these investors and the lead placement agent will be completed concurrently with the closing of the merger with Marker.

Accordingly, immediately following the effective time of the merger, before taking into account the issuance of shares in the private placement transaction described above, Marker’s stockholders and TapImmune’s current stockholders will each own 50% of the issued and outstanding shares of TapImmune common stock on a fully diluted basis (assuming all issued and outstanding warrants and options are exercised). After taking into account the issuance of shares in the private placement transaction described above, immediately following the effective time of the merger, the pro forma ownership of the issued and outstanding shares of TapImmune common stock on a fully diluted basis (assuming all issued and outstanding warrants and options are exercised) will be approximately as follows: Marker’s stockholders 27.5%, TapImmune’s current stockholders 27.5%, and the private placement transaction stockholders 45%.

At the 2018 Annual Meeting, TapImmune will ask its stockholders to consider and vote upon the following proposals:

1. To approve the issuance of TapImmune common stock, warrants to purchase TapImmune common stock and the issuance of shares of TapImmune common stock issuable upon exercise of warrants to purchase TapImmune common stock, in each case, pursuant to the merger agreement.
 2. To approve the issuance of TapImmune common stock, warrants to purchase TapImmune common stock and the issuance of shares of TapImmune common stock issuable upon exercise of warrants to purchase TapImmune common stock, in each case, pursuant to the private placement transaction.
-

3. To approve two separate proposals to amend TapImmune's articles of incorporation to:
 - a. increase the number of authorized shares of TapImmune common stock from 41,666,667 to 150,000,000, the approval of which is necessary to enable TapImmune to issue the required number of shares of TapImmune common stock, and shares of TapImmune common stock issuable upon exercise of warrants, in each case, to Marker stockholders in connection with the merger and to the investors in the private placement transaction, and
 - b. change the name of TapImmune to "Marker Therapeutics, Inc."
4. To approve the reincorporation of TapImmune from a Nevada corporation to a Delaware corporation.
5. To approve an increase in the number of authorized shares of TapImmune common stock reserved for issuance under the 2014 Omnibus Stock Ownership Plan, or the TapImmune Plan, by 6,616,666 shares from 1,383,334 to 8,000,000 shares upon completion of the merger.
6. To elect seven persons as directors of TapImmune; provided, however, that if the merger is completed, the board of directors of TapImmune will be reconstituted as set forth in the merger agreement.
7. To approve on a non-binding advisory basis TapImmune's 2017 executive compensation.
8. To ratify the appointment of Marcum LLP as TapImmune's independent registered public accounting firm for the fiscal year ending December 31, 2018.
9. To consider and vote on a proposal to adjourn the 2018 Annual Meeting, if necessary, if a quorum is present, to solicit additional proxies, in the event that there are not sufficient votes at the time of the 2018 Annual Meeting to approve items 1, 2, 3a, 3b, 4, or 5 above.
10. To transact such other business as may properly come before the 2018 Annual Meeting or any adjournment or postponement thereof.

Proposals 1, 2, 3a, 3b, 4, and 5 are conditioned upon each other, and the approval of each such proposal is a condition to the completion of the merger. Therefore, the completion of the merger cannot proceed without the approval of Proposals 1, 2, 3a, 3b, 4, and 5.

After careful consideration, TapImmune's board of directors has approved the merger agreement and the proposals referred to above and has determined that they are advisable, fair and in the best interests of TapImmune stockholders. Detailed descriptions of the strategic and financial analysis supporting this determination are contained in this proxy statement. Accordingly, TapImmune's board of directors unanimously recommends that stockholders vote "FOR" the issuance of TapImmune common stock, warrants to purchase TapImmune common stock, and the issuance of shares of TapImmune common stock issuable upon exercise of warrants to purchase TapImmune common stock, in each case, pursuant to the merger agreement, "FOR" the issuance of TapImmune common stock, warrants to purchase TapImmune common stock, and the issuance of shares of TapImmune common stock issuable upon exercise of warrants to purchase TapImmune common stock, in each case, pursuant to the private placement transaction, "FOR" the amendment to TapImmune's articles of incorporation to increase the number of authorized shares of TapImmune common stock from 41,666,667 to 150,000,000, "FOR" the amendment to TapImmune's articles of incorporation to change the name of TapImmune to "Marker Therapeutics, Inc.," "FOR" the reincorporation of TapImmune from a Nevada corporation to a Delaware corporation, "FOR" an increase in the number of authorized shares of TapImmune common stock reserved for issuance under the TapImmune Plan by 6,616,666 shares from 1,383,334 to 8,000,000 shares upon completion of the merger, "FOR" the election of seven nominees for election to the board of directors of TapImmune, "FOR" TapImmune's 2017 executive compensation, "FOR" the ratification of the appointment of Marcum LLP as TapImmune's independent registered public accounting firm for the fiscal year ending December 31, 2018, and "FOR" the adjournment of the 2018 Annual Meeting if necessary to solicit additional proxies if there are not sufficient votes at the time of the 2018 Annual Meeting to approve the issuance of TapImmune common stock and warrants to purchase common stock pursuant to the merger agreement and private placement transaction, or the charter amendments, or the reincorporation or the TapImmune Plan amendment.

More information about TapImmune, Marker, the proposed transactions and the proposals to be voted on at the 2018 Annual Meeting are contained in the accompanying proxy statement. TapImmune urges you to read the proxy statement carefully and in its entirety. IN PARTICULAR, YOU SHOULD CAREFULLY CONSIDER THE MATTERS DISCUSSED UNDER “RISK FACTORS” BEGINNING ON PAGE [13](#).

Your vote is important. Whether or not you expect to attend the 2018 Annual Meeting in person, please complete, date, sign and promptly return the accompanying proxy card in the enclosed postage paid envelope to ensure that your shares will be represented and voted at the 2018 Annual Meeting.

TapImmune is excited about the opportunities the merger brings to its stockholders, and we thank you for your consideration and continued support.

Yours sincerely,

A handwritten signature in black ink, appearing to read 'Peter L. Hoang', with a stylized flourish at the end.

Peter L. Hoang
President and Chief Executive Officer

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved the merger described in this proxy statement or the TapImmune common stock to be issued in connection with the merger or determined if this proxy statement is accurate or adequate. Any representation to the contrary is a criminal offense.

This proxy statement is dated September 14, 2018, and is first being mailed to stockholders on or about September 17, 2018.

TAPIMMUNE INC.

5 W. FORSYTH STREET, SUITE 200, JACKSONVILLE, FL 32202

NOTICE OF ANNUAL MEETING OF STOCKHOLDERS TO BE HELD ON OCTOBER 16, 2018

To the Stockholders of TapImmune Inc.:

The 2018 annual meeting of stockholders, or the 2018 Annual Meeting, of TapImmune Inc., or TapImmune, will be held at 9:00 a.m., local time, on October 16, 2018, at the Hyatt Regency Jacksonville Riverfront, 225 East Coastline Drive, Jacksonville, Florida 32202, USA, to consider and act upon the following matters:

1. To approve the issuance of TapImmune common stock, warrants to purchase TapImmune common stock and the issuance of shares of TapImmune common stock issuable upon exercise of warrants to purchase TapImmune common stock, in each case, pursuant to the merger agreement.
2. To approve the issuance of TapImmune common stock, warrants to purchase TapImmune common stock and the issuance of shares of TapImmune common stock issuable upon exercise of warrants to purchase TapImmune common stock, in each case, pursuant to the private placement transaction.
3. To approve two separate proposals to amend TapImmune's articles of incorporation to:
 - a. increase the number of authorized shares of TapImmune common stock from 41,666,667 to 150,000,000, the approval of which is necessary to enable TapImmune to issue the required number of shares of TapImmune common stock, and shares of TapImmune common stock issuable upon exercise of warrants, in each case, to Marker stockholders in connection with the merger and to the investors in the private placement transaction; and
 - b. change the name of TapImmune to "Marker Therapeutics, Inc."
4. To approve the reincorporation of TapImmune from a Nevada corporation to a Delaware corporation.
5. To approve an increase in the number of authorized shares of TapImmune common stock reserved for issuance under the TapImmune Plan by 6,616,666 shares from 1,383,334 to 8,000,000 shares upon completion of the merger.
6. To elect seven persons as directors of TapImmune; provided, however, that if the merger is completed, the board of directors of TapImmune will be reconstituted as set forth in the merger agreement.
7. To approve on a non-binding advisory basis TapImmune's 2017 executive compensation.
8. To ratify the appointment of Marcum LLP as TapImmune's independent registered public accounting firm for the fiscal year ending December 31, 2018.
9. To consider and vote on a proposal to adjourn the 2018 Annual Meeting, if necessary, if a quorum is present, to solicit additional proxies, in the event that there are not sufficient votes at the time of the 2018 Annual Meeting to approve items 1, 2, 3a, 3b, 4, or 5 above.
10. To transact such other business as may properly come before the 2018 Annual Meeting or any adjournment or postponement thereof.

TapImmune common stock is the only type of security entitled to vote at the 2018 Annual Meeting. The board of directors has fixed August 21, 2018 as the record date for the determination of stockholders entitled to notice of, and to vote at, the 2018 Annual Meeting and any adjournment or postponement thereof. Only holders of record of shares of TapImmune common stock at the close of business on the record date are entitled to notice of, and to vote at, the 2018 Annual Meeting. At the close of business on the record date, TapImmune had 13,710,544 shares of common stock outstanding and entitled to vote at the 2018 Annual Meeting. Each holder of record of shares of TapImmune common stock on the record date will be entitled to one vote for each share held on all matters to be voted upon at the 2018 Annual Meeting.

Your vote is important. The affirmative vote of the holders of a majority of the shares of TapImmune common stock present in person or represented by proxy and entitled to vote on the matter at the 2018 Annual Meeting is required for approval of Proposal 1, Proposal 2, Proposal 5, Proposal 7, Proposal 8, and Proposal 9 above. The affirmative vote of the holders of a majority of the outstanding shares of TapImmune common stock as of the record date for the 2018 Annual Meeting is required for approval of Proposal 3a, Proposal 3b, and Proposal 4 above. Proposal 6 above, the election of directors, will be determined by a plurality of the votes cast at the 2018 Annual Meeting.

Whether or not you plan to attend the 2018 Annual Meeting in person, please complete, date, sign and promptly return the accompanying proxy card in the enclosed postage paid envelope to ensure that your shares will be represented and voted at the 2018 Annual Meeting. If you date, sign and return your proxy card without indicating how you wish to vote, your proxy will be counted as a vote in favor of Proposals 1 through 9. The failure to return your proxy card or to vote in person at the 2018 Annual Meeting will have the same effect as a vote against Proposal 3a, Proposal 3b, and Proposal 4. If you attend the 2018 Annual Meeting, you may, upon your written request, withdraw your proxy and vote in person.

By Order of the Board of Directors of TapImmune Inc.



Peter L. Hoang
President and Chief Executive Officer

September 14, 2018
Jacksonville, FL

TAPIMMUNE'S BOARD OF DIRECTORS HAS DETERMINED AND BELIEVES THAT EACH OF THE PROPOSALS OUTLINED ABOVE IS ADVISABLE, FAIR, AND IN THE BEST INTERESTS OF TAPIMMUNE AND ITS STOCKHOLDERS AND HAS UNANIMOUSLY APPROVED EACH SUCH PROPOSAL. TAPIMMUNE'S BOARD OF DIRECTORS UNANIMOUSLY RECOMMENDS THAT TAPIMMUNE STOCKHOLDERS VOTE "FOR" EACH SUCH PROPOSAL.

REFERENCES TO ADDITIONAL INFORMATION

This proxy statement under Section 14(a) of the Securities Exchange Act of 1934, as amended, or the Exchange Act, and the rules thereunder, contains a notice of meeting with respect to the 2018 Annual Meeting of stockholders, or the 2018 Annual Meeting, at which TapImmune stockholders will consider and vote on the proposals to approve the issuance of common stock, par value \$0.001 per share, of TapImmune, or TapImmune common stock, issuable to the holders of common stock, par value \$0.0001, of Marker, or Marker common stock, and shares of TapImmune common stock issuable upon exercise of warrants, pursuant to the merger agreement described in this proxy statement; to approve the issuance of TapImmune common stock and TapImmune common stock issuable upon exercise of warrants to purchasers in the private placement transaction described in this proxy statement; to approve amendments to TapImmune’s articles of incorporation to: (a) increase the number of authorized shares of TapImmune common stock from 41,666,667 to 150,000,000, the approval of which is necessary to enable TapImmune to issue the required number of shares of TapImmune common stock to Marker stockholders in connection with the merger and to the purchasers in the private placement transaction, and (b) change the name of TapImmune to “Marker Therapeutics, Inc.”; to approve the reincorporation of TapImmune from a Nevada corporation to a Delaware corporation; to increase the number of authorized shares of TapImmune common stock reserved for issuance under the TapImmune Plan by 6,616,666 shares from 1,383,334 to 8,000,000 shares upon completion of the merger; to elect seven persons as directors; to approve on a non-binding advisory basis TapImmune’s 2017 executive compensation; to ratify the appointment of Marcum LLP as TapImmune’s registered public accounting firm for the fiscal year ending December 31, 2018; and to consider and vote on a proposal to adjourn the 2018 Annual Meeting, if necessary, if a quorum is present, to solicit additional proxies, in the event that there are not sufficient votes at the time of the 2018 Annual Meeting in favor of Proposals 1, 2, 3a, 3b, 4, or 5 above.

Additional business and financial information about TapImmune can be found in documents previously filed by TapImmune with the U.S. Securities and Exchange Commission, or the SEC. This information is available to you without charge at the SEC’s website at www.sec.gov.

IMPORTANT NOTICE REGARDING THE AVAILABILITY OF PROXY MATERIALS FOR THE STOCKHOLDER MEETING TO BE HELD ON OCTOBER 16, 2018:

In addition to receiving the proxy statement from TapImmune in the mail or obtaining the information on the SEC’s website, TapImmune stockholders will also be able to obtain the proxy statement, free of charge, from TapImmune by requesting copies in writing using the following contact information:

TAPIMMUNE INC.
Attn: Investor Relations
5 W. Forsyth Street, Suite 200
Jacksonville, FL 32202
Tel: (904) 516-5436

A copy of the proxy statement is also available, free of charge, at www.proxyandprinting.com and under the *Investor Relations — Financial Information* section of TapImmune’s website at www.TapImmune.com.

You may also request additional copies from our proxy solicitor, Georgeson, LLC, or Georgeson, using the following contact information:

1290 Avenue of the Americas, 9th Floor
New York, NY 10104
1-866-431-2096

or

1-781-575-2137 if calling from outside of the United States

IF YOU WOULD LIKE TO REQUEST MATERIALS, PLEASE DO SO BY OCTOBER 8, 2018 IN ORDER TO RECEIVE THEM BEFORE THE 2018 ANNUAL MEETING.

See “Where You Can Find More Information” beginning on page [193](#) of this proxy statement.

Except as otherwise specifically noted in this proxy statement “TapImmune,” “we,” “our,” “us,” and similar words refer to TapImmune Inc., including in certain cases, our subsidiaries. Throughout this proxy statement, we refer to Marker Therapeutics, Inc. as “Marker”, we refer to Timberwolf Merger Sub, Inc. as “Merger Sub”, and we refer to the Agreement and Plan of Merger and Reorganization, dated as of May 15, 2018, among TapImmune, Timberwolf Merger Sub, Inc., and Marker, as it may be further amended from time to time, as the “merger agreement.” References in this proxy statement to the “combined company” refer to TapImmune and Marker, together with their respective subsidiaries, following the completion of the merger.

In addition, throughout this proxy statement, we refer to the stockholders of TapImmune as the “TapImmune stockholders,” the stockholders of Marker as the “Marker stockholders” and the transactions contemplated by the merger agreement, including the issuance of TapImmune common stock to the Marker stockholders, as, collectively, the “merger.”

NOTE REGARDING TRADEMARKS

TapImmune[®] is TapImmune’s trade name and a registered trademark of TapImmune.

Marker Therapeutics is Marker’s trade name and a pending trademark application of Marker.

The other trademarks, trade names and service marks appearing in this proxy statement are the property of their respective holders.

GLOSSARY

ACA	Affordable Care Act
AML	acute myeloid leukemia
ASCT	autologous stem cell transplant
BCM	Baylor College of Medicine
BLA	Biologics License Application
CAGT	Center for Cell and Gene Therapy at BCM
CAR	Chimeric antigen receptor
cGMP	current Good Manufacturing Practices
CMC	chemistry, manufacturing, and controls
CMO	Contract Manufacturing Organization
CRS	cytokine-release syndrome
CTL	cytotoxic T lymphocyte
DGCL	Delaware General Corporate Law
DLI	donor lymphocyte infusion
GMP	Good Manufacturing Practices
GVHD	graft-versus-host disease
HSCT	hematopoietic stem cell transplant
ICIs	immune checkpoint inhibitors
IND	investigational new drug
IRB	Institutional Review Board
LAPP	Leukemia Antigen Peptide Pool
mAbs	monoclonal antibodies
MAPP	Mixed Antigen Peptide Pool
MDS	myelodysplastic syndromes
MM	multiple myeloma
MultiTAA	Multi Tumor-Associated Antigen
NHL	Non-Hodgkin's Lymphoma
NRS	Nevada Revised Statutes
POS	Probability of Success
r/r	relapsed/refractory
SAE	serious adverse events
TCR	T cell receptor
TIL	Tumor Infiltrating Lymphocyte

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Annex B-1	— TapImmune’s Annual Report on Form 10-K for the year ended December 31, 2017
Annex B-2	— TapImmune’s Quarterly Report on Form 10-Q for the quarter ended June 30, 2018
Annex C	— Opinion of Nomura Securities International, Inc.
Annex D-1	— Voting and Lock-Up Agreement, dated as of May 15, 2018, between Marker Therapeutics, Inc. and the TapImmune stockholders party thereto
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QUESTIONS AND ANSWERS ABOUT THE 2018 ANNUAL MEETING AND THE MERGER

The following section provides answers to frequently asked questions about the 2018 Annual Meeting and the merger. This section, however, only provides summary information. These questions and answers may not address all issues that may be important to you as a stockholder. For a more complete response to these questions and for additional information, please refer to the cross-referenced pages below. You should carefully read this entire proxy statement, including each of the Annexes attached hereto.

Q: Why am I receiving this proxy statement?

A: You are receiving this proxy statement because you have been identified as a stockholder of TapImmune as of the record date, and thus you are entitled to vote at TapImmune's 2018 Annual Meeting. This document serves as a proxy statement used to solicit proxies for the 2018 Annual Meeting. This document contains important information about the merger and the 2018 Annual Meeting of TapImmune, and you should read it carefully.

Q: When and where is the 2018 Annual Meeting?

A: The 2018 Annual Meeting will be held on October 16, 2018, at 9:00, local time, at the Hyatt Regency Jacksonville Riverfront, 225 East Coastline Drive, Jacksonville, Florida 32202, USA.

Q: Who is entitled to vote at the 2018 Annual Meeting?

A: Only stockholders of record as of the close of business on August 21, 2018, or the record date, will be entitled to vote at the 2018 Annual Meeting. As of the close of business on the record date, there were 13,710,544 shares of TapImmune common stock issued and outstanding and entitled to vote, held by 451 stockholders of record. Each stockholder is entitled to one vote for each share of TapImmune common stock held by such stockholder on the record date on each of the proposals presented in this proxy statement.

Q: What proposals will be considered at the 2018 Annual Meeting?

A: At the 2018 Annual Meeting, you will be asked to consider and vote on the following proposals:

- a proposal to approve the issuance of TapImmune common stock, warrants to purchase TapImmune common stock and the issuance of shares of TapImmune common stock issuable upon exercise of warrants to purchase TapImmune common stock, in each case, pursuant to the merger agreement;
- a proposal to approve the issuance of TapImmune common stock, warrants to purchase TapImmune common stock and the issuance of shares of TapImmune common stock issuable upon exercise of warrants to purchase TapImmune common stock, in each case, pursuant to the private placement transaction;
- a proposal to amend TapImmune's articles of incorporation to:
 - increase the number of authorized shares of TapImmune common stock from 41,666,667 to 150,000,000, the approval of which is necessary to enable TapImmune to issue the required number of shares of TapImmune common stock, and shares of TapImmune common stock issuable upon the exercise of warrants, in each case, to the Marker stockholders in connection with the merger and to the investors in the private placement transaction; and
 - change the name of TapImmune to "Marker Therapeutics, Inc."
- a proposal to approve the reincorporation of TapImmune from a Nevada corporation to a Delaware corporation;
- a proposal to approve an increase in the number of authorized shares of TapImmune common stock reserved for issuance under the TapImmune Plan by 6,616,666 shares from 1,383,334 to 8,000,000 shares upon completion of the merger;
- a proposal to elect seven persons as directors;

- a proposal to approve on a non-binding advisory basis TapImmune’s 2017 executive compensation;
- a proposal to ratify the appointment of Marcum LLP as TapImmune’s independent registered public accounting firm for the fiscal year ending December 31, 2018;
- a proposal to consider and vote on a proposal to adjourn the 2018 Annual Meeting, if necessary, if a quorum is present, to solicit additional proxies, in the event that there are not sufficient votes at the time of the 2018 Annual Meeting to approve items 1, 2, 3a, 3b, 4 or 5 above; and
- a proposal to transact such other business as may properly come before the 2018 Annual Meeting or any adjournment or postponement thereof.

Q: What is the merger?

- A: TapImmune and Marker have entered into an Agreement and Plan of Merger and Reorganization, dated as of May 15, 2018, that contains the terms and conditions of the proposed business combination of TapImmune and Marker. Under the merger agreement, Timberwolf Merger Sub, Inc., a wholly owned subsidiary of TapImmune, will merge with and into Marker, with Marker surviving as a wholly owned subsidiary of TapImmune. This transaction is referred to as the merger.

Pursuant to the terms of the merger, Marker stockholders will receive (i) shares of TapImmune’s common stock equal to the number of shares of TapImmune common stock issued and outstanding immediately prior to the effective time of the merger, and (ii) a number of warrants equal to the number of TapImmune warrants and stock options issued and outstanding immediately prior to the effective time of the merger, as described further in the section entitled “*The Merger Agreement—Merger Consideration*” beginning on page 81 of this proxy statement. Accordingly, immediately following the effective time of the merger, before taking into account the issuance of shares in the private placement transaction occurring concurrently with the merger, Marker’s stockholders and TapImmune’s current stockholders will each own 50% of the issued and outstanding shares of TapImmune common stock on a fully diluted basis (assuming all issued and outstanding warrants and options are exercised). After taking into account the issuance of shares in the private placement transaction occurring concurrently with the merger, immediately following the effective time of the merger, the pro forma ownership of the issued and outstanding shares of TapImmune common stock on a fully diluted basis (assuming all issued and outstanding warrants and options are exercised) will be approximately as follows: Marker’s stockholders 27.5%, TapImmune’s current stockholders 27.5%, and the private placement transaction stockholders 45.0%.

For a more complete description of the merger, please see the section entitled “*The Merger Agreement*” beginning on page 81 of this proxy statement. For a discussion of the accounting treatment for the merger, see the section entitled “*Accounting Treatment*” beginning on page 10 of this proxy statement.

Q: What will happen if the TapImmune stockholders do not vote to approve the issuance of TapImmune common stock pursuant to the merger agreement described in Proposal 1, the issuance of TapImmune common stock pursuant to the private placement transaction described in Proposal 2, the amendments to the articles of incorporation of TapImmune described in Proposal 3a and 3b, the Reincorporation from Nevada to Delaware described in Proposal 4 or the increase in the number of authorized shares of TapImmune common stock reserved for issuance under the TapImmune Plan described in Proposal 5?

- A: Stockholder approval of the issuance of TapImmune common stock pursuant to the merger agreement described in Proposal 1, the issuance of TapImmune common stock pursuant to the private placement transaction described in Proposal 2, the amendments to the certificate of incorporation of TapImmune described in Proposal 3a and 3b, the Reincorporation from Nevada to Delaware in Proposal 4 and the increase in the number of authorized shares of TapImmune common stock reserved for issuance under the TapImmune Plan in Proposal 5 are conditions to the consummation of the merger. If any of these proposals are not approved, the merger agreement may be terminated by TapImmune or Marker. In the event of termination for failure of TapImmune stockholders to approve the stock issuance described in Proposal 1, or the amendment to the articles of incorporation of TapImmune described in Proposals 3a and 3b, or the reincorporation in Proposal 4, or the increase in the number of authorized shares of

TapImmune common stock reserved for issuance under the TapImmune Plan in Proposal 5, TapImmune will be required to pay to Marker up to \$500,000 of out-of-pocket costs incurred by Marker in connection with the transactions, and, should certain other triggering events occur, TapImmune will be required to pay to Marker a termination fee of \$1.5 million (which amount would be reduced by any prior expense reimbursement). For additional information relating to termination rights under the merger agreement, please refer to the sections below entitled “*The Merger Agreement—Termination*” and “*The Merger Agreement—Termination Fee*” beginning on pages [94](#) and [95](#), respectively.

Q: What will happen to TapImmune if, for any reason, the merger with Marker does not close?

A: TapImmune has invested significant time and incurred, and expects to continue to incur, significant expenses related to the proposed merger with Marker. In the event the merger does not close, TapImmune may have limited ability to obtain additional financing to continue on a standalone basis. Although TapImmune’s board of directors may elect to, among other things, attempt to raise additional financing or complete another strategic transaction if the merger with Marker does not close, TapImmune’s board of directors may instead divest all or a portion of TapImmune’s business or take steps necessary to liquidate or dissolve TapImmune’s business and assets if additional financing or a viable alternative strategic transaction is not available.

Q: Why is TapImmune proposing to merge with Marker?

A: TapImmune’s board of directors considered a number of factors that supported its decision to approve the merger agreement. In the course of its deliberations, TapImmune’s board of directors also considered a variety of risks and other countervailing factors related to entering into the merger agreement.

For a more complete discussion of TapImmune’s reasons for the merger, please see the section entitled “*The Merger—TapImmune’s Reasons for the Merger*” beginning on page [60](#) of this proxy statement.

Q: What is required to consummate the merger?

A: To consummate the merger, TapImmune stockholders must approve (i) the issuance of shares of TapImmune common stock, warrants to purchase TapImmune common stock and the issuance of shares of TapImmune common stock issuable upon exercise of warrants to purchase TapImmune common stock, in each case, pursuant to the merger, which requires the affirmative vote of the holders of a majority of the shares of TapImmune common stock present in person or represented by proxy and entitled to vote on the matter at the 2018 Annual Meeting, (ii) the issuance of shares of TapImmune common stock, warrants to purchase TapImmune common stock and the issuance of shares of TapImmune common stock issuable upon exercise of warrants to purchase TapImmune common stock, in each case, pursuant to the private placement transaction, which requires the affirmative vote of the holders of a majority of the shares of TapImmune common stock present in person or represented by proxy and entitled to vote on the matter at the 2018 Annual Meeting, and (iii) the amendment of TapImmune’s articles of incorporation to increase the number of authorized shares of TapImmune common stock from 41,666,667 to 150,000,000, which requires the affirmative vote of the holders of a majority of the outstanding shares of TapImmune common stock as of the record date for the 2018 Annual Meeting. In addition, Marker stockholders must adopt the merger agreement, which requires the affirmative vote of the holders of a majority of the shares of Marker’s capital stock outstanding. On May 15, 2018, by the requisite vote, the stockholders of Marker adopted the merger agreement pursuant to a written consent in lieu of a meeting, and approved the merger and related transactions pursuant to the terms of the merger agreement. In addition to obtaining TapImmune stockholder approval, each of the other closing conditions set forth in the merger agreement must be satisfied or waived.

For a more complete description of the closing conditions under the merger agreement, please see the section entitled “*The Merger Agreement—Conditions to the Completion of the Merger*” beginning on page [85](#) of this proxy statement.

Q: Are there any federal or state regulatory requirements that must be complied with or federal or state regulatory approvals or clearances that must be obtained in connection with the merger?

A: In the United States, TapImmune must comply with applicable federal and state securities laws and NASDAQ rules and regulations in connection with the issuance of shares of TapImmune common stock in the merger and private placement transaction, including the filing with the SEC of this proxy statement. Prior to consummation of the merger and the completion of the private placement transaction, TapImmune intends to file an additional listing application with the NASDAQ Capital Market to effect the listing of the TapImmune common stock to be issued pursuant to the merger and the private placement transaction under its new name “Marker Therapeutics, Inc.” and new symbol “MRKR”, including all shares of TapImmune common stock issuable in connection with the merger and the private placement transaction or upon exercise of warrants issuable in connection with the merger and the private placement transaction.

Q: What will Marker stockholders receive in the merger?

A: Pursuant to the terms of the merger, Marker stockholders will receive (i) shares of TapImmune’s common stock equal to the number of shares of TapImmune common stock issued and outstanding immediately prior to the effective time of the merger, and (ii) a number of warrants equal to the number of TapImmune warrants and stock options issued and outstanding immediately prior to the effective time of the merger, as described further in the section entitled “*The Merger Agreement — Merger Consideration*” beginning on page [81](#) of this proxy statement. Accordingly, immediately following the effective time of the merger, before taking into account the issuance of shares in the private placement transaction described above, Marker’s stockholders and TapImmune’s current stockholders will each own 50% of the issued and outstanding shares of TapImmune common stock on a fully diluted basis (assuming all issued and outstanding warrants and options are exercised). After taking into account the issuance of shares in the private placement transaction occurring concurrently with the merger, immediately following the effective time of the merger, the pro forma ownership of the issued and outstanding shares of TapImmune common stock on a fully diluted basis (assuming all issued and outstanding warrants and options are exercised) will be approximately as follows: Marker’s stockholders 27.5%, TapImmune’s current stockholders 27.5%, and the private placement transaction stockholders 45.0%.

For a more complete discussion of the exchange ratio at the effective time of the merger, please see the section entitled “*The Merger Agreement — Merger Consideration*” beginning on page [81](#) of this proxy statement.

Q: Who will be the directors and executive officers of the combined company following the merger?

A: Effective upon the consummation of the merger, the board of directors of the combined company will be reconstituted pursuant to the terms of the merger agreement to have a six-member board of directors, comprised of three directors designated by TapImmune and three directors designated by Marker. Each board committee will be comprised of at least three (3) directors, the members of which will be determined by the parties based upon NASDAQ and SEC independence rules regarding who can sit on each committee and qualifications for each committee.

The combined company’s officers are expected to be the current officers of TapImmune. In addition, after consummation of the merger, TapImmune intends to appoint Juan Vera, M.D. as its Chief Development Officer, and Ann Leen Ph.D. as its Chief Scientific Officer.

For a more complete discussion of the directors and executive officers of the combined company following the merger, please see the section entitled “*The Merger Agreement — Directors and Officers Following the Merger*” beginning on page [90](#) of this proxy statement.

Q: What are the material federal income tax consequences of the merger to me?

A: TapImmune stockholders will not sell, exchange or dispose of any shares of TapImmune common stock as a result of the merger. Therefore, there will be no material U.S. federal income tax consequences to TapImmune stockholders as a result of the merger.

For a more complete description of the tax consequences of the merger, please see the section entitled “*The Merger — Certain U.S. Federal Income Tax Considerations*” beginning on page [80](#) of this proxy statement.

Q: Why is TapImmune seeking stockholder approval to issue shares of TapImmune common stock and warrants to purchase TapImmune common stock to the Marker stockholders and to purchasers of TapImmune common stock and warrants to purchase TapImmune common stock in the private placement transaction?

A: Because TapImmune common stock is listed on the NASDAQ Capital Market, TapImmune is subject to NASDAQ Marketplace Rules. Rule 5635 of NASDAQ Marketplace Rules requires stockholder approval if, as is the case here, a listed company issues common stock or securities convertible into or exercisable for common stock in a private placement transaction equal to 20% or more of the common stock, or 20% or more of the voting power, outstanding before the issuance for less than the greater of book or market value of the stock. Accordingly, TapImmune is seeking stockholder approval of these issuances of common stock under NASDAQ Marketplace Rules.

Q: What risks should TapImmune stockholders consider in deciding whether to vote in favor of the share issuance and name change?

A: TapImmune stockholders should carefully read the section of this proxy statement entitled “*Risk Factors*” beginning on page [13](#), which sets forth certain risks and uncertainties related to the merger, the private placement transaction and risks and uncertainties to which the combined company’s business will be subject, risks and uncertainties to which TapImmune, as an independent company, is subject, and risks and uncertainties to which Marker, as an independent company, is subject.

Q: When do you expect the merger to be consummated?

A: TapImmune and Marker anticipate that the consummation of the merger will occur in the fourth quarter of 2018, as promptly as practicable after the 2018 Annual Meeting and following satisfaction or waiver of all closing conditions. However, the exact timing of the consummation of the merger is not yet known. For a more complete description of the closing conditions under the merger agreement, please see the section entitled “*The Merger Agreement — Conditions to the Completion of the Merger*” beginning on page [85](#) of this proxy statement.

Q: How will the merger affect stock options and warrants to acquire TapImmune common stock and TapImmune’s stock option plans?

A: All stock options and warrants to acquire shares of TapImmune common stock that are outstanding immediately prior to the effective time of the merger will remain outstanding following the effective time of the merger.

Q: Am I entitled to appraisal rights?

A: TapImmune stockholders are not entitled to appraisal rights in connection with the merger or any of the proposals to be voted on at the 2018 Annual Meeting.

Q: Have Marker stockholders agreed to adopt the merger agreement?

A: Yes. On May 15, 2018, Marker stockholders adopted the merger agreement and approved the merger and related transactions pursuant to the terms of the merger agreement, in each case pursuant to a written consent in lieu of a meeting.

In addition, in connection with the execution of the merger agreement, holders beneficially owning approximately 97% of the shares of Marker’s outstanding capital stock, including Marker’s directors and executive officers, have entered into voting and lock-up agreements with TapImmune that provide, among other things, that such stockholders shall vote in favor of the adoption of the merger agreement and against any proposal made in opposition to, or in any competition with, the merger.

Q: Have any of TapImmune’s stockholders agreed to vote in favor of the issuance of the shares in the merger?

A: Yes. In connection with the execution of the merger agreement, certain TapImmune stockholders and TapImmune’s directors and executive officers beneficially owning as of August 21, 2018, approximately 35.6% of the shares of TapImmune’s outstanding common stock (excluding, for purposes of such calculation, any warrants or options held by them), have entered into either voting and support agreements, or voting and lock-up agreements, respectively, with Marker that provide, among other things, that such stockholders shall vote in favor of the adoption of the merger agreement and against any proposal made in opposition to, or in any competition with, the merger.

Q: Has TapImmune or Marker entered into any agreements with Marker’s and TapImmune’s stockholders restricting the transfer of shares of their common stock?

A: Yes. Marker’s stockholders holding approximately 97% of the outstanding shares of Marker common stock, and TapImmune’s directors and executive officers beneficially owning as of August 21, 2018, approximately 7.5% of the shares of TapImmune’s outstanding common stock (including, for purposes of such calculation, any warrants or options held by them), have executed voting and lock-up agreements which restrict the transfer of the shares of TapImmune and Marker capital stock held by the respective signatory stockholders, both before, and for 180 days following, the closing of the merger.

Q: How does TapImmune’s board of directors recommend that TapImmune stockholders vote?

A: After careful consideration, TapImmune’s board of directors unanimously recommends that TapImmune stockholders vote:

- FOR Proposal 1 to approve the issuance of TapImmune common stock, warrants to purchase TapImmune common stock and the issuance of shares of TapImmune common stock issuable upon exercise of warrants to purchase TapImmune common stock, in each case, pursuant to the merger;
- FOR Proposal 2 to approve the issuance of TapImmune common stock, warrants to purchase TapImmune common stock and the issuance of shares of TapImmune common stock issuable upon exercise of warrants to purchase TapImmune common stock, in each case, pursuant to the private placement transaction;
- FOR Proposal 3a to increase the number of authorized shares of TapImmune common stock from 41,666,667 to 150,000,000;
- FOR Proposal 3b to change the name of TapImmune to “Marker Therapeutics, Inc.”;
- FOR Proposal 4 to approve the reincorporation of TapImmune from a Nevada corporation to a Delaware corporation;
- FOR Proposal 5 to approve an increase in the number of authorized shares of TapImmune common stock reserved for issuance under the TapImmune Plan by 6,616,666 shares from 1,383,334 to 8,000,000 shares upon completion of the merger;
- FOR Proposal 6 to elect seven persons as directors;
- FOR Proposal 7 to approve on a non-binding advisory basis TapImmune’s 2017 executive compensation;
- FOR Proposal 8 to ratify the appointment of Marcum LLP as TapImmune’s independent registered public accounting firm for the fiscal year ending December 31, 2018; and
- FOR Proposal 9 to approve an adjournment of the 2018 Annual Meeting, if necessary, if a quorum is present, to solicit additional proxies if there are not sufficient votes in favor of Proposals 1, 2, 3a, 3b, 4 or 5.

Q: May I vote in person?

A: If you are a stockholder of TapImmune and your shares of TapImmune common stock are registered directly in your name with TapImmune’s transfer agent, Island Stock Transfer, you are considered, with respect to those shares, the stockholder of record, and the proxy materials and proxy card are being sent directly to you by TapImmune. If you are a TapImmune stockholder of record, you may attend the 2018 Annual Meeting to be held on October 16, 2018 and vote your shares in person, rather than signing and returning your proxy.

If your shares of TapImmune common stock are held by a bank, broker or other nominee, you are considered the beneficial owner of shares held in “street name,” and the proxy materials are being forwarded to you together with a voting instruction card by such bank, broker or other nominee. As the beneficial owner, you are also invited to attend the 2018 Annual Meeting. Since a beneficial owner is not the stockholder of record, you may not vote these shares in person at the 2018 Annual Meeting unless you obtain a proxy from your broker issued in your name giving you the right to vote the shares at the 2018 Annual Meeting.

Q: If my TapImmune shares are held in “street name” by my broker, will my broker vote my shares for me?

A: Generally, if shares are held in street name, the beneficial owner of the shares is entitled to give voting instructions to the broker or nominee holding the shares. If the beneficial owner does not provide voting instructions, the broker or nominee can still vote the shares with respect to matters that are considered to be “routine,” but not with respect to “non-routine” matters, as discussed further below. Your broker will not be able to vote your shares of TapImmune common stock without specific instructions from you for “non-routine” matters.

If your shares are held by your broker or other agent as your nominee, you will need to obtain a proxy form from the institution that holds your shares and follow the instructions included on that form regarding how to instruct your broker or other agent to vote your shares.

Q: What are “broker non-votes”?

A: If you hold shares beneficially in street name and do not provide your broker with voting instructions, your shares may constitute “broker non-votes.” “Broker non-votes” occur on a matter when a broker is not permitted to vote on that matter without instructions from the beneficial owner and instructions are not given. These matters are referred to as “non-routine” matters. Since brokers are permitted to vote on “routine” matters without instructions from the beneficial owner, “broker non-votes” do not occur with respect to “routine” matters. Proposal 8 to ratify the appointment of Marcum LLP as TapImmune’s registered public accounting firm for the fiscal year ending December 31, 2018 is the only routine matter to be voted on at the 2018 Annual Meeting. Banks, brokers and other nominees do not have discretion to vote your shares with respect to any other proposal to be voted on.

Q: How do I cast my vote if I am a stockholder of record?

A: If you are a stockholder with shares registered in your name with TapImmune’s transfer agent, Island Stock Transfer, on the record date, you may vote in person at the 2018 Annual Meeting or vote by proxy by telephone or Internet or by mail. Whether or not you plan to attend the 2018 Annual Meeting, please vote as soon as possible to ensure your vote is counted. You may still attend the 2018 Annual Meeting and vote in person even if you have already voted by proxy. For more detailed instructions on how to vote using one of these methods, please see the section of this proxy statement entitled “*The 2018 Annual Meeting — Voting Procedures*” beginning on page [47](#).

- To vote in person. You may attend the 2018 Annual Meeting and TapImmune will give you a ballot when you arrive. If you need directions to the meeting, please refer to page [45](#) of this proxy statement.
- To vote by proxy by telephone or Internet. If you have telephone or Internet access, you may submit your proxy by following the instructions provided in this proxy statement, or by following the instructions provided with your proxy materials and on the enclosed proxy card or voting instruction card.

- To vote by proxy by mail. You may submit your proxy by mail by completing and signing the enclosed proxy card and mailing it in the enclosed envelope. Your shares will be voted as you have instructed.

Q: How do I cast my vote if I am a beneficial owner of shares registered in the name of my broker or bank?

A: If you are a beneficial owner of shares registered in the name of your broker, bank, dealer or other similar organization, you should have received a proxy card and voting instructions with these proxy materials from that organization rather than from TapImmune. Simply complete and mail the proxy card to ensure that your vote is counted. Alternatively, you may vote by telephone or over the Internet as instructed by your broker or other agent. To vote in person at the 2018 Annual Meeting, you must obtain a valid proxy from your broker or other agent. Follow the instructions from your broker or other agent included with these proxy materials, or contact your broker or bank to request a proxy form.

Q: How many votes do I have?

A: On each matter to be voted upon, you have one vote for each share of TapImmune common stock you hold as of the record date.

Q: What if I return a proxy card but do not make specific choices?

A: If you return a signed and dated proxy card without marking any voting selections, your shares will be voted "FOR" the approval of the issuance of TapImmune common stock, warrants to purchase TapImmune common stock and the issuance of shares of TapImmune common stock issuable upon exercise of warrants to purchase TapImmune common stock, in each case, pursuant to the merger agreement, "FOR" the approval of the issuance of TapImmune common stock, warrants to purchase TapImmune common stock and the issuance of shares of TapImmune common stock issuable upon exercise of warrants to purchase TapImmune common stock, in each case, pursuant to the private placement transaction, "FOR" the amendment to TapImmune's articles of incorporation to increase the number of authorized shares of TapImmune common stock from 41,666,667 to 150,000,000, "FOR" the amendment to TapImmune's articles of incorporation to change the name of TapImmune to "Marker Therapeutics, Inc.," "FOR" the reincorporation of TapImmune from a Nevada corporation to a Delaware corporation, "FOR" an increase in the number of authorized shares of TapImmune common stock reserved for issuance under the TapImmune Plan by 6,616,666 shares from 1,383,334 to 8,000,000 shares upon completion of the merger, "FOR" the election of seven nominees for election to the board of directors of TapImmune, "FOR" TapImmune's 2017 executive compensation, "FOR" the ratification of the appointment of Marcum LLP as TapImmune's independent registered public accounting firm for the fiscal year ending December 31, 2018, and "FOR" the adjournment of the 2018 Annual Meeting if necessary to solicit additional proxies if there are not sufficient votes to approve the issuance of TapImmune common stock pursuant to the merger agreement or the private placement transaction, or the charter amendments, or the reincorporation or the TapImmune Plan amendment at the time of the 2018 Annual Meeting. If any other matter is properly presented at the 2018 Annual Meeting, your proxyholder (one of the individuals named on your proxy card) will vote your shares using his or her best judgment.

Q: What other matters may arise at the 2018 Annual Meeting?

A: Other than the proposals described in this proxy statement, TapImmune does not expect any other matters to be presented for a vote at the 2018 Annual Meeting. If any other matter is properly brought before the 2018 Annual Meeting, your proxy gives authority to the individuals named on your proxy card to vote on such matters in their discretion.

Q: What constitutes a quorum for purposes of the 2018 Annual Meeting?

A: A quorum of stockholders is necessary to hold a valid meeting. A quorum will be present if stockholders holding at least one third of the issued and outstanding shares entitled to vote are present or represented by proxy at the 2018 Annual Meeting. On the record date, there were 13,710,544 shares

of TapImmune common stock issued and outstanding and entitled to vote. Accordingly, the holders of 4,570,182 shares must be present at the 2018 Annual Meeting to have a quorum. Your shares will be counted toward the quorum at the 2018 Annual Meeting only if you vote in person at the meeting, you submit a valid proxy vote or your broker, bank, dealer or similar organization submits a valid proxy vote.

Q: How many votes are needed to approve each proposal?

A: The following votes are required to approve each proposal:

- Proposal 1 — To approve the issuance of TapImmune common stock, warrants to purchase TapImmune common stock and the issuance of shares of TapImmune common stock issuable upon exercise of warrants to purchase TapImmune common stock, in each case, pursuant to the merger agreement. “FOR” votes from the holders of a majority of the shares of TapImmune common stock present in person or represented by proxy and entitled to vote on the matter at the 2018 Annual Meeting are required to approve this proposal.
- Proposal 2 — To approve the issuance of TapImmune common stock, warrants to purchase TapImmune common stock and the issuance of shares of TapImmune common stock issuable upon exercise of warrants to purchase TapImmune common stock, in each case, pursuant to the private placement transaction. “FOR” votes from the holders of a majority of the shares of TapImmune common stock present in person or represented by proxy and entitled to vote on the matter at the 2018 Annual Meeting are required to approve this proposal.
- Proposal 3a — To approve an amendment to TapImmune’s articles of incorporation to increase the number of authorized shares of TapImmune common stock from 41,666,667 to 150,000,000, the approval of which is necessary to enable TapImmune to issue the required number of shares of TapImmune common stock, and shares of TapImmune common stock issuable upon exercise of warrants, in each case, to Marker stockholders in connection with the merger and to investors in connection with the private placement transaction. “FOR” votes from the holders of a majority of the outstanding shares of TapImmune common stock as of the record date for the 2018 Annual Meeting are required to approve this proposal.
- Proposal 3b — To approve an amendment to TapImmune’s articles of incorporation to change the name of TapImmune to “Marker Therapeutics, Inc.” “FOR” votes from the holders of a majority of the outstanding shares of TapImmune common stock as of the record date for the 2018 Annual Meeting are required to approve this proposal.
- Proposal 4 — To approve the reincorporation of TapImmune from a Nevada corporation to a Delaware corporation. “FOR” votes from the holders of a majority of the outstanding shares of TapImmune common stock as of the record date for the 2018 Annual Meeting are required to approve this proposal.
- Proposal 5 — To approve an increase in the number of authorized shares of TapImmune common stock reserved for issuance under the TapImmune Plan by 6,616,666 shares from 1,383,334 to 8,000,000 shares upon completion of the merger. “FOR” votes from the holders of a majority of the shares of TapImmune common stock present in person or represented by proxy and entitled to vote on the matter at the 2018 Annual Meeting are required to approve this proposal.
- Proposal 6 — To elect seven persons as directors. The seven nominees receiving the most “FOR” votes (from the votes of shares cast in person or by proxy) will be elected.
- Proposal 7 — To approve on a non-binding advisory basis TapImmune’s 2017 executive compensation. “FOR” votes from the holders of a majority of the shares of TapImmune common stock present in person or represented by proxy and entitled to vote on the matter at the 2018 Annual Meeting are required to approve this proposal.
- Proposal 8 — To ratify the appointment of Marcum LLP as TapImmune’s registered public

accounting firm for the fiscal year ending December 31, 2018. “FOR” votes from the holders of a majority of the shares of TapImmune common stock present in person or represented by proxy and entitled to vote on the matter at the 2018 Annual Meeting are required to approve this proposal.

- Proposal 9—To approve the proposal to adjourn the 2018 Annual Meeting, if necessary, to solicit additional proxies if there are not sufficient votes in favor of Proposals 1, 2, 3a, 3b, 4 or 5. If a quorum is present at the 2018 Annual Meeting, “FOR” votes from the holders of a majority of the shares of TapImmune common stock present in person or represented by proxy and entitled to vote on the matter at the 2018 Annual Meeting are required to approve this proposal. If a quorum is not present, either (i) the chairperson of the meeting or (ii) any officer entitled to preside at or to act as secretary of the meeting may adjourn the meeting.

Q: What happens if I do not return a proxy card or otherwise provide proxy instructions?

A: The failure to return your proxy card or otherwise provide proxy instructions will have the same effect as voting against Proposals 3a and 3b, and Proposal 4.

Q: May I change my vote after I have submitted a proxy or provided proxy instructions?

A: Any TapImmune stockholder of record voting by proxy, other than those TapImmune stockholders who have executed a voting and lock-up agreement, has the right to revoke the proxy at any time before the polls close at the 2018 Annual Meeting by sending a written notice stating that he, she or it would like to revoke his, her or its proxy to the Corporate Secretary of TapImmune, by providing a duly executed proxy card bearing a later date than the proxy being revoked or by attending the 2018 Annual Meeting and voting in person. Attendance alone at the 2018 Annual Meeting will not revoke a proxy. If a stockholder of TapImmune has instructed a broker to vote its shares of TapImmune common stock that are held in “street name,” the stockholder must follow directions received from its broker to change those instructions.

Q: Can I access these proxy materials on the Internet?

A: Yes. The Notice of Annual Meeting, this proxy statement and the Annexes attached hereto (including TapImmune’s Annual Report on Form 10-K for the year ended December 31, 2017, attached as Annex B-1 hereto) are available for viewing, printing, and downloading at www.proxyandprinting.com. All materials will remain posted on www.proxyandprinting.com at least until the conclusion of the meeting.

The Notice of Annual Meeting, this proxy statement and the Annexes attached hereto (including TapImmune’s Annual Report on Form 10-K for the year ended December 31, 2017, attached as Annex B-1 hereto, TapImmune’s Quarterly Report on Form 10-Q for the quarter ended June 30, 2018, attached as Annex B-2 hereto) are also available, free of charge, in PDF and HTML format under the Investor Relations — Financial Information section of TapImmune’s website at www.TapImmune.com and will remain posted on such website at least until the conclusion of the meeting.

Q: Where can I find the voting results of the meeting?

A: TapImmune will announce the preliminary voting results at the meeting. TapImmune will publish the results in a Form 8-K filed with the SEC within four business days of the meeting.

Q: What do I need to do now?

A: You are urged to read this proxy statement carefully, including each of the Annexes attached hereto, and to consider how the merger and the other proposals affect you. If your shares are registered directly in your name, you may complete, date and sign the enclosed proxy card and mail return it in the enclosed postage-paid envelope. Alternatively, you can vote by proxy by telephone or Internet, deliver your completed proxy card in person, or vote by completing a ballot in person at the 2018 Annual Meeting.

Q: Who is paying for this proxy solicitation?

A: TapImmune will bear the cost of soliciting proxies, including the printing, mailing, and filing of this proxy statement, the proxy card, and any additional information furnished to TapImmune stockholders. TapImmune has engaged Georgeson, LLC, a proxy solicitation firm, to solicit proxies from TapImmune stockholders. Arrangements will also be made with banks, brokers, nominees, custodians, and fiduciaries who are record holders of TapImmune common stock for the forwarding of solicitation materials to the beneficial owners of TapImmune common stock. TapImmune will, upon request, reimburse these banks, brokers, nominees, custodians, and fiduciaries for the reasonable out-of-pocket expenses they incur in connection with the forwarding of solicitation materials.

Q: Who can provide me with additional information and help answer my questions?

A: If you would like additional copies, without charge, of this proxy statement or if you have questions about the merger and the other proposals being considered at the 2018 Annual Meeting, including the procedures for voting your shares, you should contact Georgeson, TapImmune's proxy solicitor, by telephone at 1-866-431-2096 or 1-781-575-2137 if calling from outside of the United States.

SUMMARY

This summary highlights selected information from this proxy statement and may not contain all of the information that is important to you. To better understand the merger and the other proposals being considered at the 2018 Annual Meeting, you should read this entire proxy statement carefully, including the materials attached as Annexes hereto. See “*Where You Can Find More Information*” beginning on page [193](#) of this proxy statement. Page references are included in parentheses to direct you to a more detailed description of the topics presented in this summary.

This proxy statement includes forward-looking statements within the meaning of Section 27A of the Securities Act and Section 21E of the Exchange Act. For this purpose, any statements contained herein, other than statements of historical fact may be forward-looking statements under the provisions of The Private Securities Litigation Reform Act of 1995. In this proxy statement, words such as “anticipate,” “believe,” “could,” “estimate,” “expect,” “intend,” “may,” “plan,” “project,” “should,” “target,” “will,” “would,” or other words that convey uncertainty of future events or outcomes are used to identify these forward-looking statements. Actual results may differ materially from those indicated by such forward-looking statements as a result of various important factors. If one or more of these factors materialize, or if any underlying assumptions prove incorrect, actual results, performance or achievements may vary materially from any future results, performance, or achievements expressed or implied by these forward-looking statements. For more information, see the section entitled “Forward-Looking Statements” beginning on page [44](#) of this proxy statement.

Combined Business Strategy

The goal of TapImmune and Marker in creating the combined company is to be the leader in the development and commercialization of transformative and best-in-class immunotherapies for the treatment of hematological malignancies and solid tumors. Key elements of the combined company strategy include:

- expediting clinical development, regulatory approval, and commercialization of our lead product candidates;
- continuing collaboration with the combined company’s partners, and increasing its internal research and development activities, to improve and develop adoptive cell therapy technologies;
- investing in the combined company’s platforms to maximize the beneficial outcomes for cancer patients; and
- leveraging the combined company’s relationship with its founding institutions, scientific founders, and other scientific advisors.

Upon completion of the merger, the newly reconstituted board and management of the combined company intends to carefully evaluate the combined company’s therapeutic products and programs, and determine the future strategy and the proper allocation of resources to best maximize stockholder value in the combined company. In conjunction with this strategic review, the reconstituted board and management may de-emphasize or terminate therapeutic products or programs, as appropriate. The reconstituted board and management expect that this strategic review will be a high priority after consummation of the merger, and will continue on an ongoing basis.

For more information on the combined company’s business strategy, see the section entitled “*Marker’s Business — Combined Company Strategy*” beginning on page [152](#) of this proxy statement.

The 2018 Annual Meeting

The 2018 Annual Meeting will be held at 9:00 a.m., local time, on October 16, 2018, at the Hyatt Regency Jacksonville Riverfront, 225 East Coastline Drive, Jacksonville, Florida 32202, USA, to consider and act upon the following matters:

1. To approve the issuance of TapImmune common stock, warrants to purchase TapImmune common stock, and the issuance of shares of TapImmune common stock issuable upon exercise of warrants to purchase TapImmune common stock, in each case, pursuant to the merger agreement.

2. To approve the issuance of TapImmune common stock, warrants to purchase TapImmune common stock, and the issuance of shares of TapImmune common stock issuable upon exercise of warrants to purchase TapImmune common stock, in each case, pursuant to the private placement transaction.
3. To approve two separate proposals to amend TapImmune's articles of incorporation to:
 - a. increase the number of authorized shares of TapImmune common stock from 41,666,667 to 150,000,000, the approval of which is necessary to enable TapImmune to issue the required number of shares of TapImmune common stock, and shares of TapImmune common stock issuable upon exercise of warrants, in each case, to Marker stockholders in connection with the merger and to the investors in the private placement transaction; and
 - b. change the name of TapImmune to "Marker Therapeutics, Inc.";
4. To approve the reincorporation of TapImmune from a Nevada corporation to a Delaware corporation.
5. To approve an increase in the number of authorized shares of TapImmune common stock reserved for issuance under the TapImmune Plan by 6,616,666 shares from 1,383,334 to 8,000,000 shares upon completion of the merger.
6. To elect seven persons as directors of TapImmune; provided, however, that, if the merger is completed, the board of directors of TapImmune will be reconstituted as set forth in the merger agreement.
7. To approve on a non-binding advisory basis TapImmune's 2017 executive compensation.
8. To ratify the appointment of Marcum LLP as TapImmune's independent registered public accounting firm for the fiscal year ending December 31, 2018.
9. To consider and vote on a proposal to adjourn the 2018 Annual Meeting, if necessary, if a quorum is present, to solicit additional proxies, in the event that there are not sufficient votes at the time of the 2018 Annual Meeting to approve items 1, 2, 3a, 3b, 4, or 5 above.
10. To transact such other business as may properly come before the 2018 Annual Meeting or any adjournment or postponement thereof.

Proposals 1, 2, 3a, 3b, 4, and 5 are conditioned upon each other, and the approval of each such proposal is a condition to the completion of the merger. Therefore, the completion of the merger cannot proceed without the approval of Proposals 1, 2, 3a, 3b, 4, and 5.

TapImmune common stock is the only type of security entitled to vote at the 2018 Annual Meeting. The board of directors has fixed August 21, 2018 as the record date for the determination of stockholders entitled to notice of, and to vote at, the 2018 Annual Meeting and any adjournment or postponement thereof. Only holders of record of shares of TapImmune common stock at the close of business on the record date are entitled to notice of, and to vote at, the 2018 Annual Meeting. At the close of business on the record date, TapImmune had 13,710,544 shares of common stock outstanding and entitled to vote at the 2018 Annual Meeting. Each holder of record of shares of TapImmune common stock on the record date will be entitled to one vote for each share held on all matters to be voted upon at the 2018 Annual Meeting.

Whether or not you plan to attend the 2018 Annual Meeting in person, please complete, date, sign, and promptly return the accompanying proxy card in the enclosed postage paid envelope to ensure that your shares will be represented and voted at the 2018 Annual Meeting. If you date, sign, and return your proxy card without indicating how you wish to vote, your proxy will be counted as a vote in favor of Proposals 1 through 9. The failure to return your proxy card or to vote in person at the 2018 Annual Meeting will have the same effect as a vote against Proposal 3a, Proposal 3b and Proposal 4. If you attend the 2018 Annual Meeting, you may, upon your written request, withdraw your proxy and vote in person.

Only stockholders at the close of business on August 21, 2018, the record date, are entitled to notice of, and to vote at, the 2018 Annual Meeting and any adjournment or postponement thereof. Such stockholders are entitled to one vote on each matter submitted to stockholders at the 2018 Annual Meeting for each share of TapImmune common stock held as of the record date. At the close of business on the record date, there were 13,710,544 shares of TapImmune common stock issued and outstanding and entitled to vote at the 2018 Annual Meeting, held by 451 holders of record.

Provided a quorum is present, the affirmative vote of the holders of a majority of the shares of TapImmune common stock present in person or represented by proxy and entitled to vote on the matter at the 2018 Annual Meeting is required for the approval of each of Proposals 1, 2, 5, 7, 8, and 9, and the affirmative vote of the holders of a majority of the outstanding shares of TapImmune common stock as of the record date are required to approve Proposals 3a, 3b, and 4. Proposal 6, the election of directors, will be determined by a plurality of the votes cast at the 2018 Annual Meeting. Abstentions will be counted for purposes of determining whether there is a quorum and will have the same effect as a vote against the approval of Proposals 1, 2, 3a, 3b, 4, 5, 7, 8, and 9. Unvoted shares will have the same effect as a vote against Proposals 3a, 3b, and 4.

If you hold shares beneficially in street name and do not provide your broker with voting instructions, your shares may constitute “broker non-votes.” Broker non-votes occur on a matter when a broker is not permitted to vote on that matter without instructions from the beneficial owner and instructions are not given. Proposal 8 to ratify the selection of Marcum LLP as TapImmune’s independent registered public accounting firm for TapImmune for the fiscal year ending December 31, 2018 is the only “routine” matter to be voted on at the 2018 Annual Meeting. Broker non-votes will have the same effect as a vote against the approval of Proposals 3a, 3b, and 4.

This solicitation is made on behalf of TapImmune’s board of directors, and TapImmune will pay for the costs of solicitation. Copies of solicitation materials will be furnished to banks, brokerage firms, and other custodians, nominees, and fiduciaries holding shares in their names that are beneficially owned by others so that they may forward the solicitation materials to such beneficial owners upon request. You will need to obtain your own Internet access if you choose to access the proxy materials and/or vote over the Internet. In addition to soliciting proxies by mail, TapImmune’s directors, executive officers, and employees and Marker’s directors and executive officers might solicit proxies personally and by telephone. None of these individuals will receive any additional compensation for this. TapImmune has engaged Georgeson to assist TapImmune in the distribution of proxy materials and the solicitation of votes described above for a fee of \$12,000, plus additional fees based on the amount and types of services rendered and reimbursement of reasonable expenses. TapImmune will, upon request, reimburse brokers, banks and other nominees for their expenses in sending proxy materials to their principals and obtaining their proxies.

The Parties

TapImmune Inc.

5 West Forsyth Street, Suite 200
Jacksonville, Florida 32202
Tel: (904) 516-5436

TapImmune is a biotechnology company focusing on immunotherapy specializing in the development of innovative peptide and gene-based immunotherapeutics and vaccines for the treatment of oncology and infectious disease. Unlike other vaccine technologies that narrowly address the initiation of an immune response, TapImmune’s approach broadly stimulates the cellular immune system by enhancing the function of killer T cells and helper T cells and by restoring antigen presentation in tumor cells, thus allowing their recognition and killing by the immune system.

Marker Therapeutics, Inc.

33 5th Avenue N.W., Suite 800
New Brighton, Minnesota 55112
(651) 628-9259

Marker is a clinical stage immuno-oncology company focused on developing adoptive non-gene modified T cell therapies for the treatment of hematologic malignancies such as acute myeloid leukemia, or

AML, lymphoma, and multiple myeloma, as well as certain solid tumors. Marker's MultiTAA technology selectively expands non-engineered tumor-specific T cells that are able to kill tumor cells by targeting multiple tumor-associated antigens simultaneously to prevent immune escape and generate durable immunity. Patient/donor T cells are not genetically modified, and therefore, the cost of generating Marker's therapies is significantly reduced. Marker is preparing for Phase II clinical trials.

Marker is privately held with offices in New Brighton, Minnesota.

Summary of the Merger

Upon the terms and subject to the conditions of the merger agreement, Timberwolf Merger Sub, Inc., or the acquisition subsidiary, a Delaware corporation and wholly-owned subsidiary of TapImmune formed by TapImmune in connection with the merger, will merge with and into Marker. The merger agreement provides that upon the consummation of the merger the separate existence of the acquisition subsidiary shall cease. Marker will continue as the surviving corporation, and will be a wholly-owned subsidiary of TapImmune. Marker will be renamed Marker Cell Therapy, Inc.

Pursuant to the terms of the merger, Marker stockholders will receive (i) shares of TapImmune's common stock equal to the number of shares of TapImmune common stock issued and outstanding immediately prior to the effective time of the merger, and (ii) a number of warrants equal to the number of TapImmune warrants and stock options issued and outstanding immediately prior to the effective time of the merger, as described further in the section entitled "*The Merger Agreement—Merger Consideration*" beginning on page 81 of this proxy statement. Accordingly, immediately following the effective time of the merger, before taking into account the issuance of shares in the private placement transaction occurring concurrently with the merger, Marker's stockholders and TapImmune's current stockholders will each own 50% of the issued and outstanding shares of TapImmune common stock on a fully diluted basis (assuming all issued and outstanding warrants and options are exercised). After taking into account the issuance of shares in the private placement transaction occurring concurrently with the merger, immediately following the effective time of the merger, the pro forma ownership of the issued and outstanding shares of TapImmune common stock on a fully diluted basis (assuming all issued and outstanding warrants and options are exercised) will be approximately as follows: Marker's stockholders 27.5%, TapImmune's current stockholders 27.5%, and the private placement transaction stockholders 45.0%.

Reasons for the Merger (see page 60)

The board of directors of TapImmune considered various reasons for the merger, as described herein.

Opinion of Nomura Securities International, Inc. (see page 63)

TapImmune has engaged Nomura Securities International, Inc., or Nomura as its exclusive financial advisor in connection with the merger. As part of this engagement, Nomura delivered an opinion, dated May 14, 2018, to the TapImmune board of directors to the effect that, as of that date and based on and subject to various assumptions, qualifications, matters considered, and limitations described in the opinion, the combined consideration provided for in the merger was fair, from a financial point of view, to TapImmune. For purposes of Nomura's analyses and opinion, the term "combined consideration" refers to the stock exchange ratio and the warrant exchange ratio, taken together, but excluding (i) any of the adjustments, limitations, and procedures relating thereto set forth in the merger agreement and (ii) the additional merger warrants issuable to the Marker stockholders pursuant to the additional warrant ratio in connection with the merger, in each case, with respect to which Nomura expressed no opinion. The full text of Nomura's written opinion, dated May 14, 2018, is attached as Annex C to this proxy statement and sets forth, among other things, the assumptions made, procedures followed, matters considered, and qualifications and limitations on the review undertaken by Nomura in connection with its opinion.

Nomura's opinion was provided solely for the benefit of the Board (in its capacity as such) in connection with, and for the purposes of, its evaluation of the merger. Nomura's opinion addressed only the fairness, from a financial point of view and as of the date of such opinion, of the combined consideration (to the extent expressly specified in such opinion) and did not address any other aspect of the merger. Nomura's opinion did not address the relative merits of the merger as compared to other business strategies or transactions that

might be available with respect to TapImmune or TapImmune's underlying business decision to effect the merger. Nomura does not express any opinion and does not make any recommendation to any stockholder as to how such stockholder should vote or act with respect to the merger or any proposal to be voted upon in connection with the merger or otherwise.

Overview of the Merger Agreement

Merger Consideration (see page 81)

At the effective time of the merger:

- any shares of Marker common stock or preferred stock held as treasury stock or held or owned by Marker or any of its subsidiaries or the acquisition subsidiary immediately prior to the effective time of the merger shall be cancelled and cease to exist and no consideration shall be delivered in exchange therefor; and
- each share of Marker common stock outstanding immediately prior to the effective time of the merger (excluding shares to be cancelled as described above and excluding shares which are held by Marker stockholders who have exercised and perfected appraisal rights or dissenters' rights for such shares in accordance with the DGCL, if and to the extent applicable) shall be converted solely into the right to receive (i) a number of shares of TapImmune common stock equal to the "stock exchange ratio" (calculated as defined in the merger agreement), and (ii) a number of warrants to purchase common stock of TapImmune equal to the "warrant exchange ratio" (calculated as defined in the merger agreement).

No fractional shares of TapImmune common stock and no fractional warrants to purchase shares of TapImmune common stock will be issuable pursuant to the merger to Marker stockholders. Instead, each Marker stockholder who would otherwise be entitled to receive a fraction of a share of TapImmune common stock will be entitled to receive a cash payment determined in accordance with the merger agreement, and each Marker stockholder who would otherwise be entitled to a fraction of a warrant will receive a number of whole warrants determined by rounding up or down to the nearest whole number.

Stock Options and Warrants (see page 84)

Marker has no outstanding options to purchase Marker common stock or warrants to purchase Marker common stock.

Conditions to Completion of the Merger (see page 85)

Consummation of the merger is subject to a number of conditions (subject to certain exceptions in the merger agreement), including, among others, the following:

- there must not have been issued any temporary restraining order, preliminary or permanent injunction or other order preventing the consummation of the merger by any court of competent jurisdiction or other governmental entity of competent jurisdiction, and no law, statute, rule, regulation, ruling, or decree shall be in effect which has the effect of making the consummation of the merger illegal;
- obtaining requisite Marker and TapImmune stockholder approvals;
- Marker has received evidence, in form and substance satisfactory to it, that Timberwolf Merger Sub has obtained approval of its sole stockholder adopting the merger agreement and approving the merger;
- the existing shares of TapImmune common stock must have been continually listed on The NASDAQ Capital Market through the closing of the merger, the shares of TapImmune common stock to be issued in the merger must be approved for listing on The NASDAQ Capital Market (subject to official notice of issuance) as of the effective time of the merger;
- there is no legal proceeding pending, or overtly threatened in writing by a governmental body

which (i) challenges or seeks to restrain the consummation of the merger, (ii) relates to the merger and seeks to obtain from one of the parties to the merger agreement damages or other relief which may be material to such party, (iii) seeks to prohibit or limit in any material and adverse respect the ability of a party to the merger agreement to vote, transfer, receive dividends with respect to or otherwise exercise ownership rights with respect to the stock of TapImmune, (iv) would materially and adversely affect the right or ability of TapImmune or Marker to own the assets or operate the business of TapImmune or Marker, or (v) seeks to compel Marker, TapImmune or any subsidiary of TapImmune to dispose of or hold separate any material assets as a result of the merger;

- the License Agreement with Baylor College of Medicine will continue to be in full force and effect as of immediately following the effective time of the merger; and
- TapImmune shall have consummated the private placement transaction described in Proposal No. 2 contemporaneously with the closing of the merger, and such financing shall not adversely affect the stockholders of a party in a manner disproportionate to the stockholders of the other party.

In addition, each of Marker's and TapImmune's obligations to complete the merger is further subject to the satisfaction or waiver by that party of the following additional conditions:

- the representations and warranties regarding capitalization matters of the other party in the merger agreement must be true and correct in all but de minimis respects on the date of the merger agreement and on the closing date of the merger with the same force and effect as if made on the closing date, or, if such representations and warranties address matters as of a particular date, then as of that particular date;
- all other representations and warranties of the other party in the merger agreement must be true and correct on the date of the merger agreement and on the closing date of the merger with the same force and effect as if made on the date on which the merger is to be completed or, if such representations and warranties address matters as of a particular date, then as of that particular date, except where the failure of these representations and warranties to be true and correct would not have a material adverse effect on the other party;
- the other party to the merger agreement must have performed or complied with in all material respects all covenants and obligations in the merger agreement required to be performed or complied with by it on or before the closing of the merger, except each party's covenant to conduct its business and operations in compliance with all applicable laws, which may not have been violated in a manner that would have a material adverse effect on such party;
- the other party to the merger agreement has not experienced a material adverse effect that is continuing;
- the other party's voting and lock-up agreements must continue to be in full force and effect immediately following the effective time of the merger; and
- the other party to the merger agreement must have delivered certain certificates and other documents required under the merger agreement for the closing of the merger.

In addition, the obligation of TapImmune and Merger Sub to complete the merger is further subject to the satisfaction or waiver of the following conditions:

- Marker must have terminated certain investor agreements; and
- Marker must have delivered a certificate setting forth the allocation of the Marker consideration to its stockholders.

In addition, the obligation of Marker to complete the merger is further subject to the satisfaction or waiver of the following conditions:

- TapImmune must have caused the board of directors of TapImmune to be constituted as set forth in the merger agreement;

- the principal executive officer and the principal financial officer of TapImmune must have provided, with respect to any document filed with the SEC on or after May 15, 2018, any necessary certification required under Rule 13a-14 under the Exchange Act; and
- TapImmune must have effected the reincorporation described in Proposal No. 4 and delivered a file-stamped copy of the certificate of incorporation effecting the reincorporation and the increase in the number of authorized shares of its capital stock described in Proposal No. 3a.

No Solicitation (see page 88)

The merger agreement contains provisions prohibiting TapImmune and Marker from inquiring about or seeking a competing transaction, subject to specified exceptions described in the merger agreement. Under these “non-solicitation” provisions, each of TapImmune and Marker has agreed that neither it nor its subsidiaries, nor any of its officers, directors, employees, representatives, affiliates, advisors, or agents will directly or indirectly:

- solicit, initiate, respond to, or take any action to facilitate or encourage any inquiries or the communication, making, submission, or announcement of any acquisition inquiry or competing proposal or take any action that could reasonably be expected to lead to a competing proposal;
- enter into or participate in any discussions or negotiations with any person with respect to an acquisition inquiry or any competing proposal;
- furnish any information regarding such party to any person in connection with, in response to, relating to, or for the purpose of assisting with or facilitating an acquisition inquiry or a competing proposal;
- approve, endorse, or recommend any competing proposal, subject to the terms and conditions in the merger agreement;
- execute or enter into any letter of intent or similar document or any contract contemplating or otherwise relating to any competing proposal; or
- grant any waiver or release under any confidentiality, standstill, or similar agreement (other than to the other party).

Termination of the Merger Agreement (see page 94)

Either TapImmune or Marker can terminate the merger agreement under specified circumstances, which would prevent the merger from being consummated.

Termination Fees (see page 95)

The merger agreement provides for the payment of a termination fee of \$1.5 million by TapImmune to Marker upon termination of the merger agreement under specified circumstances, plus up to \$500,000 of out-of-pocket costs incurred by Marker in connection with the transactions and any legal fees incurred by Marker in connection with preparation of this proxy statement. The merger agreement provides for the payment of up to \$500,000 by Marker of out-of-pocket costs incurred by TapImmune and any legal fees incurred by TapImmune in connection with preparation of this proxy statement upon termination of the merger agreement under specified circumstances.

Stockholder Agreements (see page 98)

In connection with the execution of the merger agreement, (i) TapImmune’s directors and executive officers, beneficially owning in the aggregate, as of August 21, 2018, approximately 4.2% of TapImmune’s outstanding common stock (excluding warrants and options), or approximately 7.5% (including outstanding warrants and options), entered into voting and lock-up agreements with Marker, and (ii) certain Marker stockholders, including Marker’s directors and executive officers, beneficially owning in the aggregate approximately 97% of Marker’s outstanding capital stock, entered into voting and lock-up agreements with TapImmune (which agreements are attached as Annexes D-1 and D-2, respectively, and

which are referred to herein collectively as “the voting and lock-up agreements”). The voting and lock-up agreements provide, among other things, that the parties to the agreements will vote the shares of TapImmune and Marker capital stock held by them in favor of the transactions contemplated by the merger agreement. In addition, the voting and lock-up agreements place restrictions on the transfer of shares of TapImmune and Marker capital stock held by the respective signatory stockholders prior to the closing of the merger, and each such stockholder will also be subject to a 180-day lock-up on the sale of shares of capital stock of TapImmune, which period shall begin upon consummation of the merger. In addition, certain TapImmune stockholders beneficially owning in the aggregate, as of August 21, 2018 approximately 31.4% of TapImmune’s outstanding common stock (excluding, for purposes of such calculation, any warrants or options held by them), entered into voting and support agreements with Marker obligating them to vote the shares of TapImmune common stock held by them in favor of the transactions contemplated by the merger agreement.

In addition, pursuant to the conditions of the merger agreement, holders of the number of shares of Marker capital stock required to approve the merger have already approved the merger via written consent.

The Board of Directors and Management Following the Merger (see page [90](#))

Effective at the closing of the merger, the board of directors of the combined company will be reconstituted pursuant to the terms of the merger agreement to be comprised of six directors, three of whom are designated by TapImmune and three of whom are designated by Marker. Each board committee will be comprised of at least three (3) directors, the members of which will be determined by the parties based upon NASDAQ and SEC independence rules regarding who can sit on each committee and qualifications for each committee.

Interests of TapImmune’s Directors and Executive Officers (see page [75](#))

In considering the recommendation of TapImmune’s board of directors with respect to issuing shares of TapImmune common stock pursuant to the merger agreement and the other matters to be acted upon by TapImmune stockholders at the 2018 Annual Meeting, TapImmune stockholders should be aware that certain members of the board of directors and executive officers of TapImmune may have interests in the merger that may be different from, or in addition to, interests they may have as TapImmune stockholders.

As of August 21, 2018, all directors and executive officers of TapImmune, together with their affiliates, beneficially owned approximately 7.5% of the outstanding shares of TapImmune common stock (including warrants and options). The affirmative vote of the holders of a majority of the shares of TapImmune common stock present in person or represented by proxy and entitled to vote on such matter at the 2018 Annual Meeting is required for approval of Proposals 1, 2, 6, 7, 8, and 9. The affirmative vote of the holders of a majority of the outstanding shares of TapImmune common stock as of the record date for the 2018 Annual Meeting is required for approval of Proposals 3a, 3b and 4. The election of the directors, Proposal 5, will be determined by a plurality of the votes cast at the 2018 Annual Meeting.

For more detail on the terms of these agreements and other interests of TapImmune’s directors and executive officers, see “*Interests of TapImmune’s Directors and Executive Officers*” on page [75](#).

Interests of Marker’s Directors and Executive Officers (see page [78](#))

TapImmune stockholders also should be aware that certain members of the board of directors and executive officers of Marker may have interests in the merger that may be different from, or in addition to, interests they may have as Marker stockholders. For more detail on the terms of these agreements and other interests of Marker’s directors and executive officers, see “*Interests of Marker’s Directors and Executive Officers*” on page [78](#).

Certain U.S. Federal Income Tax Considerations (see page [80](#))

TapImmune stockholders will not sell, exchange, or dispose any shares of TapImmune common stock as a result of the merger. Therefore, there will be no material U.S. federal income tax consequences to TapImmune stockholders as a result of the merger.

Risk Factors (see page [13](#))

The merger, including the possibility that the merger may not be consummated, poses a number of risks to TapImmune and its stockholders. In addition, both TapImmune and Marker are subject to various risks associated with their businesses and their industries, and the combined business will also be subject to those and other risks.

Regulatory Approvals (see page [84](#))

TapImmune must comply with applicable U.S. federal and state securities laws and NASDAQ rules and regulations in connection with the issuance of shares of TapImmune common stock in the merger, including the filing with the SEC of this proxy statement.

Accounting Treatment (see page [10](#))

It is anticipated that the merger will be accounted for by TapImmune as an asset acquisition by TapImmune rather than as a business combination under ASC 805, *Business Combinations*.

Appraisal Rights (see page [84](#))

TapImmune stockholders are not entitled to appraisal rights in connection with the merger.

Comparison of Stockholder Rights

TapImmune is currently incorporated under the laws of the State of Nevada, and the rights of the stockholders of TapImmune are currently governed by the Nevada Revised Statutes, or NRS, and TapImmune's Nevada articles of incorporation and bylaws, respectively. If TapImmune's Proposal No. 4 is approved by the TapImmune stockholders, immediately before the completion of the merger, TapImmune will be reincorporated in the State of Delaware, and accordingly, the rights of the stockholders of TapImmune following the reincorporation will be governed by the Delaware General Corporation Law, or DGCL, and by a new Delaware certificate of incorporation, attached to this proxy statement as Annex J, and new bylaws under Delaware law, attached to this proxy statement as Annex K.

The rights of current TapImmune's stockholders will differ from their rights following the reincorporation and the merger. For more information regarding the comparison of stockholder rights see the section entitled "*Comparison of Rights of Stockholders — Comparison of TapImmune Stockholders' Rights Before and After the Reincorporation*" beginning on page [112](#).

ACCOUNTING TREATMENT

TapImmune concluded that the merger should be accounted for as an asset acquisition by TapImmune rather than as a business combination under Accounting Standards Codification (ASC) 805, Business Combinations. The merger was accounted for as an asset acquisition because substantially all the fair value of the assets being acquired are concentrated in a group of similar assets. Furthermore, the acquired assets did not have outputs or employees. The assets acquired by TapImmune under the merger include a license, other associated intellectual property, documentation and records, and related materials. Because Marker's intellectual property had not yet received regulatory approval, the \$128.9 million purchase price paid for these assets will be expensed in TapImmune's statement of operations for the three months ended September 30, 2018. See "Pro Forma Condensed Combined Balance Sheet" below for a description of how such purchase price was calculated.

TapImmune also considered whether the merger should be accounted for as a reverse acquisition by Marker. The purpose of the merger is for TapImmune to acquire the assets of Marker so that TapImmune can expand its product and service offerings. While the former TapImmune and Marker stockholders will hold an equal number of Board seats in the combined entity, TapImmune concluded that Marker would not be deemed the accounting acquirer under ASC 805, and therefore the merger is not a reverse acquisition, as TapImmune's CEO, CFO and senior management will continue in their current roles in the combined company. In addition, TapImmune is the larger of the two entities and issued the equity securities used to effect the merger, and no party will have a majority of the voting common stock.

PRO FORMA CONDENSED COMBINED BALANCE SHEET

The following unaudited pro forma condensed combined balance sheet is based on TapImmune's historical consolidated financial statements as adjusted to give effect to the asset acquisition. The unaudited pro forma condensed combined balance sheet as of June 30, 2018 gives effect to the merger as if the merger had occurred on June 30, 2018.

The unaudited pro forma condensed combined balance sheet should be read together with TapImmune's historical financial statements, which are included in TapImmune's latest annual report on Form 10-K and quarterly report on Form 10-Q.

	As of June 30, 2018		
	Historical	Adjustments (in thousands) (unaudited)	Pro Forma
Balance Sheet Data:			
Cash	\$ 7,783	\$ —	\$ 7,783
Total assets	\$ 7,892	\$ —	\$ 7,892
Total liabilities	\$ 3,747	\$ —	\$ 3,747
Common Stock, \$.001 par value	\$ 14	\$ 125,314 ⁽¹⁾	\$ 125,328
Additional paid-in capital	\$ 170,288	\$ —	\$ 170,288
Accumulated deficit	\$(166,157)	\$ (125,314) ⁽¹⁾	\$(291,471)
Total stockholders' equity	\$ 4,145	\$ —	\$ 4,145
Total liabilities and stockholders' equity	\$ 7,892	\$ —	\$ 7,892

- (1) The Common Stock issued for the asset acquisition was valued at \$125.3 million which is equal to the 13,710,544 common shares to be issued to Marker (determined as of August 21, 2018 and subject to adjustment pursuant to the terms of the merger agreement) multiplied by \$9.14, the closing price of TapImmune's Common Stock as of September 13, 2018. Since the assets purchased are intellectual property, the total purchase price will be immediately expensed as in process research and development with no alternative future use.

MARKET PRICE AND DIVIDEND INFORMATION

TapImmune common stock has been listed on the NASDAQ Capital Market under the symbol “TPIV” since November 8, 2016. The following table details the high and low sales prices for the common stock as reported on Nasdaq.com for the periods indicated.

	Price Range	
	High	Low
Fiscal year ending December 31, 2018:		
3 rd Quarter	\$10.92	\$6.53
2 nd Quarter	\$13.55	\$2.58
1 st Quarter	\$ 4.25	\$2.92
Fiscal year ended December 31, 2017:		
4 th Quarter	\$ 4.41	\$2.60
3 rd Quarter	\$ 3.84	\$2.68
2 nd Quarter	\$ 4.70	\$3.08
1 st Quarter	\$ 5.35	\$3.70
Fiscal year ended December 31, 2016:		
4 th Quarter	\$ 6.69	\$3.32
3 rd Quarter	\$ 7.15	\$4.80
2 nd Quarter	\$ 9.82	\$5.52
1 st Quarter	\$ 8.34	\$5.04

Marker is a private company, and its common stock is not publicly traded. There has never been, nor is there expected to be in the future, a public market for Marker common stock. Following the merger, Marker will be renamed to Marker Cell Therapy, Inc. and become a wholly owned subsidiary of TapImmune, and TapImmune will, in turn, be renamed “Marker Therapeutics, Inc.”

On May 14, 2018, the last full trading day prior to the public announcement of the proposed merger, the closing price per share of TapImmune common stock as reported on the NASDAQ Capital Market was \$3.00.

On September 13, 2018, the last practicable date before the printing of this proxy statement, the closing price per share of TapImmune common stock as reported on the NASDAQ Capital Market was \$9.14.

Following the consummation of the merger, and subject to successful application for additional listing with the NASDAQ Capital Market, TapImmune common stock will continue to be listed on the NASDAQ Capital Market, but will trade under the symbol “MRKR” and under the combined company’s new name, “Marker Therapeutics, Inc.”

Holders of Record

As of August 21, 2018, TapImmune had 451 stockholders of record, which excludes stockholders whose shares were held in nominee or street name by brokers. TapImmune believes that, when its record holders and stockholders whose shares are held in nominee or street name by brokers are combined, it has in excess of 8,100 stockholders.

As of August 21, 2018, Marker had 28 stockholders of record of Marker common stock.

Dividends

TapImmune has never declared or paid any cash dividends on its common stock. TapImmune currently does not plan to declare dividends on shares of its common stock in the foreseeable future. TapImmune expects to retain its future earnings, if any, for use in the operation and expansion of its business. The

payment of cash dividends in the future, if any, will be at the discretion of TapImmune's board of directors and will depend upon such factors as earnings levels, capital requirements, its overall financial condition and any other factors TapImmune's board deems relevant.

Marker has never paid or declared any cash dividends on its common stock.

Securities Authorized for Issuance under Equity Compensation Plans

For information about TapImmune's equity compensation plans, see Item 12 of Part III of TapImmune's Annual Report on Form 10-K for the year ended December 31, 2017, which document is attached as Annex B-1 to this proxy statement.

RISK FACTORS

If the merger is consummated, the combined company will be faced with a market environment that cannot be predicted and that involves significant risks, many of which will be beyond its control. In addition to the other information contained in this proxy statement, you should carefully consider the risks described below before deciding how to vote your shares of common stock. In addition, you should read and consider the risks associated with the business of TapImmune because these risks may also affect the combined company — these risks can be found in TapImmune’s Annual Report on Form 10-K for the fiscal year ended December 31, 2017, which document is attached as Annex B-1 to this proxy statement. You should also read and consider the other information in this proxy statement, including the other Annexes attached hereto.

Risks Related to the Merger

If the proposed merger with Marker is not consummated, TapImmune’s business could suffer materially and TapImmune’s stock price could decline.

The consummation of the proposed merger with Marker is subject to a number of closing conditions, including the approval of the stock issuance pursuant to the merger agreement by TapImmune stockholders, and other customary closing conditions. TapImmune is targeting a closing of the merger in the fourth quarter of 2018.

If the proposed merger is not consummated, TapImmune may be subject to a number of material risks, and its business and stock price could be adversely affected, as follows:

- TapImmune has incurred, and expects to continue to incur, significant expenses related to the proposed merger with Marker even if the merger is not consummated.
- The merger agreement contains covenants relating to TapImmune’s solicitation of competing acquisition proposals and the conduct of TapImmune’s business between the date of signing the merger agreement and the closing of the merger. As a result, significant business decisions and transactions before the closing of the merger require the consent of Marker. Accordingly, TapImmune may be unable to pursue business opportunities that would otherwise be in its best interest as a standalone company. If the merger agreement is terminated after TapImmune has invested significant time and resources in the merger process, TapImmune will have a limited ability to obtain additional financing to fund its operations on a standalone basis.
- TapImmune could be obligated to pay Marker a \$1.5 million termination fee in connection with the termination of the merger agreement, depending on the reason for the termination. Additionally, in connection with the termination of the merger agreement, depending on the reason for the termination, TapImmune may be obligated to pay up to \$500,000 of out-of-pocket costs incurred by Marker in connection with the transactions and any legal fees incurred by Marker in connection with preparation of this proxy statement.
- TapImmune would need to raise additional capital independently of the proposed merger to continue to operate its business on a stand-alone basis and this capital might not be available on acceptable terms, if at all.
- TapImmune’s prospective customers, collaborators and other business partners and investors in general may view the failure to consummate the merger as a poor reflection on TapImmune’s business or prospects.
- The market price of TapImmune common stock may decline to the extent that the current market price reflects a market assumption that the proposed merger will be completed.

In addition, if the merger agreement is terminated and TapImmune’s board of directors determines to seek another business combination, it may not be able to find a third party willing to provide equivalent or more attractive consideration than the consideration to be provided by each party in the merger. In such circumstances, TapImmune’s board of directors may elect to, among other things, divest all or a portion of

TapImmune’s business, or take the steps necessary to liquidate all of TapImmune’s business and assets, and in either such case, the consideration that TapImmune receives may be less attractive than the consideration to be received by TapImmune pursuant to the merger agreement.

The announcement and pendency of the proposed merger with Marker could adversely affect TapImmune’s business.

The announcement and pendency of the proposed merger could adversely affect TapImmune’s business for a number of different reasons, many of which are not within TapImmune’s control, including as follows:

- Some of TapImmune’s suppliers, distributors, collaborators, and other business partners may seek to change or terminate their relationships with TapImmune as a result of the proposed merger;
- As a result of the proposed merger, current and prospective employees could experience uncertainty about their future roles within the combined company. This uncertainty may adversely affect TapImmune’s ability to retain its key employees, who may seek other employment opportunities; and
- TapImmune’s management team may be distracted from day-to-day operations as a result of the proposed merger.

Some of TapImmune’s and Marker’s officers and directors have conflicts of interest that may influence them to support or approve the merger.

Certain officers and directors of TapImmune and Marker participate in arrangements that provide them with interests in the merger that are different from yours, including, among others, to the extent applicable, their continued service as an officer or director of the combined company, severance benefits, the acceleration of restricted stock and stock option vesting and continued indemnification. These interests, among others, may influence such officers and directors of TapImmune and Marker to support or approve the merger. For a more detailed discussion see “*The Merger — Interests of TapImmune’s Directors and Executive Officers in the Merger*” and “*The Merger — Interests of Marker’s Directors and Executive Officers in the Merger*” beginning on pages [75](#) and [78](#), respectively, of this proxy statement.

The merger may be completed even though material adverse changes may result from the announcement of the merger, industry-wide changes and other causes.

In general, either party can refuse to complete the merger if there is a material adverse change affecting the other party between May 15, 2018, the date of the merger agreement, and the closing. However, some types of changes do not permit either party to refuse to complete the merger, even if such changes would have a material adverse effect on TapImmune or Marker, to the extent they resulted from the following (unless, in some cases, they have a materially disproportionate effect on TapImmune or Marker, as the case may be):

- any rejection by a governmental body of a registration or filing by TapImmune or Marker relating to TapImmune or Marker’s intellectual property rights;
- any change in the cash position of TapImmune or Marker that results from operations in the ordinary course of business;
- conditions generally affecting the industries in which TapImmune or Marker and its subsidiaries participate or the U.S. or global economy or capital markets as a whole, to the extent that such conditions do not have a disproportionate impact on Marker and its subsidiaries, taken as a whole;
- any failure by TapImmune or Marker or any of its subsidiaries to meet internal projections or forecasts on or after the date of the merger agreement, provided that any such effect, change, event, circumstance, or development causing or contributing to any such failure to meet projections or forecasts may constitute a material adverse effect of TapImmune or Marker and may be taken into account in determining whether a material adverse effect has occurred;

- the execution, delivery, announcement, or performance of obligations under the merger agreement or the announcement, pendency or anticipated consummation of the merger;
- any natural disaster or any acts of terrorism, sabotage, military action, or war or any escalation or worsening thereof; or
- any changes after the date of the merger agreement in U.S. GAAP or applicable laws.

If adverse changes occur but TapImmune and Marker must still complete the merger, the combined company's stock price may suffer.

During the pendency of the merger, TapImmune may not be able to enter into a business combination with another party because of restrictions in the merger agreement.

Covenants in the merger agreement impede the ability of TapImmune or Marker to make acquisitions or complete other transactions that are not in the ordinary course of business pending completion of the merger. As a result, if the merger is not completed, the parties may be at a disadvantage to their competitors. In addition, while the merger agreement is in effect and subject to limited exceptions, each party is prohibited from soliciting, initiating, encouraging or taking actions designed to facilitate any inquiries or the making of any proposal or offer that could lead to the entering into certain extraordinary transactions with any third party, such as a sale of assets, an acquisition of TapImmune common stock, a tender offer for TapImmune common stock or a merger or other business combination outside the ordinary course of business, which transactions could be favorable to such party's stockholders.

The market price of the combined company's common stock may decline as a result of the merger.

The market price of the combined company's common stock may decline as a result of the merger for a number of reasons including if:

- the combined company does not achieve the perceived benefits of the merger as rapidly or to the extent anticipated by financial or industry analysts;
- the effect of the merger on the combined company's business and prospects is not consistent with the expectations of financial or industry analysts; or
- investors react negatively to the effect on the combined company's business and prospects from the merger.

TapImmune stockholders may not realize a benefit from the merger commensurate with the ownership dilution they will experience in connection with the merger.

If the combined company is unable to realize the strategic and financial benefits currently anticipated from the merger, TapImmune stockholders will have experienced substantial dilution of their ownership interest without receiving any commensurate benefit. Significant management attention and resources will be required to integrate and operate the combined company. Delays in this process could adversely affect the combined company's business, financial results, financial condition and stock price following the merger. Even if the combined company is able to integrate the business operations successfully, there can be no assurance that this integration will result in the realization of the full benefits of synergies, innovation, and operational efficiencies that may be possible from this integration and that these benefits will be achieved within a reasonable period of time.

Because the lack of a public market for the Marker shares makes it difficult to value Marker, TapImmune may pay consideration in the merger that is greater than the fair market value of the Marker shares.

The outstanding capital stock of Marker is privately held and is not traded in any public market. The lack of a public market makes it extremely difficult to determine the fair market value of Marker. Since the percentage of TapImmune's equity to be issued to Marker stockholders was determined based on negotiations between the parties, it is possible that the value of the TapImmune common stock to be issued in connection with the merger will be greater than the fair market value of Marker.

The combined company will incur significant transaction costs as a result of the merger, including investment banking, legal, and accounting fees. In addition, the combined company will incur significant consolidation and integration expenses which cannot be accurately estimated at this time. These costs could include the planned relocation of certain operations from Jacksonville, Florida to Houston, Texas as well as other transition and start-up costs associated with the clinical programs to be conducted by the combined company after the merger. Actual transaction costs may substantially exceed TapImmune's estimates and may have an adverse effect on the combined company's financial condition and operating results.

Marker's principal stockholders, executive officers, and directors will own a significant percentage of TapImmune common stock and will be able to exert significant control over matters submitted to the stockholders for approval.

Immediately following the effective time of the merger between Marker and TapImmune, and after taking into account the issuance of shares in the private placement transaction occurring concurrently with the merger, Marker's stockholders are expected to own, on a fully-diluted basis (assuming the exercise of all outstanding warrants and options), approximately 27.5%, and TapImmune's current stockholders are expected to own approximately 27.5%, of TapImmune common stock.

After the merger with TapImmune, Marker's stockholders will beneficially own a significant percentage of TapImmune common stock. This significant concentration of share ownership may adversely affect the trading price for TapImmune common stock because investors often perceive disadvantages in owning stock in companies with large stockholders. These stockholders, if they acted together, could significantly influence all matters requiring approval by the stockholders following the merger, including the election of directors and the approval of mergers or other business combination transactions. The interests of these stockholders may not always coincide with the interests of other stockholders.

The merger may limit the use of the NOL carryforwards and other tax attributes of both TapImmune and Marker to offset future taxable income of the combined company.

Under Section 382 of the Internal Revenue Code of 1986, as amended, or the Code, if a corporation undergoes an "ownership change" (generally defined as a greater than 50% change (by value) in its equity ownership over a three-year period), the corporation's ability to use its pre-change net operating loss, which is referred to as NOL, carryforwards, and other pre-change tax attributes (such as research tax credits) to offset its post-change income may be limited.

As of December 31, 2017, TapImmune had federal NOL carryforwards of approximately \$41.7 million and state NOL carryforwards of approximately \$21.9 million. The merger may result in an ownership change for TapImmune under Section 382 of the Code and may limit the use of the NOL carryforwards and other tax attributes of TapImmune to offset future taxable income of the combined company for both federal and state income tax purposes. These tax attributes are subject to expiration at various times in the future to the extent that they have not been applied to offset the taxable income of the combined company. These limitations may affect the combined company's effective tax rate in the future.

If any of the events described in "Risks Related to the Combined Company" occur, those events could cause the potential benefits of the merger not to be realized.

The risks described below in the section entitled "Risks Related to TapImmune's Business" beginning on page 17 and "Risks Related to Marker's Product Candidates" beginning on page 23 and "Risks Related to Combined Company's Business and Product Candidates" beginning on page 17 are among the most significant risks to the combined company if the merger is completed. To the extent of the occurrence of any of the events in the risks described below in the sections entitled "Risks Related to Combined Company's Financial Position and Need for Additional Capital," "Risks Related to Government Regulation," and "Risks Related to Marker's Intellectual Property" beginning on pages 22, 34 and 37, respectively, those events could cause the potential benefits of the merger not to be realized and the market price of the combined company's common stock to decline.

The financial projections included in this proxy statement involve risks, uncertainties and assumptions, many of which are beyond the control of TapImmune and Marker. As a result, they may not prove to be accurate and are not necessarily indicative of current values or future performance.

The financial projections contained in this proxy statement involve risks, uncertainties, and assumptions and are not a guarantee of future performance. The future financial results of TapImmune

and, if the merger is completed, the combined company, may materially differ from those expressed in the financial projections due to factors that are beyond TapImmune's or Marker's ability to control or predict. Neither TapImmune nor Marker can provide any assurance that any of the financial projections will be realized or that TapImmune's or, if the merger is completed, the combined company's, future financial results will not materially vary from the financial projections. The financial projections cover multiple years, and the information by its nature becomes subject to greater uncertainty with each successive year. The financial projections do not take into account any circumstances or events occurring after the date on which they were prepared. More specifically, the financial projections:

- necessarily make numerous assumptions, many of which are beyond the control of TapImmune or Marker and may not prove to be accurate;
- do not necessarily reflect revised prospects for TapImmune's or Marker's businesses, changes in general business or economic conditions, or any other transaction or event that has occurred or that may occur and that was not anticipated at the time the projections were prepared;
- are not necessarily indicative of current values or future performance, which may be significantly less favorable than is reflected in the projections; and
- should not be regarded as a representation that the financial projections will be achieved.

Risks Related to TapImmune

For risks related to the business of TapImmune, please refer to the section entitled "*Item 1A. Risk Factors*" set forth in TapImmune's Annual Report on Form 10-K for the year ended December 31, 2017, which is attached as Annex B-1 to this proxy statement.

Risks Related to Marker

Because TapImmune and Marker operate similar businesses and both are clinical-stage companies in the immuno-oncology space, many of the risks related to the business of TapImmune, disclosed in the section "*Risk Factors — Risks Related to TapImmune*" are applicable to Marker as well. This section should be read in conjunction with the section "*Risk Factors — Risks Related to TapImmune.*"

Risks Related to the Combined Company

Risks Related to the Combined Company's Business and Product Candidates

The combined company's future success will be highly dependent upon its key personnel, and its ability to attract, retain, and motivate additional qualified personnel.

The combined company's ability to compete in the highly competitive biotechnology and pharmaceutical industries depends upon its ability to attract and retain highly qualified managerial, scientific, and medical personnel. The combined company will be highly dependent on its management, scientific, and medical personnel, including Peter Hoang, its President and Chief Executive Officer, Ann Leen, Ph.D., who is expected to be its Chief Scientific Officer following completion of the merger, and Juan Vera, M.D., who is expected to be its Chief Development Officer following completion of the merger. The loss of the services of any of the combined company's executive officers, other key employees, and other scientific and medical advisors, and the combined company's inability to find suitable replacements could result in delays in product development and harm to the combined company's business. In particular, Dr. Leen is the key person who has produced Marker's MultiTAA T cell therapy-based product. A priority of the combined company will be to quickly train additional qualified scientific and medical personnel in the combined company to ensure the ability to maintain business continuity. Any delays in training such personnel could delay the development, manufacture, and clinical trials of the combined company's product candidates.

The combined company also anticipates hiring additional scientific and medical personnel to grow its business. The combined company will conduct operations in Houston, Texas. This region is headquarters to many other biopharmaceutical companies and many academic and research institutions. Competition for

skilled personnel in the combined companies market is intense and may limit its ability to hire and retain highly qualified personnel on acceptable terms or at all. If the combined company is not successful in attracting and retaining highly qualified personnel, it may not be able to successfully implement its business strategy.

The combined company's strategic relationship with Baylor College of Medicine, or BCM, is dependent, in part, upon its relationship with key medical and scientific personnel and advisors.

Marker's therapy has been developed through its collaboration with the Center for Cell and Gene Therapy at BCM, founded by Malcom K. Brenner, M.D., Ph.D., a recognized pioneer in immuno-oncology. In addition to Dr. Brenner, Marker's founders include, Ann Leen, Ph.D., Juan Vera, M.D., Helen Heslop, M.D., DSc (Hon) and Cliona Rooney, Ph.D., who have significant experience in this field and are all affiliated with the Center for Cell and Gene Therapy at BCM. Dr. Leen and Dr. Vera are expected to serve as the combined company's Chief Scientific Officer and Chief Development Officer, respectively, following completion of the merger. In addition, Dr. Brenner, Dr. Heslop and Dr. Rooney have agreed to join the combined company's newly formed Scientific Advisory Board that will become effective in conjunction with the merger.

The combined company's strategic relationship with BCM will be dependent, in part, on its relationship with these key employees and advisors, and in particular Dr. Leen and Dr. Vera, who are also employed with the Center for Cell and Gene Therapy at BCM. If the combined company loses Dr. Leen or Dr. Vera, or if either leaves their position at BCM, the combined company's relationship with BCM may deteriorate, and its business could be harmed.

The combined company, and certain of its key medical and scientific personnel, will need additional agreements in place with BCM to expand its development, manufacture, and clinical trial efforts.

Although the combined company will have an exclusive license agreement with BCM under which Marker received a worldwide, exclusive license to BCM's rights in and to three patent families to develop and commercialize the MultiTAA product candidates, the combined company will need to enter into additional agreements with BCM with respect to (i) a strategic alliance to advance pre-clinical research, early stage clinical trials, and Phase II clinical trials with respect to the combined company's product candidates, as well as continued access to its clinical data, (ii) sponsored research for investigators within the Center for Cell and Gene Therapy at BCM, and (iii) product manufacturing and support, including personnel and space at the institution for the foreseeable future. Any delays in entering into new strategic agreements with BCM related to the combined company's product candidates could delay the development, manufacture, and clinical trials of its product candidates.

The multiple roles of certain of the combined company's officers and directors could limit their time and availability to the combined company, and create, or appear to create, conflicts of interest.

After completion of the merger, Dr. Leen and Dr. Vera will continue to be employees of BCM, and will be contractually obligated to spend a significant portion of their time for BCM. In addition, Dr. Leen and Dr. Vera are co-founders and members of ViraCyte, and perform services from time to time for ViraCyte LLC, or ViraCyte. ViraCyte is owned by the same principal stockholder group as Marker and has technology which is being developed under a license agreement with BCM by the same research group at BCM. More specifically, ViraCyte is a clinical stage biopharmaceutical company, which is investigating and developing virus-specific T cell therapy technology for the prevention and/or treatment of viral infections. Accordingly, Dr. Leen and Dr. Vera may have other commitments that would, at times, limit their availability to the combined company, and other research being conducted by Dr. Leen and Dr. Vera may, at times, receive higher priority than research on the combined company's programs, which may, in turn, delay the development or commercialization of the combined company's product candidates.

In addition, John Wilson is a member, director and officer of ViraCyte and will be a director of the combined company after the consummation of the merger. Dr. Leen and Dr. Vera are also co-founders and members of ViraCyte, and perform services for ViraCyte from time to time, and Dr. Vera will be a director of the combined company after the consummation of the merger. All of these individuals will have certain fiduciary or other obligations to the combined company after the consummation of the merger and certain

fiduciary or other obligations to ViraCyte and, in the case of Dr. Leen and Dr. Vera, to BCM. Such multiple obligations may in the future result in a conflict of interest with respect to presenting other potential business opportunities to the combined company or to ViraCyte. A conflict of interest also may arise concerning the timing of the parties' planned and ongoing clinical trials, investigational new drug application filings and the parties' opportunities for marketing their respective product candidates. In addition, they may be faced with decisions that could have different implications for the combined company than for ViraCyte. Consequently, there is no assurance that these members of the combined company's board and management would always act in the combined company's best interests in all situations should a conflict arise.

Product development involves a lengthy and expensive process with an uncertain outcome, and results of earlier pre-clinical and clinical trials may not be predictive of future clinical trial results.

Clinical testing is expensive and generally takes many years to complete, and the outcome is inherently uncertain. Failure can occur at any time during the clinical trial process. The results of pre-clinical testing and early clinical trials of the combined company's product candidates may not be predictive of the results of larger, later-stage controlled clinical trials. Product candidates that have shown promising results in early-stage clinical trials may still suffer significant setbacks in subsequent clinical trials. Marker's clinical trials to date have been conducted on a small number of patients in a single clinical site for a limited number of indications. The combined company will have to conduct larger, well-controlled trials in its proposed indications at multiple sites to verify the results obtained to date and to support any regulatory submissions for further clinical development of Marker's product candidates. TapImmune's and Marker's assumptions related to Marker's products, such as with respect to lack of toxicity and manufacturing cost estimates, are based on early limited clinical trials and current manufacturing process at BCM and may prove to be incorrect. In addition, the initial estimates of the clinical cost of development may prove to be inadequate, particularly if clinical trial timing or outcome is different than predicted or regulatory agencies require further testing before approval. A number of companies in the biopharmaceutical industry have suffered significant setbacks in advanced clinical trials due to lack of efficacy or adverse safety profiles despite promising results in earlier, smaller clinical trials. Moreover, clinical data are often susceptible to varying interpretations and analyses. The combined company does not know whether any Phase II, Phase III, or other clinical trials it may conduct will demonstrate consistent or adequate efficacy and safety with respect to the proposed indication for use sufficient to receive regulatory approval or market its product candidates.

The combined company may not be able to expand its manufacturing processes to other third-party manufacturing facilities or successfully create its own manufacturing infrastructure for supply of its requirements of product candidates for use in clinical trials and for commercial sale.

The combined company will not own any facility that may be used as its clinical-scale manufacturing and processing facility following the merger. The combined company anticipates it will initially rely solely on the cGMP manufacturing facility within BCM for the manufacturing of its product candidates. If the cGMP manufacturing facility of BCM, which does manufacturing for itself and other parties, experiences capacity constraints, disruptions, or delays in manufacturing the combined company's products, the combined company's planned clinical trials and necessary manufacturing capabilities will be disrupted or delayed, which will adversely affect the combined company's ability to conduct and further develop its business as currently planned. Further, the cGMP manufacturing facility is most likely too small to conduct the pivotal clinical studies being planned by the combined company, so the combined company will need to develop its own cGMP manufacturing capacity that will be adequate for such clinical trials.

In 2019, the combined company currently intends to begin developing additional cGMP manufacturing capacity of its own that would be capable of supporting its manufacturing needs with respect to its clinical trials, particularly with respect to pivotal studies. TapImmune and Marker expect that the combined company's manufacturing strategy will involve the use of one or more Contract Manufacturing Organizations, or CMOs, or the combined company will establish its own capabilities and infrastructure, including a manufacturing facility. Establishment of the combined company's own manufacturing facility is subject to many risks. For example, the establishment of a cell-therapy manufacturing facility is a complex endeavor requiring knowledgeable individuals. Creating an internal manufacturing infrastructure will rely upon building out a complex facility and finding personnel with an

appropriate background and training to staff and operate the facility. Should it be unable to find these individuals, the combined company may need to rely on external contractors or train additional personnel to fill needed roles. There are a small number of individuals with experience in cell therapy, and the competition for these individuals is high.

The combined company would expect that development of its own manufacturing facility could provide it with enhanced control of material supply for both clinical trials and the commercial market, enable the more rapid implementation of process changes, and allow for better long-term margins. However, neither TapImmune nor Marker has any experience as a company in developing a manufacturing facility and may never be successful in developing the combined company's own manufacturing facility or capability. The combined company may establish multiple manufacturing facilities as it expands its commercial footprint to multiple geographies, which may lead to regulatory delays or prove costly. Even if the combined company is successful, its manufacturing capabilities could be affected by cost-overruns, unexpected delays, equipment failures, labor shortages, natural disasters, power failures, transportation difficulties and numerous other factors that could prevent the combined company from realizing the intended benefits of its manufacturing strategy and have a material adverse effect on the combined company's clinical development and/or commercialization plans.

In addition, the manufacturing process for any products that the combined company may develop is subject to the U.S. Food and Drug Administration, or FDA, and foreign regulatory authority approval process, and the combined company will need to contract with manufacturers who can meet all applicable FDA and foreign regulatory authority requirements on an ongoing basis. If the combined company or its CMOs are unable to reliably produce products to specifications acceptable to the FDA, or other regulatory authorities, the combined company may not obtain or maintain the approvals it needs to commercialize such products. Even if the combined company obtains regulatory approval for any of its product candidates, there is no assurance that either the combined company or its CMOs will be able to manufacture the approved product to specifications acceptable to the FDA or other regulatory authorities, to produce it in sufficient quantities to meet the requirements for the potential launch of the product, or to meet potential future demand. Any of these challenges could delay completion of clinical trials, require bridging clinical trials or the repetition of one or more clinical trials, increase clinical trial costs, delay approval of the combined company's product candidate, impair commercialization efforts, increase its cost of goods, and have an adverse effect on its clinical development and/or commercialization plans.

Regardless of whether the combined company engages additional CMOs to manufacture its products or establishes its own manufacturing facility, in order to transfer the combined company's manufacturing from or expand its manufacturing capabilities beyond BCM pursuant to its development plans, whether through additional third parties or by developing its own manufacturing capabilities, the combined company will need access to the Standard Operating Procedures and the specific Batch Production Records that are used to manufacture the product candidates. If BCM fails to transfer Marker's manufacturing processes, or impedes the combined company's ability to transfer the manufacturing processes of its products to the combined company or third-party manufacturers, the combined company's planned clinical trials and additional necessary manufacturing capabilities will be delayed, which will adversely affect the combined company's ability to conduct and further develop its business as currently planned.

The combined company will be dependent on third-party vendors to design, build, maintain and support its manufacturing and cell processing facilities.

As a result of the combined company's strategy to outsource its manufacturing, it will rely very heavily on BCM and other third-party manufacturers to perform the combined company's manufacturing of Marker's products for its clinical trials. Marker also licenses a significant portion of its technology from others and, at this time, does not own any intellectual properties or technologies. The combined company intends to rely on its contract manufacturers to produce large quantities of materials needed for clinical trials and potential product commercialization. Third-party manufacturers may not be able to meet the combined company's needs concerning timing, quantity, or quality. If the combined company is unable to contract for a sufficient supply of needed materials on acceptable terms, or if it should encounter delays or difficulties in its relationships with manufacturers, its clinical testing may be delayed, thereby delaying the submission of products for regulatory approval or the market introduction and subsequent sales of its products. Any such delay may lower the combined company's revenues and potential profitability.

If any third party breaches or terminates its agreement with the combined company, or fails to conduct its activities in a timely manner, the commercialization of the combined company's products under development could be slowed down or blocked completely. It is possible that third parties relied upon by the combined company will change their strategic focus, pursue alternative technologies, or develop alternative products, either on their own or in collaboration with others, as a means for developing treatments for the diseases targeted by the combined company's collaborative programs, or for other reasons. The effectiveness of these third parties in marketing their own products may also affect the revenues and earnings of the combined company.

The combined company intends to continue to enter into additional third-party agreements in the future. However, the combined company may not be able to negotiate any additional agreements successfully. Even if established, these relationships may not be scientifically or commercially successful.

The combined company's manufacturing process is reliant upon the specialized equipment, and other specialty materials, which may not be available to the combined company on acceptable terms or at all. For some of this equipment and materials, the combined company relies or may rely on sole source vendors or a limited number of vendors, which could impair its ability to manufacture and supply its products.

The combined company will depend on a limited number of vendors for supply of certain materials and equipment used in the manufacture of its product candidates. For example, the combined company will purchase equipment and reagents critical for the manufacture of its product candidates from Wilson Wolf Manufacturing Corporation (a company controlled by a Marker stockholder, John Wilson, who will become a director of the combined company), JPT Peptide Technologies and other suppliers. Some of the combined company's suppliers may not have the capacity to support commercial products manufactured under cGMP by biopharmaceutical firms or may otherwise be ill-equipped to support the combined company's needs. The combined company also may not have supply contracts with many of these suppliers, and may not be able to obtain supply contracts with them on acceptable terms or at all. Accordingly, the combined company may not be able to obtain key materials and equipment to support clinical or commercial manufacturing.

For some of this equipment and materials, the combined company will rely, and may in the future rely, on sole-source vendors or a limited number of vendors. An inability to continue to source product from any of these suppliers, which could be due to regulatory actions or requirements affecting the supplier, adverse financial, or other strategic developments experienced by a supplier, labor disputes or shortages, unexpected demands, or quality issues, could adversely affect the combined company's ability to satisfy demand for its product candidates, which could adversely and materially affect the combined company's operating results or its ability to conduct clinical trials, either of which could significantly harm its business.

As the combined company continues to develop and scale its manufacturing process, it may need to obtain rights to and supplies of specific materials and equipment to be used as part of that process. For example, Marker's manufacturing process is based, in part, upon the G-Rex[®] cell culture device manufactured by Wilson Wolf Manufacturing Corporation, which is used by many cell therapy developers, both in commercial and academic settings. The combined company will not own any exclusive rights to the G-Rex[®] that could be used to prevent third parties from developing similar and competing processes. The combined company may not be able to obtain rights to such materials and equipment on commercially reasonable terms, or at all, and if the combined company is unable to alter its process in a commercially viable manner to avoid the use of such materials or find a suitable substitute, it would have a material adverse effect on its business.

The combined company may enter into one or more transactions with entities controlled by one of its directors, which could pose a conflict of interest.

John Wilson, currently a significant stockholder in Marker and who will be a director of the combined company, is also CEO and co-founder of Wilson Wolf Manufacturing Corporation, which is the sole source vendor that provides Marker with the G-Rex[®] cell culture device for the large-scale production of T cells used in Marker's manufacturing process. Marker does not currently have a supply contract with Wilson Wolf Manufacturing for the G-Rex[®]. The combined company plans to negotiate a supply contract with Wilson Wolf Manufacturing for the purchase of G-Rex[®] devices. The combined company also plans to

engage Wilson Wolf Manufacturing in discussions to customize the G-Rex[®] further to optimally match the combined company's manufacturing requirements, as well as to develop a scalability plan to drive efficiencies for a commercial product. There may be conflicts of interest between the combined company and Wilson Wolf Manufacturing. There can be no assurance that Wilson Wolf Manufacturing will agree to enter into any contract with the combined company, or that the terms of any such agreements will be in the best interests of the combined company, or will have terms no less favorable to the combined company than could have been obtained from unaffiliated third parties.

Risks Related to Combined Company's Financial Condition and Need for Additional Capital

Management will have broad discretion as to the use of the proceeds from the private placement transaction, and the combined company may not use the proceeds effectively.

The combined company's management will have broad discretion as to the application of the net proceeds from the private placement transaction for general corporate purposes and working capital to advance the development of the combined company's product candidates. Management may spend the proceeds in ways that do not necessarily improve its operating results or enhance the value of its common stock.

The combined company will require additional financing before it can generate any revenue from operations.

After consummation of the merger and the private placement transaction, the combined company anticipates having sufficient cash on hand to fund its operations for at least the next thirty months. The product candidates of the combined company, however, remain in the early stages of development and the combined company anticipates it will be years before it is able to generate any revenue from operations. Accordingly, the combined company will need additional debt or equity financing in the future to execute its business plan, complete its future clinical trials, and to add manufacturing, sales, marketing, and customer support personnel in the future to advance the commercialization of its products. The combined company will operate in a market that makes its prospects difficult to evaluate, and achievement of positive cash flow from operations will depend upon revenue resulting from the successful development of its product candidates, which depend upon regulatory clearance.

In the future, if the combined company fails to satisfy the continued listing standards of NASDAQ, it may not be able to sell shares of its common stock to raise additional capital. In addition, future market conditions may limit the ability of the combined company to raise capital on favorable terms, or at all, and the terms of any public or private offerings of debt or equity securities likely would be significantly dilutive to existing stockholders at such time. There is no guarantee that the combined company will be able to obtain any of the additional debt or equity financing that will be required after completion of the merger and the private placement transaction on commercially reasonable terms or at all. If the combined company fails to obtain the necessary debt or equity financing when needed, it may not be able to execute its planned development and commercialization efforts, which would have a material adverse effect on the combined company's growth strategy, the results of its operations and financial condition and stock price. If the combined company is unable to generate sufficient capital from operations or raise additional funds, it may need to consider other alternative actions, including one or more of the following:

- delay, scale-back, or eliminate research and development of some or all of the combined company's product candidates;
- license third parties to develop and commercialize products or technologies that TapImmune would otherwise seek to develop and commercialize ourselves;
- attempt to sell the company;
- cease operations; or
- declare bankruptcy.

The occurrence of any of the foregoing events would have a material adverse effect on the combined company's growth strategy, the results of its operations and financial condition, and stock price, and there can be no assurance that it would be able to continue as a going concern.

The issuance of additional equity securities may negatively impact the trading price of the combined company's common stock.

TapImmune has issued equity securities in the past, will issue equity securities in the merger and private placement transaction, and expects to continue to issue equity securities to finance the activities of the combined company in the future. In addition, outstanding options and warrants to purchase its common stock may be exercised, and additional options and warrants may be issued, resulting in the issuance of additional shares of common stock. The issuance by the combined company of additional equity securities, including the shares of common stock issuable upon exercise of the warrants issued by TapImmune in the private placement transaction, would result in dilution to the combined company's stockholders, and even the perception that such an issuance may occur could have a negative impact on the trading price of the combined company's common stock.

The combined company will have a significant number of outstanding warrants and options, and future sales of the shares obtained upon exercise of these options or warrants could adversely affect the market price of the combined company's common stock.

Upon completion of the merger and private placement transaction, the combined company will have outstanding warrants to purchase up to 23,387,089 shares of its common stock at a weighted average exercise price of \$4.76 per share, and options exercisable for an aggregate of 439,467 shares of common stock at a weighted average exercise price of \$6.77 per share, in each case calculated as if the merger had been consummated as of August 21, 2018. TapImmune has committed to register the resale of all the shares issuable upon exercise of these warrants, and they will be freely tradable by the exercising party upon issuance. Upon such registration, the holders may sell these shares in the public markets from time to time, without limitations on the timing, amount, or method of sale. If the combined company's stock price rises, the holders may exercise their warrants and options and sell a large number of shares. This could cause the market price of the combined company's common stock to decline and cause existing stockholders to experience significant further dilution.

Risks Related to Marker's Product Candidates

Marker is a development stage company with a limited operating history, which makes it difficult to evaluate its prospects.

Marker is a clinical-stage biopharmaceutical company. Marker has no products approved for commercial sale and has not generated any revenue. Marker does not expect to generate any meaningful product sales or royalty revenues for the foreseeable future, if ever. Marker expects to incur significant additional operating losses in the future as it expands development and clinical trial efforts.

Marker may encounter substantial delays in its clinical trials, or may not be able to conduct its trials on the timelines it expects.

Clinical testing is expensive, time-consuming, and subject to uncertainty. Marker cannot guarantee that any clinical studies will be conducted as planned or completed on schedule, if at all. BCM has submitted Investigational New Drug applications, or INDs, to the FDA, which allow the use of the Mixed Antigen Peptide Pool, or MAPP, T cells and the Leukemia Antigen Peptide Pool, or LAPP, T cells for human clinical testing. BCM initiated its first clinical trials for Marker's product candidate, MAPP, in 2012, and clinical trials for LAPP in 2016. Issues may yet arise that could suspend or terminate such clinical trials. BCM intends to transfer those INDs to Marker to allow further commercial development with the combined company, and will initiate new academic INDs to cover continued conduct of the BCM Phase I trials. A failure of one or more clinical studies can occur at any stage of testing, and Marker's future clinical studies may not be successful. Events that may prevent successful or timely completion of clinical development include:

- inability to generate sufficient preclinical data to support the initiation of clinical studies;
- delays in reaching a consensus with regulatory agencies on study design;

- the FDA may not allow Marker to use the clinical trial data from a research institution to support an IND if Marker cannot demonstrate the comparability of its product candidates with the product candidate used by the relevant research institution in its clinical studies;
- delays in reaching agreement on acceptable terms with prospective contract research organizations, or CROs, and clinical study sites, the terms of which can be subject to extensive negotiation and may vary significantly among different CROs and clinical study sites;
- delays in obtaining required Institutional Review Board, or IRB, approval at each clinical study site;
- the departure of a principal investigator from a clinical site, which could cause delays in conducting the clinical trial at a particular clinical site;
- imposition of a temporary or permanent clinical hold by regulatory agencies;
- delays in recruiting suitable patients to participate in Marker's clinical studies;
- failure by Marker's CROs, other third parties, or Marker to adhere to clinical study requirements;
- failure to perform in accordance with the FDA's current good clinical practices, or cGCPs, requirements, or applicable regulatory guidelines in other countries;
- patients dropping out of a study;
- occurrence of adverse events associated with the product candidate that are viewed to outweigh its potential benefits;
- changes in regulatory requirements and guidance that require amending or submitting new clinical protocols;
- changes in the standard of care on which a clinical development plan was based, which may require new or additional trials;
- the cost of clinical studies of Marker's product candidates being greater than Marker anticipates;
- clinical studies of Marker's product candidates producing negative or inconclusive results, which may result in Marker's deciding, or regulators requiring Marker, to conduct additional clinical studies or abandon product development programs;
- transfer of manufacturing processes from BCM to Marker's contract manufacturers or other larger-scale facilities operated by a contract manufacturing organization, or CMO, delays or failure by Marker's CMOs or Marker to make any necessary changes to such manufacturing process, and any inability to obtain all necessary reagents for manufacturing the product;
- any shutdown of Marker's sole manufacturing site at BCM, which would render Marker unable to produce its products for clinical trials;
- disruptions in transportation between the clinical site and manufacturing facility; and
- delays in manufacturing, testing, release, validating, or import/export of sufficient stable quantities of Marker's product candidates for use in clinical studies or the inability to do any of the foregoing, including any quality issues associated with the contract manufacturer.

Marker also may conduct clinical and preclinical research in collaboration with other biotechnology and biologics entities in which Marker combines its technologies with those of Marker's collaborators. Such collaborations may be subject to additional delays because of the management of the trials and the necessity of obtaining additional approvals for therapeutics used in the combination trials. These combination therapies will require additional testing and clinical trials will require additional FDA regulatory approval and will increase Marker's future expenses.

Any inability to successfully complete preclinical and clinical development could result in additional costs to Marker or impair Marker's ability to generate revenue. In addition, if Marker makes manufacturing or formulation changes to its product candidates, Marker may be required, or may elect, to conduct

additional studies to bridge its modified product candidates to earlier versions. Clinical study delays could also shorten any periods during which Marker's products have patent protection and may allow Marker's competitors to bring products to market before Marker does, which could impair Marker's ability to commercialize its product candidates successfully and may harm Marker's business and the results of its operations.

It may take longer and cost more to complete Marker's clinical trials than Marker projects, or Marker may not be able to complete them at all.

For budgeting and planning purposes, Marker has projected the dates for the commencement, continuation, and completion of Marker's various clinical trials. However, a number of factors, including scheduling conflicts with participating clinicians and clinical institutions, and difficulties in identifying and enrolling patients who meet trial eligibility criteria, may cause significant delays. Marker may not commence or complete clinical trials involving any of Marker's products as projected or may not conduct them successfully.

During the second half of 2012, BCM began enrollment of the investigator-sponsored, Phase 1 clinical trial to establish the feasibility of one of Marker's lead products, MAPP, and to assess its overall safety, inclusion of multiple antigens, and dosage tolerance in patients with lymphoma, with 13 active and 17 adjuvant patients treated to date, as well as 13 patients with multiple myeloma. During the second quarter of 2016, BCM began enrollment of the investigator-sponsored Phase 1 clinical trial to establish the feasibility of one of Marker's lead products, LAPP, and to assess its overall safety, inclusion of multiple antigens, and dosage tolerance in patients with acute myeloid leukemia (AML)/myelodysplastic syndromes (MDS). However, Marker may experience difficulties in patient enrollment in Marker's future clinical trials for a variety of reasons. The timely completion of clinical trials in accordance with their protocols depends, among other things, on Marker's ability to enroll a sufficient number of patients who remain in the study until its conclusion. In addition, Marker's clinical trials will compete with other clinical trials for product candidates that are in the same therapeutic areas as Marker's product candidates, and this competition will reduce the number and types of patients available to Marker, because some patients who might have opted to enroll in Marker's trials may instead opt to enroll in a trial being conducted by one of Marker's competitors. Accordingly, Marker cannot guarantee that the trial will progress as planned or as scheduled. Delays in patient enrollment may result in increased costs or may affect the timing or outcome of Marker's ongoing clinical trial and planned clinical trials, which could prevent completion of these trials and adversely affect Marker's ability to advance the development of Marker's product candidates.

Marker expects to rely on medical institutions, academic institutions, or clinical research organizations to conduct, supervise, or monitor some or all aspects of clinical trials involving Marker's products. Marker may have less control over the timing and other aspects of these clinical trials than if Marker conducted them entirely on its own. If Marker fails to commence or complete, or experience delays in, any of its planned clinical trials, Marker may experience delays in its clinical development and/or commercialization plans.

While BCM will continue to support the Marker trials with production of MAPP and LAPP T cells under contract, Marker anticipates that it will have to rely on third parties (CMOs) or internal facilities yet to be developed for the commercial manufacture of its multi-specific T cell therapy products for clinical trials and eventual licensure. If they fail to commence or complete, or experience delays in, manufacturing Marker's multi-specific T cell therapy products, Marker's planned clinical trials will be delayed, and Marker may experience delays in its clinical development and/or commercialization plans.

Clinical trials are expensive, time-consuming, and difficult to design and implement, and Marker's clinical trial costs may be higher than for more conventional therapeutic technologies or drug products.

Clinical trials are expensive and difficult to design and implement, in part because they are subject to rigorous regulatory requirements. Because Marker's product candidates are based on new technologies and manufactured on a patient-by-patient basis, Marker expects that they will require extensive research and development and have substantial manufacturing costs. In addition, costs to treat patients with relapsed/refractory, or r/r, cancer and to treat potential side effects that may result from Marker's product candidates can be significant. Some clinical trial sites may not bill, or obtain coverage from, Medicare, Medicaid, or

other third-party payors for some or all of these costs for patients enrolled in Marker's clinical trials, and Marker may be required by those trial sites to pay such costs. Accordingly, Marker's clinical trial costs may be significantly higher per patient than those of more conventional therapeutic technologies or drug products. In addition, Marker's proposed personalized product candidates involve several complex manufacturing and processing steps, the costs of which will be borne by Marker. Depending on the number of patients Marker ultimately enrolls in its trials, and the number of trials it may need to conduct, Marker's overall clinical trial costs may be higher than for more conventional treatments.

Marker's clinical trials may fail to demonstrate adequately the safety and efficacy of its product candidates, which would prevent or delay regulatory approval and commercialization.

The clinical trials of Marker's product candidates are, and the manufacturing and marketing of its products will be, subject to extensive and rigorous review and regulation by numerous government authorities in the United States and in other countries where Marker intends to test and market its product candidates. Before obtaining regulatory approvals for the commercial sale of any of Marker's product candidates, Marker must demonstrate through lengthy, complex, and expensive preclinical testing and clinical trials that its product candidates are both safe and effective for use in each target indication. In particular, because Marker's product candidates are subject to regulation as biological drug products, Marker will need to demonstrate that they are safe, pure and potent for use in their target indications. Each product candidate must demonstrate an adequate risk versus benefit profile in its intended patient population and for its intended use. The risk/benefit profile required for product licensure will vary depending on these factors and may include not only the ability to show tumor shrinkage, but also adequate duration of response, a delay in the progression of the disease, and/or an improvement in survival. For example, response rates from the use of Marker's product candidates may not be sufficient to obtain regulatory approval unless Marker can also show an adequate duration of response. Clinical testing is expensive and can take many years to complete, and its outcome is inherently uncertain. Failure can occur at any time during the clinical trial process. The results of preclinical studies and early clinical trials of Marker's product candidates may not be predictive of the results of later-stage clinical trials. The results of studies in one set of patients or line of treatment may not be predictive of those obtained in another. Marker expects that there may be greater variability in results for products processed and administered on a patient-by-patient basis, as anticipated for Marker's product candidates, than for "off-the-shelf" products, like many other drugs. There is typically an extremely high rate of attrition from the failure of product candidates proceeding through clinical trials. Product candidates in later stages of clinical trials may fail to show the desired safety and efficacy profile despite having progressed through preclinical studies and initial clinical trials. A number of companies in the biopharmaceutical industry have suffered significant setbacks in advanced clinical trials due to lack of efficacy or unacceptable safety issues, notwithstanding promising results in earlier trials. Most product candidates that begin clinical trials are never approved by regulatory authorities for commercialization.

In addition, even if such trials are successfully completed, Marker cannot guarantee that the FDA or foreign regulatory authorities will interpret the results as Marker does, and more trials could be required before Marker submits its product candidates for approval. To the extent that the results of the trials are not satisfactory to the FDA or foreign regulatory authorities for support of a marketing application, Marker may be required to expend significant resources, which may not be available to Marker, to conduct additional trials in support of potential approval of its product candidates.

If Marker encounters difficulties enrolling patients in Marker's clinical trials, its clinical development activities could be delayed or otherwise adversely affected.

The timely completion of clinical trials in accordance with their protocols depends, among other things, on Marker's ability to enroll a sufficient number of patients who remain in the trial until its conclusion. Marker may experience difficulties in patient enrollment in Marker's clinical trials for a variety of reasons, including:

- the size and nature of the patient population;
- the patient eligibility criteria defined in the protocol;

- the size of the study population required for analysis of the trial’s primary endpoints;
- the proximity of patients to trial sites;
- the design of the trial;
- Marker’s ability to recruit clinical trial investigators with the appropriate competencies and experience;
- competing clinical trials for similar therapies or other new therapeutics not involving cell-based immunotherapy;
- clinicians’ and patients’ perceptions of the potential advantages and side effects of the product candidate being studied in relation to other available therapies, including any new drugs or treatments that may be approved for the indications Marker is investigating;
- Marker’s ability to obtain and maintain patient consents; and
- the risk that patients enrolled in clinical trials will not complete a clinical trial.

In addition, Marker’s clinical trials will compete with other clinical trials for product candidates that are in the same therapeutic areas as Marker’s product candidates. This competition will reduce the number and types of patients available to Marker, because some patients who might have opted to enroll in Marker’s trials may instead opt to enroll in a trial being conducted by one of Marker’s competitors. Because the number of qualified clinical investigators is limited, Marker expects to conduct some of its clinical trials at the same clinical trial sites that some of Marker’s competitors use, which will reduce the number of patients who are available for Marker’s clinical trials at such clinical trial sites. Moreover, because Marker’s product candidates represent a departure from more commonly used methods of cancer treatment, potential patients and their doctors may be inclined to use conventional therapies, such as chemotherapy and approved immunotherapies, rather than enroll patients in any future clinical trial. In addition, potential enrollees may opt to participate in alternate clinical trials because of the length of time between the time that the patient’s or the donor’s blood is drawn and the product is infused back into the patient.

Even if Marker can enroll a sufficient number of patients in Marker’s clinical trials, delays in patient enrollment may result in increased costs or may affect the timing or outcome of the planned clinical trials, which could prevent completion of these trials and adversely affect Marker’s ability to advance the development of its product candidates.

Marker’s product candidates may cause undesirable side effects or have other properties that could halt their clinical development, prevent their regulatory approval, limit their commercial potential, or result in significant negative consequences.

Undesirable side effects caused by Marker’s product candidates could cause Marker or regulatory authorities to interrupt, delay, or halt clinical trials and could result in a more restrictive label or the delay or denial of regulatory approval by the FDA or other comparable foreign regulatory authorities. Results of Marker’s trials could reveal a high and unacceptable severity and prevalence of side effects or unexpected characteristics.

If unacceptable toxicities arise in the development of Marker’s product candidates, Marker or the FDA or comparable foreign regulatory authorities could order Marker to cease clinical trials or deny approval of its product candidates for any or all targeted indications. Treatment-related side effects could also affect patient recruitment or the ability of enrolled subjects to complete the trial or result in potential product liability claims. In addition, these side effects may not be appropriately recognized or managed by the treating medical staff, as toxicities resulting from personalized cell therapy are not normally encountered in the general patient population and by medical personnel. Any of these occurrences may harm Marker’s business, financial condition and prospects significantly.

The manufacture of Marker’s product candidates is complex, and Marker may encounter difficulties in production, particularly with respect to process development or scaling-out of Marker’s manufacturing capabilities. If Marker, or any of Marker’s third-party manufacturers encounter such difficulties, Marker’s ability to supply its product candidates for clinical trials, or its products for patients, if approved, could be delayed or stopped, or Marker may be unable to maintain a commercially viable cost structure.

Marker’s product candidates are biologics, and the process of manufacturing its products is complex, highly regulated and subject to multiple risks. The manufacture of Marker’s product candidates involves

complex processes, including drawing blood from patients/donors, manufacturing the clinical product, and ultimately infusing the product into a patient. As a result of the complexities, the cost to manufacture biologics is generally higher than traditional small molecule chemical compounds, and the manufacturing process is less reliable and is more difficult to reproduce. Marker's manufacturing process will be susceptible to product loss or failure due to any of the following: logistical issues associated with the collection of blood cells, or starting material, from the patient, shipping such material to the manufacturing site, shipping the final product back to the patient, and infusing the patient with the product; manufacturing issues associated with the differences in patient starting cells; interruptions in the manufacturing process; contamination; equipment failure; improper installation or operation of equipment, vendor or operator error; inconsistency in cell growth; and variability in product characteristics. Even minor deviations from normal manufacturing processes could result in reduced production yields, product defects, and other supply disruptions. If for any reason Marker loses a patient's cells, or later-developed product at any point in the process, the manufacturing process for that patient will need to be restarted and the resulting delay may adversely affect that patient's outcome and/or the results of clinical trials. If microbial, viral, or other contaminations are discovered in Marker's product candidates or in the manufacturing facilities in which Marker's product candidates are made, such manufacturing facilities may need to be closed for an extended period of time to investigate and remedy the contamination.

Because Marker's product candidates are manufactured for each particular patient, Marker will be required to maintain a chain of identity with respect to the patient's/donor's blood cells as it moves from the patient to the manufacturing facility, through the manufacturing process, and back to the patient. Maintaining such a chain of identity is difficult and complex, and failure to do so could result in adverse patient outcomes, loss of product, or regulatory action including withdrawal of Marker's products from the market. Further, as product candidates are developed through preclinical to late stage clinical trials towards approval and commercialization, it is common that various aspects of the development program, such as manufacturing methods, are altered along the way in an effort to optimize processes and results. Such changes carry the risk that they will not achieve these intended objectives, and any of these changes could cause Marker's product candidates to perform differently and affect the results of planned clinical trials or other future clinical trials.

Currently, Marker's product candidates are manufactured using processes by BCM, its third-party research institution collaborator, that Marker may not intend to use for more advanced clinical trials or commercialization. Although Marker is working to develop commercially viable processes, doing so is a difficult and uncertain task, and there are risks associated with scaling to the level required for advanced clinical trials or commercialization, including, among others, cost overruns, potential problems with process scale-out, process reproducibility, stability issues, lot consistency, and timely availability of raw materials. As a result of these challenges, Marker may experience delays in Marker's clinical development and/or commercialization plans. Marker may ultimately be unable to reduce the cost of goods for Marker's product candidates to levels that will allow for an attractive return on investment if and when those product candidates are commercialized.

The deviations in Marker's proposed new products from existing products may require Marker to perform additional testing, which will increase the cost, and extend the time for obtaining approval.

Marker's MultiTAA T cell therapy platform is based on the adoptive T cell therapy technology that Marker licensed from BCM and that is presently available as a physician-sponsored investigational therapy for the treatment of lymphoma, AML/MDS and multiple myeloma in the U.S. at BCM. The current method of treatment is labor intensive and expensive. Marker is performing process optimization that it anticipates will enable more efficient manufacturing of its products. Marker may have difficulty demonstrating that the products produced from its new processes are identical to the existing products. The FDA may require additional clinical testing before permitting a larger clinical trial with the new processes, and also the product may not be as efficacious in the new clinical trials. Cellular products are not considered to be well characterized products because there are hundreds of markers present on these cells, and even small changes in manufacturing processes could alter the cell types. It is unclear at this time which of those markers are critical for success of these cells to combat cancer, so Marker's ability to predict the outcomes with newer manufacturing processes is limited. The changes that Marker may make to the existing manufacturing process may require additional testing, which may increase costs and timelines associated with these developments.

In addition to developing a multi-antigen T cell-based therapy on existing adoptive T cell therapy technology, Marker is currently evaluating the desirability of conducting clinical trials of Marker's products in combination with other existing drugs. These combination therapies will require additional testing, and clinical trials will require additional FDA regulatory approval and will increase Marker's future cost of development.

Marker will be unable to commercialize its products if its trials are not successful.

Marker's research and development programs are at an early stage. Marker must demonstrate its products' safety and efficacy in humans through extensive clinical testing. Marker may experience numerous unforeseen events during, or as a result of, the testing process that could delay or prevent commercialization of Marker's products, including but not limited to the following:

- safety and efficacy results in various human clinical trials reported in scientific and medical literature may not be indicative of results Marker obtains in its clinical trials;
- after reviewing test results, Marker or its collaborators may abandon projects that Marker might previously have believed to be promising;
- Marker, its collaborators or regulators, may suspend or terminate clinical trials if the participating subjects or patients are being exposed to unacceptable health risks; and
- the effects Marker's potential products have may not be the desired effects or may include undesirable side effects or other characteristics that preclude regulatory approval or limit their commercial use if approved.

Clinical testing is very expensive, can take many years, and the outcome is uncertain. It can take as much as 12 months or more before Marker learns the results from any clinical trial using Marker's MultiTAA T cell therapy. The data collected from Marker's clinical trials may not be sufficient to support approval by the FDA of Marker's MultiTAA T cell therapy-based product candidates for the treatment of hematological malignancies. The clinical trials for Marker's products under development may not be completed on schedule and the FDA may not ultimately approve any of Marker's product candidates for commercial sale. If Marker fails to adequately demonstrate the safety and efficacy of any product candidate under development, Marker may not receive regulatory approval for those products, which would prevent Marker from generating revenues or achieving profitability.

Marker's research and development efforts are to a large extent dependent upon BCM's investigators.

It will take time to fully develop Marker's research and development infrastructure. Marker currently depends upon and will continue to depend upon independent investigators and collaborators, such as BCM, and which in the future may include other universities, medical institutions, and strategic partners, to conduct Marker's preclinical and clinical trials. Marker does not yet have its own research and development laboratory or a strategic research and development agreement or manufacturing agreement in place with BCM. If Marker needs to enter into alternative arrangements, its product development activities would be delayed. Agreements with such third parties might terminate for a variety of reasons, including a failure to perform by the third parties.

Marker expects to use the results of BCM's research to support the filing with the FDA of INDs to conduct more advanced clinical trials of Marker's products. However, Marker has limited control over the nature or timing of BCM's clinical trials and limited visibility into their day-to-day activities. The research Marker is funding constitutes only a small portion of BCM's overall research. Other research being conducted by Dr. Ann Leen and Dr. Juan Vera may at times receive higher priority than research on Marker's programs. These factors could adversely affect the timing of Marker's IND filings and its ability to conduct future planned clinical trials.

Marker is subject to extensive regulation, which can be costly, time consuming and can subject Marker to unanticipated delays; even if Marker obtains regulatory approval for some of its products, those products may still face regulatory difficulties.

All of Marker's potential products, cell processing and manufacturing activities, are subject to comprehensive regulation by the FDA in the United States and by comparable authorities in other

countries. The process of obtaining FDA and other required regulatory approvals, including foreign approvals, is expensive and often takes many years and can vary substantially based upon the type, complexity and novelty of the products involved. In addition, regulatory agencies may lack experience with Marker's technologies and products, which may lengthen the regulatory review process, increase Marker's development costs and delay or prevent their commercialization.

No adoptive T cell therapy using MultiTAA T cells has been approved for marketing in the U.S. by the FDA. Consequently, there is no precedent for the successful commercialization of products based on Marker's technologies. In addition, Marker has had only limited experience in filing and pursuing applications necessary to gain regulatory approvals, which may impede Marker's ability to obtain timely FDA approvals, if at all. Marker has not yet sought FDA approval for any adoptive T cell therapy product. Marker will not be able to commercialize any of its potential products until Marker obtains FDA approval, and so any delay in obtaining, or inability to obtain, FDA approval would harm Marker's proposed business.

If Marker violates regulatory requirements at any stage, whether before or after marketing approval is obtained, Marker may be fined, forced to remove a product from the market and experience other adverse consequences including delay, which could materially harm Marker's business development. Additionally, Marker may not be able to obtain the labeling claims necessary or desirable for the promotion of its products. Marker may also be required to undertake post-marketing trials. In addition, if Marker or others identify side effects after any of Marker's adoptive T cell therapy products are on the market, or if manufacturing problems occur, regulatory approval may be withdrawn and reformulation of Marker's products may be required.

Marker may not be able to license newly developed MultiTAA T cell technology from BCM and others.

An important element of Marker's intellectual property portfolio is to license additional rights and technologies from BCM. Marker's inability to license the rights and technologies that Marker has identified, or newly developed MultiTAA T cell technology that Marker may in the future identify, could have a material adverse impact on Marker's ability to complete the development of its products or to develop additional products. No assurance can be given that Marker will be successful in licensing any additional rights or technologies from BCM and others. Failure to obtain additional rights and licenses may detrimentally affect Marker's planned development of additional product candidates and could increase the cost, and extend the timelines associated with Marker's development of such other products.

The market opportunities for Marker's product candidates may be limited to those patients who are ineligible for or have failed prior treatments and may be small.

The FDA often approves new therapies initially only for use in patients with relapsed or refractory metastatic disease. Marker expects to initially seek approval of its product candidates in this setting. Subsequently, for those products that prove to be sufficiently beneficial, if any, Marker would expect to seek approval in earlier lines of treatment and potentially as a first line therapy. There is no guarantee, however, that Marker's product candidates, even if approved, would be approved for earlier lines of therapy, and, prior to any such approvals, Marker may have to conduct additional clinical trials.

Marker's projections of both the number of people who have the cancers it is targeting, as well as the subset of people with these cancers in a position to receive second or third line therapy, and who have the potential to benefit from treatment with Marker's product candidates, are based on Marker's research and estimates. These estimates have been derived from a variety of sources, including scientific literature, surveys of clinics, patient foundations, or market research by third parties, and may prove to be incorrect. Further, new studies may change the estimated incidence or prevalence of these cancers. The number of treatable patients may turn out to be lower than expected. Additionally, the potentially addressable patient population for Marker's product candidates may be limited or may not be amenable to treatment with Marker's product candidates, and may also be limited by the cost of Marker's treatments and the reimbursement of those treatment costs by third-party payors. For instance, Marker expects its lead product candidate, LAPP, to initially target a small patient population that suffers from AML. Even if Marker obtains significant market share for its product candidates, because the potential target populations are small, Marker may never achieve profitability without obtaining regulatory approval for additional indications.

Marker is required to pay substantial royalties and lump sum milestone payments under Marker's license agreement with BCM, and Marker must meet certain milestones to maintain Marker's license rights.

Under Marker's license agreement with BCM for Marker's MultiTAA T cell therapy technologies, Marker is currently required to pay both substantial milestone payments and royalties to BCM based on its revenues from sales of its products utilizing the licensed technologies, and these payments could adversely affect the overall profitability for Marker of any products that it may seek to commercialize. In order to maintain its license rights under the BCM license agreement, Marker will need to meet certain specified milestones, subject to certain cure provisions, in the development of its product candidates. There is no assurance that Marker will be successful in meeting all of the milestones in the future on a timely basis or at all.

In addition, upon a liquidity event (as defined in Marker's Exclusive License Agreement, or the BCM license agreement, with BCM, but shall not include the merger) of the licensee under the BCM license agreement (which, if the merger is consummated, the licensee shall be the combined company), BCM will receive a liquidity incentive payment of 0.5% of the liquidity event proceeds (as defined in the BCM license agreement) received by such licensee or its stockholders in the liquidity event, thereby diluting the amount of proceeds available to the licensee or its stockholders in a liquidity event.

Because Marker's current products represent, and Marker's other potential product candidates will represent novel approaches to the treatment of disease, there are many uncertainties regarding the development, the market acceptance, third-party reimbursement coverage and the commercial potential of Marker's product candidates.

There is no assurance that the approaches offered by Marker's products will gain broad acceptance among doctors or patients or that governmental agencies or third-party medical insurers will be willing to provide reimbursement coverage for proposed product candidates. Moreover, Marker does not have verifiable internal marketing data regarding the potential size of the commercial market for Marker's product candidates, nor has Marker obtained independent marketing surveys to verify the potential size of the commercial markets for Marker's current product candidates or any future product candidates. Since Marker's current product candidates and any future product candidates will represent new approaches to treating various conditions, it may be difficult, in any event, to accurately estimate the potential revenues from these product candidates. Accordingly, Marker may spend large amounts of money trying to obtain approval for product candidates that have an uncertain commercial market. The market for any products that Marker successfully develops will also depend on the cost of the product. Marker does not yet have sufficient information to reliably estimate what it will cost to commercially manufacture Marker's current product candidates, and the actual cost to manufacture these products could materially and adversely affect the commercial viability of these products. Marker's goal is to reduce the cost of manufacturing its therapies. However, unless Marker is able to reduce those costs to an acceptable amount, Marker may never be able to develop a commercially viable product. If Marker does not successfully develop and commercialize products based upon its approach, or find suitable and economical sources for materials used in the production of its products, Marker will not become profitable.

Marker's MultiTAA T cell therapy may be provided to patients in combination with other agents provided by third parties. The cost of such combination therapy may increase the overall cost of MultiTAA T cell therapy and may result in issues regarding the allocation of reimbursements between Marker's therapy and the other agents, all of which may adversely affect Marker's ability to obtain reimbursement coverage for the combination therapy from third-party medical insurers.

No assurance can be given that Marker will be able to develop a new, FDA-compliant, more efficient, lower cost manufacturing process upon which Marker's business plan to commercialize MultiTAA-based products is dependent.

In cooperation with Marker's potential contract manufacturers, Marker intends to develop improved methods for generating and selecting T cells, and to develop methods for large-scale production of its current product candidates that are in accordance with current Good Manufacturing Practices, or cGMP, procedures. Developing a new, scaled-up, pharmaceutical manufacturing process that can more efficiently and cost effectively, and in a more automated manner produce, measure and control the physical and/or

chemical attributes of Marker's products in a cGMP facility is subject to many uncertainties and difficulties. Marker has never manufactured its adoptive T cell therapy product candidate on any scale, commercial or otherwise. As a result, Marker cannot give any assurance that it will be able to establish a manufacturing process that can produce its products at a cost or in quantities necessary to make them commercially viable. Moreover, Marker's third-party manufacturers will have to continually adhere to current cGMP regulations enforced by the FDA through its facilities inspection program. If the facilities of these manufacturers cannot pass a pre-approval plant inspection, the FDA premarket approval of Marker's products will not be granted. In complying with cGMP and foreign regulatory requirements, Marker and any of Marker's third-party manufacturers will be obligated to expend time, money and effort in production, record-keeping and quality control to assure that Marker's products meet applicable specifications and other requirements. If Marker or any of its third-party manufacturers fail to comply with these requirements, Marker may be subject to regulatory action. No assurance can be given that Marker will be able to develop such manufacturing process, or that its partners will thereafter be able to establish and operate such a production facility.

If product liability lawsuits are brought against Marker, Marker may incur substantial liabilities and may be required to limit commercialization of Marker's product candidates.

Marker faces an inherent risk of product liability as a result of the clinical testing of its product candidates and will face an even greater risk if Marker commercializes any products. For example, Marker may be sued if its product candidates cause or are perceived to cause injury or are found to be otherwise unsuitable during clinical testing, manufacturing, marketing or sale. Any such product liability claims may include allegations of defects in manufacturing, defects in design, a failure to warn of dangers inherent to the product, negligence, strict liability or a breach of warranties. Claims could also be asserted under state consumer protection laws. If Marker cannot successfully defend itself against product liability claims, Marker may incur substantial liabilities or be required to limit commercialization of its product candidates. Even successful defense would require significant financial and management resources. Regardless of the merits or eventual outcome, liability claims may result in:

- decreased demand for Marker's product candidates;
- injury to Marker's reputation;
- withdrawal of clinical trial participants;
- initiation of investigations by regulators;
- costs to defend the related litigation;
- a diversion of management's time and Marker's resources;
- substantial monetary awards to trial participants or patients;
- product recalls, withdrawals or labeling, marketing or promotional restrictions;
- loss of revenue;
- exhaustion of any available insurance and Marker's capital resources; and
- the inability to commercialize any product candidate.

Marker's inability to obtain sufficient product liability insurance at an acceptable cost to protect against potential product liability claims could inhibit or prevent the commercialization of products it develops, alone or with collaborators. Marker's insurance policies may also have various exclusions, and Marker may be subject to a product liability claim for which Marker has no insurance coverage. While Marker will obtain clinical trial insurance for Marker's Phase II clinical trials of MAPP and LAPP, Marker may have to pay amounts awarded by a court or negotiated in a settlement that exceed Marker's coverage limitations or that are not covered by its insurance, and Marker may not have, or be able to obtain, sufficient capital to pay such amounts. Even if Marker's agreements with any future collaborators entitle it to indemnification against losses, such indemnification may not be available or adequate should any claim arise.

Marker faces significant competition from other biotechnology and pharmaceutical companies and from non-profit institutions.

Competition in the field of cancer therapy is intense and is accentuated by the rapid pace of technological development. Research and discoveries by others may result in breakthroughs that may render Marker's products obsolete even before they generate any revenue. There are products currently under development by others that could compete with the products that Marker is developing. Many of Marker's potential competitors have substantially greater research and development capabilities and manufacturing, marketing, financial and managerial resources than Marker has. Marker's competitors may:

- develop safer or more effective immunotherapies and other therapeutic products;
- reach the market more rapidly, reducing the potential sales of Marker's products; or
- establish superior proprietary positions.

Potential competitors in the market for treating hematological malignancies are companies such as Bristol-Myers Squibb, Roche/Genentech, Merck, Novartis, Gilead, Amgen, Pfizer, and GlaxoSmithKline, which already have products on the market or in development. Other companies, such as Celgene, Cellectis and Adaptimmune, which are focused on genetically engineered T cell technologies to treat cancer, may also be competitors. Furthermore, companies such as Iovance are developing non-genetically modified T cell therapies such as Tumor Infiltrating Lymphocyte, or TIL, therapies that may compete with Marker's products. All of these companies, and most of Marker's other current and potential competitors have substantially greater research and development capabilities and financial, scientific, regulatory, manufacturing, marketing, sales, human resources, and experience than Marker does. Many of Marker's competitors have several therapeutic products that have already been developed, approved and successfully commercialized, or are in the process of obtaining regulatory approval for their therapeutic products in the United States and internationally.

Universities and public and private research institutions in the U.S. and around the world are also potential competitors. While these universities and public and private research institutions primarily have educational objectives, they may develop proprietary technologies that lead to other FDA approved therapies or that secure patent protection that Marker may need for the development of its technologies and products.

Marker's lead product candidate, LAPP, is a therapy for the treatment of refractory AML. Currently, there are numerous companies that are developing various alternate treatments for AML. Accordingly, LAPP faces significant competition in the AML treatment space from multiple companies. Even if Marker obtains regulatory approval for LAPP, the availability and price of competitors' products could limit the demand and the price Marker will be able to charge for its therapy. Marker may not be able to implement its business plan if the acceptance of its products is inhibited by price competition or the reluctance of physicians to switch from other methods of treatment to Marker's product, or if physicians switch to other new therapies, drugs or biologic products or choose to reserve Marker's products for use in limited circumstances.

Marker's internal computer systems, or those used by its contract research organizations or other contractors or consultants, may fail or suffer security breaches.

Despite the implementation of security measures, Marker's internal computer systems and those of its contract research organizations and other contractors and consultants are vulnerable to damage from computer viruses, unauthorized access, natural disasters, terrorism, war and telecommunication and electrical failures. If such an event were to occur and cause interruptions in Marker's operations, it could result in disruption of Marker's drug development programs. For example, the loss of clinical study data from completed or ongoing clinical studies for a product candidate could result in delays in Marker's regulatory approval efforts and significantly increase its costs to recover or reproduce the data. To the extent that any disruption or security breach were to result in loss of or damage to Marker's data or applications, or inappropriate disclosure of confidential or proprietary information, Marker could incur liability and the further development of any product candidates could be delayed.

Risks Related to Government Regulation of Marker

The FDA regulatory approval process is lengthy and time-consuming, and Marker may experience significant delays in the clinical development and regulatory approval of its product candidates.

Marker has not previously submitted a Biologics License Application, or BLA, to the FDA, or similar approval filings to comparable foreign authorities. A BLA must include extensive preclinical and clinical data and supporting information to establish the product candidate's safety and effectiveness for each desired indication. The BLA must also include significant information regarding the chemistry, manufacturing and controls, or CMC, for the product. Marker expects the novel nature of Marker's product candidates to create further challenges in obtaining regulatory approval. For example, the FDA has limited experience with commercial development of cell therapies for cancer. Accordingly, the regulatory approval pathway for Marker's product candidates may be uncertain, complex, expensive and lengthy, and approval may not be obtained.

Marker may also experience delays in completing planned clinical trials for a variety of reasons, including delays related to:

- the availability of financial resources to commence and complete the planned trials;
- reaching agreement on acceptable terms with prospective CROs and clinical trial sites, the terms of which can be subject to extensive negotiation and may vary significantly among different CROs and trial sites;
- obtaining approval by an independent institutional review board, or IRB, at each clinical trial site;
- recruiting suitable patients to participate in a trial;
- having patients complete a trial or return for post-treatment follow-up;
- clinical trial sites deviating from trial protocol or dropping out of a trial;
- adding new clinical trial sites; or
- manufacturing sufficient quantities of qualified materials under cGMPs and applying them on a subject by subject basis for use in clinical trials.

Marker could also encounter delays if physicians face unresolved ethical issues associated with enrolling patients in clinical trials of Marker's product candidates in lieu of prescribing existing treatments that have established safety and efficacy profiles. Further, a clinical trial may be suspended or terminated by Marker, the IRB for the institutions in which such trials are being conducted, the Data Monitoring Committee for such trial, or by the FDA or other regulatory authorities due to a number of factors. Those factors could include failure to conduct the clinical trial in accordance with regulatory requirements or Marker's clinical protocols, inspection of the clinical trial operations or trial site by the FDA or other regulatory authorities resulting in the imposition of a clinical hold, unforeseen safety issues or adverse side effects, failure to demonstrate a benefit from using a product candidate, changes in governmental regulations or administrative actions or lack of adequate funding to continue the clinical trial. If Marker experiences termination of, or delays in the completion of, any clinical trial of Marker's product candidates, the commercial prospects for Marker's product candidates will be harmed, and its ability to generate product revenue will be delayed. In addition, any delays in completing Marker's clinical trials will increase Marker's costs, slow down Marker's product development and approval process and jeopardize Marker's ability to commence product sales and generate revenue.

Obtaining and maintaining regulatory approval of Marker's product candidates in one jurisdiction does not mean that Marker will be successful in obtaining regulatory approval of its product candidates in other jurisdictions.

Obtaining and maintaining regulatory approval of Marker's product candidates in one jurisdiction does not guarantee that Marker will be able to obtain or maintain regulatory approval in any other jurisdiction, while a failure or delay in obtaining regulatory approval in one jurisdiction may have a negative effect on the regulatory approval process in others. For example, even if the FDA grants marketing approval

of a product candidate, comparable regulatory authorities in foreign jurisdictions must also approve the manufacturing, marketing and promotion of the product candidate in those countries. Approval procedures vary among jurisdictions and can involve requirements and administrative review periods different from, and greater than, those in the United States, including additional preclinical studies or clinical trials as clinical studies conducted in one jurisdiction may not be accepted by regulatory authorities in other jurisdictions. In many jurisdictions outside the United States, a product candidate must be approved for reimbursement before it can be approved for sale in that jurisdiction. In some cases, the price that Marker intends to charge for Marker's products is also subject to approval.

Marker may also submit marketing applications in other countries. Regulatory authorities in jurisdictions outside of the United States have requirements for approval of product candidates with which Marker must comply prior to marketing in those jurisdictions. Obtaining foreign regulatory approvals and compliance with foreign regulatory requirements could result in significant delays, difficulties and costs for Marker and could delay or prevent the introduction of its products in certain countries. If Marker fails to comply with the regulatory requirements in international markets and/or receive applicable marketing approvals, its target market will be reduced and Marker's ability to realize the full market potential of its product candidates will be harmed.

Even if Marker receives regulatory approval of its product candidates, it will be subject to ongoing quality and regulatory obligations and continued regulatory review, which may result in significant additional expense, and Marker may be subject to penalties if it fails to comply with regulatory requirements or experiences unanticipated problems with its product candidates.

Any regulatory approvals that Marker receives for its product candidates will require surveillance to monitor the safety and efficacy of the product candidate. The FDA may also require a risk evaluation and mitigation strategy in order to approve Marker's product candidates, which could entail requirements for a medication guide, physician communication plans or additional elements to ensure safe use, such as restricted distribution methods, patient registries and other risk minimization tools. In addition, if the FDA or a comparable foreign regulatory authority approves Marker's product candidates, the manufacturing processes, labeling, packaging, distribution, adverse event reporting, storage, advertising, promotion, import, export and recordkeeping for Marker's product candidates will be subject to extensive and ongoing regulatory requirements. These requirements include submissions of safety and other post-marketing information and reports, registration, as well as continued compliance with cGMPs and cGCPs for any clinical trials that Marker conducts post-approval. Later discovery of previously unknown problems with Marker's product candidates, including adverse events of unanticipated severity or frequency, or with Marker's third-party manufacturers or manufacturing processes, or failure to comply with regulatory requirements, may result in, among other things:

- restrictions on the marketing or manufacturing of Marker's product candidates, withdrawal of the product from the market, or voluntary or mandatory product recalls;
- fines, warning letters or holds on clinical trials;
- refusal by the FDA to approve pending applications or supplements to approved applications filed by Marker or suspension or revocation of license approvals;
- product seizure or detention, or refusal to permit the import or export of Marker's product candidates; and
- injunctions or the imposition of civil or criminal penalties.

The FDA's and other regulatory authorities' policies may change and additional government regulations may be enacted that could prevent, limit or delay regulatory approval of Marker's product candidates. Marker cannot predict the likelihood, nature or extent of government regulation that may arise from future legislation or administrative action, either in the United States or abroad. If Marker is slow or unable to adapt to changes in existing requirements or the adoption of new requirements or policies, or if it is not able to maintain regulatory compliance, Marker may lose any marketing approval that it may have obtained and Marker may not achieve or sustain profitability.

Recently enacted and future legislation in the United States and other countries may affect the prices Marker may obtain for its product candidates and increase the difficulty and cost to commercialize its product candidates.

In the United States and many other countries, rising healthcare costs have been a concern for governments, patients and the health insurance sector, which has resulted in a number of changes to laws and regulations, and may result in further legislative and regulatory action regarding the healthcare and health insurance systems that could affect Marker's ability to profitably sell any product candidates for which it has obtained marketing approval.

For example, the Patient Protection and Affordable Care Act, as amended by the Health Care and Education Reconciliation Act, or ACA, was enacted in the United States in March 2010, with the stated goals of containing healthcare costs, improving quality and expanding access to healthcare, and includes measures to change health care delivery, increase the number of individuals with insurance, ensure access to certain basic health care services, and contain the rising cost of care. Since January 2017, President Trump has signed two executive orders and other directives designed to delay, circumvent, or loosen certain requirements mandated by the ACA. Concurrently, Congress has considered legislation that would repeal or repeal and replace all or part of the ACA. While Congress has not passed repeal legislation, two bills affecting the implementation of certain taxes under the ACA have been signed into law. The Tax Cuts and Jobs Act of 2017 includes a provision that repealed, effective January 1, 2019, the tax-based shared responsibility payment imposed by the ACA on certain individuals who fail to maintain qualifying health coverage for all or part of a year that is commonly referred to as the "individual mandate". Additionally, on January 22, 2018, President Trump signed a continuing resolution on appropriations for fiscal year 2018 that delayed the implementation of certain ACA-mandated fees, including the so-called "Cadillac" tax on certain high cost employer-sponsored insurance plans, the annual fee imposed on certain health insurance providers based on market share, and the medical device excise tax on non-exempt medical devices. Further, the Bipartisan Budget Act of 2018, among other things, amended the ACA, effective January 1, 2019, to increase from 50% to 70% the point-of-sale discount that is owed by pharmaceutical manufacturers who participate in Medicare Part D and to close the coverage gap in most Medicare drug plans, commonly referred to as the "donut hole." Congress may consider other legislation to repeal or replace elements of the ACA. These executive orders and legislative actions may result in increased health insurance premiums and reduce the number of people with health insurance in the United States, and have other effects that could adversely affect U.S. health insurance markets and the ability of patients to have access to therapies that Marker's product candidates can provide.

In addition, other federal health reform measures have been proposed and adopted in the United States. For example, as a result of the Budget Control Act of 2011, providers are subject to Medicare payment reductions of 2% per fiscal year through 2027 unless additional Congressional action is taken. Further, the American Taxpayer Relief Act of 2012 reduced Medicare payments to several providers and increased the statute of limitations period for the government to recover overpayments to providers from three to five years. The Medicare Access and CHIP Reauthorization Act of 2015 also introduced a quality payment program under which certain individual Medicare providers will be subject to certain incentives or penalties based on new program quality standards. Payment adjustments for the Medicare quality payment program will begin in 2019. At this time, it is unclear how the introduction of the quality payment program will impact overall physician reimbursement under the Medicare program. Any reduction in reimbursement from Medicare or other government programs may result in a similar reduction in payments from private payors. Further, there has been heightened governmental scrutiny in the United States of pharmaceutical pricing practices in light of the rising cost of prescription drugs and biologics.

The combination of healthcare cost containment measures, increased health insurance costs, reduction of the number of people with health insurance coverage, as well as future legislation and regulations focused on reducing healthcare costs by reducing the cost of, or reimbursement and access to, pharmaceutical products, may limit or delay Marker's ability to commercialize its products, generate revenue or attain profitability.

Marker's employees, independent contractors, consultants, commercial partners and vendors may engage in misconduct or other improper activities, including noncompliance with regulatory standards and requirements.

Marker is exposed to the risk of employee fraud or other illegal activity by its employees, independent contractors, consultants, commercial partners and vendors. Misconduct by these parties could include

intentional, reckless and/or negligent conduct that fails to: comply with the laws of the FDA and other similar foreign regulatory bodies, provide true, complete and accurate information to the FDA and other similar foreign regulatory bodies, comply with manufacturing standards Marker has established, comply with healthcare fraud and abuse laws in the United States and similar foreign fraudulent misconduct laws, or report financial information or data accurately or to disclose unauthorized activities to Marker. If Marker obtains FDA approval of any of its product candidates and begins commercializing those products in the United States, Marker's potential exposure under such laws will increase significantly, and its costs associated with compliance with such laws are also likely to increase. These laws may impact, among other things, Marker's current activities with principal investigators and research patients, as well as proposed and future sales, marketing and education programs. In particular, the promotion, sales and marketing of healthcare items and services, as well as certain business arrangements in the healthcare industry, are subject to extensive laws designed to prevent fraud, kickbacks, self-dealing and other abusive practices. These laws and regulations may restrict or prohibit a wide range of pricing, discounting, marketing and promotion, structuring and commission(s), certain customer incentive programs and other business arrangements generally. Activities subject to these laws also involve the improper use of information obtained in the course of patient recruitment for clinical trials.

Efforts to ensure that Marker's business arrangements comply with applicable healthcare laws may involve substantial costs. It is possible that governmental and enforcement authorities will conclude that Marker's business practices may not comply with current or future statutes, regulations or case law interpreting applicable fraud and abuse or other healthcare laws and regulations. If any such actions are instituted against Marker, and it is not successful in defending itself or in asserting its rights, those actions could have a significant impact on its business, including the imposition of civil, criminal and administrative penalties, damages, disgorgement, monetary fines, possible exclusion from participation in Medicare, Medicaid and other federal healthcare programs, contractual damages, reputational harm, diminished profits and future earnings, and curtailment of Marker's operations, any of which could adversely affect Marker's ability to develop its business. In addition, the approval and commercialization of any of Marker's product candidates outside the United States will also likely subject Marker to foreign equivalents of the healthcare laws mentioned above, among other foreign laws.

Risks Related to Marker's Intellectual Property

Marker may be involved in lawsuits to protect or enforce its patents or the patents of its licensors, which could be expensive, time-consuming and unsuccessful.

Competitors may infringe Marker's intellectual property rights or those of Marker's licensors. To counter infringement or unauthorized use, Marker may be required to file infringement claims, which can be expensive and time-consuming. In addition, in a patent infringement proceeding, a court may decide that one or more of the patents Marker owns or in-licenses is not valid or is unenforceable, and/or is not infringed. An adverse result in any litigation or defense proceedings could put one or more of Marker's patents at risk of being invalidated, held unenforceable, or interpreted narrowly and could put Marker's patent applications at risk of not issuing. Defense of these claims, regardless of their merit, would involve substantial litigation expense and would be a substantial diversion of employee resources from Marker's business. Marker may not prevail in any lawsuits that it initiates, and the damages or other remedies awarded, if any, may not be commercially meaningful. In the event of a successful claim of infringement against Marker, Marker may have to pay substantial damages, including treble damages and attorneys' fees for willful infringement, obtain one or more licenses from third parties, pay royalties or redesign Marker's infringing products, which may be impossible or require substantial time and monetary expenditure.

Periodic maintenance fees, renewal fees, annuity fees and various other governmental fees on any issued patent and/or pending patent applications will be due to the U.S. Patent and Trademark Office, or USPTO, and foreign patent agencies in several stages over the lifetime of Marker's patents and/or applications. The USPTO and various foreign governmental patent agencies require compliance with a number of procedural, documentary, fee payment and other similar provisions during the patent application process. Marker employs reputable law firms and other professionals to help it comply, and in many cases, an inadvertent lapse can be cured by payment of a late fee or by other means in accordance with rules applicable to the particular jurisdiction. However, there are situations in which noncompliance can result in abandonment or

lapse of the patent or patent application, resulting in partial or complete loss of patent rights in the relevant jurisdiction. Noncompliance events that could result in abandonment or lapse of a patent or patent application include, but are not limited to, failure to respond to official actions within prescribed time limits, non-payment of fees and failure to properly legalize and submit formal documents. In such an event, Marker's competitors might be able to enter the market, which would have a material adverse effect on Marker's business development.

Marker may incur substantial costs as a result of litigation or other proceedings relating to patent and other intellectual property rights.

Marker's involvement in any litigation or other proceeding relating to intellectual property rights, even if resolved in Marker's favor, could result in substantial costs and distract management and other employees. Some of Marker's competitors may be better able to sustain the costs of complex patent litigation because they have substantially greater resources. If there is litigation against Marker, Marker may not be able to continue its development operations.

Interference or derivation proceedings provoked by third parties or brought by Marker or declared by the USPTO may be necessary to determine the priority of inventions with respect to Marker's patents or patent applications or those of Marker's licensors. Should third parties file patent applications, or be issued patents claiming technology also used or claimed by Marker, Marker may be required to participate in interference or derivation proceedings in the USPTO to determine priority of invention. Marker may be required to participate in interference or derivation proceedings involving its issued patents and pending applications. An unfavorable outcome could require Marker to cease using the related technology or to attempt to license rights from the prevailing party. The business of Marker could be harmed if the prevailing party does not offer Marker a license on commercially acceptable terms.

Issued patents covering Marker's product candidates could be found invalid or unenforceable if challenged in court or with the USPTO.

If Marker, its licensing partner, or any potential future collaborator initiates legal proceedings against a third party to enforce a patent directed to one of Marker's product candidates, the defendant could counterclaim that the patent is invalid and/or unenforceable in whole or in part. In patent litigation in the United States, defendant counterclaims alleging invalidity and/or unenforceability are commonplace. Grounds for a validity challenge include an alleged failure to meet any of several statutory requirements, including lack of novelty, obviousness or non-enablement. Grounds for an unenforceability assertion could include an allegation that someone connected with prosecution of the patent withheld relevant information from the USPTO or made a misleading statement during prosecution. Third parties may also raise similar claims before administrative bodies in the United States or abroad, even outside the context of litigation. Such mechanisms include re-examination, post grant review, and equivalent proceedings in foreign jurisdictions (e.g., opposition proceedings). Such proceedings could result in revocation or amendment to Marker's patents in such a way that they are no longer directed to Marker's product candidates. The outcome following legal assertions of invalidity and unenforceability is unpredictable, and prior art could render Marker's patents or those of Marker's licensors invalid or could prevent a patent from issuing from one or more of its pending patent applications. There is no assurance that all potentially relevant prior art relating to Marker patents and patent applications has been found. There is also no assurance that there is not prior art of which Marker is aware, but which Marker does not believe affects the validity or enforceability of a claim in Marker patents and patent applications, which may, nonetheless, ultimately be found to affect the validity or enforceability of a claim. Furthermore, even if Marker patents are unchallenged, they may not adequately protect Marker's intellectual property, provide exclusivity for Marker product candidates, prevent others from designing around Marker claims or provide Marker with a competitive advantage. If a defendant were to prevail on a legal assertion of invalidity and/or unenforceability, Marker would lose at least part, and perhaps all, of the patent protection on Marker's product candidates. In addition, if the breadth or strength of protection provided by Marker's patents and patent applications is threatened, it could dissuade companies from collaborating with Marker to license, develop or commercialize current or future product candidates. Such a loss of patent protection could have a material adverse impact on Marker's business development.

If Marker is unable to protect its proprietary rights, Marker may not be able to compete effectively or operate profitably.

Marker's commercial success is dependent in part on its ability to obtain, maintain, and enforce the patents and other proprietary rights that it has licensed and may develop, and on its ability to avoid infringing the proprietary rights of others. Marker generally seeks to protect its proprietary position by filing patent applications in the United States and abroad related to its product candidates, proprietary technologies and their uses that are important to its business. Marker's patent applications cannot be enforced against third parties practicing the technology claimed in such applications unless, and until, patents issue from such applications, and then only to the extent the issued claims are directed to the technology. There can be no assurance that Marker's patent applications or those of its licensor will result in additional patents being issued or that issued patents will afford sufficient protection against competitors with similar technology, nor can there be any assurance that the patents issued will not be infringed, designed around or invalidated by third parties. Even issued patents may later be found invalid or unenforceable or may be modified or revoked in proceedings instituted by third parties before various patent offices or in courts. The degree of future protection for Marker's proprietary rights is uncertain. Only limited protection may be available and may not adequately protect Marker's rights or permit Marker to gain or keep any competitive advantage. This failure to properly protect the intellectual property rights relating to Marker's product candidates could have a material adverse effect on Marker's financial condition and results of operations.

Marker seeks to protect its proprietary technology and processes, in part, by entering into confidentiality agreements with relevant employees, consultants, scientific advisors, and contractors. Marker also seeks to preserve the integrity and confidentiality of its data and trade secrets by maintaining physical security of the premises and physical and electronic security of the information technology systems. While Marker has confidence in these individuals, organizations, and systems, agreements or security measures may be breached, and Marker may not have adequate remedies for any breach. In addition, trade secrets may otherwise become known or be independently discovered by competitors. To the extent that the consultants, contractors or collaborators use intellectual property owned by others in their work for Marker, disputes may arise as to the rights in related or resulting know-how and inventions.

Although Marker owns one issued patent in Europe with claims directed to methods of generating multi-antigen specific T cell products, Marker cannot be certain that the claims in other pending U.S. or European patent applications, international patent applications, and patent applications in certain other foreign territories directed to methods of generating multi-antigen specific T cell products, or Marker's other product candidates, will be considered patentable by the United States Patent and Trademark Office, or USPTO, courts in the United States or by the patent offices and courts in foreign countries, nor can Marker be certain that the claims in its issued European patent will not be found invalid or unenforceable if challenged.

All of Marker's intellectual property rights are currently licensed from BCM, so that the preparation and prosecution of these patents and patent applications was not performed by Marker or under Marker's control. Furthermore, patent law relating to the scope of claims in the biotechnology field in which it operates is still evolving and, consequently, patent positions in Marker's industry may not be as strong as in other more well-established fields. The patent positions of biotechnology companies can be highly uncertain and involve complex legal and factual questions for which important legal principles remain unresolved. No consistent policy regarding the breadth of claims allowed in biotechnology patents has emerged to date. The patent application process is subject to numerous risks and uncertainties, and there can be no assurance that Marker or any of its potential future collaborators will be successful in protecting Marker product candidates by obtaining and defending patents. These risks and uncertainties include the following:

- the USPTO and various foreign governmental patent agencies require compliance with a number of procedural, documentary, fee payment and other provisions during the patent process, the noncompliance with which can result in abandonment or lapse of a patent or patent application, and partial or complete loss of patent rights in the relevant jurisdiction;
- patent applications may not result in any patents being issued;

- patents that may be issued or in-licensed may be challenged, invalidated, modified, revoked, circumvented, found to be unenforceable or otherwise may not provide any competitive advantage;
- Marker's competitors, many of whom have substantially greater resources than Marker, and many of whom have made significant investments in competing technologies, may seek or may have already obtained patents that will limit, interfere with or eliminate Marker's ability to make, use and sell Marker's potential product candidates;
- there may be significant pressure on the U.S. government and international governmental bodies to limit the scope of patent protection both inside and outside the United States for disease treatments that prove successful, as a matter of public policy regarding worldwide health concerns; and
- countries other than the United States may have patent laws less favorable to patentees than those upheld by U.S. courts, allowing foreign competitors a better opportunity to create, develop and market competing product candidates.

The patent prosecution process is also expensive and time-consuming, and Marker may not be able to file and prosecute all necessary or desirable patent applications at a reasonable cost or in a timely manner or in all jurisdictions where protection may be commercially advantageous. It is also possible that Marker will fail to identify patentable aspects of Marker's research and development output before it is too late to obtain patent protection. Moreover, in some circumstances, Marker may not have the right to control the preparation, filing and prosecution of patent applications, or to maintain the patents, directed to technology that Marker licenses from third parties. Marker may also require the cooperation of Marker's licensor, BCM, in order to enforce the licensed patent rights, and such cooperation may not be provided. Therefore, these patents and applications may not be prosecuted and enforced in a manner consistent with the best interests of Marker's business. Marker cannot be certain that patent prosecution and maintenance activities by Marker's licensor have been or will be conducted in compliance with applicable laws and regulations, which may affect the validity and enforceability of such patents or any patents that may issue from such applications. If they fail to do so, this could cause Marker to lose rights in any applicable intellectual property that Marker in-licenses, and as a result Marker's ability to develop and commercialize products or product candidates may be adversely affected and Marker may be unable to prevent competitors from making, using and selling competing products.

In addition, identification of third-party patent rights that may be relevant to Marker's technology is difficult because patent searching is imperfect due to differences in terminology among patents, incomplete databases and the difficulty in assessing the meaning of patent claims. The issuance of a patent is not conclusive as to its inventorship, scope, validity or enforceability and it is uncertain how much protection, if any, will be given to the patents Marker has licensed from BCM if either BCM or Marker attempts to enforce the patents and/or if they are challenged in court or in other proceedings, such as oppositions, which may be brought in foreign jurisdictions to challenge the validity of a patent. A third party may challenge Marker's patents, if issued, or the patent rights that it licenses from others in the courts or patent offices in the United States and abroad. It is possible that a competitor may successfully challenge Marker's patents or that a challenge will result in loss of exclusivity or in patent claims being narrowed, invalidated or held unenforceable, which could limit Marker's ability to stop others from using or commercializing similar or identical products, or limit the duration of the patent protection of Marker's products and product candidates. Moreover, the cost of litigation to uphold the validity of patents and to prevent infringement can be substantial. If the outcome of litigation is adverse to Marker, third parties may be able to use Marker's patented invention without payment to it. Moreover, it is possible that competitors may infringe Marker's patents or successfully avoid them through design innovation. To stop these activities Marker may need to file a lawsuit. These lawsuits are expensive and would consume time and other resources, even if Marker were successful in stopping the violation of Marker's patent rights. In addition, there is a risk that a court would decide that Marker's patents are not valid and that Marker does not have the right to stop the other party from using the inventions. There is also the risk that, even if the validity of Marker's patents were upheld, a court would refuse to stop the other party on the ground that its activities are not covered by, that is, do not infringe, Marker's patents.

Should third parties file patent applications, or be issued patents claiming technology also used or claimed by Marker's licensor(s) or by Marker in any future patent application, Marker may be required to participate in interference proceedings in the USPTO to determine priority of invention for those patents or patent applications that are subject to the first-to-invent law in the United States, or may be required to participate in derivation proceedings in the USPTO for those patents or patent applications that are subject to the first-inventor-to-file law in the United States. Marker may be required to participate in such interference or derivation proceedings involving Marker's issued patents and pending applications. Marker may be required to cease using the technology or to license rights from prevailing third parties as a result of an unfavorable outcome in an interference proceeding or derivation proceeding. A prevailing party in that case may not offer Marker a license on commercially acceptable terms.

The use of Marker's technologies could potentially conflict with the rights of others.

Marker's potential competitors or other entities may have or acquire patent or proprietary rights that they could enforce against Marker's licensors. There is a substantial amount of litigation, both within and outside the United States, involving patent and other intellectual property rights in the biotechnology and pharmaceutical industries, including patent infringement lawsuits, interferences, oppositions, reexaminations, *inter partes* review proceedings and post-grant review, or PGR, proceedings before the USPTO and/or corresponding foreign patent offices. Numerous third-party U.S. and foreign issued patents and pending patent applications exist in the fields in which Marker is developing product candidates. There may be third-party patents or patent applications with claims to materials, formulations, methods of manufacture or methods for treatment related to the use or manufacture of our product candidates. If they do so, then they could limit Marker's ability to make, use, sell, offer for sale or import our product candidates and products that may be approved in the future, or impair our competitive position by requiring Marker to alter its products, pay licensing fees or cease activities.

As the biotechnology industry expands and more patents are issued, the risk increases that Marker's product candidates may be subject to claims of infringement of the patent rights of third parties. Because patent applications are maintained as confidential for a certain period of time, until the relevant application is published Marker may be unaware of third-party patents that may be infringed by commercialization of any of Marker's product candidates, and Marker cannot be certain that it was the first to file a patent application related to a product candidate or technology. Moreover, because patent applications can take many years to issue, there may be currently-pending patent applications that later issue as patents that Marker's product candidates may infringe. If Marker's products conflict with patent rights of others, third parties could bring legal actions against Marker or its collaborators, licensees, suppliers or customers, claiming damages and seeking to enjoin manufacturing and marketing of the affected products. If these legal actions are successful, in addition to any potential liability for damages, Marker could be required to obtain a license in order to continue to manufacture or market the affected products. Marker may not prevail in any legal action and a required license under the patent may not be available on acceptable terms or at all.

Changes in U.S. patent law could diminish the value of patents in general, thereby impairing Marker's ability to protect its products.

As is the case with other biopharmaceutical companies, Marker's success is dependent on intellectual property, particularly patents. Obtaining and enforcing patents in the biopharmaceutical industry involve both technological and legal complexity, and is therefore costly, time-consuming and inherently uncertain. Changes in either the patent laws or in the interpretations of patent laws in the United States and other countries may diminish the value of Marker's intellectual property. Marker cannot predict the breadth of claims that may be allowed or enforced in our patents or in third-party patents. For example, on September 16, 2011, the Leahy-Smith America Invents Act, or Leahy-Smith Act, was signed into law. The Leahy-Smith Act includes a number of significant changes to U.S. patent law. These include provisions that affect the way patent applications will be prosecuted and may also affect patent litigation. In particular, under the Leahy-Smith Act, the United States transitioned in March 2013 to a "first inventor to file" system in which the first inventor to file a patent application will be entitled to the patent. Third parties are allowed to submit prior art before the issuance of a patent by the USPTO, and may become involved in post-grant proceedings including post grant review, derivation, reexamination, *inter-partes* review or interference

proceedings challenging Marker's patent rights or the patent rights of others. An adverse determination in any such submission, proceeding or litigation could reduce the scope or enforceability of, or invalidate, Marker's patent rights, which could adversely affect Marker's competitive position. In addition, recent U.S. Supreme Court rulings on several patent cases have narrowed the scope of patent protection available in certain circumstances and weakened the rights of patent owners in certain situations. In addition to increasing uncertainty with regard to Marker's ability to obtain patents in the future, this combination of events has created uncertainty with respect to the value of patents, once obtained. Depending on decisions by the U.S. Congress, the federal courts, and the USPTO, the laws and regulations governing patents could change in unpredictable ways that would weaken Marker's ability to obtain new patents or to enforce Marker's existing patents and patents that Marker might obtain in the future. While Marker does not believe that any of the patents owned or licensed by Marker will be found invalid based on these decisions, Marker cannot predict how future decisions by the courts, the U.S. Congress or the USPTO may impact the value of Marker's patents.

Marker has limited foreign intellectual property rights and may not be able to protect its intellectual property rights throughout the world.

Marker has limited intellectual property rights outside the United States. Filing, prosecuting and defending patents on product candidates in all countries throughout the world would be prohibitively expensive, and Marker's intellectual property rights in some countries outside the United States can be less extensive than those in the United States. In addition, the laws of some foreign countries do not protect intellectual property rights to the same extent as federal and state laws in the United States. Consequently, Marker may not be able to prevent third parties from practicing its inventions in all countries outside the United States, or from selling or importing products made using its inventions in and into the United States or other jurisdictions. Competitors may use Marker's technologies in jurisdictions where Marker has not obtained patent protection to develop their own products and further, may export otherwise infringing products to territories where Marker has patent protection, but enforcement is not as strong as that in the United States. These products may compete with Marker's products and patents or other intellectual property rights may not be effective or sufficient to prevent them from competing.

Many companies have encountered significant problems in protecting and defending intellectual property rights in foreign jurisdictions. The legal systems of certain countries, particularly certain developing countries, do not favor the enforcement of patents, trade secrets and other intellectual property protection, particularly those relating to biopharmaceutical products, which could make it difficult for Marker to stop the infringement of its patents or marketing of competing products in violation of Marker's proprietary rights generally. Proceedings to enforce Marker's patent rights in foreign jurisdictions could result in substantial costs and divert Marker's efforts and attention from other aspects of Marker's business, could put Marker's patents at risk of being invalidated or interpreted narrowly and Marker's patent applications at risk of not issuing and could provoke third parties to assert claims against Marker. Marker may not prevail in any lawsuits that it initiates and the damages or other remedies awarded, if any, may not be commercially meaningful. Accordingly, Marker's efforts to enforce Marker's intellectual property rights around the world may be inadequate to obtain a significant commercial advantage from the intellectual property that Marker develops or licenses.

Marker may be subject to claims that its employees, consultants or independent contractors have wrongfully used or disclosed confidential information of third parties.

As is common in the biotechnology and pharmaceutical industries, in addition to our employees, Marker engages the services of consultants to assist it in the development of its product candidates. Marker has received confidential and proprietary information from third parties. Marker employs individuals or engages consultants who were previously employed at other biotechnology or pharmaceutical companies. Marker may be subject to claims that it or its employees, consultants or independent contractors have inadvertently or otherwise used or disclosed confidential information of these third parties or Marker's employees' former employers. Litigation may be necessary to defend against these claims. Even if Marker is successful in defending against these claims, litigation could result in substantial cost and be a distraction to Marker's management and employees.

If Marker fails to comply with any obligations under its existing license agreement or any future license agreements, or disputes arise with respect to those agreements, it could have a negative impact on its business and its intellectual property rights.

Marker is a party to a license agreement with BCM that imposes, and Marker may enter into additional licensing arrangements with third parties that may impose, diligence, development and commercialization timelines, milestone payment, royalty, insurance and other obligations on it. Marker's rights to use the licensed intellectual property are subject to the continuation of and Marker's compliance with the terms of these agreements. Disputes may arise regarding Marker's rights to intellectual property licensed to it from a third party, including but not limited to:

- the scope of rights granted under the license agreement and other interpretation-related issues;
- the extent to which Marker technology and processes infringe on intellectual property of the licensor that is not subject to the licensing agreement;
- the sublicensing of patent and other rights;
- Marker's diligence obligations under the license agreement and what activities satisfy those diligence obligations;
- the ownership of inventions and know-how resulting from the creation or use of intellectual property by Marker, alone or with its licensors and collaborators;
- the scope and duration of Marker's payment obligations;
- Marker's rights upon termination of such agreement; and
- the scope and duration of exclusivity obligations of each party to the agreement.

If disputes over intellectual property and other rights that Marker has licensed or acquired from third parties prevent or impair its ability to maintain its current licensing arrangements on acceptable terms, Marker may be unable to successfully develop and commercialize the affected product candidates. If Marker fails to comply with its obligations under current or future licensing agreements, these agreements may be terminated or the scope of Marker's rights under them may be reduced and Marker might be unable to develop, manufacture or market any product that is licensed under these agreements.

Marker may be subject to claims challenging the inventorship or ownership of Marker patents and other intellectual property.

Marker may be subject to claims that former employees, collaborators or other third parties have an ownership interest in Marker patents or other intellectual property. Litigation may be necessary to defend against these and other claims challenging inventorship or ownership. If Marker fails in defending any such claims, in addition to paying monetary damages, Marker may lose valuable intellectual property rights. Such an outcome could have a material adverse effect on Marker's business. Even if Marker is successful in defending against such claims, litigation could result in substantial costs and distraction to management and other employees.

Patent terms may be inadequate to protect Marker's competitive position on Marker's product candidates for an adequate amount of time.

Patents have a limited lifespan. In the United States, if all maintenance fees are timely paid, the natural expiration of a patent is generally 20 years from its earliest U.S. non-provisional filing date. Various extensions may be available, but the life of a patent, and the protection it affords, is limited. Even if patents covering Marker's product candidates are obtained, once the patent life has expired, Marker may be subject to competition from competitive products, including biosimilars. Given the amount of time required for the development, testing and regulatory review of new product candidates, patents protecting such candidates might expire before or shortly after such candidates are commercialized. As a result, Marker's owned and licensed patent portfolio may not provide sufficient rights to exclude others from commercializing products similar or identical to Marker's products.

FORWARD-LOOKING STATEMENTS

This proxy statement includes forward-looking statements within the meaning of Section 21E of the Exchange Act and Section 27A of the Securities Act. For this purpose, any statements contained herein, other than statements of historical fact, including statements regarding the proposed merger with Marker, including the expected timetable for completing the merger; future financial and operating results, including targeted product milestones and potential revenues; benefits and synergies of the merger; future opportunities of the combined company; the progress and timing of product development programs and related trials; the potential efficacy of products and product candidates; and the strategy, projected costs, prospects, plans and objectives of management of either TapImmune, Marker or the combined company, may be forward-looking statements under the provisions of The Private Securities Litigation Reform Act of 1995. In this proxy statement, words such as “anticipate,” “believe,” “could,” “estimate,” “expect,” “intend,” “may,” “plan,” “project,” “should,” “target,” “will,” “would” or other words that convey uncertainty of future events or outcomes are used to identify these forward-looking statements. Actual results may differ materially from those indicated by such forward-looking statements as a result of various important factors, including “critical accounting estimates” and risks relating to (with respect to TapImmune, Marker and/or the combined company, as applicable): the ability to consummate the proposed merger; the ability to maintain compliance with NASDAQ listing standards; the liquidity and trading market for shares prior to and following the consummation of the proposed merger and private placement transaction; clinical trials, including difficulties or delays in the completion of patient enrollment, data collection or data analysis; uncertainties in obtaining successful pre-clinical and clinical results for product candidates and unexpected costs that may result therefrom; ability to manufacture sufficient product to conduct clinical trials; ability to manage potential conflicts of interest concerning manufacturing and licensing matters; ability to obtain required regulatory approvals for product candidates; costs, timing and regulatory review of the combined company’s studies and clinical trials; failure to realize any value of certain product candidates being developed, in light of inherent risks and difficulties involved in successfully bringing product candidates to market; the ability to develop new product candidates; the ability to commercialize and launch any product candidate that receives regulatory approval; the ability to attain market acceptance among physicians, patients, patient advocacy groups, health care payors and the medical community for future products of the combined company; the ability to market any approved drug successfully or at all once it is on the market in light of challenges relating to regulatory compliance, pricing, market acceptance and competition; the ability to obtain the substantial additional funding required to conduct development and commercialization activities; and the ability to obtain, maintain and enforce patent and other intellectual property protection for currently marketed products and product candidates. These and other risks are described in greater detail in the section entitled “*Risk Factors*” beginning on page [13](#) of this proxy statement. Many of these factors that will determine actual results are beyond TapImmune’s, Marker’s, or the combined company’s ability to control or predict. If one or more of these factors materialize, or if any underlying assumptions prove incorrect, actual results, performance or achievements may vary materially from any future results, performance or achievements expressed or implied by these forward-looking statements. In addition, any forward-looking statements in this proxy statement represent TapImmune’s views only as of the date of this proxy statement and should not be relied upon as representing TapImmune’s views as of any subsequent date. TapImmune anticipates that subsequent events and developments will cause its views to change. However, while TapImmune may elect to update these forward-looking statements publicly at some point in the future, TapImmune specifically disclaims any obligation to do so, except as may be required by law, whether as a result of new information, future events or otherwise. TapImmune’s forward-looking statements generally do not reflect the potential impact of any future acquisitions, mergers, dispositions, joint ventures or investments it may make.

THE 2018 ANNUAL MEETING

TapImmune is furnishing this proxy statement to its stockholders as part of the solicitation of proxies by TapImmune's board of directors for use at the 2018 Annual Meeting and at any adjournments or postponements thereof.

Date, Time and Place

The 2018 Annual meeting of the stockholders, or the 2018 Annual Meeting, of TapImmune Inc., or TapImmune, will be held at 9:00 a.m., local time, on October 16, 2018, at the Hyatt Regency Jacksonville Riverfront, 225 East Coastline Drive, Jacksonville, Florida 32202, USA.

If you are a holder of record and plan to attend the 2018 Annual Meeting, please bring your proxy or a photo identification to confirm your identity. If you are a beneficial owner of common stock held by a bank or broker, i.e., in "street name," you will need proof of ownership to be admitted to the meeting. A recent brokerage statement or letter from a bank or broker are examples of proof of ownership. If you want to vote in person your common stock held in "street name," you must get a proxy in your name from the registered holder.

Purposes of the 2018 Annual Meeting

The purposes of the 2018 Annual Meeting are to consider and act upon the following matters:

1. To approve the issuance of TapImmune common stock, warrants to purchase TapImmune common stock and the issuance of shares of TapImmune common stock issuable upon exercise of warrants to purchase TapImmune common stock, in each case, pursuant to the merger agreement.
2. To approve the issuance of TapImmune common stock, warrants to purchase TapImmune common stock and the issuance of shares of TapImmune common stock issuable upon exercise of warrants to purchase TapImmune common stock, in each case, pursuant to the private placement transaction.
3. To approve two separate proposals to amend TapImmune's articles of incorporation to:
 - a. increase the number of authorized shares of TapImmune common stock from 41,666,667 to 150,000,000, the approval of which is necessary to enable TapImmune to issue the required number of shares of TapImmune common stock, and shares of TapImmune common stock issuable upon exercise of warrants, in each case, to Marker stockholders in connection with the merger and to the investors in the private placement transaction; and
 - b. change the name of TapImmune to "Marker Therapeutics, Inc."
4. To approve the reincorporation of TapImmune from a Nevada corporation to a Delaware corporation.
5. To approve an increase in the number of authorized shares of TapImmune common stock reserved for issuance under the TapImmune Plan by 6,616,666 shares from 1,383,334 to 8,000,000 shares upon completion of the merger.
6. To elect seven persons as directors of TapImmune; provided, however, that, if the merger is completed, the board of directors of TapImmune will be reconstituted as set forth in the merger agreement.
7. To approve on a non-binding advisory basis TapImmune's 2017 executive compensation.
8. To ratify the appointment of Marcum LLP as TapImmune's independent registered public accounting firm for the fiscal year ending December 31, 2018.

9. To consider and vote on a proposal to adjourn the 2018 Annual Meeting, if necessary, if a quorum is present, to solicit additional proxies, in the event that there are not sufficient votes at the time of the 2018 Annual Meeting to approve items 1, 2, 3a, 3b, 4 or 5 above.
10. To transact such other business as may properly come before the 2018 Annual Meeting or any adjournment or postponement thereof.

Proposals 1, 2, 3a, 3b, 4 and 5 are conditioned upon each other, and the approval of each such proposal is a condition to the completion of the merger. Therefore, the completion of the merger cannot proceed without the approval of Proposals 1, 2, 3a, 3b, 4 and 5.

The merger agreement is attached as Annex A.

Recommendation of TapImmune’s Board of Directors

After careful consideration, TapImmune’s board of directors unanimously recommends that TapImmune stockholders vote:

- FOR Proposal 1 to approve the issuance of TapImmune common stock, warrants to purchase TapImmune common stock and the issuance of shares of TapImmune common stock issuable upon exercise of warrants to purchase TapImmune common stock, in each case, pursuant to the merger;
- FOR Proposal 2 to approve the issuance of TapImmune common stock, warrants to purchase TapImmune common stock and the issuance of shares of TapImmune common stock issuable upon exercise of warrants to purchase TapImmune common stock, in each case, pursuant to the private placement transaction;
- FOR Proposal 3a to increase the number of authorized shares of TapImmune common stock from 41,666,667 to 150,000,000;
- FOR Proposal 3b to change the name of TapImmune to “Marker Therapeutics, Inc.”;
- FOR Proposal 4 to approve the reincorporation of TapImmune from a Nevada corporation to a Delaware corporation;
- FOR Proposal 5 to approve an increase in the number of authorized shares of TapImmune common stock reserved for issuance under the TapImmune Plan by 6,616,666 shares from 1,383,334 to 8,000,000 shares upon completion of the merger;
- FOR Proposal 6 to elect seven persons as directors;
- FOR Proposal 7 to approve on a non-binding advisory basis TapImmune’s 2017 executive compensation;
- FOR Proposal 8 to ratify the appointment of Marcum LLP as TapImmune’s independent registered public accounting firm for the fiscal year ending December 31, 2018; and
- FOR Proposal 9 to approve an adjournment of the 2018 Annual Meeting, if necessary, if a quorum is present, to solicit additional proxies if there are not sufficient votes in favor of Proposals 1, 2, 3a, 3b, 4 or 5.

Record Date and Stockholders Entitled to Vote

Only holders of record of shares of TapImmune common stock at the close of business on August 21, 2018, the record date for the 2018 Annual Meeting, are entitled to vote the shares of TapImmune common stock they held on the record date at the 2018 Annual Meeting. At the close of business on the record date, there were 13,710,544 shares of TapImmune common stock outstanding and entitled to vote at the 2018 Annual Meeting, held by 451 stockholders of record. Each holder of record is entitled to one vote for each share of TapImmune common stock held by such stockholder on the record date on each of the proposals presented in this proxy statement.

Voting Procedures

If your TapImmune common stock is held by a broker, bank or other nominee, they should send you instructions that you must follow in order to have your shares voted. If you hold shares in your own name, you may vote by proxy in any one of the following ways:

- via the Internet by accessing the proxy materials on the secure website, www.proxyandprinting.com, and following the voting instructions on that website;
- via telephone by calling Geogeson toll free 1-866-431-2096 in the United States or 1-781-575-2137 if outside the United States and following the recorded instructions; or
- by completing, dating, signing and returning the enclosed proxy card.

The Internet and telephone voting procedures are designed to authenticate stockholders' identities by use of a control number to allow stockholders to vote their shares and to confirm that stockholders' instructions have been properly recorded. Voting via the Internet or telephone must be completed by 1:00 a.m., Eastern time on October 16, 2018. Of course, you can always come to the meeting and vote your shares in person. If you submit or return a proxy card without giving specific voting instructions, your shares will be voted as recommended by TapImmune's board of directors.

TapImmune is not aware of any other matters to be presented at the meeting except for those described in this proxy statement. If any matters not described in this proxy statement are presented at the meeting, your proxyholder (one of the individuals named on your proxy card) will use their own judgment to determine how to vote your shares. If the meeting is adjourned, your proxyholder may vote your shares on the new meeting date as well, unless you revoke your proxy instructions before then.

Whether or not you plan to attend the 2018 Annual Meeting in person, please vote as soon as possible to ensure your vote is counted.

Revoking Your Proxy Instructions

If you are a stockholder of record, you can revoke your proxy before your shares are voted at the meeting by:

- Filing a written notice of revocation bearing a later date than the proxy with TapImmune's Corporate Secretary at 5 W. Forsyth Street, Suite 200, Jacksonville, FL 32202 at or before the taking of the vote at the meeting;
- Duly executing a later-dated proxy relating to the same shares and delivering it to TapImmune's Corporate Secretary at 5 W. Forsyth Street, Suite 200, Jacksonville, FL 32202 at or before the taking of the vote at the meeting; or
- Attending the meeting and voting in person (although attendance at the meeting will not in and of itself constitute a revocation of a proxy).

If you are a beneficial owner of shares held in "street name," you may submit new voting instructions by contacting your bank, broker, nominee or trustee. You may also vote in person at the meeting if you obtain a legal proxy from them.

Counting Votes

Consistent with state law and TapImmune's bylaws, the presence, in person or by proxy, of at least one-third of the shares outstanding and entitled to vote at the meeting will constitute a quorum for purposes of voting on a particular matter at the meeting. On the record date, there were 13,710,544 shares of TapImmune common stock outstanding and entitled to vote. Accordingly, the holders of 4,570,182 shares must be present at the 2018 Annual Meeting to have a quorum.

Once a share is represented for any purpose at the meeting, it is deemed present for quorum purposes for the remainder of the meeting and any adjournment thereof unless a new record date is set for the adjournment. Shares held of record by stockholders or their nominees who do not vote by proxy or attend the meeting in person will not be considered present or represented and will not be counted in determining

the presence of a quorum. Signed proxies that withhold authority or reflect abstentions or “broker non-votes” will be counted for purposes of determining whether a quorum is present. “Broker non-votes” are proxies received from brokerage firms or other nominees holding shares on behalf of their clients who have not been given specific voting instructions from their clients with respect to non-routine matters. If there is no quorum, the chairperson of the meeting or any officer entitled to preside at or to act as secretary of the meeting may adjourn the 2018 Annual Meeting to another date.

Assuming the presence of a quorum at the meeting, the following votes are required to approve each proposal:

- Proposal 1 — To approve the issuance of TapImmune common stock, warrants to purchase TapImmune common stock and the issuance of shares of TapImmune common stock issuable upon exercise of warrants to purchase TapImmune common stock, in each case, pursuant to the merger agreement. “FOR” votes from the holders of a majority of the shares of TapImmune common stock present in person or represented by proxy and entitled to vote on the matter at the 2018 Annual Meeting are required to approve this proposal.
- Proposal 2 — To approve the issuance of TapImmune common stock, warrants to purchase TapImmune common stock and the issuance of shares of TapImmune common stock issuable upon exercise of warrants to purchase TapImmune common stock, in each case, pursuant to the private placement transaction. “FOR” votes from the holders of a majority of the shares of TapImmune common stock present in person or represented by proxy and entitled to vote on the matter at the 2018 Annual Meeting are required to approve this proposal.
- Proposal 3a — To approve an amendment to TapImmune’s articles of incorporation to increase the number of authorized shares of TapImmune common stock from 41,666,667 to 150,000,000, the approval of which is necessary to enable TapImmune to issue the required number of shares of TapImmune common stock, and shares of TapImmune common stock issuable upon exercise of warrants, in each case, to Marker stockholders in connection with the merger and to purchasers in connection with the private placement transaction. “FOR” votes from the holders of a majority of the outstanding shares of TapImmune common stock as of the record date for the 2018 Annual Meeting are required to approve this proposal.
- Proposal 3b — To approve an amendment to TapImmune’s articles of incorporation to change the name of TapImmune to “Marker Therapeutics, Inc.” “FOR” votes from the holders of a majority of the outstanding shares of TapImmune common stock as of the record date for the 2018 Annual Meeting are required to approve this proposal.
- Proposal 4 — To approve the reincorporation of TapImmune from a Nevada corporation to a Delaware corporation. “FOR” votes from the holders of a majority of the outstanding shares of TapImmune common stock as of the record date for the 2018 Annual Meeting are required to approve this proposal.
- Proposal 5 — To approve an increase in the number of authorized shares of TapImmune common stock reserved for issuance under the TapImmune Plan by 6,616,666 shares from 1,383,334 to 8,000,000 shares upon completion of the merger. “FOR” votes from the holders of a majority of the shares of TapImmune common stock present in person or represented by proxy and entitled to vote on the matter at the 2018 Annual Meeting are required to approve this proposal.
- Proposal 6 — To re-elect seven persons as directors. The seven nominees receiving the most “FOR” votes (from the votes of shares cast in person or by proxy) will be elected.
- Proposal 7 — To approve on a non-binding advisory basis TapImmune’s 2017 executive compensation. “FOR” votes from the holders of a majority of the shares of TapImmune common stock present in person or represented by proxy and entitled to vote on the matter at the 2018 Annual Meeting are required to approve this proposal.

- Proposal 8 — To ratify the appointment of Marcum LLP as TapImmune’s registered public accounting firm for the fiscal year ending December 31, 2018. “FOR” votes from the holders of a majority of the shares of TapImmune common stock present in person or represented by proxy and entitled to vote on the matter at the 2018 Annual Meeting are required to approve this proposal.
- Proposal 9 — To approve the proposal to adjourn the 2018 Annual Meeting, if necessary, to solicit additional proxies if there are not sufficient votes in favor of Proposals. 1, 2, 3a, 3b, 4 or 5. If a quorum is present at the 2018 Annual Meeting, “FOR” votes from the holders of a majority of the shares of TapImmune common stock present in person or represented by proxy and entitled to vote on the matter at the 2018 Annual Meeting are required to approve this proposal. If a quorum is not present, either (i) the chairperson of the meeting or (ii) any officer entitled to preside at or to act as secretary of the meeting may adjourn the meeting.

With respect to “routine” matters, such as the ratification of the selection of TapImmune’s independent registered public accounting firm, a bank, brokerage firm, or other nominee has the authority (but is not required) under the rules governing self-regulatory organizations, or the SRO rules, including NASDAQ, to vote its clients’ shares if the clients do not provide instructions. When a bank, brokerage firm, or other nominee votes its clients’ shares on routine matters without receiving voting instructions, these shares are counted both for establishing a quorum to conduct business at the meeting and in determining the number of shares voted FOR, AGAINST or ABSTAINING with respect to such routine matters.

With respect to “non-routine” matters, a bank, brokerage firm, or other nominee is not permitted under the SRO rules to vote its clients’ shares if the clients do not provide instructions. The bank, brokerage firm, or other nominee will so note on the voting instruction form, and this constitutes a “broker non-vote.” “Broker non-votes” will be counted for purposes of establishing a quorum to conduct business at the meeting, but not for determining the number of shares voted FOR, AGAINST, ABSTAINING or WITHHELD FROM with respect to such non-routine matters.

In summary, if you do not vote your proxy, your bank, brokerage firm, or other nominee may either:

- vote your shares on routine matters and cast a “broker non-vote” on non-routine matters; or
- leave your shares unvoted altogether.

TapImmune encourages you to provide instructions to your bank, brokerage firm, or other nominee by voting your proxy. This action ensures that your shares will be voted in accordance with your wishes at the meeting.

No Dissenters’ Rights or Appraisal Rights

Holders of TapImmune common stock will not be entitled to any dissenters’ rights or appraisal rights with respect to any of the proposals to be voted on at the 2018 Annual Meeting.

Solicitation of Proxies

TapImmune will pay the cost of this proxy solicitation. You will need to obtain your own Internet access if you choose to access the proxy materials and/or vote over the Internet. In addition to soliciting proxies by mail, TapImmune’s directors, executive officers and employees and Marker’s directors and executive officers might solicit proxies personally and by telephone. None of these individuals will receive any additional compensation for this. TapImmune has engaged Georgeson to assist TapImmune in the distribution of proxy materials and the solicitation of votes described above for a fee of \$12,000, plus additional fees based on the amount and types of services rendered and reimbursement of reasonable expenses. TapImmune will, upon request, reimburse brokers, banks and other nominees for their expenses in sending proxy materials to their principals and obtaining their proxies.

Adjournments and Postponements

The 2018 Annual Meeting may be adjourned, recessed or postponed if a quorum is present.

If the time, date and place of an adjourned meeting are announced at the original convening of the 2018 Annual Meeting, no notice of an adjourned meeting need be given unless, after the adjournment, a new record date is fixed for the adjourned meeting, in which case notice of the adjourned meeting will be given to each stockholder of record entitled to vote at the meeting. At any subsequent reconvening of the 2018 Annual Meeting at which a quorum is present in person or represented by proxy, any business may be transacted that might have been transacted at the original meeting, and all proxies will be voted in the same manner as they would have been voted at the original convening of the 2018 Annual Meeting, except for any proxies that have been validly revoked or withdrawn prior to the reconvened meeting.

Voting by TapImmune’s Directors, Executive Officers and Principal Stockholders

As of the close of business on the record date for the 2018 Annual Meeting, TapImmune’s directors and executive officers beneficially owned, in the aggregate 578,095 shares of TapImmune common stock, or collectively approximately 4.2% of the issued and outstanding shares of TapImmune common stock. In connection with the execution of the merger agreement, stockholders beneficially owning, as of August 21, 2018, approximately 35.6% of the shares of TapImmune’s outstanding common stock (excluding, for purposes of such calculation, any warrants or options held by them), including TapImmune’s directors and executive officers, have entered into voting agreements with Marker that provide, among other things, that such stockholders shall vote in favor of the adoption of the merger agreement and against any proposal made in opposition to, or in any competition with, the merger. For more information on the voting and lock-up agreements, please see the section of this proxy statement entitled “*Agreements Related to the Merger*” beginning on page [97](#). TapImmune’s directors and executive officers have interests in the merger that may be different from, or in addition to, the interests of TapImmune stockholders generally. For more information, please see the section of this proxy statement entitled “*The Merger — Interests of TapImmune’s Directors and Executive Officers in the Merger*” beginning on page [75](#).

Assistance

If you need assistance in completing your enclosed proxy card or have questions regarding the 2018 Annual Meeting, please contact Georgeson, which is acting as TapImmune’s proxy solicitation agent in connection with the merger, toll free at 1-866-431-2096 or 1-781-575-2137 if calling from outside of the United States.

THE PARTIES**TapImmune Inc.**

5 W. Forsyth Street, Suite 200
Jacksonville, FL 32202
Tel: (904) 516-5436

TapImmune is a biotechnology company focusing on immunotherapy specializing in the development of innovative peptide and gene-based immunotherapeutics and vaccines for the treatment of oncology and infectious disease. Unlike other vaccine technologies that narrowly address the initiation of an immune response, TapImmune's approach broadly stimulates the cellular immune system by enhancing the function of killer T cells and helper T cells, and by restoring antigen presentation in tumor cells, thus allowing their recognition and killing by the immune system.

Marker Therapeutics, Inc.

33 5th Avenue N.W., Suite 800
New Brighton, Minnesota 55112
(651) 628-9259

Marker is a clinical stage immuno-oncology company focused on developing adoptive non-gene modified T cell therapies for the treatment of hematologic malignancies such as acute myeloid leukemia, mymphoma, and multiple myeloma, as well as certain solid tumors. Marker's MultiTAA technology selectively expands non-engineered tumor-specific T cells that are able to kill tumor cells by targeting multiple tumor-associated antigens simultaneously to prevent immune escape and generate durable immunity. Patient/donor T cells are not genetically modified, and therefore, the cost of generating Marker's therapies is significantly reduced. Marker is preparing for Phase II clinical trials.

Marker is privately held with offices in New Brighton, Minnesota.

THE MERGER

This section and the section entitled “The Merger Agreement” beginning on page 81 of this proxy statement describe the material aspects of the merger, including the merger agreement. While TapImmune believes that this description covers the material terms of the merger and the merger agreement, it may not contain all of the information that is important to you. You should read carefully this entire proxy statement, including the merger agreement, which is attached as Annex A to this proxy statement, and the other Annexes attached hereto.

Background of the Merger

From time to time, TapImmune has considered strategic business initiatives intended to further the development of its business and maximize stockholder value.

In late Spring 2017, Peter Hoang met for drinks at a restaurant in Houston, Texas with Ali Behbahani, M.D., a partner at New Enterprise Associates, or NEA. John Wilson, the CEO of Marker, was also at the restaurant with Dr. Behbahani, and was introduced to Mr. Hoang.

In early Summer 2017, ViraCyte was searching for a new CEO, and Peter Hoang was recommended to ViraCyte for consideration. ViraCyte is owned by the same principal stockholder group as Marker and has technology which is being developed by the same research group at Baylor College of Medicine, or BCM, including Ann Leen, Ph.D., and Juan Vera, M.D. ViraCyte is a clinical stage biopharmaceutical company developing cellular immunotherapies for infectious disease applications. John Wilson is the Managing Director of ViraCyte.

In or around June 2017, Mr. Hoang and his wife had dinner with Dr. Leen and Dr. Vera to discuss the possibility of Mr. Hoang becoming CEO of ViraCyte. After the dinner, Mr. Hoang had a follow-up discussion with John Wilson in which Mr. Hoang conveyed that the timing was not right for Mr. Hoang to consider becoming the ViraCyte CEO, but he was willing to help ViraCyte by providing advice on strategy and financing, without compensation. Subsequently, Mr. Hoang attended some meetings regarding ViraCyte at Mr. Wilson’s request and provided advice to Mr. Wilson from time to time. In or around August 2017, ViraCyte issued approximately 1.0% of ViraCyte’s equity to Mr. Hoang in appreciation of his assistance to ViraCyte.

On September 22, 2017, Peter Hoang became the TapImmune CEO.

On October 19, 2017, Peter Hoang, two members of the TapImmune board of directors, Sherry Grisewood and Rick Wasserman, met in Houston, Texas with representatives of another company, Company A, to discuss the possibility of a merger with Company A. A follow-up meeting was scheduled for October 31, 2017 for additional due diligence.

On October 22, 2017, Peter Hoang and John Wilson, the CEO of Marker, discussed by phone the possibility of a merger of TapImmune and Marker. In June 2017, Marker had received the first tranche of \$3.0 million of an up to \$20 million investment from Battersea Biotech, LLC, or Battersea, a joint investment entity formed by three venture capital funds, including NEA, to develop alternative cell therapies and technologies for cancer immunotherapy. Subsequent to the investment, Marker and Battersea jointly determined that the two companies should unwind the investment. On November 2, 2017, Battersea and Marker entered into a Stock Purchase Agreement providing for Marker to repurchase all of the shares of Series A Preferred Stock that had been issued to Battersea in exchange for \$2,625,000. Therefore, the call on October 22, 2017 between Mr. Hoang and Mr. Wilson was timely, since Marker would very shortly be able to pursue an alternative transaction.

On October 23, 2017, John Wilson discussed by phone with Ali Behbahani the possibility of a merger between Marker and TapImmune. Dr. Behbahani had been the NEA partner leading the investment by NEA in Battersea, and the related Battersea investment in Marker. Dr. Behbahani was also serving as a member of the Marker board of directors, and was aware that the investment of Battersea in Marker was in the process of being unwound.

On October 26, 2017, Peter Hoang, John Wilson and Ali Behbahani discussed by phone the potential benefits of a merger between Marker and TapImmune. Effective the same date, the board of directors of Marker, which included Dr. Behbahani, signed a unanimous written consent approving the repurchase by

Marker of the Series A Preferred Stock that had been purchased by Battersea in exchange for \$2,625,000. Dr. Behbahani subsequently resigned from the board of Marker on November 2, 2017, in connection with the closing of the repurchase by Marker of the Series A Preferred Stock from Battersea.

On October 30, 2017, a meeting was held at BCM to provide the TapImmune executive management with detailed manufacturing and clinical data generated by Marker for the lymphoma, myeloma, and AML indications. The attendees at the meeting included Peter Hoang, two directors of TapImmune, Glynn Wilson and Mark Reddish, two other executives of TapImmune, an investment banker from Piper Jaffray (by telephone), and Ann Leen and Juan Vera of Marker. Ann Leen, Ph.D., is an Associate Professor at BCM and a co-principal investigator of the clinical trials of the technology being developed by Marker. Juan Vera, M.D., is an Associate Professor at the Center for Gene Therapy at BCM and an expert in manufacturing cell therapies.

On October 30, 2017, prior to the scheduled meeting with Company A on October 31, 2017, Company A requested a term sheet before progressing with additional due diligence. When the parties were unable to come to an agreement on next steps, the scheduled meeting with Company A on October 31, 2017 was cancelled.

On November 8, 2017, a meeting was held in Dallas, Texas to provide Ali Behbahani with background on TapImmune and its clinical programs, and to discuss the benefits of a possible merger between Marker and TapImmune. The attendees at the meeting included Peter Hoang, a director of TapImmune (Glynn Wilson), and four executives of TapImmune.

On November 10, 2017, Peter Hoang sent John Wilson an e-mail with a preliminary framework of terms for the proposed merger between the two companies, and which he was prepared to discuss with the TapImmune board of directors.

On November 14, 2017, the TapImmune board of directors held a regularly scheduled quarterly meeting in Jacksonville, FL. At the meeting, Peter Hoang discussed the Marker merger opportunity, as well as the opportunity for a transaction with Company A. After discussion among the board members, the board decided to continue discussions with Marker, but cease discussions with Company A. The board also established a Merger and Acquisition Committee, or M&A Committee, composed of three members, David Laskow-Pooley, Mark Reddish and Joshua Silverman. At the meeting, the board also authorized Mr. Hoang to engage an investment banking firm and to prepare a term sheet for the proposed merger with Marker in accordance with the preliminary framework of terms that Mr. Hoang had presented at the meeting.

Also on November 14, 2017, Peter Hoang had an initial call with Company B regarding a potential merger with Company B.

On December 4, 2017, a meeting was held in Houston TX at BCM to discuss (i) the TapImmune clinical program and recent developments, (ii) the Marker background and transaction objectives, (iii) an update on Marker's clinical program, and (iv) the next steps for the merger, including setting up a data room, clinical development planning, and transaction documentation. The meeting participants included Peter Hoang, two directors of TapImmune, Glynn Wilson and Mark Reddish, four other executives of TapImmune, an investment banker from Piper Jaffray (by telephone), and John Wilson (by telephone), Ann Leen and Juan Vera of Marker.

On December 5 and 6, 2017, meetings were held in Houston between Peter Hoang, a TapImmune director (Glynn Wilson), and four executives of TapImmune, and representatives of Company B. The participants discussed their respective companies and whether a merger of the two companies would be mutually beneficial. The TapImmune executives subsequently determined that any discussion of a merger with Company B should be deferred, and that the potential merger with Marker should be the priority.

On December 8, 2017, the TapImmune board members met by telephone to hear presentations from four investment banking firms who were interested in acting as financial advisor to TapImmune in connection with the proposed transaction with Marker. After hearing presentations from the four firms, and asking questions regarding the capabilities of each firm, the TapImmune board selected Nomura to serve as TapImmune's financial advisor in connection with the proposed transaction with Marker.

On December 9, 2017, Peter Hoang discussed by phone with John Wilson the next steps needed to advance the merger discussions.

On December 12, 2017, Dr. Richard Kenney, the Chief Medical Officer of TapImmune, met in Houston at BCM with Dr. Leen and Dr. Vera to review the clinical data from Marker's clinical program.

On January 4, 2018, a due diligence call was held between two TapImmune executives, Dr. Kenney and Gerald Garrett, and Dr. Vera and a BCM clinician, to review Marker's clinical data and investigational new drug (IND) submission approach.

On January 12, 2018, an organizational meeting of TapImmune executives, Nomura representatives and a partner of Seyfarth Shaw LLP, or Seyfarth Shaw, was held in Houston, Texas at the Seyfarth Shaw offices to discuss the background and reasons for the proposed merger with Marker, and plan the next steps. Seyfarth Shaw had been selected as TapImmune's transaction counsel.

On January 30, 2018, a team of TapImmune executives met in Houston, Texas at BCM with Dr. Leen and Dr. Vera in the morning until mid-afternoon to review selected data from patient files, Gantt charts and the future clinical trials proposed by Marker. In mid-afternoon, Peter Hoang, Michael Loiacono and a group of Nomura representatives joined the meeting. The group also had dinner that night at a local Houston restaurant.

Also on January 30, Seyfarth Shaw sent an initial draft of the Merger Agreement between TapImmune and Marker to Winthrop & Weinstine, P.A., Marker's counsel.

On January 31, 2018, a team of TapImmune executives and advisors (including representatives from Nomura, Seyfarth Shaw and Seed IP) continued the meeting in Houston, Texas at BCM with Marker representatives, including Dr. Leen and Dr. Vera, and John Wilson, who joined by phone for a portion of the meeting. The all-day meeting included (i) a discussion of the costs for Marker's clinical trials, (ii) Marker's intellectual property, (iii) a discussion with Nomura representatives of the strategic rationale for the merger, as well as the proposed process and timing for closing the merger, including a proposed PIPE financing, (iv) a presentation by John Wilson on Marker's history and background, (v) an overview by Seyfarth Shaw of the terms of the draft Merger Agreement that had been distributed the prior day, with additional input from Marker's counsel from Winthrop & Weinstine, P.A., and (vi) an overview by Dr. Leen of Marker's clinical data.

On February 6, 2018, a conference call was held with the Audit Committee of the TapImmune board at which Peter Hoang and Michael Loiacono updated the members of the Audit Committee regarding the accounting treatment of the proposed transaction and the accounting rationale suggesting the merger should be treated as an asset acquisition rather than a business combination.

On February 7, 2018, Dr. Richard Kenney and Dr. Juan Vera had a call to discuss the manufacturing process for the T cells used in the treatment that had been developed by Marker. They decided that this was an involved discussion which needed to include a larger group of representatives from both companies, and a meeting was scheduled for February 12, 2018 in Houston.

Also on February 7, 2018, a conference call was held to update members of the M&A Committee of the board on the status of the proposed merger with Marker. The participants included Peter Hoang and other TapImmune executives who had been involved in the due diligence efforts, as well as representatives from Nomura and Seyfarth Shaw. During the call, the representatives from Nomura provided an overview of the marketing efforts for the PIPE financing, and a Seyfarth Shaw partner provided an overview of the terms of the Merger Agreement.

In the morning on February 9, 2018, a conference call of the TapImmune board of directors was held for the purpose of updating the full Board on the progress of the merger, including the upcoming meetings at BCM scheduled for that day. The call included representatives of Nomura and Seyfarth Shaw. During the call, Peter Hoang updated the board on recent actions to advance the proposed transaction. In addition, he discussed the possibility, which had been suggested by John Wilson, of TapImmune acquiring a similar technology being developed by ViraCyte, LLC, a related company to Marker which is owned by the same stockholder group as Marker and is being developed by the same research group at BCM, including Dr. Leen and Dr. Vera. ViraCyte is a clinical stage biopharmaceutical company developing cellular

immunotherapies for severe viral infections, and uses similar technology to Marker for use in infectious disease indications. Mr. Hoang stated that ViraCyte was a possible follow-on transaction after the merger with Marker transaction was closed, and discussed possible transaction structures for ViraCyte. Mr. Hoang also discussed with the board the potential timing for Marker negotiating and finalizing a License Agreement with BCM for the technology being developed by Dr. Leen and Dr. Vera and their research team.

Mid-day on February 9, 2018, Dr. Leen and Dr. Vera made a presentation on the ViraCyte technology to Peter Hoang and other TapImmune executives, a TapImmune board member, Mark Reddish (by phone), and representatives of Nomura, Seyfarth Shaw and Seed IP. The meeting was held in Houston Texas at BCM's offices.

In mid-afternoon on February 9, 2018, a meeting was held at BCM's offices with a representative of BCM's Licensing Group, John Wilson and Peter Hoang to discuss the background of why the Battersea investment in Marker had been unwound in November 2017.

In late afternoon on February 9, 2018, a meeting was held at BCM's offices with a representative of BCM's Licensing Group. The meeting included a team of TapImmune executives and advisors, including representatives of Nomura, Seyfarth Shaw and Seed IP, and Marker representatives, John Wilson and Dr. Leen and Dr. Vera. At the meeting, the parties discussed (i) background information on TapImmune, (ii) the reasons for the proposed merger between Marker and TapImmune, (iii) TapImmune's plans for developing the BCM/Marker technology, (iv) TapImmune's plans to raise additional capital in a PIPE financing to be closed concurrently with the proposed merger, and (v) the proposed timing for the merger, and the need for Marker and BCM to negotiate and finalize a definitive License Agreement for the technology being developed by Dr. Leen and Dr. Vera, and the other members of the BCM research team.

At the conclusion of the meeting with the representative of the BCM Licensing Group on February 9, 2018, the rest of the group discussed (i) the terms to be proposed to BCM for a BCM license agreement, (ii) other agreements with BCM that would be needed, including a Sponsored Research Agreement and Manufacturing Agreement, (iii) the possibility for including an option for TapImmune to be able to purchase ViraCyte as part of the merger transaction, and (iv) the background of the prior Battersea Biotech investment in Marker and the subsequent repurchase of the investment.

On February 12, 2018, a meeting was held between a technical team of TapImmune executives and Dr. Vera at BCM's offices in Houston Texas to discuss the post-closing transition of the clinical trials and T cell manufacturing from BCM's facilities to a new facility to be opened in Houston by TapImmune. It is expected that this transition will take about a year after the closing to allow for TapImmune to locate and build out an appropriate facility to continue the research and development of the Marker technology.

On February 14, 2018, a conference call was held to discuss the current draft of the BCM license agreement, so that it could be sent to the BCM Licensing Group. The group on the call included John Wilson and Dr. Vera, and Marker's counsel, Peter Hoang and other TapImmune executives, Seed IP representatives and a Seyfarth Shaw representative. The group had an extensive discussion to review the key provisions of the draft BCM license agreement and provided direction to Seed IP to prepare a revised draft of the BCM license agreement.

Also on February 14, 2018, Marker's counsel sent a revised draft of the Merger Agreement to TapImmune's counsel.

On February 15, 2018, Peter Hoang updated the M&A Committee of the TapImmune board on recent developments in the merger. The participants on the call included other TapImmune executives, and representatives from Nomura and Seyfarth Shaw. The Committee discussed the status of negotiations for the BCM license agreement, the revised draft of the Merger Agreement provided by Marker's counsel, which had been received the night before, and Mr. Hoang's discussion with John Wilson on the possibility of including ViraCyte in the current merger. Mr. Hoang and Mr. Wilson had concluded that including ViraCyte in the merger with Marker would unduly complicate the merger, and it would be better for TapImmune to determine the advisability of acquiring ViraCyte after the closing of the merger with Marker. The Committee also discussed the timing for Nomura to start making calls to market the PIPE financing to institutional investors.

During the period of February 15–20, 2018, Mr. Hoang and Mr. Wilson, as well as Marker’s licensing counsel, and Dr. Leen and Dr. Vera, held a number of conference calls to discuss the negotiations of the terms of the BCM license agreement with the BCM Licensing Group.

On February 21, 2018, a due diligence meeting was held in Houston at BCM’s offices with Ali Behbahani of NEA, and Dr. Leen and Dr. Vera, to discuss a potential investment by NEA in the PIPE financing. Attendees at the meeting included Mr. Hoang and other TapImmune executives and advisors, including representatives of Nomura and Seyfarth Shaw. Dr. Behbahani had previously met with Dr. Leen and Dr. Vera in 2017 in connection with NEA’s investment in Battersea Biotech. Dr. Leen and Dr. Vera, and other members of the BCM research team updated Dr. Behbahani on the clinical trial progress since their prior meetings and on the proposed plans for the combined company post-merger.

On February 21, 2018, Peter Hoang, Glynn Wilson, and Nomura representatives had a dinner meeting with representatives of Company B, which Company B had requested. At the dinner, Mr. Hoang explained that TapImmune was in advanced discussions with another party about a potential transaction and was not in a position to re-open discussions with Company B regarding a possible transaction.

On February 22, 2018, a group of TapImmune executives met with Dr. Leen and Dr. Vera, and other Marker representatives, at BCM’s offices in Houston to discuss the transition strategy post-merger for the IND submissions of BCM to the FDA covering the technology being licensed from BCM.

Also on February 22, 2018, a group of TapImmune executives and Marker representatives, including Dr. Leen, Dr. Vera and John Wilson, held a meeting at BCM’s offices in Houston with Christopher Marai, a Managing Director for Biotechnology Equity Research at Nomura. The purpose of the meeting was to educate Mr. Marai about the Marker technology and the clinical research program being conducted at BCM.

On February 23, 2018, Peter Hoang updated the M&A Committee of the TapImmune board on recent developments in the merger. The participants on the call included other TapImmune executives, and representatives from Nomura and Seyfarth Shaw. The Committee discussed the status of the negotiations for the License Agreement with BCM, the discussions with NEA regarding an investment in the PIPE financing, and the marketing efforts to other potential investors TapImmune was planning for Nomura to begin the following week.

In late afternoon on February 23, 2018, a series of meetings were held at BCM’s offices in Houston with representatives of the BCM Licensing Group Office and other BCM representatives, to discuss the terms of the License Agreement between BCM and Marker. The participants in the meeting included Peter Hoang, John Wilson and Marker’s licensing counsel.

On February 28, 2018, Peter Hoang updated the M&A Committee of the Board on recent developments in the merger. The participants on the call included other TapImmune executives, and representatives from Nomura and Seyfarth Shaw. The Committee discussed the status of the negotiations for the BCM license agreement and the marketing by Nomura of the PIPE financing.

On March 2, 2018, a conference call was held among TapImmune executives, Dr. Leen and Dr. Vera, Nomura representatives, and Paul Walker and Ali Behbahani of NEA, to allow Mr. Walker of NEA an opportunity to hear the Marker presentation in connection with NEA’s due diligence on Marker and the PIPE financing.

On March 8, 2018, a dinner meeting was held in New York with the members of the TapImmune Board and John Wilson and Juan Vera to provide an opportunity for the parties to meet each other.

On March 9, 2018, the TapImmune board of directors held its regularly scheduled meeting in New York. Participants in the meeting at various times included other TapImmune executives and advisors, including representatives of Nomura, Seyfarth Shaw, Seed IP and Shumaker. At the meeting, the Board participated in discussions regarding (i) an overview of Marker and the combined company, (ii) a review of the due diligence on Marker’s intellectual property and clinical data, (iii) a review by counsel of the terms of the Merger Agreement and ancillary documents, (iv) the negotiations for the BCM license agreement, and (v) an update on the marketing of the PIPE financing.

On March 9 and 10, 2018, members of the TapImmune board other than Mr. Hoang held informal meetings with John Wilson and Juan Vera to give those Board members an opportunity to ask questions about Marker and its clinical research program.

On March 16, 2018, the BCM license agreement between BCM and Marker was finalized.

In late February 2018, Nomura had started contacting potential investors for the PIPE financing and continued their marketing efforts through March 2018. TapImmune instructed Nomura to focus its marketing on venture capital funds and other similar institutional investors which had experience with making long-term investments in private early-stage biopharmaceutical companies such as Marker.

Throughout all of March 2018, Peter Hoang and other TapImmune executives made roadshow presentations under confidentiality agreements with prospective investors who had been contacted by Nomura, and responded to due diligence requests. During this time period, Mr. Hoang was in frequent contact with John Wilson on the status of the PIPE financing and the responses received from prospective investors. Mr. Hoang and other TapImmune executives were also in frequent contact with Dr. Leen and Dr. Vera for follow-up information needed to answer questions posted by prospective investors.

On March 22, 2018 a conference call was held as part of the due diligence conducted by NEA with respect to the PIPE financing. The participants included Peter Hoang and other TapImmune executives, Dr. Leen and Dr. Vera, Nomura representatives, and other senior representatives of NEA, including David Mott, Elliott Sigal and Ali Behbahani.

On March 23, 2018, Peter Hoang, Dr. Leen and Dr. Vera held a meeting with Ted Tenthoff, a Managing Director for Biotechnology Equity Research at Piper Jaffray at BCM's offices in Houston. The purpose of the meeting was to educate Mr. Tenthoff about the Marker technology and the clinical research program being conducted at BCM.

On March 28, 2018, a conference call was held to update the TapImmune board on the status of the PIPE financing. Participants on the call included other TapImmune executives and representatives from Nomura. The Nomura representatives provided an update of their discussions with potential investors in the PIPE financing, and the TapImmune executives and Nomura representatives provided updates on certain due diligence questions posed by board members at the prior board meeting. The board also discussed the potential cash shortfall should there be a significant delay in closing the merger and the PIPE financing, and the potential need for TapImmune to obtain bridge financing prior to the closing of the merger.

On April 2, 2018, TapImmune and Marker executives made a presentation to the NEA investment committee in a meeting held in Washington D.C. The participants included Peter Hoang, Dr. Richard Kenney, Dr. Leen and Dr. Vera (by telephone), and Nomura representatives, in addition to the members of the NEA investment committee.

In April 2018, Peter Hoang and other TapImmune executives continued their roadshow presentations with prospective investors, and continued responding to due diligence requests regarding the Marker clinical trial results and plans for the combined company. During this period, Mr. Hoang and other TapImmune executives were in frequent contact with Dr. Leen and Dr. Vera for follow-up information needed to answer questions posted by prospective investors on the Marker clinical trial results. Mr. Hoang also was in frequent contact with John Wilson and the members of the TapImmune Board regarding the status of the PIPE financing.

On May 1, 2018, a conference call was held to update the TapImmune Board on the status of the PIPE financing. Participants on the call included other TapImmune executives and representatives from Nomura. Peter Hoang updated the board on the status of the PIPE financing, which was taking substantially more time than had originally been expected. Mr. Hoang discussed the possibility that the PIPE investor group would not be finalized by May 15, 2018, which was the filing date for the Form 10-Q of TapImmune for the first quarter of 2018. The board discussed the alternatives for TapImmune if the PIPE financing was not finalized by May 15, and the need for bridge or interim financing due to TapImmune's current cash reserves only being sufficient to fund TapImmune's operations until sometime in the third quarter. The board discussed the financing alternatives potentially available to TapImmune for the bridge financing. These

alternatives included potential venture debt financing options, a \$1.0 million bridge financing offered by John Wilson, and incentivizing TapImmune's institutional stockholders to exercise some of their warrants in exchange for a reduction of the warrant exercise price. Finally, the board discussed the advisability of signing and announcing the merger on May 15 if the PIPE financing had not been finalized by such date, and agreed to provide a closing condition to Marker for the merger related to a minimum level of PIPE financing concurrently. The TapImmune board felt it was advisable to have the bridge or interim financing lined up when the Form 10-Q was filed. The next board meeting was set for May 14 in New York to consider the approval of the Merger Agreement and any interim or bridge financing.

During the first two weeks of May 2018, TapImmune executives continued having discussions with prospective investors in the PIPE financing. They also commenced discussions under confidentiality agreements with potential funding sources of interim financing, including existing large institutional stockholders. The focus of these stockholder discussions was on issuing additional shares of TapImmune common stock in a private placement transaction and/or exercising warrants at a reduced exercise price. During this time period, Peter Hoang was in frequent contact with John Wilson and members of the TapImmune board.

On May 9, 2018, a conference call was held among Peter Hoang and Michael Loiacono, Nomura representatives and TapImmune counsel from Seyfarth Shaw to discuss the status of the PIPE financing, and the increasing likelihood that the PIPE financing would not be finalized by May 15. John Wilson subsequently joined the call. The parties on the call discussed the plan for TapImmune and Marker to sign the Merger Agreement without having the PIPE financing in place. Under this plan, TapImmune would be able to approach a much wider group of prospective investors, since the merger would be publicly announced. The parties discussed the need to offer an inducement to Marker to agree to sign and announce the Merger Agreement prior to the finalization of the PIPE financing. Among other things, the parties discussed providing Marker with an increase in the number of warrants to be issued to the Marker stockholders if the final terms of the PIPE financing imposed unanticipated dilution to the Marker stockholders. The revised structure would involve issuing additional warrants priced at \$0.01 to make up any shortfall from a minimum value of \$30 million, which would be measured at the purchase price for the PIPE financing. Nomura and Seyfarth Shaw were instructed to work on the details for the increased contingent warrants and proposed revisions to the Merger Agreement.

On May 11, 2018, Seyfarth Shaw sent a proposal to John Wilson and Marker's counsel to provide for the issuance of additional warrants with an exercise price of \$0.01 to make up for any shortfall in the value of the TapImmune shares being issued in the merger from a minimum value of \$30 million, with such value to be based on the purchase price for the TapImmune shares to be issued in the PIPE financing.

On May 12, 2018, Peter Hoang and other TapImmune executives, Nomura representatives and Seyfarth Shaw attorneys negotiated with John Wilson and Marker's counsel the final terms of the contingent additional warrants with an exercise price of \$0.01 per share that would be issuable to the Marker stockholders if the value of the TapImmune shares being issued in the merger were less than \$30 million, with such value to be based on the purchase price for the TapImmune shares to be issued in the PIPE financing. The parties also finalized the revised terms of the Merger Agreement.

On May 13, 2018, Peter Hoang notified the TapImmune board that the negotiations with Marker had been completed, and sent them copies of the revised Merger Agreement.

On May 14, 2018, the TapImmune board held a special meeting at the New York offices of Nomura, which included TapImmune executives, and representatives of Nomura, Seyfarth Shaw and Shumaker. Peter Hoang, Nomura and Seyfarth Shaw reviewed the progress of negotiations with Marker and advised the TapImmune board that all outstanding points had been resolved to the parties' mutual satisfaction. Various TapImmune executives provided an overview of the Marker technology and clinical trial results, as well as the business plan for the combined company. A partner of Seyfarth Shaw reviewed the terms of the merger agreement, which had been previously provided to the TapImmune board. The Seyfarth partner also explained the terms of the contingent additional warrants with an exercise price of \$0.01 per share that would be issuable to the Marker stockholders if the value of the TapImmune shares being issued in the merger were less than \$30 million, with such value to be based on the purchase price for the TapImmune shares to be issued in the PIPE financing.

Also at the May 14, 2018 board meeting, representatives of Nomura reviewed with the TapImmune board Nomura's financial analysis performed in connection with the merger and rendered to the TapImmune board its oral opinion, which was subsequently confirmed by delivery of a written opinion dated May 14, 2018, to the effect that, as of the date of such opinion, and based upon and subject to the assumptions made, procedures followed, matters considered and qualifications and limitations on the review undertaken by Nomura in connection with its opinion, the combined consideration provided for in the merger was fair, from a financial point of view, to TapImmune. After discussion, TapImmune's board adopted resolutions declaring that the merger agreement and the transactions contemplated thereby were advisable, fair and in the best interests of TapImmune and its stockholders, approved the merger agreement and the transactions contemplated thereby and authorized TapImmune to enter into the merger agreement with Marker. Finally, the TapImmune board discussed and approved interim financing with certain of its large institutional stockholders that would involve issuing additional shares of common stock in a private placement transaction to one stockholder and inducing other stockholders to exercise warrants at a reduced exercise price pursuant to warrant exercise agreements.

On May 15, 2018, TapImmune and Marker executed the merger agreement, and certain TapImmune and Marker stockholders entered into voting agreements with TapImmune and Marker.

On May 15, 2018, prior to market open, TapImmune and Marker issued a joint press release, and held a conference call for the investment community, announcing that the companies had entered into a definitive agreement under which Marker will merge with a subsidiary of TapImmune and TapImmune had obtained interim financing.

On May 18, 2018, TapImmune closed on the previously announced sale of 1,300,000 shares of TapImmune common stock for \$2.40 per share with an existing stockholder in a private placement transaction, with aggregate gross proceeds of approximately \$3.1 million. Also on May 18, 2018, TapImmune and certain existing institutional investors, who are holders of various warrants to purchase shares of TapImmune common stock, closed on the previously announced warrant exercises in which TapImmune agreed to reduce the exercise price for a portion of the investors' previously purchased warrants to \$2.50 per share, provided that the investors exercise such warrants for cash immediately, which they did, for 782,506 shares and aggregate proceeds of approximately \$2.0 million. The investors in these transactions also signed Voting and Support Agreements agreeing to vote any shares of TapImmune common stock held by them in favor of the merger and related transactions.

On May 22, 2018, TapImmune engaged Piper Jaffray & Co. to be the sole lead placement agent for the PIPE financing, with Nomura to be the co-placement agent. With the merger now publicly announced, TapImmune requested that Piper Jaffray expand the group of prospective investors in the PIPE financing to include institutional funds and investors which primarily or exclusively invest in public companies.

From May 23, 2018 to June 7, 2018, Peter Hoang and other TapImmune executives worked with Piper Jaffray to make roadshow presentations with the expanded group of prospective investors, and responded to due diligence requests regarding the Marker clinical trial results and plans for the combined company. During this period, Mr. Hoang and other TapImmune executives were in frequent contact with Dr. Leen and Dr. Vera for follow-up information needed to answer questions posted by prospective investors on the Marker clinical trial results.

On the night of June 7, 2018, Piper Jaffray informed TapImmune that it was ready to price the PIPE financing to sell \$70 million of TapImmune common stock at a purchase price of \$4.00 per share, which would include 75% warrant coverage with five-year warrants having an exercise price of \$5.00 per share.

Also on the night of June 7, 2018, the TapImmune board held a special meeting by conference call with TapImmune executives, and representatives of Piper Jaffray, Seyfarth Shaw and Shumaker. On the conference call, representatives of Piper Jaffray discussed the results of the PIPE financing efforts, and informed the board that it was ready to finalize the PIPE financing on the terms outlined above. After discussion, the TapImmune board unanimously approved the terms of the PIPE financing and the transactions contemplated thereby and authorized TapImmune to enter into the securities purchase agreements with each of the PIPE financing investors.

On June 8, 2018, TapImmune and each of the PIPE investors executed securities purchase agreements for the PIPE financing. On June 8, 2018, prior to market open, TapImmune issued a press release announcing the PIPE financing, which is referred to in this proxy statement as the private placement transaction.

Due to the increased dilution associated with the \$70 million PIPE financing, which was substantially larger than originally anticipated, John Wilson requested that the TapImmune board consider potential means to offset the unanticipated dilution to the Marker stockholders, including the potential issuance of additional warrants. The TapImmune board communicated its willingness to consider reasonable approaches to accommodate the request from Marker. Between June 8, 2018 to June 12, 2018, Peter Hoang and John Wilson engaged in numerous discussions as to potential approaches to facilitate Marker's objectives, as well as considerations associated with any adjustments to the existing agreements and merger structure. On June 12, 2018, John Wilson, after consulting with his advisors, informed Peter Hoang that Marker would proceed without any changes to the existing agreements or merger structure.

TapImmune's Reasons for the Merger

TapImmune's board considered the following factors in reaching its conclusion to approve the merger and to recommend that the TapImmune stockholders approve the issuance of shares of TapImmune common stock in the Merger and the private placement transaction, all of which TapImmune's board viewed as supporting its decision to approve the merger with Marker:

- TapImmune's board believes, based in part on the judgment, advice and analysis of TapImmune's senior management with respect to the potential strategic, financial and operational benefits of the merger (which judgment, advice and analysis was informed in part on the business, technical, financial, accounting and legal due diligence investigation performed with respect to Marker), that Marker's proprietary MultiTAA T cell platform has a potentially compelling therapeutic product profile as compared to competitive cell therapy approaches, and has the potential to significantly disrupt the current offerings of gene-modified T cell therapies, including CAR-T and TCR approaches. TapImmune believes that Marker's technology has the potential to lead to the development and commercialization of immunotherapies for the treatment of hematological malignancies and solid tumors.
- TapImmune's board also reviewed with its management and Marker's research team the current plans of Marker for developing its MultiTAA T cell platform to confirm the likelihood that the combined company would possess sufficient financial resources to allow the management team to focus on the continued development and potential commercialization. TapImmune's board also considered the possibility that the combined company would be able to take advantage of the potential benefits resulting from the combination of the TapImmune public company structure with the Marker business to raise additional funds in the future to continue developing Marker's MultiTAA T cell platform.
- TapImmune's board concluded that the Merger would provide the existing TapImmune stockholders a significant opportunity to participate in the potential growth of the combined company following the Merger.
- TapImmune's board also considered that the combined company will be led by an experienced senior management team and a board of directors with representation from each of the current boards of directors of TapImmune and Marker.
- TapImmune's board considered the financial analyses of Nomura presented at the May 14, 2018 board meeting and the opinion of Nomura, dated May 14, 2018, to the board that, as of that date and based on and subject to the assumptions made, procedures followed, matters considered and qualifications and limitations on the review undertaken by Nomura described in its opinion, the combined consideration provided for in the merger was fair, from a financial point of view, to TapImmune, as more fully described below in the section entitled "*The Merger — Opinion of Nomura Securities International, Inc.*" beginning on page [63](#).

- TapImmune’s board considered the terms of the BCM license agreement between BCM and Marker.
- TapImmune’s board also reviewed the recent financial condition, results of operations and financial condition of TapImmune, including:
 - the risks of continuing to operate TapImmune on a stand-alone basis and the belief that the combination of TapImmune’s and Marker’s businesses would create more value for TapImmune stockholders in the long-term than TapImmune could create as an independent, stand-alone company, given the anticipated costs, timing and risks associated with continuing the development of TapImmune products in development and/or in-licensing or acquiring additional technologies or product candidates; and
 - historical and current financial market conditions and stock prices and historical stock prices and trading volumes of TapImmune common stock.

TapImmune’s board also reviewed the terms of the Merger and associated transactions, including:

- the exchange ratio in the merger which is intended to result in the TapImmune stockholders holding, on a fully-diluted basis (assuming the issuance of all outstanding warrants and options), and before considering the issuance of the common stock and warrants in the private placement transaction occurring concurrently with the merger, 50% of the outstanding shares of the combined company on a fully-diluted basis immediately following the effective time of the merger, before the impact of any adjustments for additional warrants potentially issuable to the Marker stockholders if the value of the TapImmune shares being issued in the merger were less than \$30 million, with such value to be based on the purchase price for the TapImmune shares to be issued in the private placement transaction. Such adjustment mechanism, which was never given effect due to the stock purchase price subsequently agreed to in the private placement transaction announced on June 8, 2018, is described further in the section entitled “*The Merger Agreement — Merger Consideration*” beginning on page [81](#) of this proxy statement;
- the merger is intended to be treated as a reorganization for U.S. federal income tax purposes, and in the merger, neither the TapImmune stockholders nor Marker stockholders will generally recognize taxable gain or loss for U.S. federal income tax purposes;
- Marker stockholders, with approximately 86% of the outstanding shares of Marker common stock, had agreed to approve the merger agreement within 24 hours after the signing of the merger agreement;
- the limited number and nature of the conditions to Marker’s obligation to consummate the merger and the limited risk of non-satisfaction of such conditions;
- that TapImmune has rights under the merger agreement to consider certain unsolicited acquisition proposals under certain circumstances should TapImmune receive a superior proposal;
- the conclusion of the TapImmune board of directors that the potential termination fee of \$1.5 million, which occurs upon termination of the merger agreement under certain specified circumstances, was reasonable;
- the no-solicitation provisions governing the ability of Marker to engage in negotiations with, provide any confidential information or data to, and otherwise have discussions with, any person relating to an alternative acquisition proposal; and
- the belief that the terms of the merger agreement, including the parties’ representations, warranties and covenants, and the conditions to their respective obligations, are reasonable under the circumstances.

In the course of its deliberations, the TapImmune board of directors also considered a variety of risks and other countervailing factors related to entering into the merger agreement and the proposed business combination with Marker, including:

- the risk that TapImmune might be unable to successfully find investors to purchase at least \$25 million of common stock in the private placement transaction that was a condition to closing under the merger agreement, or that the terms of such private placement transaction would be unfavorable to TapImmune;
- the potential effect of the \$1.5 million termination fee in deterring other potential acquirers from proposing an alternative transaction that may be more advantageous to TapImmune stockholders;
- the possibility that the anticipated benefits of the merger may not be realized or that they may be lower than expected;
- the substantial expenses to be incurred in connection with the merger, including transaction expenses that would be incurred whether or not the merger is completed;
- the possible volatility and potential decline, at least in the short term, of the trading price of TapImmune common stock resulting from the merger announcement;
- the risk that the merger might not be consummated in a timely manner or at all and the potential adverse effect of the public announcement of the merger or of a delay or failure to complete the merger with Marker on the reputation of TapImmune;
- the risk to the business, operations and financial results of TapImmune in the event that the merger is not consummated;
- the restrictions on the conduct of TapImmune’s business prior to completion of the merger, which require TapImmune to carry on its business in the ordinary course and consistent with past practice, subject to specific additional restrictions, which may delay or prevent TapImmune from pursuing business opportunities that otherwise would be in its best interests as an independent, stand-alone company;
- the risks, challenges and costs associated with successfully integrating two companies;
- the strategic direction of the combined board and the related ability of Marker stockholders and investors in the private placement transaction to significantly influence the combined company’s business following completion of the merger; and
- various other risks associated with the combined company and the merger, including those described in the section entitled “*Risk Factors*” in this proxy statement.

The foregoing discussion of the factors considered by TapImmune’s board of directors is not intended to be exhaustive, but does set forth the principal factors considered by TapImmune’s board of directors. TapImmune’s board of directors unanimously approved the merger agreement after considering the various factors described above and other factors that each member of TapImmune’s board of directors deemed relevant. In view of the wide variety of factors considered by the members of TapImmune’s board of directors in connection with their evaluation of the merger agreement and the complexity of these matters, TapImmune’s board of directors did not consider it practical, and did not attempt, to quantify, rank or otherwise assign relative weights to the specific factors it considered in reaching its decision. TapImmune’s board of directors made its decision based on the totality of information presented to and considered by it. In considering the factors discussed above, individual directors may have given different weights to different factors.

TAPIMMUNE’S BOARD OF DIRECTORS UNANIMOUSLY DETERMINED THAT THE MERGER AGREEMENT AND THE MERGER ARE ADVISABLE, FAIR AND IN THE BEST INTERESTS OF TAPIMMUNE STOCKHOLDERS AND UNANIMOUSLY APPROVED THE MERGER AGREEMENT. TAPIMMUNE’S BOARD OF DIRECTORS UNANIMOUSLY RECOMMENDS THAT TAPIMMUNE STOCKHOLDERS APPROVE THE ISSUANCE OF TAPIMMUNE COMMON STOCK, WARRANTS TO PURCHASE TAPIMMUNE COMMON

STOCK, AND SHARES OF TAPIMMUNE COMMON STOCK ISSUABLE UPON EXERCISE OF WARRANTS TO PURCHASE TAPIMMUNE COMMON STOCK, PURSUANT TO THE MERGER AGREEMENT; THE ISSUANCE OF TAPIMMUNE COMMON STOCK AND WARRANTS TO PURCHASE TAPIMMUNE COMMON STOCK, AND SHARES OF TAPIMMUNE COMMON STOCK ISSUABLE UPON EXERCISE OF WARRANTS TO PURCHASE TAPIMMUNE COMMON STOCK, IN THE PRIVATE PLACEMENT TRANSACTION; THE AMENDMENTS TO TAPIMMUNE'S ARTICLES OF INCORPORATION TO INCREASE THE NUMBER OF AUTHORIZED SHARES OF TAPIMMUNE COMMON STOCK FROM 41,666,667 TO 150,000,000, TO CHANGE TAPIMMUNE'S NAME TO "MARKER THERAPEUTICS, INC."; AND THE REINCORPORATION FROM NEVADA TO DELAWARE.

Opinion of Nomura Securities International, Inc.

TapImmune engaged Nomura as its exclusive financial advisor in connection with the merger. As part of this engagement, Nomura delivered an opinion, dated May 14, 2018, to the TapImmune board to the effect that, as of that date and based on and subject to various assumptions, qualifications, matters considered and limitations described in the opinion, the combined consideration provided for in the merger was fair, from a financial point of view, to TapImmune. For purposes of Nomura's analyses and opinion, the term "combined consideration" refers to the stock exchange ratio and the warrant exchange ratio, taken together, but excluding (i) any of the adjustments, limitations and procedures relating thereto set forth in the merger agreement and (ii) the additional merger warrants issuable to the Marker stockholders pursuant to the additional warrant ratio in connection with the merger, in each case, with respect to which Nomura expressed no opinion. The full text of Nomura's written opinion, dated May 14, 2018, is attached as Annex C to this proxy statement and sets forth, among other things, the assumptions made, procedures followed, matters considered and qualifications and limitations on the review undertaken by Nomura in connection with its opinion.

Nomura's opinion was provided solely for the benefit of the TapImmune board (in its capacity as such) in connection with, and for the purposes of, its evaluation of the merger. Nomura's opinion addressed only the fairness, from a financial point of view and as of the date of such opinion, of the combined consideration (to the extent expressly specified in such opinion) and did not address any other aspect of the merger. Nomura's opinion did not address the relative merits of the merger as compared to other business strategies or transactions that might be available with respect to TapImmune or TapImmune's underlying business decision to effect the merger. Nomura does not express any opinion and does not make any recommendation to any stockholder as to how such stockholder should vote or act with respect to the merger or any proposal to be voted upon in connection with the merger or otherwise.

In arriving at its opinion, Nomura, among other things:

- reviewed certain publicly available business and financial information relating to TapImmune and Marker;
- reviewed certain internal financial information and other data relating to the businesses and financial prospects of TapImmune that were provided to Nomura by the management of TapImmune and not publicly available, including the financial projections;
- reviewed certain internal financial information and other data relating to the businesses and financial prospects of Marker that were provided to Nomura by the management of TapImmune and not publicly available, including financial forecasts and estimates prepared by management of TapImmune after consultation with the management of Marker;
- conducted discussions with members of the senior managements of TapImmune and Marker concerning the businesses and financial prospects of TapImmune and Marker;
- performed a discounted cash flow analysis of each of TapImmune and Marker in which Nomura analyzed their respective future cash flows (taking into account certain adjustments and on an unadjusted basis) using financial forecasts and estimates prepared by the management of TapImmune;

- reviewed publicly available financial and stock market data with respect to certain other companies that Nomura believed to be comparable to TapImmune or Marker;
- compared the financial terms of the merger with the publicly available financial terms of certain other transactions that Nomura believed to be generally comparable to the merger;
- reviewed current and historical market prices of TapImmune's common stock;
- considered certain pro forma effects of the merger on TapImmune's financial statements;
- reviewed a draft, dated as of May 12, 2018, of the merger agreement;
- considered TapImmune's historical capital raising efforts; and
- conducted such other financial studies, analyses and investigations, and considered such other information, as Nomura deemed necessary or appropriate.

In connection with its review, with the consent of the TapImmune board, Nomura did not independently verify, nor did it assume any responsibility for independent verification of, any of the information provided to or reviewed by it for the purpose of its opinion and, with the consent of the board, Nomura relied on such information being complete and accurate in all material respects. In addition, with the consent of the Board, Nomura did not make any independent evaluation or appraisal of any of the assets or liabilities (contingent or otherwise) of TapImmune or Marker, nor was Nomura furnished with any such evaluation or appraisal. Nomura also did not evaluate, and did not express an opinion as to the impact of the merger on, the solvency, viability or fair value of TapImmune or Marker under any state or federal law relating to bankruptcy, insolvency or similar matters or the ability of TapImmune or Marker to pay its obligations when they become due. With respect to the financial forecasts, estimates and pro forma effects referred to above, Nomura assumed, at the direction of the board, that they had been reasonably prepared on a basis reflecting the best currently available estimates and judgments of the management of each of TapImmune and Marker as to the future financial performance of such company and such pro forma effects. In addition, Nomura assumed with the board's approval that the financial forecasts and estimates referred to above will be achieved at the times and in the amounts projected and that each of TapImmune and Marker will raise additional capital during the periods covered by such forecasts and estimates. Nomura also assumed, with the board's consent, that TapImmune's ability to raise capital will be enhanced once the merger is consummated. Nomura has also assumed, with the board's consent, that the merger will qualify for U.S. federal income tax purposes as a reorganization within the meaning of Section 368(a) of the Internal Revenue Code of 1986, as amended. Nomura expressed no opinion regarding the fairness of the amount or nature of the compensation to any of TapImmune's officers, directors or employees, or class of such persons, relative to the compensation to the public stockholders of TapImmune, in connection with the merger. Nomura's opinion is necessarily based on economic, monetary, market and other conditions as in effect on, and the information available to Nomura as of, the date of its opinion. It should be understood that subsequent developments may affect Nomura's opinion, and Nomura does not have any obligation to update, revise or reaffirm its opinion.

Although Nomura's opinion was approved by its Fairness Opinion Committee, Nomura does not address the relative merits of the merger or any related transaction as compared to other business strategies or transactions that might be available to TapImmune or TapImmune's underlying business decision to effect the merger or any related transaction. Nomura's opinion does not constitute a recommendation to any stockholder as to how such stockholder should vote or act with respect to the merger or any related transaction. At the TapImmune board's direction, Nomura has not been asked to, nor has Nomura, offered any opinion as to (i) the terms, other than the combined consideration to the extent expressly specified in its opinion, of the merger agreement or any related documents or the form of the merger or any related transaction, (ii) the private placement transaction in any respect, including the impact, terms and form of, and any documents relating to, the private placement transaction and the ability of the private placement transaction to be consummated. Nomura expressed no opinion as to what the value of the TapImmune common stock will be when issued pursuant to the merger or any related transaction or the price at which the TapImmune common stock will trade at any time. In addition, Nomura expressed no opinion as to any adjustment, or the effect of any adjustment, to the amount of the exercise price of any warrant or option issued by TapImmune. In rendering its opinion, Nomura assumed, with the consent of the board, that

(i) the final executed form of the merger agreement would not differ in any material respect from the draft that Nomura reviewed, (ii) TapImmune and Marker would comply with all material terms of the merger agreement, and (iii) the merger would be consummated in accordance with the terms of the merger agreement without any adverse waiver or amendment of any material term or condition thereof. Nomura also assumed that all governmental, regulatory or other consents and approvals necessary for the consummation of the merger would be obtained without any adverse effect on TapImmune, Marker or the expected benefits of the merger in any way meaningful to Nomura's analysis. Nomura is not a legal, regulatory, tax or accounting expert and relied on the assessments made by TapImmune and its advisors with respect to such issues. Nomura was not authorized to solicit and did not solicit indications of interests in a business combination with TapImmune from any other party.

In connection with rendering its opinion to the TapImmune board, Nomura performed a variety of financial and comparative analyses which are summarized below. The following summary is not a complete description of all analyses performed and factors considered by Nomura in connection with its opinion. The preparation of a financial opinion is a complex process involving subjective judgments and is not necessarily susceptible to partial analysis or summary description. With respect to the selected companies analysis and the selected transactions analysis summarized below, no company or transaction used as a comparison was identical to TapImmune or the merger. These analyses necessarily involve complex considerations and judgments concerning financial and operating characteristics and other factors that could affect the public trading or acquisition values of the companies concerned.

In arriving at its opinion, Nomura employed several analytical methodologies and no one method of analysis should be regarded as critical to the overall conclusion reached by Nomura. Each analytical technique has inherent strengths and weaknesses, and the nature of the available information may further affect the value of particular techniques. The overall conclusion reached by Nomura was based on all analyses and factors presented, taken as a whole, and also on application of Nomura's experience and judgment. Such conclusion may have involved significant elements of subjective judgment and qualitative analysis and no opinion was given as to the value or merit standing alone of any one or more portions of such analyses or factors.

Nomura believes that its analyses and the summary below must be considered as a whole and that selecting portions of its analyses and factors or focusing on information presented in tabular format, without considering all analyses and factors or the narrative description of the analyses, could create a misleading or incomplete view of the processes underlying Nomura's analyses and opinion. Nomura did not draw, in isolation, conclusions from or with regard to any one factor or method of analysis for purposes of its opinion, but rather arrived at its opinion based on the results of all analyses undertaken by it and assessed as a whole.

In performing its analyses, Nomura considered industry factors (such as the probability of success of a drug), general business and economic conditions and other matters, many of which are beyond the control of TapImmune and Marker. The estimates of the future performance of TapImmune and Marker in or underlying Nomura's analyses are not necessarily indicative of actual values or actual future results, which may be significantly more or less favorable than those estimates or those suggested by Nomura's analyses. The analyses do not purport to be appraisals or to reflect the prices at which a company or business might actually be sold or acquired or the prices at which any securities have traded or may trade at any time in the future. Accordingly, the estimates used in, and the ranges of valuations resulting from, any particular analysis described below are inherently subject to substantial uncertainty and should not be taken as Nomura's view of the actual value of TapImmune or Marker.

The combined consideration to be paid by TapImmune pursuant to the merger agreement was determined through negotiations between TapImmune and Marker and was approved by the TapImmune board. The decision to enter into the merger agreement and any related agreements was solely that of the board. Nomura's opinion and analyses were only one of many factors considered by the board in its evaluation of the merger and should not be viewed as determinative of the views of the board, management or any other party with respect to the merger or related transactions or the consideration payable in the merger or related transactions.

Financial Analyses

The summary of the financial analyses described below under this heading “—*Financial Analyses*” is a summary of the material financial analyses provided by Nomura to the TapImmune board in connection with Nomura’s opinion, dated May 14, 2018. **The financial analyses summarized below include information presented in tabular format. In order to fully understand the financial analyses performed by Nomura, the tables must be read together with the text of each summary. The tables alone do not constitute a complete description of the financial analyses. Selecting portions of Nomura’s financial analyses or factors considered or focusing on the data set forth in the tables below without considering all analyses or factors or the full narrative description of such analyses or factors, including the methodologies and assumptions underlying the analyses, could create a misleading or incomplete view of Nomura’s financial analyses.**

52 Week Share Price Performance of TapImmune

Nomura performed a valuation analysis of the equity value of TapImmune common stock (i) as of May 11, 2018 and (ii) based on the share price performance of the TapImmune common stock in the 52 weeks ended May 11, 2018, in each case in which Nomura reviewed certain financial and stock information of TapImmune. Nomura observed that the price of TapImmune common stock as of the close of market on May 11, 2018 was \$2.88 per share and that the low and high prices of shares of TapImmune common stock for the 52 week period ended May 11, 2018 were \$2.58 and \$4.41 per share, respectively.

Nomura calculated the equity value of TapImmune by multiplying such per share prices by the total number of fully diluted shares of TapImmune common stock using the treasury method and based on TapImmune’s public filings as of May 11, 2018. This analysis yielded the following:

Approximate Equity Value (in US\$ millions)	
As of May 11, 2018	Based on Low and High for 52 Week Period ended May 11, 2018
\$32	\$28 – 48

Recent Biotech IPOs

Nomura reviewed and compared Marker to biotechnology companies that were in the pre-clinical Phase II trial stage of drug development and underwent initial public offerings between January 2017 and May 11, 2018. Nomura used publicly available information and current and historical financial information for each such company in its analysis. The companies for this analysis were as follows:

- Evelo Biosciences, Inc.
- Aslan Pharmaceuticals Ltd
- Unit Biotechnology Inc.
- MorphoSys AG
- Surface Oncology Inc.
- Unum Therapeutics Inc.
- Homology Medicines Inc.
- Arcus Biosciences Inc.
- BioXcel Therapeutics Inc.
- Sol-Gel Technologies Ltd
- Solid Biosciences Inc.
- resTORbio Inc.
- Menlo Therapeutics Inc.
- Denali Therapeutics Inc.
- Arsanis Inc.
- Apellis Pharmaceuticals
- InflaRx NV
- Allena Pharmaceuticals Inc.
- Spero Therapeutics Inc.
- Deciphera Pharmaceuticals Inc.
- Nightstar Therapeutics Ltd
- Krystal Biotech Inc.
- Clementia Pharmaceuticals Inc.
- Sienna Pharmaceuticals Inc.
- Aileron Therapeutics Inc.
- Mersana Therapeutics Inc.
- Argenx NV
- G1 Therapeutics Inc.
- Ovid Therapeutics Inc.
- Biohaven Pharmaceutical
- Zymeworks Inc.
- Verona Pharma plc
- Tocagen Inc.
- Jounce Therapeutics Inc.
- ObsEva SA
- Anaptys Bio Inc.

In such analysis, Nomura reviewed, among other things, the pre-initial public offering equity value of each such company and derived an implied equity valuation range of Marker based on the mean and median pre-initial public offering equity values of such companies. This analysis indicated the following approximate implied equity value reference range for Marker:

**Approximate Implied
Equity Value Reference Range
(in US\$ millions)**

\$300 to \$395

Comparable Companies Analyses

TapImmune. Nomura performed a comparable company analysis with respect to TapImmune. Nomura reviewed and compared TapImmune to certain publicly traded companies that, similar to TapImmune, are pre-clinical Phase III stage oncology firms focused on developing treatments for various forms of cancer. Nomura used publicly available information and current and historical financial information for each such comparable company in its analysis. The companies selected were as follows:

- Aduro Biotech
- NantKWest
- Immune Design
- Genoceca
- Advaxis

In each case, these companies were selected on the basis of their financial and operating metrics and characteristics, including products in pre-clinical and clinical trials, risk profile, size and type of operations. Nomura calculated the enterprise values of each comparable company as of the close of market on May 11, 2018 and derived an implied equity valuation of TapImmune based on the mean and median enterprise values of such companies, which valuation assumed that TapImmune had a cash balance of \$5.1 million based on TapImmune's public filings as of May 11, 2018. This analysis indicated the following implied equity value reference range for TapImmune:

**Implied
Equity Value Reference Range
(in US\$ millions)**

\$66 to \$164

Marker. Nomura performed a comparable company analysis with respect to Marker. Nomura reviewed and compared Marker to certain publicly traded companies that, similar to Marker, are Phase I to Phase II stage oncology firms focused on developing treatments for various forms of cancer. Nomura used publicly available information and current and historical financial information for each such comparable company in its analysis. The companies selected were as follows:

- Atara Biotherapeutics
- Iovance Biotherapeutics
- Adaptimmune Therapeutics
- Cellectis
- Ziopharm Oncology
- Bellicum Pharmaceuticals
- Celyad
- Unum Therapeutics

In each case, these companies were selected on the basis of their financial and operating metrics and characteristics, including products in clinical trials, risk profile, size and type of operations. Nomura calculated the enterprise values of each comparable company as of the close of market on May 11, 2018 and derived an implied equity valuation of Marker based on the mean and median enterprise values of such companies. This analysis indicated the following implied equity value reference range for Marker:

**Implied
Equity Value Reference Range
(in US\$ millions)**

\$741 to \$816

Discounted Cash Flow Analyses

TapImmune. Nomura performed a discounted cash flow analysis of TapImmune by calculating the estimated present values of the unlevered free cash flows that TapImmune was forecasted to generate during the period from June 30, 2018 to December 31, 2033 based on the financial projections. Nomura then discounted the unlevered free cash flow to present value as of June 30, 2018 using a selected discount rate range of 14.0% to 16.0% based on Nomura's estimation of TapImmune's then current weighted average cost of capital. Nomura further adjusted the unlevered free cash flow by assuming that TapImmune had a 15.0% probability of success, or POS, which was provided by TapImmune management, of obtaining regulatory approval of a clinical trial of a Phase II asset and reducing the unlevered free cash flow by 85.0%. Nomura then calculated a terminal value for TapImmune by applying a range of perpetual growth rates of -0.1% to 1.0% to the unlevered free cash flow of TapImmune for 2033 (as adjusted for the 15.0% POS). Nomura then calculated TapImmune's implied equity valuation by adding the present value of the POS adjusted unlevered free cash flows, the terminal value and TapImmune's cash balance of \$5.1 million (based on TapImmune's public filings as of May 11, 2018). This analysis indicated the following approximate implied equity value reference range for TapImmune:

**Approximate Implied
Equity Value Reference Range
(in US\$ millions)**

\$115 to \$175

Marker. Nomura performed a discounted cash flow analysis of Marker by calculating the estimated present values of the unlevered free cash flows that Marker was forecasted to generate during the period from June 30, 2018 to December 31, 2033 based on the financial projections. Nomura then discounted the unlevered free cash flow to present value as of June 30, 2018 using a selected discount rate range of 13.0% to 15.0% based on Nomura's estimation of Marker's then current weighted average cost of capital. Nomura further adjusted the unlevered free cash flow by assuming that Marker had a 15.0% POS of obtaining regulatory approval of a clinical trial of a Phase II asset and reducing the unlevered free cash flow by 85.0%. Nomura then calculated a terminal value for Marker by applying a range of perpetual growth rates of -0.1% to 1.0% to the unlevered free cash flow of Marker for 2033 (as adjusted for the 15.0% POS). Nomura then calculated Marker's implied equity valuation by adding the present value of the POS adjusted unlevered free cash flows and the terminal value. This analysis indicated the following approximate implied equity value reference range for Marker:

**Approximate Implied
Equity Value Reference Range
(in US\$ millions)**

\$385 to \$565

Comparable Transaction Analysis

Nomura analyzed certain publicly available information in the following transactions, which involved acquisitions of biotech or biotechnology firms with products in pre-clinical to Phase II stage of clinical trials announced since January 1, 2016:

<u>Date Announced</u>	<u>Acquirer</u>	<u>Target</u>
February 2018	Merck	Viralalytics
February 2018	Astellas	Universal Cells
January 2018	Seattle Genetics	Canadian Therapeutics
January 2018	Celgene Corporation	Juno Therapeutics
December 2017	Roche	Ignyta
December 2017	Gilead Sciences	Cell Design Labs
August 2017	Bristol-Myers Squibb	IFM Therapeutics
December 2016	Sumitomo Dainippon Pharma	Tolero Pharmaceuticals
November 2016	Celldex Therapeutics	Kolltan Pharma
October 2016	Astellas	Ganymed Pharma
September 2016	Celgene	EngMab
April 2016	AbbVie	Stemcetrx
January 2016	Merck	Iomet
January 2016	Roche	Tensha Therapeutics

Nomura reviewed the purchase price paid in each such transaction and derived an implied equity valuation of Marker based on the mean and median purchase price (other than any earnout or other deferred consideration) in each such transaction. This analysis indicated the following approximate implied equity value reference range for Marker:

**Approximate Implied
Equity Value Reference Range
(in US\$ millions)**

\$350 to \$1,365

Implied Equity Value Contribution Analysis

Nomura reviewed the implied equity value contribution of Marker to the combined company following the consummation of the merger based on the implied equity valuation reference ranges indicated in the financial analyses described above. This analysis indicated the following:

<u>Marker Implied Equity Value based on</u>	<u>As compared to</u>	<u>TapImmune Implied Equity Value based on</u>	<u>Implied Equity Contribution by Marker</u>
Recent Biotech IPOs Analysis		Equity Value as of May 11, 2018	90.5% to 92.6%
Comparable Companies Analysis		Comparable Companies Analysis	81.8% to 92.6%
Comparable Transactions Analysis		Equity Value as of May 11, 2018	91.7% to 97.7%
Discounted Cash Flow Analysis (POS Adjusted)		Discounted Cash Flow Analysis (POS Adjusted)	68.8% to 83.1%

Nomura noted that, based on the terms of the merger agreement, the stockholders of Marker would own 50% of the issued and outstanding equity of the combined company immediately following the consummation of the merger, but without taking into account the closing of the private placement transaction occurring concurrently with the closing of the merger.

The lower end of each reference range was calculated by dividing (i) the lowest Marker implied equity value indicated in the applicable analysis by (ii) a number equal to (A) such lowest Marker implied equity value plus (B) the highest TapImmune implied equity value indicated in the applicable analysis.

The upper end of each reference range was calculated by dividing (i) the highest Marker implied equity value indicated in the applicable analysis by (ii) a number equal to (A) such highest Marker implied equity value plus (B) the lowest TapImmune implied equity value indicated in the applicable analysis.

Implied Combined Consideration Analysis

Nomura reviewed the combined consideration and the implied equity valuation reference ranges indicated in the Implied Equity Value Contribution analysis described above. Nomura then calculated the range of combined company shares that each stockholder of Marker would receive as the implied combined consideration per share of Marker common stock and, as part of such calculation, Nomura deducted the aggregate exercise price of then-outstanding TapImmune warrants, which was approximately \$22 million, and the aggregate exercise price of the maximum number of warrants to be issued to the Marker stockholders in connection with the transaction, which was approximately \$14 million.

This analysis indicated the following:

Marker Implied Equity Value based on	As compared to	TapImmune Implied Equity Value based on	Implied TapImmune Shares Issued per Marker Share
Recent Biotech IPOs Analysis		Equity Value as of May 11, 2018	46.4 to 61.8
Comparable Companies Analysis		Comparable Companies Analysis	8.0 to 29.3
Comparable Transactions Analysis		Equity Value as of May 11, 2018	54.5 to 219.3
Discounted Cash Flow Analysis (POS Adjusted)		Discounted Cash Flow Analysis (POS Adjusted)	3.8 to 9.3

Nomura then noted that its calculations indicated that each Marker stockholder would receive a maximum of 1.58 shares of combined company common stock for each share of Marker common stock in connection with the merger.

Certain Additional Informational

Nomura observed certain factors that were not considered part of Nomura's financial analyses with respect to its opinion but were referenced for informational purposes only, including, among other things, the following:

- A discounted cash flow analysis with respect to TapImmune where a 12.5% to 17.5% POS was used instead of a 15.0% POS, which (assuming all other elements of the financial analysis described in “— Financial Analyses — Discounted Cash Flow Analyses — TapImmune” are held constant) indicated an implied equity value reference range for TapImmune of \$102 million to \$192 million;
- A discounted cash flow analysis with respect to Marker where a 12.5% to 17.5% POS was used instead of a 15.0% POS, which (assuming all other elements of the financial analysis described in “— Financial Analyses — Discounted Cash Flow Analyses — Marker” are held constant) indicated an implied equity value reference range for Marker of \$332 million to \$628 million.
- The purchase prices paid in each of the mergers listed below, which involved acquisitions of biotech or biotechnology firms with products in the Phase III stage of clinical trials announced since January 1, 2016. Nomura noted that the mean and median of the purchase prices of such transactions were approximately \$6.7 billion and \$5.1 billion, respectively.

<u>Date Announced</u>	<u>Acquirer</u>	<u>Target</u>
April 2018	Servier	Shire (Oncology Business)
August 2017	Gilead Sciences	Kite Pharma
January 2017	Takeda	Ariad Pharmaceuticals
August 2016	Pfizer	Medivation
May 2016	Jazz	Celator Pharma

Miscellaneous

Nomura's opinion and its presentation to the TapImmune board was one of many factors taken into consideration by the Board in deciding to approve the merger agreement. Consequently, the analyses described above should not be viewed as determinative of the view of the board with respect to the combined consideration or of whether the board would have been willing to agree to different terms in the merger. The combined consideration and other terms of the merger were determined through arm's-length negotiations between TapImmune and Marker and were approved by the board. Nomura did not recommend any specific merger consideration to TapImmune.

Under the terms of Nomura's engagement, TapImmune has agreed to pay Nomura for its financial advisory services in connection with the merger an aggregate fee of \$1.5 million, of which \$350,000 was payable upon issuance of Nomura's opinion, and the balance of which is contingent upon consummation of the merger. Also, in connection with the merger, Nomura is acting as the co-placement agent in connection with the private placement transaction and TapImmune has agreed to pay Nomura for such placement agent services an aggregate fee currently estimated to be \$3.0 million. In addition, TapImmune has agreed to reimburse Nomura for its reasonable expenses up to \$75,000 in connection with the merger and the private placement transaction, including fees, disbursements and other charges of outside legal counsel, and to indemnify Nomura and related parties against certain liabilities, including liabilities under the federal securities laws, arising out of Nomura's engagement.

Nomura and its affiliates are engaged in financial services, including, without limitation, investment banking, financial advisory, corporate finance, retail banking, securities and derivatives trading, asset finance, merchant banking and asset management. In the ordinary course of business, Nomura, its successors and affiliates may hold or trade, for their own accounts and the accounts of their customers, the equity, debt or other securities or financial instruments (including bank loans and other obligations) of TapImmune or any currency or commodity that may be involved in the merger and, accordingly, may at any time hold a long or short position in such securities, instruments, currencies or commodities (or in related derivatives).

Nomura, as part of its investment banking services, is regularly engaged in the valuation of businesses and their securities in connection with transactions including mergers and acquisitions, leveraged buyouts, corporate restructurings, negotiated underwritings, secondary distributions of listed and unlisted securities, private placements, valuations for corporate and other purposes, and other transactions. In the ordinary course of business, Nomura and/or certain of its affiliates may act as a market maker and broker in the publicly traded securities of TapImmune and/or other entities involved in the merger or their respective affiliates and receive customary compensation in connection therewith.

The TapImmune board selected Nomura as its exclusive financial advisor in connection with the merger because Nomura is an internationally recognized investment banking firm with substantial experience in similar transactions and because of Nomura's familiarity with TapImmune and its business.

Certain Financial Projections

While TapImmune has from time to time provided limited quarterly and full-year financial guidance in its regular earnings press release and other investor materials, which may have covered, among other items, research and development and general and administrative expenses, TapImmune's management team has not, as a matter of course, otherwise publicly disclosed internal projections as to future performance, earnings or other results due to the unpredictability of the underlying assumptions and estimates. This proxy statement includes unaudited standalone financial projections of TapImmune management's

estimates of TapImmune and Marker that were made available to TapImmune’s board of directors in connection with its consideration of the merger. The projections reviewed by TapImmune’s board of directors were adjusted by TapImmune to reflect probability of success assumptions based on TapImmune management’s analysis of a number of factors, including management’s experience and judgment as informed by historical precedents and, in some cases, industry guidelines. TapImmune provided its projections of Marker with POS adjustments reflected, as described further below. Marker did not participate in the preparation of any of the financial projections set forth in this “*Certain Financial Projections*” section and did not review or approve any of the financial projections.

Following are a series of financial projections on TapImmune’s and Marker’s potential sales and earnings before interest and taxes which were provided to TapImmune’s board of directors on May 14, 2018, based on the most current assumptions at that time. Readers should refer to “*Important Information about the Financial Projections*” for further cautionary statements regarding the financial projections.

The estimates of EBIT included in the following financial projections of TapImmune and Marker, or the financial projections, were calculated by TapImmune management using GAAP and other measures which are derived from GAAP, but such estimates constitute non-GAAP financial measures within the meaning of applicable rules and regulations of the SEC. These non-GAAP financial measures do not include estimates for non-cash stock compensation and include adjustments to reflect TapImmune management’s estimates for the probability of success related to clinical approval, as described below. The non-GAAP financial measures used in the financial projections were provided to and relied upon by Nomura for purposes of its financial analyses and its fairness opinion (to the extent described in the section entitled “*The Merger—Opinion of TapImmune’s Financial Advisor*” beginning on page 63) and by TapImmune’s board of directors in connection with its consideration of the merger (to the extent described below). Additionally, the non-GAAP financial measures were used in the financial projections provided to Marker in connection with its consideration of a potential strategic transaction with TapImmune.

Methodology for Estimating Probability of Success (POS) Adjustments

In order for a therapy to reach the market, that therapy must successfully complete various phases of clinical trials and then must be approved by a regulatory agency (such as the FDA) for marketing. Typically, a therapy progresses from preclinical (non-human) testing into and through clinical (human) testing in a serial manner culminating in the regulatory review and potential approval.

In order to calculate the probability of success for a therapy to gain regulatory approval, one must consider both the probability of achieving individual clinical milestones as well as the total cumulative probability of the therapy progressing from the current phase of clinical development through approval. Because each phase of development has its own individual probability of success, in order to calculate the total cumulative probability of success through approval at any given point in development, one typically uses the product of multiplying all of the probabilities of success of each individual phase to be completed to arrive at a total cumulative probability of success for marketing approval. Collectively, these likelihoods of achieving certain outcomes on both an individual and collective basis are referred to as the therapy’s POS.

The cumulative POS for an individual product is applied directly to all future revenues and is similarly applied to expenses that are projected to occur post-marketing approval if the existence of such expenses is dependent upon the future approval of the product. For any expenses that are projected to occur before marketing approval, expenses associated with the completion of ongoing activities devoted to progressing to the next phase are considered sunk costs and are not adjusted. For expenses that occur in the phase following the current phase of an individual product, the appropriate cumulative probability from the current phase to the appropriate projected stage of development is applied to the expense.

May 2018 Projections

In February 2018, as a consequence of limited cash resources and a challenging environment for TapImmune to raise capital, TapImmune management began actively pursuing, and engaged Nomura to serve as TapImmune’s financial advisor in connection with, a process to evaluate and assess a merger with Marker. In connection with the strategic evaluation undertaken by TapImmune, TapImmune’s management

team prepared a series of updated projections based on information available at the time the projections were developed, with respect to industry performance and competition, regulatory conditions, general business, economic, market and financial conditions and matters specific to TapImmune's and Marker's product candidates, all of which are difficult to predict and many of which are beyond TapImmune's control.

TapImmune Projections

TapImmune management provided a preliminarily updated forecast to TapImmune's board of directors, on a non-POS adjusted basis, for the period from June 30, 2018 to December 31, 2033 for feedback from TapImmune's board of directors on the underlying assumptions — See Figure 1 below.

Figure 1: Financial Projections — TapImmune Standalone
(Amounts in Millions)

	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
Sales	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 57	\$ 113	\$ 171	\$ 229	\$ 325	\$ 472	\$ 786	\$ 896	\$ 1,104	\$ 1,154
EBIT⁽¹⁾	\$(12)	\$(11)	\$(9)	\$(12)	\$(14)	\$(54)	\$(15)	\$ 31	\$ 72	\$ 119	\$ 193	\$ 317	\$ 592	\$ 673	\$ 844	\$ 867
UFCF⁽²⁾	\$(13)	\$(11)	\$(18)	\$(12)	\$(14)	\$(69)	\$(35)	\$ 0	\$ 32	\$ 68	\$ 125	\$ 221	\$ 437	\$ 500	\$ 632	\$ 647

(1) EBIT is defined as estimated earnings before interest and taxes. EBIT is a non-GAAP financial measure.

(2) UFCF is defined as unlevered free cash flow.

Marker Projections

In connection with the strategic process undertaken by TapImmune, TapImmune management provided forecast estimates for Marker which included revenue projections for the period from June 30, 2018 to December 31, 2033. See Figure 2 below.

Figure 2: Financial Projections: Marker Standalone
(Amounts in Millions)

	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
Sales	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 344	\$ 531	\$ 1,245	\$ 1,695	\$ 2,075	\$ 2,552	\$ 2,570	\$ 2,570	\$ 2,570	
EBIT	\$(7)	\$(9)	\$(15)	\$(22)	\$(26)	\$(31)	\$(75)	\$ 194	\$ 336	\$ 892	\$ 1,249	\$ 1,559	\$ 1,932	\$ 1,931	\$ 1,908	\$ 1,883
UFCF⁽²⁾	\$(7)	\$(9)	\$(22)	\$(22)	\$(25)	\$(44)	\$(91)	\$ 92	\$ 206	\$ 646	\$ 930	\$ 1,176	\$ 1,472	\$ 1,473	\$ 1,457	\$ 1,439

(1) EBIT is defined as estimated earnings before interest and taxes. EBIT is a non-GAAP financial measure.

(2) UFCF is defined as unlevered free cash flow.

Although presented with numeric specificity, the financial projections reflect numerous estimates and assumptions with respect to the commercial business. All of these assumptions are difficult to predict and many are beyond TapImmune's control.

Important Information About the Financial Projections

While the financial projections summarized above were prepared in good faith and based on information available at the time of preparation, no assurance can be made regarding future events. The estimates and assumptions underlying the financial projections involve judgments with respect to, among other things, future economic, competitive, regulatory and financial market conditions and future business decisions that may not be realized and that are inherently subject to significant business, economic, competitive and regulatory uncertainties and contingencies, including, among others, risks and uncertainties described in this proxy statement under the sections captioned "Risk Factors" and "Forward-Looking Statements" and information in TapImmune's consolidated financial statements and

notes thereto included in TapImmune's most recent filings on Form 10-K and 10-Q, all of which are difficult to predict and many of which are beyond the control of TapImmune. There can be no assurance that the underlying assumptions will prove to be accurate or that the projected results will be realized, and actual results will likely differ, and may differ materially, from those reflected in the financial projections, whether or not the merger is completed.

The financial projections summarized above also reflect numerous variables, expectations and assumptions available at the time they were prepared as to certain business decisions that are subject to change. These projections do not reflect revised prospects for TapImmune's or Marker's business, changes in general business or economic conditions, or any other transaction or event that has occurred or that may occur and that was not anticipated at the time the financial projections were prepared. TapImmune has not prepared revised financial projections to take into account variables or views of management that have changed since the dates on which the relevant projections were finalized. If the financial projections were prepared as of the date of this proxy statement, certain of the information would be materially different.

As a result, the financial projections cannot be considered a reliable predictor of future operating results, and this information should not be relied on as such.

This prospective financial information was not prepared with a view toward compliance with published guidelines of the SEC or the guidelines established by the American Institute of Certified Public Accountants for preparation, presentation of prospective financial information, published guidelines of the SEC regarding forward-looking statements and the use of non-GAAP measures or GAAP. In the view of TapImmune's management, each set of projections prepared by them was prepared on a reasonable basis based on the best information available to TapImmune's management at the time of preparation taking into account the assumptions underlying the relevant alternative scenario for such financial projections. The financial projections, however, are not fact and should not be relied upon as being necessarily indicative of future results of TapImmune, Marker or, following the completion of the merger, the combined company, and readers of this proxy statement are cautioned not to place undue reliance on this information. The inclusion of the financial projections in this proxy statement shall not be deemed an admission or representation by TapImmune that such information is material. None of the financial projections reflects any impact of the merger.

The prospective financial information included in this proxy has been prepared by, and is the responsibility of, TapImmune's management. Marcum LLP has neither examined, compiled nor performed any procedures with respect to the accompanying prospective financial information and, accordingly, Marcum LLP does not express an opinion or any other form of assurance with respect thereto. The Marcum LLP report included in the Annual Report on Form 10-K attached as Annex B-1 to this proxy statement relates to TapImmune's historical financial information. It does not extend to the prospective financial information and should not be read to do so.

None of TapImmune, Marker or any of their respective affiliates, advisors, officers, directors or representatives has made or makes any representation to any person regarding the ultimate performance of TapImmune, Marker or the combined company compared to the financial projections. TapImmune has made no representation to Marker, and Marker has made no representation to TapImmune, in the merger agreement or otherwise concerning these financial projections. The financial projections cover multiple years, and such information by its nature becomes subject to greater uncertainty with each successive year. Neither Marker nor any of its stockholders, officers, or directors participated in the preparation of the financial projections.

The inclusion of a summary of these financial projections in this proxy statement should not be regarded as an indication that any of TapImmune, Marker or their respective affiliates, advisors, officers, directors or representatives considered these financial projections to be predictive of actual future events, and these financial projections should not be relied upon as such nor should the information contained in these financial projections be considered appropriate for other purposes. None of TapImmune, Marker or their respective affiliates, advisors, officers, directors or representatives can give you any assurance that actual results will not differ materially from these financial projections, and none of them undertakes any obligation, except as required by law, to update or otherwise revise the financial projections contained in

this proxy statement to reflect circumstances existing since their preparation or to reflect the occurrence of unanticipated events or to reflect changes in general economic or industry conditions, even in the event that any or all of the underlying assumptions are shown to be in error.

The summary of the financial projections is not included in this proxy statement in order to induce any TapImmune stockholder to vote in favor of any of the proposals necessary to consummate the merger or the adjournment proposal.

Interests of TapImmune's Directors and Executive Officers in the Merger

In considering the recommendation of TapImmune's board of directors with respect to issuing shares of TapImmune common stock as contemplated by the merger agreement and the other matters to be acted upon by TapImmune stockholders at the 2018 Annual Meeting, TapImmune stockholders should be aware that certain members of the board of directors and executive officers of TapImmune may have interests in the merger that are different from, or in addition to, the interests of TapImmune stockholders. TapImmune's board of directors was aware of these potential conflicts of interest and considered them, among other matters, in reaching its decision to approve the merger agreement and the related transaction and to recommend that TapImmune stockholders vote to approve the issuance of TapImmune common stock in connection with the merger and the other matters to be acted upon by TapImmune stockholders at the 2018 Annual Meeting.

Board of Directors and Management

Following the merger, the board of directors of the combined company will be comprised of six members, three of whom will be designated by TapImmune prior to the closing of the merger. The three current directors designated by TapImmune to serve on the board of the combined company effective as of the effective time of the merger are Peter Hoang, Frederick Wasserman and David Laskow-Pooley. Dr. Glynn Wilson, Mark Reddish, Sherry Grisewood and Joshua Silverman have provided resignations from TapImmune's board of directors and committees that will take effect only if the merger is consummated.

The initial management of the combined company is expected to be comprised substantially of the current members of TapImmune management. Effective July 16, 2018, TapImmune hired Tsvetelina Pencheva Hoang, Ph.D., the spouse of Peter Hoang, as the Vice President of Research and Development of TapImmune. Previously, Dr. Hoang was the director of translational research at Bellicum Pharmaceuticals with a functional role as the head of the CAR-T and TCR discovery programs at Bellicum. Since this was a related party transaction, the Audit Committee reviewed and approved the hiring of Dr. Hoang at a meeting on July 9, 2018 subject to the approval of Marker, as required by the merger agreement. Marker has provided this approval.

Ownership Interests

As of August 21, 2018, all directors and executive officers of TapImmune, together with their affiliates, beneficially owned approximately 4.2% of the shares of TapImmune common stock (excluding any warrants or options), or approximately 7.5% (including any warrants and options). The affirmative vote of the holders of a majority of the shares of TapImmune common stock present in person or represented by proxy and entitled to vote on such matter at the 2018 Annual Meeting is required for approval of Proposal 1, Proposal 2, Proposal 5, Proposal 7, Proposal 8 and Proposal 9. The affirmative vote of holders of a majority of the outstanding shares of TapImmune common stock as of the record date for the 2018 Annual Meeting is required for the approval of Proposals 3a, 3b, and Proposal 4. Proposal 6, the election of the directors, will be determined by a plurality of the votes cast at the 2018 Annual Meeting. All directors and executive officers of TapImmune have executed a voting and lock-up agreement pursuant to which they have agreed to vote in favor of Proposals 1, 3a and 3b, 4 and 5. For more information on the voting and lock-up agreements, please see the section of this proxy statement entitled "*Agreements Related to the Merger*" beginning on page [97](#).

Employment Agreements

TapImmune has entered into employment agreements with its named executive officers, which include severance agreements. As noted below, each of the severance agreements provide for substantially similar terms.

TapImmune and Mr. Hoang entered into an Employment Agreement on September 22, 2017 pursuant to which Mr. Hoang agreed to serve as TapImmune's President and Chief Executive Officer. The term of the agreement is for three years and will be automatically extended for an additional 12 months unless terminated by Mr. Hoang or TapImmune.

Dr. Glynn Wilson has been a longstanding executive of TapImmune and was appointed as TapImmune's Executive Chairman on July 1, 2009. TapImmune and Dr. Wilson entered into a new employment agreement on November 12, 2015, which was subsequently amended on July 18, 2016 and September 22, 2017. As a result of the most recent amendment where Dr. Wilson transitioned the role of President and Chief Executive Officer to Mr. Hoang on September 22, 2017, Dr. Wilson agreed to serve as TapImmune's Strategic Advisor until December 31, 2018.

On August 25, 2016, TapImmune entered into an Employment Agreement with Michael J. Loiacono, pursuant to which Mr. Loiacono agreed to serve as TapImmune's Chief Financial Officer and Chief Accounting Officer. The term of the agreement is for two years and will be automatically extended for an additional 12 months prior to the end of the term, or no later than ninety (90) days prior to the end of any such successive 12-month term unless terminated by Mr. Loiacono or TapImmune.

If a named executive officer's employment is terminated by TapImmune for Cause (as defined in their respective employment agreements) or by a named executive officer during the term of the agreement, he will be entitled to receive his accrued compensation of (i) then-current annual base salary through the date of termination; (ii) any reimbursable expenses for which he has not yet been reimbursed as of the date of termination; and (iii) any other rights and vested benefits (if any) provided under employee benefit plans and programs of TapImmune, determined in accordance with the applicable terms and provisions of such plans and programs.

If a named executive officer's employment is terminated by TapImmune without "Cause" or by him for "Good Reason" (as defined in their respective employment agreements), subject to his execution of a release of claims against TapImmune, and in addition to the payment of the accrued compensation, TapImmune is obligated to make additional severance payments to such named executive officer within 60 days after his termination date equal to 2/3 (in the case of Dr. Wilson), twelve months (in the case of Mr. Hoang) or six months (in the case of Mr. Loiacono) of his annual base salary, as in effect at the termination date, plus any earned but unpaid bonus.

Upon a non-renewal of Mr. Hoang's employment agreement by TapImmune at the end of the term, Mr. Hoang will be entitled to be paid 12 months of his annual base salary over a twelve-month period.

The employment agreements of the named executive officers also contain change of control provisions providing that if the named executive officers' employment with TapImmune is terminated by TapImmune without Cause or by them for Good Reason (in the case of Dr. Wilson, Mr. Hoang and Mr. Loiacono) during the period of ninety (90) days (in the case of Dr. Wilson and Mr. Loiacono) or six months (in the case of Mr. Hoang) following a Change in Control (as that term is defined below) of TapImmune, in lieu of the additional severance payments described above, the named executive officers will be entitled to receive a severance payment equal to the sum of (i) 2/3 of (in the case of Dr. Wilson), eighteen (18) months of (in the case of Mr. Hoang), eight (8) months of (in the case of Mr. Loiacono) their respective annual base salaries, at the higher of the base salary rate in effect on the date of termination or the base salary rate in effect immediately before the effective date of the Change of Control (in the case of Dr. Wilson, Mr. Hoang and Mr. Loiacono), and (ii) their Performance Bonus for the year which includes the effective date of the Change in Control, payable at the target level of performance, which will be paid in a single lump sum after his execution and non-revocation of the Release (in the case of Dr. Wilson, Mr. Hoang and Mr. Loiacono). In addition, they will also receive in the same payment the amount of any performance bonus that, as of the date of termination, has been earned by the named executive officers but has not yet been paid by TapImmune (in the case of Dr. Wilson, Mr. Hoang and Mr. Loiacono). If the named executive officers hold any stock options or other stock awards granted under TapImmune's 2014 Omnibus Stock Ownership Plan which are not fully vested at the time their employment with TapImmune is terminated by TapImmune without Cause during the period of ninety (90) days (in the case of Dr. Wilson, and Mr. Loiacono) or six months (in the case of Mr. Hoang) following a Change in Control, such equity awards shall become fully vested as of the termination date. For purposes of the employment agreement, the term "Change in

Control” means a transaction or series of transactions which constitutes a sale of control of TapImmune, a change in effective control of TapImmune, or a sale of all or substantially all of the assets of TapImmune, or a transaction which qualifies as a “change in ownership” or “change in effective control” of TapImmune or a “change in ownership of substantially all of the assets” of TapImmune under the standards set forth in Treasury Regulation section 1.409A-3(i)(5) (in the case of Dr. Wilson, Mr. Hoang and Mr. Loiacono). Unless an executive is terminated, neither the merger nor the private placement transaction will constitute a change of control for purposes of the employment agreements.

During their employment term and for a period of 12 months thereafter, Dr. Wilson, Mr. Hoang and Mr. Loiacono are subject to a covenant not to compete with TapImmune and not to solicit any of its customers, vendors or employees.

The initial executive leadership of the combined company is expected to be the executive leadership of TapImmune, and therefore it is not expected that certain of TapImmune’s executive officers will resign for “good reason” (as defined under his or her severance agreement) and thus be entitled to the payments described above.

Merger Related Compensation of Named Executive Officers

Golden Parachute Disclosure

Item 402(t) of Regulation S-K of the Securities Act requires disclosure of information about compensation for TapImmune’s Chief Executive Officer and the two most highly compensated officers as of the end of its last fiscal year, who are referred to as the named executive officers, that is based on or otherwise related to the merger. The table below sets forth the amount of payments and benefits that each of TapImmune’s named executive officers may receive in connection with the merger, assuming that the merger qualifies as a change in control as defined in each applicable agreement and/or plan, that the merger was consummated and such executive officer experienced a qualifying termination on August 21, 2018 and is entitled to full benefits available under its employment agreement. The amounts indicated below are estimates based on multiple assumptions that may or may not actually occur, including assumptions described in this proxy statement. Therefore, the payment of any such amounts are only hypothetical. The actual amounts that would be paid upon a named executive officer’s termination of employment can be determined only at the time of such executive’s separation from TapImmune. As a result of the foregoing assumptions, the actual amounts, if any, to be received by a named executive officer may materially differ from the amounts set forth below.

Name	Cash (\$) ⁽¹⁾	Equity (\$)	Other (\$) ⁽³⁾	Total (\$)
Peter Hoang	\$634,375	—	\$14,907	\$649,282
Glynn Wilson	\$188,333	—	\$ 2,181	\$191,014
Michael Loiacono	\$163,333	\$ 0 ⁽²⁾	\$19,367	\$288,902

- (1) The amount in this column for Mr. Hoang represents potential cash severance payments that Mr. Hoang may receive under his employment agreement if Mr. Hoang is terminated without cause (as defined in his employment agreement) or resigns for good reason (as defined in his employment agreement) within six months following closing of the merger. The amount in this column for Dr. Wilson and Mr. Loiacono represents potential cash severance payments that Dr. Wilson and Mr. Loiacono may receive under their employment agreements if Dr. Wilson or Mr. Loiacono is terminated without cause (as defined in his employment agreement) or resigns for good reason (as defined in his employment agreement) within ninety days following closing of the merger. The amount of Mr. Hoang’s severance represents payment equal to his current salary of \$362,500 per year for 18 months totaling \$543,750, plus his performance bonus for the year which includes the effective date of the change of control at the target level of \$90,625. The amount of Dr. Wilson’s severance represents payment equal to his current salary of \$206,000 per year for 8 months totaling \$137,333, plus his performance bonus for the year which includes the effective date of the change of control at the target level of \$51,500. The amount of Mr. Loiacono’s severance represents payment equal to his

current salary of \$200,000 per year for 8 months totaling \$133,333, plus his performance bonus for the year which includes the effective date of the change of control at the target level of \$30,000. The amounts specified in this footnote (1) are double-trigger payments, meaning that the merger must be consummated and the named executive officer experiences a qualifying termination.

- (2) All of the unvested stock options held by Mr. Loiacono that are outstanding immediately prior to the effective time he is terminated without cause (as defined in his employment agreement) or resigns for good reason (as defined in his employment agreement) within ninety days following closing of the merger will become fully vested and exercisable, but each such stock option has an exercise price per share greater than the average closing market price of TapImmune common stock over the first five business days following the first public announcement of the merger, and therefore, no value is reported in this column.
- (3) The amount in this column represents COBRA premiums Mr. Hoang, Dr. Wilson and Mr. Loiacono are currently expected to receive for 18 months, 8 months and 8 months, respectively. The amounts specified in this footnote (3) are double-trigger payments.

Indemnification and Insurance of Directors and Officers

For a description of the rights to indemnification and insurance to which TapImmune's officers and directors are entitled following the effective time of the merger pursuant to the merger agreement, please refer to the section entitled "*The Merger Agreement — Indemnification of Directors and Officers*" beginning on page [91](#) of this proxy statement.

Interests of Marker's Directors, Executive Officers and Principal Stockholders in the Merger

Board of Directors and Management

Following the merger, the board of directors of the combined company will be comprised of six members, three of whom are to be designated by Marker under the terms of the merger agreement. The three directors designated by Marker to serve on the board of the combined company at the effective time of the merger are John Wilson, Juan Vera and David Eansor. Following the closing of the merger, it is expected that Juan Vera will be appointed as the Chief Development Officer of the combined company and Ann Leen will be appointed as the Chief Scientific Officer of the combined company.

In addition, John Wilson is the CEO and co-founder of Wilson Wolf Manufacturing Corporation, which provides the G-Rex[®] cell culture platform for the large-scale production of T cells in Marker's manufacturing process pursuant to a Small Business Innovative Research grant for which Wilson Wolf Manufacturing was the grantee. After the merger, it is expected that Wilson Wolf Manufacturing Corporation will continue to supply the G-Rex[®] cell culture platform to the combined company on terms to be negotiated between the parties.

Ownership Interests

The following parties are the principal Marker stockholders, and director appointees to the combined company board of directors, holding the percentages set forth below of the outstanding shares of TapImmune common stock based on 13,710,544 shares of TapImmune common stock outstanding as of August 21, 2018, and 11,200,002 shares of Marker common stock outstanding:

Marker Stockholder	Percentage of Outstanding Shares of TapImmune Common Stock After Giving Effect to the Merger ⁽¹⁾	Percentage of Outstanding Shares of TapImmune Common Stock After Giving Effect to the Merger and the Private Placement Transaction ⁽²⁾
John Wilson†	21.78%	13.29%
Juan Vera†	7.16%	4.37%
Ann Leen	7.16%	4.37%
Baylor College of Medicine	5.36%	3.27%
Salt Free, LP	4.73%	2.9%
Helen Heslop	2.45%	1.50%
David Eansor†*	0%	0%

† Marker appointee to the combined company board of directors.

* Mr. Eansor has indicated that he does not own any TapImmune shares.

- (1) The percentage ownership of each such person immediately upon the consummation of the merger is based on 27,421,088 shares of common stock of the combined company assumed to be outstanding upon the consummation of the merger, assuming the merger had closed on August 21, 2018 (excluding warrants and options).
- (2) The percentage ownership of each such person immediately upon the consummation of the merger is based on 44,921,088 common shares outstanding consisting of (i) 27,421,088 shares of common stock of the combined company assumed to be outstanding upon the consummation of the merger, assuming the merger had closed on August 21, 2018, and (ii) 17,500,000 shares of common stock to be issued in connection with the TapImmune's contemplated private placement transaction occurring contemporaneously with the merger (excluding warrants and options).

Repayment of Loan by John Wilson to Marker

In the merger agreement, TapImmune agreed that if John Wilson has loaned funds to Marker to pay reasonable attorneys', accountants' and travel expenses in connection with the merger, the balance of such amounts that remain unpaid at closing will be repaid by the combined company promptly after closing. At the time the merger agreement was signed, Marker had a minimal amount of cash, and it was expected that Mr. Wilson would need to make loans to Marker to enable it to pay its legal fees and other expenses related to the merger. As of August 21, 2018, John Wilson had loaned Marker \$100,000 for expenses that had not been repaid. Any unpaid loans of Marker will become liabilities of the combined company, which will need to be paid promptly after closing under the terms of the merger agreement.

Indemnification and Insurance of Officers and Directors

For a description of the rights to indemnification and insurance to which Marker's officers and directors are entitled following the effective time of the merger pursuant to the merger agreement, please refer to the section entitled "*The Merger Agreement — Indemnification of Directors and Officers*" beginning on page [91](#) of this proxy statement.

Executive Officers Following the Merger

As of the date of this proxy statement, none of Marker's executive officers has entered into any new agreement or arrangement with TapImmune, Marker or any of their affiliates regarding employment with,

or the right to purchase or participate in the equity of, the combined company or one or more of its affiliates, other than with respect to the merger. Following the closing of the merger, it is expected that Juan Vera will be appointed as the Chief Development Officer of the combined company and Ann Leen will be appointed as the Chief Scientific Officer of the combined company.

Certain U.S. Federal Income Tax Considerations

The following is a summary of certain U.S. federal income tax considerations relating to the merger generally applicable to U.S. persons (as defined below) who hold TapImmune common stock as “capital assets” (generally, assets held for investment purposes). For purposes of this summary, the term “U.S. person” means any beneficial owner which is a citizen or individual resident of the United States, a corporation or other entity taxable as a corporation for U.S. federal income tax purposes created in or organized under the laws of the United States or any political subdivision thereof, an estate the income of which is subject to U.S. federal income tax without regard to its source, or a trust that (1) is subject to the supervision of a court within the United States and the control of one or more U.S. persons or (2) has a valid election in effect under applicable U.S. Treasury regulations to be treated as a U.S. person.

This summary does not purport to address all U.S. federal income tax consequences relating to the merger, nor does it take into account the specific circumstances of any particular TapImmune stockholder, some of which may be subject to special tax rules (including, but not limited to, tax-exempt organizations (including private foundations), banks or other financial institutions, insurance companies, broker-dealers, traders in securities that elect to use a mark-to-market method of accounting for their securities holdings, regulated investment companies, real estate investment trusts, U.S. expatriates, stockholders subject to the alternative minimum tax, stockholders that own shares of Marker common stock, partnerships and other pass-through entities and investors in such entities, persons that own or are treated as owning (or owned or are treated as having owned) 5% or more of the voting shares of TapImmune common stock, persons that hold TapImmune common share as part of a straddle, hedge, conversion or constructive sale transaction or other integrated transaction, and stockholders whose functional currency is not the U.S. dollar.

This summary is based on the Code, U.S. Treasury regulations promulgated under the Code, administrative pronouncements and rulings of the U.S. Internal Revenue Service, and judicial decisions, all as in effect on the date hereof, and all of which are subject to change (possibly with retroactive effect) and to differing interpretations. This summary does not describe any state, local or foreign tax law considerations, or any aspect of U.S. federal tax law other than income taxation (e.g., estate or gift tax or the Medicare contribution tax).

Each TapImmune stockholder should consult its own tax advisers regarding the U.S. federal, state, local and foreign tax consequences of the merger to them under their particular circumstances.

The Merger

TapImmune stockholders will not sell, exchange or dispose of any shares of TapImmune common stock as a result of the merger. Therefore, there will be no material U.S. federal income tax consequences to TapImmune stockholders as a result of the merger.

THE MERGER AGREEMENT

The following is a summary of the material terms of the merger agreement. A copy of the merger agreement is attached as Annex A to this proxy statement. The merger agreement has been attached to this proxy statement to provide you with information regarding its terms. The summary of the material terms of the merger agreement below and elsewhere in this proxy statement is qualified in its entirety by reference to the merger agreement. This summary may not contain all of the information about the merger agreement that is important to you. TapImmune urges you to read carefully the merger agreement in its entirety as it is the legal document governing the merger.

Form of the Merger

Upon the terms and subject to the conditions of the merger agreement, Timberwolf Merger Sub, Inc., a Delaware corporation and wholly-owned subsidiary of TapImmune formed by TapImmune in connection with the merger, will merge with and into Marker. The merger agreement provides that upon the consummation of the merger, the separate existence of the acquisition subsidiary shall cease. Marker will continue as the surviving corporation, will be renamed prior to closing to Marker Cell Therapy, Inc. and will be a wholly-owned subsidiary of TapImmune.

In connection with the consummation of the merger, assuming Proposal 3b is approved by TapImmune stockholders at the 2018 Annual Meeting, TapImmune will be renamed “Marker Therapeutics, Inc.” and expects to trade on the NASDAQ Capital Market under the symbol “MRKR”.

Effective Time of the Merger

The merger agreement requires the parties to consummate the merger after all of the conditions to the consummation of the merger contained in the merger agreement are satisfied or waived, including the adoption of the merger agreement by the stockholders of Marker, the approval by TapImmune stockholders of the issuance of TapImmune common stock in the merger and the private placement transaction and the amendment to TapImmune’s articles of incorporation described in Proposal 3a. The merger will become effective upon the filing of a certificate of merger with the Secretary of State of the State of Delaware or at such later time as is agreed by TapImmune and Marker and specified in the certificate of merger. Neither TapImmune nor Marker can predict the exact timing of the consummation of the merger, but it is expected to occur in the fourth quarter of 2018.

Merger Consideration

At the effective time of the merger, and subject to the conditions set forth in the merger agreement:

- each share of Marker common stock or preferred stock held as treasury stock or held or owned by Marker, TapImmune or the acquisition subsidiary immediately prior to the effective time of the merger shall be cancelled and cease to exist and no consideration shall be delivered in exchange therefor; and
- each share of Marker common stock outstanding immediately prior to the effective time of the merger (excluding shares to be cancelled as described above and excluding shares which are held by Marker stockholders who have exercised and perfected appraisal rights or dissenters’ rights for such shares in accordance with the DGCL, if and to the extent applicable) shall be converted solely into the right to receive (i) a number of shares of TapImmune common stock equal to the “stock exchange ratio” (calculated as described below), and (ii) a number of warrants to purchase shares of TapImmune common stock equal to the “warrant exchange ratio” (calculated as described below).

In addition, under the merger agreement, if the value of the aggregate number of shares of TapImmune common stock received by the Marker stockholders pursuant to the stock exchange ratio is less than \$30 million, using the purchase price per share of TapImmune common stock set forth in the definitive purchase agreements agreed to by third-party investors in the private placement transaction, each share of Marker common stock outstanding immediately prior to the effective time of the merger shall receive a number of additional warrants to purchase shares of TapImmune common stock equal to the “additional

warrant ratio” (calculated as described below). Because the value of the shares of TapImmune common stock to be received by the Marker stockholders in the merger will exceed \$30 million, as valued using the \$4.00 purchase price for shares of TapImmune common stock to be issued in the private placement transaction, no additional warrants are issuable to the Marker stockholders under this provision.

Exchange Ratios

Under the merger agreement, the stock exchange ratio is calculated by dividing (a) the total number of shares of TapImmune common stock outstanding immediately prior to the effective time of the merger by (b) the total number of shares of Marker common stock outstanding immediately prior to the effective time of the merger.

Although Marker and TapImmune generally may not issue any additional capital stock or other security during the period following signing of the merger agreement until the closing (except as otherwise contemplated by the merger agreement), holders of TapImmune warrants and options may exercise such warrants and options during the period prior to closing. Accordingly, the stock exchange ratio per share of Marker’s common stock will be based on the number of shares of TapImmune common stock outstanding immediately prior to the effective time of the merger, and will not be calculated until the day prior to the closing date of the merger.

Under the merger agreement, the warrant exchange ratio is calculated by dividing (a) the total number of warrants to purchase TapImmune common stock plus the total number of options to purchase TapImmune common stock outstanding immediately prior to the effective time of the merger by (b) the total number of shares of Marker common stock outstanding immediately prior to the effective time of the merger.

As noted above, holders of TapImmune warrants and options may exercise such warrants and options during the period prior to closing. Accordingly, the warrant exchange ratio per share of Marker’s common stock will be based on the number of warrants to purchase TapImmune common stock and the total number of options to purchase TapImmune common stock outstanding immediately prior to the effective time of the merger, and will not be calculated until the day prior to the closing date of the merger.

Under the merger agreement, the additional warrant ratio is calculated by dividing the number of additional merger warrants to be issued by the total number of shares of Marker common stock outstanding immediately prior to the effective time of the merger, where the number of additional merger warrants to be issued is equal to (A) \$30 million minus the product of (i) the purchase price per share of TapImmune common stock set forth in the definitive purchase agreements agreed to by third-party investors in the private placement transaction, and (ii) the aggregate number of shares of TapImmune common stock received by the Marker stockholders pursuant to the stock exchange ratio *divided by* (B) the purchase price per share of TapImmune common stock set forth in the definitive purchase agreements agreed to by third-party investors in the private placement transaction.

Under the exchange ratio formulae in the merger agreement, as of immediately after the merger, the former Marker stockholders and the former TapImmune stockholders are each expected to own 50% of the combined company on a fully diluted basis (assuming the exercise of all outstanding warrants and options) and prior to the contemplated issuance of shares in the private placement transaction. No additional warrants to purchase shares of TapImmune common stock shall be issuable to the Marker stockholders pursuant to the additional warrant ratio because the minimum value of the aggregate number of shares of TapImmune common stock to be received by the Marker stockholders in the merger will exceed \$30 million, as valued using the \$4.00 purchase price for shares of TapImmune common stock to be issued in the private placement transaction.

Terms of the Merger Warrants and Additional Merger Warrants

The merger warrants to be issued pursuant to the warrant exchange ratio shall be immediately exercisable as of the closing date of the merger for a term of five years from the closing date of the merger. The exercise price of the merger warrants to be issued pursuant to the warrant exchange ratio is \$2.99 per

share, which is equal to the volume weighted average of the closing prices of the TapImmune common stock on the NASDAQ Capital Market, as reported by Bloomberg Financial Markets, for the ten (10) trading days immediately preceding the date of this Agreement.

Any additional warrants that would have been issuable pursuant to the additional warrant ratio described above would have been exercisable for the period beginning on the first anniversary of the closing date of the merger and ending on the fifth anniversary of the closing date of the merger at an exercise price of \$0.01 per share. As stated above, no additional warrants are issuable pursuant to the additional warrant ratio.

Payment of the Merger Consideration

The merger agreement provides that, at the effective time of the merger, TapImmune will deposit with an exchange agent acceptable to TapImmune and Marker (i) the merger shares and warrants issuable to Marker stockholders pursuant to the merger agreement, and (ii) cash sufficient to make the payments to non-accredited Marker stockholders required under the merger agreement. All of the Marker stockholders are accredited investors so no payments will be made under clause (ii).

No fractional shares of TapImmune common stock or warrants to purchase TapImmune common stock will be issuable pursuant to the merger to Marker stockholders. Instead, each holder of Marker common stock who would otherwise be entitled to receive a fractional share of TapImmune common stock (after aggregating all fractional shares of TapImmune common stock issuable to such holder) shall, instead be paid in cash the dollar amount (rounded to the nearest whole cent), without interest, determined by multiplying such fraction by the closing price of a share of TapImmune common stock on The NASDAQ Capital Market on the date the merger becomes effective. In lieu of any fractional warrant, each Marker stockholder who would otherwise be entitled to a fraction of a warrant will receive a number of whole warrants determined by rounding up or down to the nearest whole number.

The merger agreement provides that, promptly after the effective time of the merger, the exchange agent will mail to each holder of record of Marker capital stock immediately prior to the effective time of the merger a letter of transmittal and instructions for surrendering and exchanging the record holder's Marker stock certificates for book-entry shares of TapImmune common stock and warrants to purchase TapImmune common stock (or, in the case of the non-accredited Marker stockholders, for cash). Upon the valid surrender of a Marker capital stock certificate for exchange to the exchange agent, together with a duly signed letter of transmittal and such other documents as the exchange agent or TapImmune may reasonably require, the Marker stock certificate surrendered will be cancelled and the holder of the Marker stock certificate will be entitled to receive the following:

- the shares of TapImmune common stock in uncertificated book-entry form that such holder has the right to receive pursuant to the provisions of the merger agreement, and the warrants to purchase shares of TapImmune common stock that such holder has the right to receive pursuant to the provisions of the merger agreement;
- cash in lieu of any fractional share of TapImmune common stock; and
- dividends or other distributions, if any, declared or made with respect to TapImmune common stock with a record date after the effective time of the merger.

At the effective time of the merger, all holders of certificates representing shares of Marker common stock that were outstanding immediately prior to the effective time of the merger will cease to have any rights as stockholders of Marker. Each Marker stock certificate shall be deemed, from and after the effective time of the merger, to represent only the right to receive shares of TapImmune common stock (and cash in lieu of any fractional share of TapImmune common stock) and warrants to purchase shares of TapImmune common stock, or, in the case of non-accredited Marker stockholders, cash. TapImmune will not pay dividends or other distributions on any shares of TapImmune common stock to be issued in exchange for any unsurrendered Marker stock certificate until the Marker stock certificate is surrendered as provided in the merger agreement.

If any Marker stock certificate has been lost, stolen or destroyed, TapImmune may, in its discretion, and as a condition to the delivery of any shares of TapImmune common stock, require the owner of such lost, stolen or destroyed certificate to deliver an affidavit claiming such certificate has been lost, stolen or destroyed and post a bond indemnifying TapImmune against any claim suffered by TapImmune related to the lost, stolen or destroyed certificate or any TapImmune common stock issued in exchange for such certificate as TapImmune may reasonably request.

Marker Stock Options and Warrants

Marker has represented that there are no outstanding options to purchase Marker common stock or warrants to purchase Marker common stock, and no options to purchase Marker common stock or warrants to purchase Marker common stock may be issued prior to the effective time of the merger.

Regulatory Approvals

In the United States, TapImmune must comply with applicable federal and state securities laws and NASDAQ rules and regulations in connection with the issuance of shares of TapImmune common stock in the merger, including the filing with the SEC of this proxy statement. Additionally, prior to consummation of the merger, TapImmune intends to file an additional listing application with the NASDAQ Capital Market and to effect the additional listing of TapImmune common stock issuable in connection with the merger or upon exercise of Marker's outstanding stock options or warrants.

NASDAQ Listing

TapImmune common stock currently is listed on the NASDAQ Capital Market under the symbol "TPIV". Pursuant to the merger agreement, TapImmune agreed to use its commercially reasonable efforts to maintain its existing listing on the NASDAQ Capital Market and to cause the shares of TapImmune common stock being issued in the merger to be approved for listing on the NASDAQ Capital Market at or prior to the effective time of the merger. Prior to consummation of the merger, TapImmune intends to file an additional listing application with the NASDAQ Capital Market. If such application is accepted, TapImmune anticipates that its common stock will continue to be listed on the NASDAQ Capital Market following the closing of the merger under the trading symbol "MRKR".

Appraisal Rights

Holders of TapImmune common stock are not entitled to appraisal rights or dissenters' rights in connection with the merger. If the merger is completed, Marker stockholders are entitled to appraisal rights or dissenters' rights under the DGCL, if and to the extent applicable and to the extent not waived.

Amendments to TapImmune's Articles of Incorporation and Bylaws

Stockholders of record of TapImmune common stock on the record date for the 2018 Annual Meeting will be asked to approve amendments to the articles of incorporation of TapImmune, which shall, upon consummation of the merger, increase the number of authorized shares of TapImmune common stock from 41,666,667 to 150,000,000, and change the name of the corporation from "TapImmune Inc." to "Marker Therapeutics, Inc.," as described elsewhere in this proxy, which requires the affirmative vote of the holders of a majority of the outstanding shares of TapImmune common stock as of the record date for the 2018 Annual Meeting. If the reincorporation in Proposal 4 is approved, at the effective time of the merger, the bylaws of TapImmune will be the new Delaware bylaws of TapImmune set forth on Annex K hereto.

Conditions to the Completion of the Merger

Each party's obligation to complete the merger is subject to the satisfaction or, to the extent permitted by applicable law, the written waiver by each of the parties, at or prior to the merger, of various conditions (subject to certain exceptions set forth in the merger agreement), which include the following:

- there must not have been issued any temporary restraining order, preliminary or permanent injunction or other order preventing the consummation of the merger by any court of competent jurisdiction or other governmental entity of competent jurisdiction, and no law, statute, rule, regulation, ruling or decree shall be in effect which has the effect of making the consummation of the merger illegal;
- the holders of at least 66 $\frac{2}{3}$ % of the outstanding shares of Marker common stock must have approved the merger;
- stockholders of TapImmune must have approved the issuance of TapImmune common stock in the merger, the amendment to TapImmune's articles of incorporation described in Proposal 3a and the name change described in Proposal 3b, the reincorporation of TapImmune from Nevada to Delaware described in Proposal 4, and the increase in the number of shares authorized under the TapImmune Plan described in Proposal 8;
- Marker has received evidence, in form and substance satisfactory to it, that Merger Sub has obtained approval of Merger Sub's sole stockholder adopting the merger agreement and approving the merger;
- the existing shares of TapImmune common stock must have been continually listed on the NASDAQ Capital Market through the closing of the merger, the shares of TapImmune common stock to be issued in the merger must be approved for listing on The NASDAQ Capital Market (subject to official notice of issuance) as of the effective time of the merger;
- there is no legal proceeding pending, or overtly threatened in writing by a governmental body which:
 - challenges or seeks to restrain the consummation of the merger;
 - relates to the merger and seeks to obtain from one of the party's to the merger agreement damages or other relief which may be material to such party;
 - seeks to prohibit or limit in any material and adverse respect the ability of a party to the merger agreement to vote, transfer, receive dividends with respect to or otherwise exercise ownership rights with respect to the stock of TapImmune;
 - would materially and adversely affect the right or ability of TapImmune or Marker to own the assets or operate the business of TapImmune or Marker; or
 - seeks to compel Marker, TapImmune or any subsidiary of TapImmune to dispose of or hold separate any material assets as a result of the merger;
- the BCM license agreement will continue to be in full force and effect as of immediately following the effective time of the merger; and
- TapImmune will have consummated the private placement financing described in Proposal No. 2 contemporaneously with the closing of the merger, and such financing shall not adversely affect the stockholders of a party in a manner disproportionate to the stockholders of the other party.

In addition, each of Marker's and TapImmune's obligation to complete the merger is further subject to the satisfaction or waiver by that party of the following additional conditions:

- the representations and warranties regarding capitalization matters of the other party in the merger agreement must be true and correct in all but de minimis respects on the date of the merger agreement and on the closing date of the merger with the same force and effect as if made on the closing date, or, if such representations and warranties address matters as of a particular date, then as of that particular date;

- all other representations and warranties of the other party in the merger agreement must be true and correct on the date of the merger agreement and on the closing date of the merger with the same force and effect as if made on the date on which the merger is to be completed or, if such representations and warranties address matters as of a particular date, then as of that particular date, except where the failure of these representations and warranties to be true and correct would not have a material adverse effect on the other party;
- the other party to the merger agreement must have performed or complied with in all material respects all covenants and obligations in the merger agreement required to be performed or complied with by it on or before the closing of the merger, except each party's covenant to conduct its business and operations in compliance with all applicable laws, which may not have been violated in a manner that would have a material adverse effect on the such party;
- the other party's voting and lock-up agreements must continue to be in full force and effect immediately following the effective time of the merger; and
- the other party to the merger agreement must have delivered certain certificates and other documents required under the merger agreement for the closing of the merger.

In addition, the obligation of TapImmune and Merger Sub to complete the merger is further subject to the satisfaction or waiver of the following conditions:

- Marker must have terminated certain investor agreements;
- Marker must have delivered a certificate setting forth the allocation of the Marker consideration to its stockholders; and
- there shall have been no effect, change, event, circumstance, or development that is or could reasonably be expected to be materially adverse to, or has or could reasonably be expected to have or result in a material adverse effect on (a) the business, financial condition, assets or operations of Marker and its subsidiaries taken as a whole, including without limitation, (i) Marker's chief executive officer as of the date hereof is no longer serving in such capacity, (ii) the commencement of a legal proceeding regarding a felony criminal act by a governmental body against Marker and/or any of its officers or directors, or (iii) any conviction of a felony criminal act against Marker and/or any of its officers or directors or (b) the ability of Marker to consummate the merger or any of the other transactions contemplated by the merger agreement or to perform any of its covenants or obligations under the merger agreement in all material respects, each referred to as a material adverse effect as it relates to Marker. The merger agreement provides that certain events shall not, either alone or in combination, be considered a materially adverse effect as it relates to Marker, including, without limitation:
 - any rejection by a governmental body of a registration or filing by Marker relating to Marker's intellectual property rights;
 - any change in the cash position of Marker that results from operations in the ordinary course of business;
 - conditions generally affecting the industries in which Marker and its subsidiaries participate or the U.S. or global economy or capital markets as a whole, to the extent that such conditions do not have a disproportionate impact on Marker and its subsidiaries, taken as a whole;
 - any failure by Marker or any of its subsidiaries to meet internal projections or forecasts on or after the date of the merger agreement, provided that any such effect, change, event, circumstance or development causing or contributing to any such failure to meet projections or forecasts may constitute a material adverse effect of Marker and may be taken into account in determining whether a material adverse effect has occurred;
 - the execution, delivery, announcement or performance of obligations under the merger agreement or the announcement, pendency or anticipated consummation of the merger;

- any natural disaster or any acts of terrorism, sabotage, military action or war or any escalation or worsening thereof; or
- any changes after the date of the merger agreement in U.S. GAAP or applicable laws.

In addition, the obligation of Marker to complete the merger is further subject to the satisfaction or waiver of the following conditions:

- TapImmune must have caused the board of directors of TapImmune to be reconstituted as set forth in the merger agreement;
- the principal executive officer and the principal financial officer of TapImmune must have provided, with respect to any document filed with the SEC on or after May 15, 2018, any necessary certification required under Rule 13a-14 under the Exchange Act;
- TapImmune must have effected the reincorporation described in Proposal No. 4 and delivered a file-stamped copy of the certificate of incorporation effecting the reincorporation and the increase in the number of authorized shares of its capital stock described in Proposal No. 3a; and
- there shall have been no effect, change, event, circumstance, or development that is or could reasonably be expected to be materially adverse to, or has or could reasonably be expected to have or result in a material adverse effect on (a) the business, financial condition, assets or operations of TapImmune and its subsidiaries taken as a whole, including without limitation, (i) TapImmune's chief executive officer as of the date hereof is no longer serving in such capacity, (ii) the commencement of a legal proceeding regarding a felony criminal act by a governmental body against TapImmune and/or any of its officers or directors, or (iii) any conviction of a felony criminal act against TapImmune and/or any of its officers or directors or (b) the ability of TapImmune to consummate the merger or any of the other transactions contemplated by the merger agreement or to perform any of its covenants or obligations under the merger agreement in all material respects, each referred to as a material adverse effect as it relates to TapImmune. The merger agreement provides that certain events shall not, either alone or in combination, be considered a material adverse effect as it relates to TapImmune, including, without limitation:
 - any rejection by a governmental body of a registration or filing by TapImmune relating to TapImmune's intellectual property rights;
 - any change in the cash position of TapImmune that results from operations in the ordinary course of business;
 - conditions generally affecting the industries in which TapImmune and its subsidiaries participate or the U.S. or global economy or capital markets as a whole, to the extent that such conditions do not have a disproportionate impact on TapImmune and its subsidiaries, taken as a whole;
 - any failure by TapImmune or any of its subsidiaries to meet internal projections or forecasts on or after the date of the merger agreement, provided that any such effect, change, event, circumstance or development causing or contributing to any such failure to meet projections or forecasts may constitute a material adverse effect of TapImmune and may be taken into account in determining whether a material adverse effect has occurred;
 - the execution, delivery, announcement or performance of obligations under the merger agreement or the announcement, pendency or anticipated consummation of the merger;
 - any natural disaster or any acts of terrorism, sabotage, military action or war or any escalation or worsening thereof; or
 - any changes after the date of the merger agreement in U.S. GAAP or applicable laws.

No Solicitation

The merger agreement contains provisions prohibiting TapImmune and Marker from inquiring about or seeking a competing transaction, subject to specified exceptions described in the merger agreement. Under these “non-solicitation” provisions, each of TapImmune and Marker has agreed that neither it nor its subsidiaries, nor any of its officers, directors, employees, representatives, affiliates, advisors or agents will directly or indirectly:

- solicit, initiate, respond to or take any action to facilitate or encourage any inquiries or the communication, making, submission or announcement of any acquisition inquiry or competing proposal or take any action that could reasonably be expected to lead to a competing proposal;
- enter into or participate in any discussions or negotiations with any person with respect to an acquisition inquiry or any competing proposal;
- furnish any information regarding such party to any person in connection with, in response to, relating to or for the purpose of assisting with or facilitating an acquisition inquiry or a competing proposal;
- approve, endorse or recommend any competing proposal, subject to the terms and conditions in the merger agreement;
- execute or enter into any letter of intent or similar document or any contract contemplating or otherwise relating to any competing proposal; or
- grant any waiver or release under any confidentiality, standstill or similar agreement (other than to the other party).

However, prior to the approval of the proposals relating to the merger set forth in this proxy statement at the meeting of the stockholders of TapImmune stockholders, (i) TapImmune may enter into discussions or negotiations with, any person that has made (and not withdrawn) a bona fide, unsolicited, competing proposal, which such party’s board of directors determines in good faith, after consultation with its independent financial advisor, if any, and its outside legal counsel, constitutes, or would reasonably be expected to result in, a superior competing proposal, and (ii) thereafter furnish to such person non-public information regarding such party (but not any non-public information pertaining to the other party or the merger) pursuant to an executed confidentiality agreement containing provisions (including nondisclosure provisions, use restrictions, non-solicitation provisions, no hire provisions and “standstill” provisions) at least as favorable to such party as those contained in the confidentiality agreement between TapImmune and Marker, but in each case of the foregoing clauses (i) and (ii), only if: (A) neither such party nor any representative of such party has breached its non-solicitation obligations under the merger agreement; (B) the board of directors of such party determines in good faith based on the advice of outside legal counsel, that the failure to take such action would reasonably constitute a breach of the fiduciary duties of the board of directors of such party under applicable legal requirements; (C) at least 24 hours prior to furnishing any such non-public information to, or entering into discussions with, such person, such party gives the other party written notice of the identity of such person and of such party’s intention to furnish nonpublic information to, or enter into discussions with, such person; and (D) at least 24 hours prior to furnishing any such non-public information to such person, such party furnishes such non-public information to Marker or TapImmune, as applicable (to the extent such non-public information has not been previously furnished by such party to Marker or TapImmune, as applicable). Without limiting the generality of the foregoing, each party has acknowledged and agreed that, in the event any representative of such party (whether or not such representative is purporting to act on behalf of such party) takes any action that, if taken by such party, would constitute a breach of the non-solicitation obligations of such party, the taking of such action by such representative shall be deemed to constitute a breach of the non-solicitation obligations of such party for purposes of the merger agreement.

TapImmune and Marker will notify each other promptly but no later than 24 hours after receipt of any acquisition inquiry or a competing proposal, and any such notice will be made orally and in writing and will indicate in reasonable detail the terms and conditions of such acquisition inquiry or competing proposal, including the identity of the person making or submitting such acquisition inquiry or competing proposal. Both TapImmune and Marker will keep the other informed, on a current basis, of the status and material

developments (including any changes to the terms) of such competing proposal. In addition, each party shall provide the other party with at least five business days' written notice of a meeting of its board of directors (or any committee thereof) at which its board of directors (or any committee thereof) is reasonably expected to consider a competing proposal or acquisition inquiry.

An acquisition inquiry means, with respect to TapImmune and/or Marker, an inquiry, indication of interest or request for information (other than an inquiry, indication of interest or request for information made or submitted by Marker, on the one hand, or TapImmune, on the other hand, to the other) that would reasonably be expected to lead to an acquisition proposal with such party to the merger agreement.

A competing proposal is, with respect to TapImmune and/or Marker, any offer or proposal, whether written or oral (other than an offer or proposal made or submitted by or on behalf of Marker or any of its affiliates, on the one hand, or by or on behalf of TapImmune or any of its affiliates, on the other hand, to the other) made by a third party contemplating or otherwise relating to any of the following with respect to such party to the merger agreement:

- any merger, consolidation, amalgamation, share exchange, business combination, issuance of securities, acquisition of securities, reorganization, recapitalization, tender offer, exchange offer or other similar transaction: (i) in which a party to the merger agreement is a constituent corporation; (ii) in which a person or "group" (as defined in the Exchange Act and the rules promulgated thereunder) of persons directly or indirectly acquires beneficial or record ownership of securities representing more than 20% of the outstanding securities of any class of voting securities of such party to the merger agreement or any of its subsidiaries; or (iii) in which a party to the merger agreement or any of its subsidiaries issues securities representing more than 20% of the outstanding securities of any class of voting securities of such party to the merger agreement or any of its subsidiaries; provided, however, in the case of TapImmune, the private placement transaction shall not be deemed a competing proposal;
- any sale, lease, exchange, transfer, license, acquisition or disposition of any business or businesses or assets that constitute or account for 20% or more of the consolidated book value or the fair market value of the assets of a party and its subsidiaries, taken as a whole (other than any lease, exchange, transfer, license, disposition, partnership, or collaboration involving less than substantially all of the assets of Marker pursuant to a collaboration agreement, partnership agreement or similar arrangement);
- any tender offer or exchange offer that if consummated would result in any person beneficially owning 20% or more of the outstanding equity securities of a party to the merger agreement or any of its subsidiaries.

A superior competing proposal is any unsolicited bona fide written competing proposal (with all references to 20% in the definition of competing proposal being treated as references to 50% for these purposes) made by a third party that (i) was not obtained or made as a direct or indirect result of a breach of (or in violation of) the merger agreement and (ii) is on terms and conditions that the board of directors of TapImmune determines, in its reasonable, good faith judgment, after obtaining and taking into account such matters that its board of directors deems relevant following consultation with its outside legal counsel and financial advisor, if any (A) is more favorable, from a financial point of view, to the TapImmune stockholders than the terms of the merger; and (B) is reasonably capable of being consummated; provided, however, that any such offer shall not be deemed to be a superior competing proposal if any financing required to consummate the merger contemplated by such offer is not committed and is not reasonably capable of being obtained by such third party.

Either TapImmune or Marker, as the case may be, may terminate the merger agreement if the other party or any of its representatives willfully and intentionally materially breached the non-solicitation provisions of the merger agreement.

Marker (prior to the approval of the proposals relating to the merger set forth in this proxy statement at the meeting of the TapImmune stockholders), may also terminate the merger agreement if (i) TapImmune failed to include its board of directors' approval and recommendation to stockholders relating to the merger in this proxy statement, (ii) the TapImmune board of directors approved, endorsed or

recommended a competing proposal, or (iii) TapImmune entered into a definitive agreement to effect a competing proposal. If the merger agreement is terminated by Marker in connection with the provisions relating to a the failure of TapImmune to include its board of directors approval and recommendation to stockholders relating to the merger, or competing proposal, a termination fee and expense reimbursement shall be due and payable to Marker. See the section titled “*The Merger Agreement—Termination of the Merger Agreement*” and “*—Termination Fee*” beginning on page 94 and page 95, respectively, of this proxy statement for a more complete discussion of the termination fees and expense reimbursement obligations.

Meeting of TapImmune Stockholders and Marker Stockholder Approval

TapImmune is obligated under the merger agreement to call, give notice of and hold a meeting of its stockholders for the purposes of voting on the issuance of shares of TapImmune common stock described in Proposal 1, the amendments to TapImmune’s articles of incorporation described in Proposal 3a and 3b, the reincorporation described in Proposal 4 and the increase in the authorized shares of TapImmune common stock reserved for issuance under the TapImmune Plan described in Proposal 8. The TapImmune stockholders’ meeting shall be held as promptly as practicable after this proxy statement is filed with the SEC and either (i) the SEC has indicated that it does not intend to review the proxy statement or that its review is completed, or (ii) at least ten days have passed since the proxy statement was filed with the SEC without receiving any correspondence from the SEC commenting upon or indicating intent to review the proxy statement.

Marker is obligated under the merger agreement to obtain written consents of its stockholders sufficient to adopt the merger agreement and approve the merger and related transactions. On May 15, 2018, Marker had obtained through a written consent of the Marker stockholders the requisite vote necessary to approve the merger and related transactions pursuant to the terms of the merger agreement.

Directors and Officers Following the Merger

Effective at the closing of the merger, the combined company board of directors will be reconstituted to be comprised of six directors, three of whom are designated by TapImmune and three of whom are designated by Marker pursuant to the terms of the merger agreement. Each of the directors appointed will be up for election at the 2019 annual meeting of stockholders. Each board committee will be comprised of at least three (3) directors, the members of which will be determined by the parties based upon NASDAQ and SEC independence rules regarding who can sit on each committee and qualifications for each committee.

Initially, the executive management team of the combined company after the merger is expected to consist of members of the TapImmune executive management team prior to the merger. In addition, after consummation of the merger, the combined company intends to appoint Juan Vera as its Chief Development Officer and Ann Leen as its Chief Scientific Officer.

The three members of the combined company board of directors who have been designated by the TapImmune board of directors to continue serving after the closing of the merger are Peter Hoang, Frederick Wasserman and David Laskow-Pooley. See “*Proposal No. 5 Election of Directors—Director Nominees*” beginning on page 128 for additional information regarding each of Mr. Hoang, Mr. Wasserman and Mr. Laskow-Pooley. Dr. Glynn Wilson, Mark Reddish, Sherry Grisewood and Joshua Silverman have provided resignations from TapImmune’s board of directors and committees that will take effect only if the merger is consummated.

The three members of the combined company board of directors who have been designated by Marker, together with their biographical information, are set forth below.

John Wilson. Effective upon consummation of the merger, John Wilson will become a member of the board of directors of the combined company. Since 1996, Mr. Wilson has been the CEO of Wilson Wolf Manufacturing Corporation, which designs, developments and manufactures products for the field of biotechnology, including cell culture devices and bioreactors. Mr. Wilson is the co-inventor of the G-Rex[®] cell culture platform, which is used for the large-scale production of T cells. Mr. Wilson has over 30 years of experience in the design, development and manufacture of products for the field of biotechnology, including cell culture devices and bioreactors. Mr. Wilson has obtained over 50 related patents with

numerous patents currently pending. Mr. Wilson is a co-founder of Marker, and since 2015, has served as Marker's CEO. Effective upon consummation of the merger, Mr. Wilson will resign as an officer of Marker. Mr. Wilson is also a co-founder of ViraCyte, LLC, a clinical stage biopharmaceutical company developing cellular immunotherapies for severe viral infections, and since 2013 has served as its Managing Director. Prior to co-founding Wilson Wolf Manufacturing, Marker and ViraCyte, Mr. Wilson was a principal mechanical engineer at Cellex Biosciences (now The Cell Culture Company) where he contributed to the world's first commercially available fully-automated hollow fiber bioreactor cell culture system. Mr. Wilson has a BA in Business Administration and a BA in Economics from Hamline University in Minnesota, and a B.S. in Mechanical Engineering from the University of Minnesota.

Juan F. Vera, MD. Effective upon consummation of the merger, Dr. Vera will become a member of the board of directors of the combined company. Dr. Vera was trained as a medical surgeon, and since 2004 has been in different positions at the Center for Cell and Gene Therapy (CAGT) at BCM, first as a postdoctoral associate from 2004 to 2008, an instructor from 2009 to 2010, an Assistant Professor from 2011 to 2014 and an Associate Professor from 2015 to present. While at the CAGT, he has worked extensively on developing novel T cell therapies and optimizing manufacturing processes for clinical applications at the CAGT. In collaboration with Wilson Wolf Manufacturing Corporation, he has been instrumental in the design and testing of the G-Rex® cell culture platform and pioneered its use for the large-scale production of T cells. Dr. Vera is also a co-founder of Marker as well as ViraCyte, LLC, a clinical stage biopharmaceutical company developing cellular immunotherapies for severe viral infections. Dr. Vera has extensive expertise in developing and streamlining therapeutic candidates from the research bench to the cGMP facility while ensuring robust production and scalability. Dr. Vera has previously collaborated with Celgene and Bluebird Bio in developing novel CAR T cell therapies. He has also been the recipient of different prestigious awards including the Idea Development Award from the Department of Defense and Mentored Research Scholar Award from the American Cancer Society. Dr. Vera received his MD from the University El Bosque in Bogota, Colombia.

David Eansor. Effective upon consummation of the merger, David Eansor will become a member of the board of directors of the combined company. Since April 2015, Mr. Eansor has been Senior Vice President of the Biotech Division of Bio-Techne Corporation (NASDAQ: TECH), a leading developer and manufacturer of high quality purified proteins—notably cytokines and growth factors, antibodies, immunoassays, as well as biologically active small molecule compounds. He has P&L responsibility for the largest division of Bio-Techne which includes the R&D Systems, Novus and Tocris brands of assays, proteins, antibodies, small molecules and cell culture products. From 2013 to 2015, Mr. Eansor was Senior Vice President of Novus Biologicals, which was acquired by Bio-Techne in July 2014. Prior to joining Novus Biologicals, Mr. Eansor was the President of the Life Science Research business of Thermo Fisher Scientific from 1996 to 2010, and then was promoted to serve as the President of the Bioscience Division of Thermo Fisher from 2010 to 2013. Mr. Eansor has a BSc in Chemistry from University of Western Ontario, a Bachelor of Commerce in General Business and Economics, and an MBA from the University of Windsor, Ontario, Canada.

In connection with the private placement transaction occurring concurrently with the merger, one of the investors, NEA, was granted the right to designate either a board observer or a board member to the TapImmune board of directors, and has elected to initially designate a board observer. In addition, another investor in the private placement transaction, Aisling Capital, was granted the right to designate a board observer.

Indemnification of Directors and Officers

Under the merger agreement, from the closing of the merger through the sixth anniversary of the date on which the effective time of the merger occurs, TapImmune and the surviving corporation in the merger agreed to, jointly and severally, indemnify and hold harmless to the fullest extent allowed under DGCL each present and former director or officer of TapImmune or Marker against all claims, losses and other costs, including attorneys' fees, incurred in connection with any claim, action, suit, proceeding or investigation, arising out of such individual's position as a director or officer of TapImmune or Marker, whether asserted or claimed prior to, at or after the effective time of the merger. Subject to certain circumstances, each such indemnified officer or director will also be entitled to the advancement of expenses incurred in the defense of such claim, action, suit, proceeding or investigation.

Under the merger agreement, the certificate of incorporation and bylaws of TapImmune and the surviving corporation will contain provisions no less favorable with respect to indemnification, advancement of expenses and exculpation of present and former directors and officers of each of TapImmune and Marker than are presently set forth in the certificate of incorporation and bylaws of TapImmune and Marker, as applicable, which provisions shall not be amended, modified or repealed for a period of six years' time from the effective time of the merger in a manner that would materially and adversely affect the rights thereunder of individuals who, at or prior to the effective time of the merger, were officers or directors of TapImmune or Marker.

Conduct of Business Pending the Merger

During the period commencing on May 15, 2018 and ending at the earlier of the date of termination of the merger agreement and the effective time of the merger, each party agreed that it will conduct its business in the ordinary course, pay outstanding accounts payables and other current liabilities (including payroll) when due and payable, subject to good faith disputes, and conduct its business and operations in compliance with all applicable laws, rules, regulations. Each party also agreed that it would provide the other party with prompt notice upon the occurrence of certain events or discovery of certain conditions, facts or circumstances.

TapImmune and Marker also agreed that prior to the effective time of the merger, subject to certain limited exceptions set forth in the merger agreement, without the consent of the other party, each of TapImmune and Marker would not:

- declare, accrue, set aside or pay any dividend or make any other distribution in respect of any shares of capital stock; or repurchase, redeem or otherwise reacquire any shares of capital stock or other securities;
- sell, issue or grant, or authorize the issuance of, or make any commitments to sell, issue, grant or authorize the issuance of: (i) any capital stock or other security (except in the case of TapImmune, TapImmune common stock issued upon the exercise of outstanding options or warrants to purchase TapImmune common stock, shares of TapImmune common stock to be issued in the private placement transaction, and shares of TapImmune issued in connection with any interim financing prior to the closing of the merger); (ii) any option, warrant or right to acquire any capital stock or any other security (except in the case of TapImmune, any repricing of warrants outstanding as of the date of the merger agreement); or (iii) any equity-based award or instrument convertible into or exchangeable for any capital stock or other security, or (iv) any debt securities or any rights to acquire any debt securities;
- except as required to give effect to anything in contemplation of the closing of the merger, amend its articles of incorporation, bylaws or other charter or organizational documents, or effect or become a party to any merger, consolidation, share exchange, business combination, recapitalization, reclassification of shares, stock split, reverse stock split or similar transaction, except as related to any of the transactions contemplated by the merger agreement;
- form any subsidiary or acquire any equity interest or other interest in any other entity;
- lend money to any person (except for reasonable advances to employees and consultants for travel and other reasonable business related expenses in the ordinary course of business); incur or guarantee any indebtedness for borrowed money, other than in the ordinary course of business or, in the case of TapImmune, in connection with any interim financing prior to the closing of the merger; guarantee any debt securities of others; or make any capital expenditure or commitment individually in excess of \$100,000 or in excess of \$250,000 in the aggregate, in the case of TapImmune, or make any capital expenditure or commitment in excess of \$20,000, in the case of Marker;
- adopt, establish, or enter into any employee plan; cause or permit any employee plan to be amended other than as required by law, including in order to make amendments for the purposes of section 409A of the tax code, subject to review and approval by the other party (with such other party's approval not to be unreasonably withheld); enter into any contract with a labor

union or collective bargaining agreement, pay any bonus or make any profit-sharing or similar payment to (other than in the ordinary course of business), or increase the amount of the wages, salary, commissions, fringe benefits or other compensation or remuneration payable to, any of its directors or employees, accelerate the vesting of or entitlement to any payment, award, compensation or benefit with respect to any employee, pay or increase the severance or change of control benefits offered to any employee, or provide or make any tax-related gross-up payment;

- enter into any material transaction outside the ordinary course of business;
- acquire any material asset nor sell, lease or otherwise irrevocably dispose of any of its assets or properties or grant any encumbrance with respect to such assets or properties, other than in the ordinary course of business;
- make, change or revoke any material tax election, file any material amendment to any tax return, adopt or change any accounting method in respect of taxes, change any annual tax accounting period, enter into any tax allocation agreement, tax sharing agreement or tax indemnity agreement, other than commercial contracts entered into in the ordinary course of business with vendors, customers or landlords, enter into any closing agreement with respect to any tax, settle or compromise any claim, notice, audit report or assessment in respect of material taxes, apply for or enter into any ruling from any tax authority with respect to taxes, surrender any right to claim a material tax refund, or consent to any extension or waiver of the statute of limitations period applicable to any material tax claim or assessment;
- enter into, amend or terminate any material contract;
- initiate or settle any legal proceeding;
- adopt any stockholder rights plan or similar arrangement; or
- agree, resolve or commit to do any of the restrictions noted in the above bullets.

Additional Agreements

Each of Marker and TapImmune has agreed to, among other things:

- use its commercially reasonable efforts to cause to be taken all actions necessary to consummate the merger and any other transaction contemplated by the merger agreement;
- reasonably cooperate with the other parties and provide the other parties with such assistance as may be reasonably requested for the purpose of facilitating the performance by each party of its respective obligations under the merger agreement and to enable the surviving corporation to continue to meet its obligations under the merger agreement following the closing;
- make all filings and other submissions (if any) and give all notices (if any) required to be made and given by such party in connection with the merger and any other transaction contemplated by the merger agreement;
- use commercially reasonable efforts to obtain each consent (if any) reasonably required to be obtained (pursuant to any applicable law or contract, or otherwise) by such party in connection with the merger and any other transaction contemplated by the merger agreement or for such contract to remain in full force and effect;
- use its commercially reasonable efforts to lift any injunction prohibiting, or any other legal bar to, the merger and any other transaction contemplated by the merger agreement;
- use its commercially reasonable efforts to satisfy the conditions precedent to the consummation of the merger and any other transaction contemplated by the merger agreement; and
- use its commercially reasonable efforts to cause the merger to qualify, and agree not to, and not permit or cause any of its affiliates or any subsidiaries to, take any actions or cause any action to be taken which would reasonably be expected to prevent the merger from qualifying, as a “reorganization” under Section 368(a) of the Code.

Marker and TapImmune agreed that:

- TapImmune shall use its commercially reasonable efforts to maintain its existing listing on the NASDAQ Capital Market and to cause the shares of TapImmune common stock being issued in the merger to be approved for listing on the NASDAQ Capital Market at or prior to the effective time of the merger;
- Marker and TapImmune shall not permit any of their respective subsidiaries or representatives to issue any press release or disclosure regarding the merger or the other contemplated transactions unless the other party has approved the disclosure in writing or such party has determined in good faith, upon the advice of legal counsel that such disclosure is required by applicable legal requirement and advises the other party and consults with the other party regarding the text of such press release or disclosure;
- Marker shall use reasonable best efforts to obtain, as promptly as practicable but in any event within 24 hours after the execution of the merger agreement, irrevocable actions by written consent from its stockholders adopting the merger agreement and approving the merger and related transactions;
- Marker shall deliver to TapImmune all such information necessary for TapImmune to confirm that Marker stockholders receiving shares in the merger are “accredited investors” as defined in Rule 501(a) of Regulation D promulgated under the Securities Act.

Termination

The merger agreement may be terminated at any time before the completion of the merger, whether before or after the required stockholder approvals to complete the merger have been obtained, as set forth below:

- 1) by mutual written consent duly authorized by the board of directors of each of Marker and TapImmune;
- 2) by Marker or TapImmune if the merger has not been completed by September 15, 2018; provided, that this right to terminate the merger agreement will not be available to any party whose action or failure to act has been a principal cause of the failure of the merger to be completed by such date and such action or failure to act constitutes a breach of the merger agreement; and provided, further, that, in the event this proxy statement is still being reviewed or commented on by the SEC, either party shall be entitled to extend the date for termination of the merger agreement for an additional 60 days;
- 3) by Marker or TapImmune if a court or other governmental entity has issued a final and nonappealable order, decree or ruling or taken any other action that permanently restrains, enjoins or otherwise prohibits the merger;
- 4) by TapImmune if Marker did not obtain the written consent of a requisite number of its stockholders necessary to approve the merger and related matters within 24 hours of the execution of the merger agreement;
- 5) by Marker or TapImmune if the TapImmune annual meeting has been held and completed and the required proposals have not been approved; provided, that this right to terminate the merger agreement shall not be available to TapImmune if failure to obtain the approval of TapImmune stockholders was caused by the action or failure to act of TapImmune and such action or failure to act constitutes a material breach by TapImmune of the merger agreement;
- 6) by Marker, at any time prior to the approval of the required proposals, including the issuance of the shares of TapImmune common stock and warrants pursuant to the merger, if (each such event, a “TapImmune triggering event”): (i) TapImmune failed to include in this proxy statement the recommendation of its board of directors that the stockholders of TapImmune vote to approve the required proposals, including the issuance of TapImmune common stock and warrants in the merger; (ii) the TapImmune board has approved, endorsed or recommended any

- competing proposal, (iii) TapImmune has entered into any definitive agreement for a competing proposal; or (iv) TapImmune has willfully and intentionally materially breached the non-solicitation obligations in the merger agreement;
- 7) by TapImmune, at any time prior to the adoption of the merger agreement by the stockholders of Marker, if (each such event, a “Marker triggering event”), Marker has willfully and intentionally materially breached the non-solicitation obligations in the merger agreement;
 - 8) by Marker if TapImmune or Merger Sub breaches any of its representations, warranties, covenants or agreements in the merger agreement or if any representation or warranty of the other party has become inaccurate, in either case that would prevent TapImmune or Merger Sub from satisfying their closing conditions and such breach remains uncured for 15 calendar days after receipt of written notice of such breaches;
 - 9) by TapImmune if Marker breaches any of its representations, warranties, covenants or agreements in the merger agreement or if any representation or warranty of the other party has become inaccurate, in either case that would prevent Marker from satisfying its closing conditions and such breaches remain uncured for 15 calendar days after receipt of written notice of such breaches;
 - 10) by TapImmune (prior to obtaining the required vote from TapImmune stockholders) if the TapImmune board authorizes TapImmune to enter into any definitive agreement for a competing proposal that constitutes a superior competing proposal (so long as (i) TapImmune has complied with the non-solicitation and notification provisions in the merger agreement, (ii) TapImmune pays Marker the termination fee and expenses reimbursable under the merger agreement and (iii) a copy of such agreement has been delivered to Marker); or
 - 11) by Marker if all closing conditions have been satisfied (or if Marker is willing to waive any conditions that have not been satisfied) other than the consummation of TapImmune’s private placement transaction and Marker is prepared to consummate the closing of the Merger upon consummation of TapImmune’s private placement transaction, and TapImmune’s private placement transaction is not consummated within twenty calendar days after notice from Marker to TapImmune of the foregoing.

Termination Fee

Except as set forth below, all fees and expenses incurred in connection with the merger agreement and the transactions contemplated thereby shall be paid by the party incurring such expenses, whether or not the merger is consummated. Notwithstanding the foregoing, TapImmune agreed that if John Wilson has loaned funds to Marker to pay reasonable attorneys’, accountants’ and travel expenses in connection with the merger, the balance of such amounts that remain unpaid at closing will be repaid by the surviving corporation promptly after closing.

TapImmune is required to pay to Marker a one-time nonrefundable termination fee of \$1.5 million if the merger agreement is terminated by TapImmune or Marker, as applicable, pursuant to clauses 6 or 10 above. TapImmune is also required to pay third-party expense reimbursements of up to \$500,000 and all legal fees and expenses of Marker incurred in connection with the preparation of this proxy statement if the merger agreement is terminated by Marker or TapImmune, as applicable, pursuant to clauses 5, 6, 8 or 10 above.

Marker is required to pay third-party expense reimbursements of up to \$500,000 and all legal fees and expenses of Marker incurred in connection with the preparation of this proxy statement if the merger agreement is terminated by Marker or TapImmune, as applicable, pursuant to clauses 4, 7 or 9 above, or if TapImmune fails to consummate the transactions to be consummated at closing solely as a result of a Marker material adverse effect.

Any termination of the merger agreement shall not relieve any party for its common law fraud or from any liability for any willful and material breach of any representation, warranty, covenant, obligation or other provision contained in the merger agreement.

Representations and Warranties

The merger agreement contains customary representations and warranties of TapImmune, Marker and the acquisition subsidiary for a transaction of this type. TapImmune's representations and warranties are qualified by its disclosure schedules and, in some cases, by TapImmune's SEC reports. Marker's representations and warranties are qualified by its disclosure schedules. The representations and warranties in the merger agreement relate to, among other things:

- corporate organization, power and similar corporate matters;
- subsidiaries and organizational documents;
- capital structure;
- financial statements and, with respect to TapImmune, documents filed with the SEC and the accuracy of information contained in those documents;
- any material changes or events;
- title to assets;
- real property and leaseholds;
- intellectual property;
- the validity of material contracts to which the parties or their subsidiaries are a party and any violation, default or breach to such contracts;
- undisclosed liabilities;
- compliance with legal and regulatory requirements;
- filing of tax returns and payment of taxes;
- employee benefits and related matters;
- environmental matters;
- insurance matters;
- litigation matters;
- authority to enter into the merger agreement and the related agreements;
- inapplicability of Section 203 of the DGCL and other anti-takeover statutes to the merger;
- votes required for completion of the merger and approval of the relevant proposals that will come before each of the 2018 Annual Meeting and the Marker written stockholder consent;
- any conflicts or violations of each party's agreements as a result of the merger or the merger agreement;
- transactions with affiliates;
- accuracy and lack of omission of disclosures in this proxy statement; and
- with respect to TapImmune, the valid issuance in the merger of the TapImmune common stock.

The representations and warranties are, in many respects, qualified by materiality and knowledge, and will not survive the merger, but their accuracy forms the basis of one of the conditions to the obligations of Marker and TapImmune to complete the merger.

Amendment

The merger agreement may be amended by an instrument in writing signed on behalf of each of TapImmune, Merger Sub and Marker with the approval of the respective boards of directors of TapImmune, Merger Sub and Marker at any time, except that after the merger agreement has been adopted by the stockholders of Marker or TapImmune, no amendment which by law requires further approval by the stockholders of Marker or TapImmune, as the case may be, shall be made without such further approval.

AGREEMENTS RELATED TO THE MERGER

Voting and Lock-Up Agreements

In connection with the execution of the merger agreement, (i) TapImmune's directors and executive officers, beneficially owning in the aggregate, as of August 21, 2018, approximately 4.2% of TapImmune's outstanding common stock (excluding outstanding warrants and options), or 7.5% (including warrants and options), entered into voting and lock-up agreements with Marker, and (ii) certain Marker stockholders, including Marker's directors and executive officers, beneficially owning in the aggregate approximately 97% of Marker's outstanding capital stock, entered into voting and lock-up agreements with TapImmune. The voting and lock-up agreements, which are attached as Annexes D-1 and D-2 hereto, provide, among other things, that the parties to the agreements will vote (i) in favor of the merger and the adoption of the merger agreement and the transactions contemplated thereby; (ii) against the approval or adoption of any proposal made in opposition to, or in competition with, the proposed merger; and (iii) against any other action which is intended, or could reasonably be expected to, impede, interfere with, delay, postpone, discourage or adversely affect the consummation of the merger or any of the other transactions contemplated by the merger agreement. In addition, the voting and lock-up agreements place restrictions on the transfer of shares of TapImmune and Marker capital stock held by the respective signatory stockholders prior to the closing of the merger, and each such stockholder will also be subject to a 180-day lock-up on the sale of shares of capital stock of TapImmune, which period shall begin upon consummation of the merger.

The TapImmune directors and executive officers that entered into the voting and lock-up agreements are Peter Hoang, Dr. Glynn Wilson, Michael J. Loiacono, Sherry Grisewood, David Laskow-Pooley, Mark Reddish, Joshua Silverman and Frederick Wasserman.

The Marker stockholders that entered into voting and lock-up agreements are John R. Wilson, Juan F. Vera, Ann M. Leen, Salt Free LP, Helen E. Heslop, and BCM.

Merger Registration Rights Agreement

In order to induce certain Marker stockholders to adopt and approve the merger agreement and approve the merger, TapImmune has agreed to enter into, at the closing of the merger, a registration rights agreement, or the merger registration rights agreement (the form of which is attached as Annex E hereto) with such stockholders. Under the merger registration rights agreement, if TapImmune registers any shares of TapImmune common stock for resale pursuant to the private placement transaction occurring concurrently with the merger, such stockholders will have the right to include their TapImmune common stock issued or issuable to such stockholders pursuant to the merger, or the registrable securities, in the registration statement. The underwriters of any underwritten offering will have the right to limit up to 50% of the number of shares having registration rights to be included in the registration statement in certain circumstances. In addition, if by the date that is 180 days after the closing of the merger, TapImmune has not already filed a registration statement with respect to the private placement transaction occurring concurrently with the merger and such registration statement has not been declared effective, TapImmune shall be obligated to file a resale registration statement on Form S-3 providing for the resale by such stockholders of their registrable securities, and shall use its commercially reasonable effort to cause the resale registration statement to be declared effective.

TapImmune will use its commercially reasonable efforts to cause the resale registration statement to remain continuously effective until the earliest of (i) the sale pursuant to a registration statement of all of the registrable securities under the merger registration rights agreement covered by the resale registration statement, (ii) the sale, transfer or other disposition pursuant to Rule 144 of the Securities Act of all of the registrable securities under the merger registration rights agreement covered by the resale registration statement, (iii) such time as the registrable securities under the merger registration rights agreement covered by the resale registration statement that are not held by affiliates of TapImmune are, in the opinion of counsel to TapImmune, eligible for resale pursuant to Rule 144 without any limitation or restrictions, or (iv) such time as all of the registrable securities under the merger registration rights agreement covered by the resale registration statement have been sold to TapImmune or any of its subsidiaries.

Marker Written Consent of Stockholders

Additionally, pursuant to the conditions of the merger agreement, Marker has obtained a written consent from the holders of 97% of the shares of Marker capital stock outstanding for purposes of

(i) adopting the merger agreement and approving the merger and all other transactions contemplated under the merger agreement, (ii) acknowledging that such adoption and approval of the merger and the other contemplated transactions given thereby is irrevocable and that such stockholder is aware it may have the right to demand appraisal for its shares pursuant to Section 262 of the DGCL, if applicable, a copy of which was attached thereto, and that such stockholder has received and read a copy of Section 262 of the DGCL, and (iii) acknowledging that by its approval of the merger it is not entitled to appraisal or dissenters' rights with respect to its shares in connection with the merger and thereby waives any rights to receive payment of the fair value of its capital stock under the DGCL. Therefore, Marker stockholders holding shares representing the requisite vote have adopted the merger agreement and approved the merger and related transactions pursuant to the terms of the merger agreement. No additional Marker stockholder approval is required to effect the merger and the related transactions.

Interim Financing Agreements

Common Stock Purchase Agreement

On May 18, 2018, TapImmune closed on the previously announced sale of 1,300,000 shares of TapImmune common stock for \$2.40 per share pursuant to a Common Stock Purchase Agreement with an existing accredited investor, Eastern Capital Limited, in a private placement transaction under Rule 506 of Regulation D pursuant to the terms of a Common Stock Purchase Agreement. Aggregate gross proceeds were approximately \$3.1 million.

Warrant Exercise Agreements

Also on May 18, 2018, TapImmune and certain existing institutional investors, who are holders of various warrants to purchase shares of TapImmune common stock, closed on warrant exercise agreements in which TapImmune agreed to reduce the exercise price for a portion of the investors' previously purchased Series C, Series D, Series E and Series F warrants from \$6.00, \$9.00, \$15.00 and \$7.20, respectively per share to \$2.50 per share, provided that the investors exercise such warrants for cash immediately, which they did, for 782,506 shares and aggregate proceeds of approximately \$2.0 million. The shares of TapImmune common stock underlying the exercised warrants are registered for resale under the Form S-3 Registration Statement (File no. 333-220538) declared effective by the SEC on December 29, 2017.

Voting and Support Agreements

In connection with the interim financing agreements described above, the TapImmune investors in such interim financing entered into voting and support agreements with Marker, whereby each agreed to vote in favor of (i) the merger and the adoption of the merger agreement and the transactions contemplated thereby, and (ii) any related proposals which are reasonably related to enable the consummation of the merger. As of August 21, 2018, the TapImmune stockholders who entered into these voting and support agreements beneficially owned in the aggregate approximately 31.4% of TapImmune's outstanding common stock (excluding, for purposes of such calculation, any warrants or options held by them).

Each stockholder executing a voting and support agreement has made representations and warranties to Marker regarding ownership of the shares subject to such agreement, such stockholder's power and authority to execute the support agreement, due execution and enforceability of the voting and support agreement. Unless otherwise waived, all of these support agreements prohibit entering into any tender, voting or other agreement, or grant a proxy or power of attorney, with respect to the shares subject to such agreement that is inconsistent with the voting and support agreement or otherwise take any other action with respect to the shares subject to such agreement that would in any way restrict, limit or interfere with the performance of stockholder's obligations under the voting and support agreement or the transactions contemplated thereby, including the consummation of the transactions contemplated by the merger agreement. The voting and support agreements will terminate at the earlier of the effective time of the merger or the termination of the merger agreement in accordance with its terms. There are no restrictions in the voting and support agreements prohibiting the sale of the shares of TapImmune common stock held by such stockholders.

Private Placement Transaction — Securities Purchase Agreements

On June 8, 2018, TapImmune entered into securities purchase agreements, in the form attached to this proxy statement as Annex L, for a private placement transaction with a select group of institutional and accredited investors, or the private placement transaction purchasers. Pursuant to the securities purchase agreements, the private placement transaction purchasers have agreed to purchase 17,500,000 shares of TapImmune's common stock at \$4.00 per share, for gross offering proceeds of \$70 million. Each share of TapImmune common stock will be issued with a warrant to purchase 0.75 additional shares of TapImmune's common stock at an exercise price of \$5.00 per share, each a warrant and collectively the warrants, for an aggregate of 13,125,000 warrants. In accordance with NASDAQ Stock Market Rule 5635, the completion of the issuance and sale of the TapImmune common stock and warrants pursuant to the securities purchase agreements is subject to the approval of TapImmune's stockholders.

The warrants will be immediately exercisable upon issuance at closing and will have a term of five years. Subject to obtaining stockholder approval of the issuance and sale of the TapImmune common stock and warrants pursuant to the securities purchase agreements, the private placement transaction is expected to close concurrently with TapImmune's merger with Marker. In addition, TapImmune granted the private placement transaction purchasers certain registration rights with respect to the shares of TapImmune common stock and the shares of TapImmune common stock to be received pursuant to the exercise of the warrants.

Neither the shares of TapImmune common stock nor the additional shares of TapImmune common stock to be issued pursuant to the exercise of the warrants have been registered under the Securities Act, and may not be offered or sold in the United States in the absence of an effective registration statement or exemption from registration requirements. Under the securities purchase agreement, TapImmune shall be obligated to file within 15 calendar days from the date of the closing of the private placement transaction, a resale registration statement on Form S-3 (or on Form S-1 in the event that TapImmune is not eligible to use Form S-3) providing for the resale by the private placement transaction purchasers of the TapImmune common stock issued or issuable to such stockholders pursuant to the securities purchase agreements and warrants, or the purchasers registrable securities.

The closing of the private placement transaction is conditioned upon the approval of TapImmune's stockholders of the securities to be issued pursuant to the merger and the private placement transaction.

MATTERS BEING SUBMITTED TO A VOTE OF TAPIMMUNE STOCKHOLDERS

PROPOSAL 1

APPROVAL OF THE ISSUANCE OF COMMON STOCK, WARRANTS TO PURCHASE COMMON STOCK, AND COMMON STOCK ISSUABLE UPON EXERCISE OF WARRANTS TO PURCHASE COMMON STOCK IN THE MERGER

General

At the 2018 Annual Meeting, TapImmune stockholders will be asked to approve the issuance of TapImmune common stock, warrants to purchase TapImmune common stock and shares of TapImmune common stock issuable upon exercise of the warrants, pursuant to the merger agreement. Pursuant to the terms of the merger, Marker stockholders will receive (i) shares of TapImmune's common stock equal to the number of shares of TapImmune common stock issued and outstanding immediately prior to the effective time of the merger, and (ii) a number of warrants equal to the number of TapImmune warrants and stock options issued and outstanding immediately prior to the effective time of the merger. Accordingly, immediately following the effective time of the merger, before taking into account the issuance of shares in the private placement transaction, Marker's stockholders and TapImmune's current stockholders will each own 50% of the issued and outstanding shares of TapImmune common stock on a fully diluted basis (assuming all issued and outstanding warrants and options are exercised). After taking into account the issuance of shares in the private placement transaction, immediately following the effective time of the merger, the pro forma ownership of the issued and outstanding shares of TapImmune common stock on a fully diluted basis (assuming all issued and outstanding warrants and options are exercised) will be approximately as follows: Marker's stockholders 27.5%, TapImmune's current stockholders 27.5%, and the private placement transaction stockholders 45%.

The terms of, reasons for and other aspects of the merger agreement and the issuance of TapImmune common stock pursuant to the merger agreement are described in detail in the other sections of this proxy statement. The full text of the merger agreement is attached to this proxy statement as Annex A.

Proposals 1, 2, 3a, 3b, 4 and 5 (described below) are conditioned upon each other, and the approval of each such proposal is a condition to the completion of the merger. Therefore, the completion of the merger and the private placement transaction cannot proceed without the approval of Proposals 1, 2, 3a, 3b, 4 and 5.

Voting by Proxyholder

Your proxyholder (one of the individuals named on your proxy card) will vote your common stock in accordance with your instructions. Unless you give specific instructions to the contrary, your common stock will be voted for the issuance of TapImmune common stock pursuant to the merger agreement.

Required Vote; Recommendation of Board of Directors

The affirmative vote of the holders of a majority of the shares of TapImmune common stock present in person or represented by proxy and entitled to vote on such matter at the 2018 Annual Meeting is required for approval of the issuance of TapImmune common stock pursuant to the merger agreement. A "broker non-vote" will have no effect on the outcome of this proposal, while an abstention will have the same effect as a vote against the approval of this proposal.

TAPIMMUNE'S BOARD OF DIRECTORS UNANIMOUSLY RECOMMENDS THAT TAPIMMUNE STOCKHOLDERS VOTE "FOR" PROPOSAL 1 TO APPROVE THE ISSUANCE OF TAPIMMUNE COMMON STOCK, WARRANTS TO PURCHASE COMMON STOCK AND COMMON STOCK ISSUABLE UPON EXERCISE OF WARRANTS TO PURCHASE COMMON STOCK, PURSUANT TO THE MERGER AGREEMENT.

PROPOSAL 2**APPROVAL OF THE ISSUANCE OF COMMON STOCK, WARRANTS TO PURCHASE COMMON STOCK, AND COMMON STOCK ISSUABLE UPON EXERCISE OF WARRANTS TO PURCHASE COMMON STOCK, IN THE PRIVATE PLACEMENT TRANSACTION*****General***

At the 2018 Annual Meeting, TapImmune stockholders will be asked to approve the issuance of TapImmune common stock, warrants to purchase TapImmune common stock and shares of TapImmune common stock issuable upon exercise of the warrants, pursuant to the private placement transaction. Pursuant to the private placement transaction, the private placement transaction purchasers have agreed to purchase 17,500,000 shares of TapImmune's common stock at \$4.00 per share, for gross offering proceeds of \$70 million. Each share of TapImmune common stock will be issued with a warrant to purchase 0.75 additional shares of TapImmune's common stock at an exercise price of \$5.00 per share, for an aggregate of 13,125,000 warrants. After taking into account the issuance of shares in the private placement transaction, immediately following the effective time of the merger, the pro forma ownership of the issued and outstanding shares of TapImmune common stock on a fully diluted basis (assuming all issued and outstanding warrants and options are exercised) will be approximately as follows: Marker's stockholders 27.5%, TapImmune's current stockholders 27.5%, and the private placement transaction stockholders 45%. The issuance of TapImmune common stock and warrants pursuant to the private placement transaction are described in detail in the other sections of this proxy statement.

Proposals 1, 2, 3a, 3b, 4 and 5 (described below) are conditioned upon each other, and the approval of each such proposal is a condition to the completion of the merger. Therefore, the completion of the merger and the private placement transaction cannot proceed without the approval of Proposals 1, 2, 3a, 3b, 4 and 5.

Voting by Proxyholder

Your proxyholder (one of the individuals named on your proxy card) will vote your common stock in accordance with your instructions. Unless you give specific instructions to the contrary, your common stock will be voted for the issuance of TapImmune common stock pursuant to the private placement transaction.

Required Vote; Recommendation of Board of Directors

The affirmative vote of the holders of a majority of the shares of TapImmune common stock present in person or represented by proxy and entitled to vote on such matter at the 2018 Annual Meeting is required for approval of the issuance of TapImmune common stock pursuant to the private placement transaction. A "broker non-vote" will have no effect on the outcome of this proposal, while an abstention will have the same effect as a vote against the approval of this proposal.

TAPIMMUNE'S BOARD OF DIRECTORS UNANIMOUSLY RECOMMENDS THAT TAPIMMUNE STOCKHOLDERS VOTE "FOR" PROPOSAL 2 TO APPROVE THE ISSUANCE OF TAPIMMUNE COMMON STOCK, WARRANTS TO PURCHASE COMMON STOCK AND COMMON STOCK ISSUABLE UPON EXERCISE OF WARRANTS TO PURCHASE COMMON STOCK, PURSUANT TO THE PRIVATE PLACEMENT TRANSACTION.

PROPOSAL 3A**APPROVAL OF AMENDMENT TO TAPIMMUNE'S ARTICLES OF INCORPORATION TO INCREASE THE NUMBER OF AUTHORIZED SHARES OF TAPIMMUNE COMMON STOCK FROM 41,666,667 TO 150,000,000*****General***

As of August 21, 2018, there were (i) 13,710,544 shares of TapImmune common stock issued and outstanding and no shares of TapImmune preferred stock issued and outstanding, (ii) an aggregate of 4,755,061 issued and outstanding warrants to purchase shares of TapImmune common stock and (iii) an aggregate of 439,467 issued and outstanding stock options under the TapImmune Plan. Had the merger been consummated on August 21, 2018, after market close, TapImmune would have issued to Marker stockholders (i) an aggregate of 13,710,544 shares of TapImmune common stock, and (ii) an aggregate of 5,194,528 warrants to purchase TapImmune common stock, and without taking into account the private placement transaction. Pursuant to the private placement transaction, the private placement transaction purchasers have agreed to purchase 17,500,000 shares of TapImmune common stock and in connection with such purchase will receive warrants to purchase an aggregate of 13,125,000 shares of TapImmune common stock.

The amendment would increase TapImmune's total number of authorized shares of all classes of capital stock from 46,666,667 shares to 155,000,000 shares, which would consist of (i) 150,000,000 shares of TapImmune common stock and (ii) 5,000,000 shares of preferred stock.

The amendment is intended to provide adequate authorized share capital to: (i) accommodate the issuance of shares of TapImmune common stock in the merger and the private placement transaction; (ii) accommodate the shares of TapImmune common stock issuable upon exercise of the warrants issued in the merger and the private placement transaction, and (iii) to provide flexibility for future issuances of TapImmune common stock if determined by TapImmune's board of directors to be in the best interests of the combined company without incurring the risk, delay and potential expense incident to obtaining stockholder approval for a particular issuance.

Proposals 1, 2, 3a, 3b, 4 and 5 are conditioned upon each other, and the approval of each such proposal is a condition to the completion of the merger. Therefore, the completion of the merger and the private placement transaction cannot proceed without the approval of Proposals 1, 2, 3a, 3b, 4 and 5. By approving this Proposal 3a, TapImmune stockholders are also approving the certificate of amendment to the amended and restated articles of incorporation, attached hereto as Annex F, reflecting the amendments contemplated by this Proposal 3a and, if approved by TapImmune stockholders, Proposals 3b, and the certificate of incorporation attached hereto as Annex J contemplated by Proposal 4. All TapImmune stockholders are encouraged to read the proposed certificate of amendment to the amended and restated articles of incorporation attached hereto as Annex F and the certificate of incorporation attached hereto as Annex J in their entirety.

Additionally, the proposed certificate of amendment to the amended and restated articles of incorporation will only be filed with the office of the Secretary of State of the State of Nevada and, therefore, become effective, if the merger is to be consummated.

Voting by Proxyholder

Your proxyholder (one of the individuals named on your proxy card) will vote your common stock in accordance with your instructions. Unless you give specific instructions to the contrary, your common stock will be voted for the amendment to TapImmune's articles of incorporation to increase the number of authorized shares of common stock from 41,666,667 to 150,000,000, the approval of which is necessary to enable TapImmune to issue the required number of shares of TapImmune common stock, and shares of TapImmune common stock issuable upon exercise of warrants, in each case, to Marker stockholders in connection with the merger and the private placement transaction.

Required Vote; Recommendation of Board of Directors

The affirmative vote of the holders of a majority of the outstanding shares of TapImmune common stock as of the record date for the 2018 Annual Meeting is required for approval of the amendment to

TapImmune’s articles of incorporation to elect for TapImmune to increase the number of authorized shares of common stock from 41,666,667 to 150,000,000. A failure to submit a proxy card or vote at the 2018 Annual Meeting, an abstention or a “broker non-vote” will have the same effect as a vote against the approval of this proposal.

TAPIMMUNE’S BOARD OF DIRECTORS UNANIMOUSLY RECOMMENDS THAT TAPIMMUNE STOCKHOLDERS VOTE “FOR” PROPOSAL 3A TO APPROVE THE AMENDMENT TO TAPIMMUNE’S ARTICLES OF INCORPORATION TO INCREASE THE NUMBER OF AUTHORIZED SHARES OF COMMON STOCK FROM 41,666,667 TO 150,000,000.

PROPOSAL 3B**APPROVAL OF AMENDMENT TO TAPIMMUNE'S ARTICLES OF INCORPORATION TO CHANGE THE NAME OF TAPIMMUNE TO "MARKER THERAPEUTICS, INC."*****General***

The primary reason for the corporate name change is that it is required by the terms of the merger agreement and management believes this will allow for brand recognition of Marker's technology following the consummation of the merger. TapImmune's management also believes that the current name will no longer accurately reflect the business of the combined company and the mission of the combined company subsequent to the consummation of the merger. At the effective time of the merger, TapImmune expects to trade under the symbol "MRKR" on the NASDAQ Capital Market.

Proposals 1, 2, 3a, 3b, 4 and 5 are conditioned upon each other, and the approval of each such proposal is a condition to the completion of the merger. Therefore, the completion of the merger and the private placement transaction cannot proceed without the approval of Proposals 1, 2, 3a, 3b, 4 and 5. By approving this Proposal 3b, TapImmune stockholders are also approving the certificate of amendment to the amended and restated articles of incorporation, attached hereto as Annex F, reflecting the amendments contemplated by this Proposal 3b and, if approved by TapImmune stockholders, Proposals 3a, and the certificate of incorporate attached hereto as Annex J contemplated by Proposal 4. All TapImmune stockholders are encouraged to read the proposed certificate of amendment to the amended and restated articles of incorporation attached hereto as Annex F and the certificate of incorporation attached hereto as Annex J in their entirety.

Voting by Proxyholder

Your proxyholder (one of the individuals named on your proxy card) will vote your common stock in accordance with your instructions. Unless you give specific instructions to the contrary, your common stock will be voted for the amendment to TapImmune's articles of incorporation to change TapImmune's name to "Marker Therapeutics, Inc."

Required Vote; Recommendation of Board of Directors

The affirmative vote of the holders of a majority of the outstanding shares of TapImmune common stock as of the record date for the 2018 Annual Meeting is required for approval of the amendment to TapImmune's articles of incorporation to change TapImmune's name to "Marker Therapeutics, Inc." A failure to submit a proxy card or vote at the 2018 Annual Meeting, an abstention or a "broker non-vote" will have the same effect as a vote against the approval of this proposal.

TAPIMMUNE'S BOARD OF DIRECTORS UNANIMOUSLY RECOMMENDS THAT TAPIMMUNE STOCKHOLDERS VOTE "FOR" PROPOSAL 3B TO APPROVE THE AMENDMENT TO TAPIMMUNE'S ARTICLES OF INCORPORATION TO CHANGE TAPIMMUNE'S NAME TO "MARKER THERAPEUTICS, INC."

PROPOSAL NO. 4

APPROVAL OF THE REINCORPORATION OF TAPIMMUNE FROM NEVADA TO DELAWARE

References in this section to “TapImmune” refer to TapImmune both as a Nevada corporation before the Reincorporation and to TapImmune as a Delaware corporation following the Reincorporation.

General

The TapImmune board of directors has approved and recommends that TapImmune stockholders approve the proposal to change the state of incorporation of TapImmune from the State of Nevada to the State of Delaware, which is referred to as the “Reincorporation,” and the proposal, the “Reincorporation Proposal”. The TapImmune board of directors has approved a plan of conversion, a copy of which is attached hereto as Annex G, which is referred to as the “plan of conversion”, to effect the Reincorporation. This proposal to approve the plan of conversion and effect the Reincorporation requires the affirmative vote of the holders of a majority of the outstanding shares of TapImmune common stock on the record date for the 2018 Annual Meeting.

If the TapImmune stockholders approve the Reincorporation Proposal, at the effective time of the Reincorporation, which would occur only in connection with the completion of the merger, TapImmune will file with the Nevada Secretary of State the certificate of amendment to the amended and restated articles of incorporation noted in Proposals 3a and 3b to increase its authorized shares and change its name to Marker Therapeutics, Inc. Marker will then file a certificate of amendment with the Delaware Secretary of State to change its name to Marker Cell Therapy, Inc. in order for the reincorporation of TapImmune to take effect in Delaware with TapImmune’s new name. This will be followed by the filing by TapImmune, under its new name, of articles of conversion with the Nevada Secretary of State, which is referred to as the “articles of conversion”, a copy of which is attached as Annex H, the filing by TapImmune, under its new name, of a certificate of conversion with the Delaware Secretary of State, which is referred to as the “certificate of conversion”, a copy of which is attached as Annex I, and the filing of the Delaware certificate of incorporation with the Delaware Secretary of State, a copy of which is attached as Annex J. In addition, assuming that TapImmune stockholders approve this proposal and the articles of conversion, the certificate of conversion and the Delaware certificate of incorporation are filed, the board of directors of TapImmune will adopt the Delaware bylaws, a copy of which is attached as Annex K. Apart from being governed by the Delaware certificate of incorporation, the Delaware bylaws and the DGCL, for all other purposes, TapImmune as a Delaware corporation, which is referred to as “TapImmune Delaware”, will be the same entity as TapImmune was as a Nevada corporation immediately prior to the Reincorporation: TapImmune Delaware will continue with all of the rights, privileges and powers of TapImmune; it will possess all of the properties of TapImmune; it will continue with all of the debts, liabilities and obligations of TapImmune; and it will continue with the same officers and directors of TapImmune immediately prior to the merger, as more fully described below. The completion of the Reincorporation is a condition to Marker’s obligation to complete the merger.

TapImmune is not required to obtain any regulatory approvals prior to the Reincorporation, and the Reincorporation will not have any material accounting, financial or tax impacts on TapImmune.

Proposals 1, 2, 3a, 3b, 4 and 5 are conditioned upon each other, and the approval of each such proposal is a condition to the completion of the merger. Therefore, the completion of the merger and the private placement transaction cannot proceed without the approval of Proposals 1, 2, 3a, 3b, 4 and 5. By approving this Proposal 4, TapImmune stockholders are also approving the certificate of incorporation, attached hereto as Annex J, reflecting the reincorporation of the company from Nevada to Delaware contemplated by this Proposal 4 and, if approved by TapImmune stockholders, Proposals 3a and 3b and the certificate of amendment to the amended and restated articles of incorporation attached hereto as Annex F. All TapImmune stockholders are encouraged to read the proposed certificate of amendment to the amended and restated articles of incorporation attached hereto as Annex F and the certificate of incorporation attached hereto as Annex J in their entirety.

Reasons for the Reincorporation

Reincorporation of TapImmune into a Delaware corporation is a condition to Marker’s obligation to complete the merger. Marker is a Delaware corporation. Delaware is a nationally recognized leader in

adopting and implementing comprehensive and flexible corporate laws. The DGCL is frequently revised and updated to accommodate changing legal and business needs and is more widely used and interpreted than other state corporate laws, including the NRS. Delaware courts have developed considerable expertise in dealing with corporate legal issues and produced a substantial body of case law construing the DGCL. Because the judicial system is based largely on legal precedents, the abundance of Delaware case law should serve to enhance the relative clarity and predictability of many areas of corporate law, offering added advantages to TapImmune by allowing the TapImmune board of directors and management to make corporate decisions and take corporate actions with greater assurance as to the validity and consequences of those decisions and actions. Reincorporation from Nevada to Delaware may also make it easier to attract future candidates willing to serve on the TapImmune board of directors, because many such candidates are already familiar with Delaware corporate law, including provisions relating to director indemnification, from their past business experience.

Changes as a Result of Reincorporation

If the Reincorporation Proposal is approved at the TapImmune annual stockholders' meeting, the Reincorporation will effect a change in the legal domicile of TapImmune and other changes of a legal nature, the most significant of which are described under "Comparison of Rights of Stockholders" beginning on page [112](#). While the Reincorporation itself will not result in any change in headquarters, business, trading status on the NASDAQ, jobs, management, location of any of TapImmune's offices or facilities, number of employees, assets, liabilities or net worth (other than as a result of the costs incident to the Reincorporation), or officers and directors of TapImmune, some of these changes will occur as a result of the merger described in the section entitled "*The Merger*" beginning on page [52](#).

Mechanism for Reincorporation into Delaware

The process for reincorporating TapImmune from Nevada to Delaware calls for the articles of conversion to be filed with the Nevada Secretary of State and for the certificate of conversion and the Delaware certificate of incorporation to be filed with the Delaware Secretary of State at approximately the same time, or with an effective time, desired for the Reincorporation to take effect.

The Plan of Conversion

The Reincorporation will be effected pursuant to the plan of conversion. The plan of conversion provides that TapImmune will convert into a Delaware corporation and become subject to Delaware law. By virtue of the Reincorporation, all of the assets, rights, privileges and powers of TapImmune, and all property owned by TapImmune, all debts due to TapImmune, as well as all causes of action belonging to TapImmune immediately prior to the Reincorporation, remain vested in TapImmune Delaware following the Reincorporation. In addition, by virtue of the Reincorporation, all debts, liabilities and duties of TapImmune immediately prior to the Reincorporation will remain attached to TapImmune Delaware following the Reincorporation. The directors and officers of TapImmune immediately prior to the Reincorporation will be the directors and officers of TapImmune Delaware.

At the effective time of the Reincorporation, each then outstanding share of TapImmune common stock will automatically be converted into one share of TapImmune Delaware common stock, and each outstanding option, warrant or other right to acquire shares of TapImmune common stock will constitute an option, warrant or other rights to acquire an equal number of shares of TapImmune Delaware common stock. TapImmune stockholders and holders of TapImmune stock options or other rights will not be required to exchange their TapImmune stock certificates, stock options, or other documentation, respectively, and should not destroy any stock certificates, stock options or documentation or submit any stock certificates, stock options or other documentation to TapImmune unless they are requested to do so. Any TapImmune stock certificates submitted to TapImmune for transfer after the effective time of the Reincorporation will be exchanged automatically for TapImmune Delaware stock certificates.

Effect of Vote for the Reincorporation Proposal

A vote in favor of the Reincorporation Proposal is a vote to approve the plan of conversion, and therefore the Reincorporation. A vote in favor of the Reincorporation Proposal is also effectively a vote in favor of the Delaware certificate of incorporation, as the plan of conversion will authorize TapImmune to file the articles of conversion, the certificate of conversion and the Delaware certificate of incorporation.

Effective Time

If the Reincorporation Proposal is approved, the Reincorporation will become effective upon the filing of, or at the date and time specified in, as applicable, the articles of conversion filed with the Secretary of State of Nevada and the certificate of conversion and the Delaware certificate of incorporation filed with the Secretary of State of Delaware, in each case upon acceptance thereof by the Nevada Secretary of State and the Delaware Secretary of State, as applicable. If the Reincorporation Proposal is approved by the TapImmune stockholders, it is anticipated that the TapImmune board of directors will cause the Reincorporation to be effected immediately prior to the effective time of the merger. However, the Reincorporation may be delayed by the TapImmune board of directors or the plan of conversion may be terminated and abandoned by action of the TapImmune board of directors at any time prior to the effective time of the Reincorporation, whether before or after the approval by TapImmune stockholders, for any reason (with the prior written consent of Marker). However, because completion of the Reincorporation is a condition to Marker's obligation to complete the merger, if TapImmune does not complete the Reincorporation, Marker may elect to terminate the merger agreement and to not complete the merger.

Effect of Not Obtaining the Required Vote for Approval

If the Reincorporation Proposal fails to obtain the requisite vote for approval, the Reincorporation will not be completed and TapImmune will continue to be incorporated in Nevada and be subject to the Nevada articles of incorporation and the Nevada bylaws. Because completion of the Reincorporation is a condition to Marker's obligation to complete the merger, if the Reincorporation Proposal fails to obtain the requisite vote for approval, Marker may elect to terminate the merger agreement and to not complete the merger.

Accounting Treatment of the Reincorporation

The Reincorporation will have no effect from an accounting perspective because there is no change in the entity as a result of the Reincorporation. Accordingly, the historical financial statements of TapImmune previously filed with the SEC as of and for all periods through the date hereof will be the financial statements of TapImmune Delaware following the Reincorporation.

Regulatory Approval

To TapImmune's knowledge, the only required regulatory or governmental approval or filing necessary in connection with the completion of the Reincorporation will be the filing of the articles of conversion with the Nevada Secretary of State and the filing of the certificate of conversion and the Delaware certificate of incorporation with the Delaware Secretary of State.

United States Federal Income Tax Consequences of the Reincorporation

TapImmune believes that the Reincorporation should constitute a reorganization within the meaning of Section 368(a)(I)(F) of the Internal Revenue Code, which is known as an F Reorganization. The F Reorganization should not represent a taxable transaction to TapImmune for United States federal income tax purposes. The tax basis and the holding period for each of its assets should remain unchanged, and other tax attributes, such as the earnings and profits account and the net operating loss carryforwards, should also be unaffected, subject to certain limitations. The stockholders of TapImmune should not recognize any gain or loss as a result of the F Reorganization. Their tax basis for their shares, and their holding periods for their shares, should not be affected.

Each TapImmune stockholder should consult its own tax advisor to determine the particular tax consequences to such stockholder of the Reincorporation, including the applicability and effect of United States federal, state, local, foreign and other tax laws.

Description of Capital Stock

The following information describes TapImmune Delaware common stock and preferred stock and provisions of the Delaware certificate of incorporation and the Delaware bylaws, all as will be in effect upon the completion of the merger, assuming the reincorporation of TapImmune from Nevada to Delaware and the approval of TapImmune Proposal No. 4. This description is only a summary. You should also refer to

the applicable provisions of the DGCL and the Delaware certificate of incorporation and Delaware bylaws that will govern the TapImmune Delaware corporation, which is also referred to as “TapImmune Delaware,” following the merger, attached to this proxy statement as Annex J and Annex K, respectively.

Authorized Capital Stock

If Proposal 3a is approved, TapImmune’s total number of authorized shares of all classes of capital stock would be increased from 46,666,667 shares to 155,000,000 shares, which would consist of (i) 150,000,000 shares of TapImmune common stock and (ii) 5,000,000 shares of preferred stock, all of which are undesignated. As of August 21, 2018, the TapImmune record date, TapImmune had 13,710,544 shares of outstanding common stock and 451 stockholders of record, and no shares of preferred stock were outstanding. Had the Reincorporation and the merger been consummated on August 21, 2018, after market close, TapImmune Delaware would have 27,421,088 shares of outstanding common stock. The rights, preferences and privileges of holders of TapImmune Delaware common stock will be subject to, and may be adversely affected by, the rights of the holders of shares of any series of preferred stock, which TapImmune Delaware may designate and issue in the future. Upon the closing of the merger, there will be no shares of TapImmune Delaware preferred stock outstanding.

Common Stock

Voting Power. Except as otherwise required by law or as otherwise provided in any certificate of designation for any series of preferred stock, the holders of common stock will possess all voting power for the election of TapImmune Delaware’s directors and all other matters requiring stockholder action, except with respect to amendments to the Delaware certificate of incorporation that alter or change the powers, preferences, rights or other terms of any outstanding preferred stock if the holders of such affected series of preferred stock are entitled to vote on such an amendment. Holders of common stock will be entitled to one vote per share on matters to be voted on by stockholders. Except as otherwise provided by law, the Delaware certificate of incorporation or the Delaware bylaws or in respect of the election of directors, all matters to be voted on by TapImmune Delaware’s stockholders must be approved by a majority of the votes cast on the matter. In the case of an election of directors, where a quorum is present, a plurality of the votes cast will be sufficient to elect each director.

Dividends. Subject to prior rights and preferences, if any, that may apply to shares of preferred stock outstanding at the time, the holders of outstanding shares of TapImmune Delaware common stock will be entitled to receive dividends, payable in cash, property or stock, out of assets legally available at the times and in the amounts as TapImmune Delaware’s board of directors may from time to time determine.

Liquidation Distribution. If TapImmune Delaware voluntarily or involuntarily liquidates, dissolves or winds-up, the holders of TapImmune Delaware common stock will be entitled to receive after distribution in full of the preferential amounts, if any, to be distributed to the holders of preferred stock or any series of preferred stock, all of the remaining assets available for distribution ratably in proportion to the number of shares of common stock held by them.

Preemptive or Other Rights. Holders of TapImmune Delaware common stock will have no conversion, preemptive or other subscription rights and there will be no sinking fund or redemption provisions applicable to TapImmune Delaware common stock.

Preferred Stock

The Delaware certificate of incorporation authorizes TapImmune Delaware’s board of directors, without further stockholder action, to issue up to 5,000,000 shares of preferred stock, par value \$0.001 per share, in one or more series, and to fix the designation, powers, preferences, and rights of the shares of such series and any qualifications, limitations or restrictions thereof, without further vote or action by TapImmune Delaware’s stockholders. The rights with respect to a class or series of preferred stock may be greater than the rights attached to TapImmune Delaware common stock. It is not possible to state the actual effect of the issuance of any shares of TapImmune Delaware preferred stock on the rights of holders of TapImmune Delaware common stock until TapImmune Delaware’s board of directors determines the specific rights attached to that class or series of preferred stock.

Options and Warrants

As of August 21, 2018, there were 4,755,061 shares of TapImmune’s common stock issuable upon the exercise of warrants, and 439,467 shares issuable upon the exercise of options. The board of directors has approved an increase of 6,616,666 shares available for grant under the 2014 TapImmune Plan, subject to approval of our stockholders in connection with the annual stockholder’s meeting as set forth in Proposal 5. Had the Reincorporation and the merger been consummated on August 21, 2018, after market close, there would have been 9,949,589 shares of TapImmune Delaware’s common stock issuable upon the exercise of warrants, and 439,467 shares issuable upon the exercise of options.

Registration Rights

Pursuant to the merger, the holders of Marker stock will acquire shares of TapImmune Delaware common stock and warrants to purchase shares of TapImmune Delaware common stock. These holders will be granted certain demand registration rights and piggyback registration rights with respect to their shares of TapImmune Delaware common stock and the shares of TapImmune Delaware common stock issuable upon the exercise of the warrants, subject to customary cutbacks, blackout periods and other exceptions.

Anti-Takeover Effects of Various Provisions of Delaware Law, the Delaware Certificate of Incorporation and the Delaware Bylaws

Delaware Anti-Takeover Statute. TapImmune Delaware will be subject to Section 203 of the DGCL, an anti-takeover statute. In general, Section 203 of the DGCL prohibits a publicly held Delaware corporation from engaging in a “business combination” with an “interested stockholder” for a period of three years following the time the person became an interested stockholder, unless the business combination or the acquisition of shares that resulted in a stockholder becoming an interested stockholder is approved in a prescribed manner. A “business combination” includes a merger, asset or stock sale, or other transaction resulting in a financial benefit to the interested stockholder. Generally, an “interested stockholder” is a person who, together with affiliates and associates, owns (or within three years prior to the determination of interested stockholder status did own) 15% or more of a corporation’s voting stock. A Delaware corporation may “opt out” of this provision with an express provision in its original certificate of incorporation or an express provision in its certificate of incorporation or bylaws resulting from a stockholders’ amendment approved by at least a majority of the outstanding voting shares. However, TapImmune Delaware is not “opting out” of this provision. The existence of this provision would be expected to have an anti-takeover effect with respect to transactions not approved in advance by TapImmune Delaware’s board of directors, including discouraging attempts that might result in a premium over the market price for the shares of common stock held by TapImmune Delaware’s stockholders.

Removal of Directors. The Delaware bylaws provide that the stockholders of TapImmune Delaware may remove directors, with or without cause, by affirmative vote of the holders of at least two-thirds of the outstanding shares of TapImmune Delaware common stock. However, whenever a director has been elected by a voting group of stockholders, only the stockholders from that voting group may participate in the vote to remove him or her, and such vacancy may be filled only by the stockholders of that voting group.

Amendments to Bylaws. The Delaware bylaws may be amended, adopted, altered or repealed by TapImmune Delaware’s board of directors or by the affirmative vote of a majority of the outstanding shares of TapImmune Delaware common stock, voting together as a class, entitled to vote on the matter.

Size of Board and Vacancies. The Delaware certificate of incorporation and Delaware bylaws provide that the number of directors on the TapImmune Delaware board of directors will be fixed exclusively by its board of directors. Subject to the Delaware bylaws, any vacancies created in its board of directors resulting from any increase in the number of directors or the death, resignation, retirement, disqualification, removal from office or other cause may be filled by a majority of the directors then in office, even if less than a quorum is present. Any director appointed to fill a vacancy on TapImmune Delaware’s board of directors will be appointed for a term expiring at the next election of the class for which such director has been appointed, and until his or her successor has been elected and qualified or until his earlier resignation or removal.

Stockholder Action by Written Consent. The Delaware bylaws provides that stockholders may take action by written consent in lieu of a meeting if the consent is signed by holders of outstanding stock having not less than the number of votes that would be necessary to authorize or take such action at a meeting at which all shares entitled to vote on such matter were present and voted, and notice of the action taken by written consent is given to any stockholders who would have been entitled to vote if the action had been taken at a meeting but who did not sign the consent.

Special Stockholder Meetings. The Delaware bylaws provide that special meetings of TapImmune Delaware's stockholders may be called only by the chairman of the board of directors, the chief executive officer or a majority of the board of directors. This limitation on the right of stockholders to call a special meeting could make it more difficult for stockholders to initiate actions that are opposed by TapImmune Delaware's board of directors. These actions could include the removal of an incumbent director or the election of a stockholder nominee as a director. In addition, the limited ability of the TapImmune stockholders to call a special meeting of stockholders may make it more difficult to change the existing board and management.

Requirements for Advance Notification of Stockholder Nominations and Proposals. The Delaware bylaws provide that stockholders seeking to bring business before an annual meeting of stockholders, or to nominate candidates for election as directors at an annual meeting of stockholders, must provide timely notice thereof in writing. To be timely, a stockholder's notice must be delivered to TapImmune Delaware's principal executive offices not later than 90 days nor earlier than 120 days prior to the date of TapImmune Delaware's annual meeting in the preceding year, subject to changes if the annual meeting date is advanced more than 30 days before or delayed more than 60 days after the anniversary date of the preceding year's annual meeting. The Delaware bylaws also specify certain requirements as to the form and content of a stockholder's notice. These provisions may preclude stockholders from bringing matters before an annual meeting of stockholders or from making nominations for directors at an annual meeting of stockholders.

No Cumulative Voting. The Delaware certificate of incorporation does not give the stockholders the right to cumulate votes in the election of directors. Without cumulative voting, a minority stockholder may not be able to gain as many seats on the board of directors as the stockholder would be able to gain if cumulative voting were permitted. The absence of cumulative voting makes it more difficult for a minority stockholder to gain a seat on the board of directors or influence the board's decision regarding a takeover.

Undesignated Preferred Stock. The authority of TapImmune Delaware's board of directors to issue preferred stock could potentially be used to discourage attempts by third parties to obtain control of the corporation through a merger, tender offer, proxy contest or otherwise by making such attempts more difficult or more costly. TapImmune Delaware's board of directors will be able to issue preferred stock with voting rights or conversion rights that, if exercised, could adversely affect the voting power of the holders of common stock.

Corporate Opportunities. The Delaware certificate of incorporation provides that TapImmune Delaware renounces any interest or expectancy in the business opportunities of directors or of holders of preferred stock and their partners, directors, officers, members, stockholders and employees, provided that such directors or other persons are not employees of TapImmune Delaware or any of its subsidiaries, and each such person will have no obligation to offer TapImmune Delaware their opportunities.

Limitations on Liability, Indemnification of Officers and Directors, and Insurance

The DGCL authorizes corporations to eliminate or limit the personal liability of directors to corporations and their stockholders for monetary damages for breaches of directors' fiduciary duties as directors, and the Delaware certificate of incorporation includes such an exculpation provision. The Delaware certificate of incorporation includes provisions that require TapImmune Delaware to indemnify, to the fullest extent allowable under the DGCL, the directors and officers of TapImmune Delaware or any of its subsidiaries. The Delaware certificate of incorporation also provides that TapImmune Delaware must pay the expenses incurred by the indemnified person in defending or otherwise participating in any proceeding in advance of its final disposition, subject to TapImmune Delaware's receipt of an undertaking from the indemnified party that such party will repay such amount if it is ultimately determined that such

party is not entitled to be indemnified by TapImmune Delaware. The Delaware certificate of incorporation expressly authorizes TapImmune Delaware to carry insurance to protect TapImmune Delaware's directors and officers against liability asserted against them or incurred by them in any such capacity.

The limitation of liability and indemnification provisions in the Delaware certificate of incorporation may discourage stockholders from bringing a lawsuit against directors for breach of their fiduciary duty. These provisions may also have the effect of reducing the likelihood of derivative litigation against TapImmune Delaware's directors and officers, even though such an action, if successful, might otherwise benefit TapImmune Delaware and its stockholders. However, these provisions do not limit or eliminate TapImmune Delaware's rights, or those of any stockholder, to seek non-monetary relief such as injunction or rescission in the event of a breach of a director's duty of care. The provisions do not alter the liability of directors under the federal securities laws. In addition, investments in TapImmune Delaware may be adversely affected to the extent that, in a class action or direct suit, the corporation pays the costs of settlement and damage awards against directors and officers pursuant to these indemnification provisions. However, TapImmune believes that these indemnification provisions are necessary to attract and retain qualified directors and officers.

Exclusive Forum

The Delaware bylaws provide that unless the board of directors otherwise determines, the Court of Chancery of the State of Delaware will be the sole and exclusive forum for any derivative action or proceeding brought on behalf of TapImmune Delaware, any action asserting a claim of breach of a fiduciary duty owed by any director or officer of TapImmune Delaware to TapImmune Delaware or TapImmune Delaware stockholders, any action asserting a claim against TapImmune Delaware or any director or officer of TapImmune Delaware arising pursuant to any provision of the DGCL, the Delaware certificate of incorporation or the Delaware bylaws, or any action asserting a claim against TapImmune Delaware or any director or officer of TapImmune Delaware that relates to the internal affairs or governance of TapImmune Delaware that arises under or by virtue of the laws of the State of Delaware. However, if the Court of Chancery of the State of Delaware dismisses any such action for lack of subject matter jurisdiction, the action may be brought in another state court sitting in the State of Delaware. This provision may limit a stockholder's ability to bring a claim in a judicial forum (other than in a Delaware court) that it finds preferable for disputes with TapImmune and its directors, officers or other employees.

Authorized but Unissued Shares

The authorized but unissued shares of TapImmune Delaware common stock and preferred stock will be available for future issuance without stockholder approval. These additional shares may be utilized for a variety of corporate purposes, including future public offerings to raise additional capital, corporate acquisitions, employee benefit plans and "poison pill" rights plans. The existence of authorized but unissued shares of common stock and preferred stock could render more difficult or discourage an attempt to obtain control of TapImmune by means of a proxy contest, tender offer, merger or otherwise. TapImmune currently has no plans to issue shares, other than in connection with the merger, the transactions contemplated thereby and in the ordinary course of business.

Listing

TapImmune common stock is listed on the NASDAQ Capital Market under the symbol "TPIV." After the merger, and assuming Proposals 1, 2, 3a, 3b, 4 and 5 are approved, TapImmune Delaware common stock will be listed on the NASDAQ Capital Market under the symbol "MRKR."

Transfer Agent and Registrar

The transfer agent and registrar for TapImmune common stock is and TapImmune Delaware common stock will be Island Stock Transfer:

Island Stock Transfer
15500 Roosevelt Blvd.
Clearwater, FL 33760
(727) 289-0010
www.islandstocktransfer.com

For more information regarding the rights of holders of TapImmune Delaware common stock, see “*Comparison of Rights of Stockholders*” below.

Comparison of Rights of Stockholders**Comparison of TapImmune Stockholders’ Rights Before and After the Reincorporation**

As a result of differences between the NRS and the DGCL, as well as differences between TapImmune’s governing documents before and after the Reincorporation, the Reincorporation will effect changes in the rights of the TapImmune stockholders. Summarized below are material rights of the TapImmune stockholders (including certain significant differences thereof) prior to and after giving effect to the Reincorporation resulting from the differences between the NRS and the DGCL, and the differences between the Nevada articles of incorporation and the Nevada bylaws and the Delaware certificate of incorporation and the Delaware bylaws to be adopted as part of the Reincorporation. The summary below is not an exhaustive list of all differences or a complete description of the differences described, and is qualified in its entirety by reference to the NRS and the DGCL, to our Nevada articles of incorporation and Nevada bylaws, and to our Delaware certificate of incorporation and Delaware bylaws.

Nevada Articles of Incorporation and Nevada Bylaws (NRS)	Delaware Certificate of Incorporation and Delaware Bylaws (DGCL)
<u>Authorized Capital</u>	
<p>The Nevada articles of incorporation authorize TapImmune to issue 46,666,667 shares: 41,666,667 shares of common stock, par value of \$0.001 per share, and 5,000,000 shares of preferred stock, par value of \$0.001 per share.</p> <p>As of August 21, 2018, there were 13,710,544 shares of TapImmune’s common stock and no shares of TapImmune’s preferred stock issued and outstanding. Additionally, there were 4,755,061 shares of common stock issuable upon the exercise of warrants, and 439,467 shares issuable upon the exercise of options.</p>	<p>The Delaware certificate of incorporation authorizes TapImmune Delaware to issue 155,000,000 shares: 150,000,000 shares of common stock, par value of \$0.001 per share, and 5,000,000 shares of preferred stock, par value of \$0.001 per share.</p> <p>Assuming reincorporation and effectiveness of the merger and the private placement, there will be 44,921,088 shares of TapImmune Delaware’s common stock issued and outstanding, 23,387,089 shares of common stock issuable upon the exercise of warrants, and 439,467 shares issuable upon the exercise of options. As of the date the reincorporation is completed, no shares of TapImmune Delaware’s preferred stock will be outstanding.</p>

Outstanding Capital Stock; Issuance of Additional Shares

TapImmune’s board of directors may authorize the issuance of additional shares of common stock or preferred shares up to the amounts authorized in the Nevada articles of incorporation, without stockholder approval, subject only to the restrictions of the NRS and the Nevada articles of incorporation.

TapImmune Delaware’s board of directors may authorize the issuance of additional shares of common stock or preferred shares up to the amounts authorized in the Delaware certificate of incorporation, without stockholder approval, subject only to the restrictions of the DGCL and the Delaware certificate of incorporation.

**Nevada Articles of Incorporation and
Nevada Bylaws
(NRS)**

**Delaware Certificate of Incorporation and
Delaware Bylaws
(DGCL)**

Designation of Class or Series of Preferred Stock

Under the NRS, if a corporation desires to have more than one class or series of stock, the articles of incorporation must prescribe, or vest authority in the board of directors to prescribe, the classes, series and the number, and the voting powers, designations, preferences, limitations, restrictions and relative rights, of each class or series of stock.

TapImmune's articles of incorporation authorize the issuance of preferred shares and vest authority in the board of directors to prescribe the class, series, number and designations of each class or series of stock.

The comparable provision of the DGCL is substantially the same as the described provision of the NRS.

TapImmune Delaware's certificate of incorporation authorize the issuance of preferred shares and vests authority in the board of directors to prescribe the class, series, number and designations of each class or series of stock

Size and qualification of Board of Directors

The NRS provides that a corporation must have at least one director and may provide in its articles of incorporation or bylaws for a fixed or variable number of directors, and for the manner in which the number of directors may be increased or decreased. Unless otherwise provided in the articles of incorporation, directors need not be stockholders.

The Nevada articles of incorporation provide for a variable range for the number of directors, the exact number of which to be determined pursuant to the bylaws. The Nevada bylaws provide that the board of directors will consist of not less than one or more than ten members, and the number may be increased or decreased by resolution of the board of directors. TapImmune's board of directors is currently comprised of seven members.

The DGCL provides that a corporation's board of directors must consist of one or more individuals, with the number fixed by or in the manner provided in the bylaws, unless the certification of incorporation fixes the number of directors, in which case a change in the number of directors shall be made only by amendment of the certificate.

The Delaware certificate of incorporation provides that the number of directors is fixed by resolution adopted by a majority of the authorized number of directors constituting the board of directors of TapImmune Delaware. TapImmune Delaware's board of directors will initially be comprised of seven members.

Classified Board of Directors

The NRS permits, but does not require, a classified board of directors. At least one-fourth of the total number of directors of a Nevada corporation must be elected annually.

The Nevada articles of incorporation do not provide for a classified board of directors.

The DGCL permits, but does not require, a classified board of directors, which can be divided into a maximum of three classes of directors, such that at least one-third of the total number of directors of a Delaware corporation must be elected annually.

The Delaware certificate of incorporation does not provide for a classified board of directors.

**Nevada Articles of Incorporation and
Nevada Bylaws
(NRS)**

**Delaware Certificate of Incorporation and
Delaware Bylaws
(DGCL)**

Election of Directors

The NRS provides that, unless the articles of incorporation or bylaws require more than a plurality of the votes cast, directors must be elected at the annual meeting of the stockholders by a plurality of the votes cast at the election. The NRS provides that a corporation's articles of incorporation may provide for cumulative voting.

The DGCL provides that unless the certificate of incorporation or bylaws provide otherwise, the director are elected by a plurality of the votes of the shares present in person or represented by proxy and entitle to vote in the election at a stockholders meeting at which a quorum is present. The DGCL provides that a corporation's certificate of incorporation may provide for cumulative voting.

The Nevada articles of incorporation and Nevada bylaws do not contain provisions requiring more than a plurality of the votes cast for the election of directors. The Nevada articles of incorporation do not provide for cumulative voting.

The Delaware bylaws provide that election of directors is by a plurality of votes cast at a meeting at which a quorum is present. The Delaware certificate of incorporation does not provide for cumulative voting.

Removal of Directors

Under the NRS, any one or all of the directors of a corporation may be removed by the holders of not less than two-thirds of the voting power of a corporation's issued and outstanding stock. The NRS does not distinguish between removal of directors with or without cause.

Under the DGCL, any director or the entire board of directors may be removed, with or without cause, by the holders of only a majority of the shares then entitled to vote at an election of directors (in contrast to Nevada's two-thirds requirement), except as follows: (a) unless the certificate of incorporation otherwise provides, in the case of a corporation whose board is classified, stockholders may effect such removal only for cause; or (b) in the case of a corporation having cumulative voting, if less than the entire board is to be removed, no director may be removed without cause if the votes cast against such director's removal would be sufficient to elect such director if then cumulatively voted at an election of the entire board of directors, or, if there be classes of directors, at an election of the class of directors of which such director is a part.

The Nevada bylaws provide that any director or directors may be removed at any time, with or without cause, by the vote of the holders representing not less than two-thirds of the outstanding shares then entitled to voting power.

The Delaware bylaws provide that, except as otherwise provided by the certificate of incorporation or bylaws, any directors or the entire board of directors may be removed, with or without cause, by the affirmative vote of holders of a majority of outstanding shares then entitled to vote at a meeting for the election of directors.

Vacancies on the Board of Directors

Under the NRS, all vacancies on the board of directors of a Nevada corporation may be filled by a majority of the remaining directors, though less than a quorum, unless the articles of incorporation provide otherwise. Unless otherwise provided in the articles of incorporation or bylaws, directors chosen to fill any other vacancies will hold office until a

Under the DGCL, all vacancies on the board of directors of a Delaware corporation may be filled by a majority of the remaining directors, though less than a quorum, unless the certificate of incorporation or bylaws provide otherwise. Unless otherwise provided in the certificate of incorporation, the board may fill the vacancies for

Nevada Articles of Incorporation and Nevada Bylaws (NRS)	Delaware Certificate of Incorporation and Delaware Bylaws (DGCL)
successor is elected and qualified, or until the director resigns or is removed.	the remainder of the term of office of resigning director or directors. Further, if, at the time of filling any vacancy, the directors then in office shall constitute less than a majority of the whole board, the Delaware Court of Chancery may, upon application of any stockholder or stockholders holding at least 10% of the total number of the shares at the time outstanding having the right to vote for such directors, summarily order an election to be held to fill any such vacancies or newly created directorships, or to replace the directors chosen by the directors then in office.
The Nevada bylaws provide that any vacancy on the board of directors may be filled by the affirmative vote of a majority of the directors though less than a quorum, and any director so chosen will hold office until his successor is duly elected and qualified.	The Delaware bylaws provide that any vacancy on the board of directors may be filled by the affirmative vote of a majority of the directors though less than a quorum, and any director so chosen will hold office until his successor is duly elected and qualified.
	However, as noted, the DGCL provides greater protection to TapImmune's stockholders by permitting stockholders representing at least 10% of the issued and outstanding shares to apply to the Delaware Court of Chancery to have an election of directors in the situation where the directors in office constitute less than a majority of the whole board of directors.
<u>Notice of Stockholders' Meeting</u>	
The Nevada bylaws provide that written notice stating the time and place of the meeting shall be delivered not less than 10 or more than 60 days before the date of any stockholders' meeting. All notices must state the purpose or purposes for which the meeting is called.	The Delaware bylaws provide that written notice stating the time and place of the meeting and, in the case of a special meeting, the purpose or purposes for which the meeting is called, shall be delivered not less than 10 or more than 60 days before the date of any stockholders' meeting.
<u>Effect of Failure to Hold Annual Meeting of Stockholders</u>	
The NRS provides that if a corporation fails to hold an annual stockholders' meeting to elect directors within 18 months after the last election of directors, a Nevada district court will have jurisdiction in equity and may order an election upon petition of one or more stockholders holding at least 15% of the voting power.	The DGCL provides that if an annual meeting for election of directors is not held on the date designated or an action by written consent to elect directors in lieu of an annual meeting has not been taken within 30 days after the date designated for the annual meeting, or if no date has been designated, for a period of 13 months after the latest to occur of the organization of the corporation, its last annual meeting or the last action by written consent to elect directors in lieu of an annual meeting, the Court of Chancery may summarily order a meeting to be held upon the application of any stockholder or director.

**Nevada Articles of Incorporation and
Nevada Bylaws
(NRS)**

The Nevada bylaws do not change this statutory rule.

**Delaware Certificate of Incorporation and
Delaware Bylaws
(DGCL)**

The Delaware Bylaws do not change this statutory rule. As between Nevada law and Delaware law, Delaware law provides for a shorter interval than Nevada law (13 months versus 18 months) before a stockholder can apply to a court to order a meeting for the election of directors. Also, Nevada law requires that application be made by a stockholder holding at least 15% of the voting power. Delaware law permits any stockholder or director to make the application.

Stockholder Action by Written Consent

The NRS provides that, unless the articles of incorporation or bylaws provide otherwise, any action required or permitted to be taken at a meeting of the stockholders may be taken without a meeting if the holders of outstanding stock having at least the minimum number of votes that would be necessary to authorize or take such action at a meeting consent to the action in writing.

The DGCL provides that, unless the certificate of incorporation provide otherwise, any action required or permitted to be taken at a meeting of the stockholders may be taken without a meeting if the holders of outstanding stock having at least the minimum number of votes that would be necessary to authorize or take such action at a meeting consent to the action in writing, except that, in addition, the DGCL requires the corporation to give prompt notice of the taking of corporate action without a meeting by less than unanimous written consent to those stockholders that did not consent in writing.

The Nevada bylaws provide that any action which may be taken by the vote of stockholders at a meeting may be taken without a meeting if authorized by written consent of holders of at least a majority of the voting power, except that, if a greater proportion is required for such action at a meeting, then the greater proportion of written consents is required.

The Delaware bylaws provide that any action which may be taken by the vote of stockholders at a meeting may be taken without a meeting if authorized by written consent of holders of at least a majority of the voting power, except that, if a greater proportion is required for such action at a meeting, then the greater proportion of written consents is required. Prompt notice of the action taken is required to be given to those stockholders that did not consent in writing.

Stockholder Quorum

The NRS provides that, unless otherwise provided by the articles of incorporation or bylaws, a majority of the voting power present in person or by proxy constitutes a quorum at a meeting of stockholders.

The DGCL generally provides that a quorum for a stockholders' meeting consists of a majority of shares entitled to vote present in person or represented by proxy at such meeting, unless the certificate of incorporation or bylaws provide otherwise. but in no event may a quorum consist of less than one-third of the shares entitled to vote at a meeting.

The Nevada bylaws provide that the holders of one-third of the outstanding shares entitled to vote at the meeting, present in person or represented by a proxy, constitute a quorum, except as otherwise provided in the NRS or the Nevada articles of incorporation.

The Delaware bylaws provide that the holders of one-third of the outstanding shares entitled to vote at the meeting, present in person or represented by proxy, constitute a quorum for the transaction of business, except as otherwise provided in the DGCL or the certificate of incorporation.

**Nevada Articles of Incorporation and
Nevada Bylaws
(NRS)**

**Delaware Certificate of Incorporation and
Delaware Bylaws
(DGCL)**

Stockholder Voting Provisions

The NRS provides that, unless the articles of incorporation provide otherwise, each outstanding share is entitled to one vote on each matter voted on at a stockholders' meeting. The NRS further provides that, unless otherwise provided by the articles of incorporation or bylaws: (1) action by the stockholders on a matter other than the election of directors is approved if the number of votes cast in favor of the action exceed the number of votes cast in opposition to the action; (2) directors are generally elected by a plurality of the votes cast at the election; (3) where a separate vote by a class or series is permitted or required, a majority of the voting power of the class or series that is present or represented by proxy, regardless of whether the proxy has authority to vote on all matters, generally constitutes a quorum; and (4) where a separate vote by a class or series is permitted or required, generally an act by the stockholders of each such class or series is approved if a majority of the voting power of a quorum of the class or series votes for the action.

The Nevada bylaws provide that action by the stockholders is approved by the affirmative vote of the holders of a majority of the shares present in person or represented by proxy at the meeting and entitled to vote on the subject matter, unless the vote of a greater proportion or number or voting by classes is otherwise required by statute or the Nevada articles of incorporation or Nevada bylaws.

Special Meetings of Stockholders

The NRS provides that unless otherwise provided in a corporation's articles of incorporation or bylaws, the entire board of directors, any two directors, or the president of the corporation may call annual or special meetings of the stockholders.

The Nevada bylaws provide that special meetings of the stockholders of the corporation may only be called by the Chairman of the board of directors or the board of directors.

The DGCL provides that, unless otherwise provided in a corporation's certificate of incorporation, each stockholder is entitled to one vote for each share of capital stock held by such stockholder. The DGCL further provides that unless otherwise provided by the certificate of incorporation or bylaws: (1) generally, action by the stockholders on a matter other than the election of directors is approved if the number of votes cast in favor of the action exceed the number of votes cast in opposition to the action; (2) directors are generally elected by a plurality of the votes cast at the election; and (3) where a separate vote by a class or series is required, a majority of the voting power of the class or series that is present or represented by proxy generally constitutes a quorum.

The Delaware bylaws provide that, except as otherwise provided by statute, the certificate of incorporation or its bylaws, if a quorum is present, all matters to be voted on by its stockholders, except for the election of directors, must be approved by the affirmative vote of a majority of the stock entitled to vote on the subject matter present in person or represented by proxy. Elections of directors shall be determined by a plurality of the votes cast.

Under the DGCL, a special meeting of stockholders may be called by the board of directors or by such persons as may be authorized by the certificate of incorporation or by the bylaws.

The Delaware bylaws provide that special meetings of the stockholders may be called by the Chairman of the board of directors, the Chief Executive Officer, or a majority vote of the entire board of directors.

**Nevada Articles of Incorporation and
Nevada Bylaws
(NRS)**

**Delaware Certificate of Incorporation and
Delaware Bylaws
(DGCL)**

Stockholder Vote for Mergers and Other Corporate Reorganizations

Unless otherwise provided in the articles of incorporation, the NRS requires authorization by a majority of outstanding shares entitled to vote, as well as approval by the board of directors, with respect to the terms of a merger or a sale of substantially all of the assets of the corporation. So long as the surviving corporation is organized in Nevada, the NRS does not generally require a stockholder vote of the surviving corporation if: (1) the existing articles of incorporation are not amended; (2) each share of stock of the surviving corporation outstanding immediately before the merger is identical after the merger; (3) the number of voting shares outstanding immediately after the merger, plus the number of new voting shares issued as a result of the merger will not exceed the total number of voting shares of the surviving corporation outstanding immediately before the merger by more than 20%; and (4) the number of participating shares outstanding immediately after the merger, plus the number of participating shares issuable as a result of the merger will not exceed the total number of participating shares outstanding immediately before the merger by more than 20%.

The Nevada articles of incorporation do not contain any provisions that depart from the provisions of the NRS.

The comparable provision of the DGCL is substantially the same as the described provision of the NRS and requires authorization by a majority of outstanding shares entitled to vote, as well as approval by the board of directors, with respect to the terms of a merger or a sale of substantially all of the assets of the corporation. The DGCL does not require a stockholder vote of the surviving corporation if (1) the existing certificate of incorporation is not amended; (2) each share of stock of the surviving corporation outstanding immediately before the effective date of the merger is identical after the merger; and (3) either no shares of common stock of the surviving corporation and no shares, securities or obligations convertible into such stock are to be issued or delivered under the plan of merger, or if the authorized unissued shares or shares of common stock of the surviving corporation to be issued or delivered under the plan of merger plus those initially issuable upon conversion of any other shares, securities or obligations to be issued or delivered under such plan do not exceed 20% of the shares of common stock of such constituent corporation outstanding immediately prior to the effective date of the merger.

Neither the Delaware certificate of incorporation nor the Delaware bylaws change this statutory rule.

Indemnification of Officers and Directors and Advancement of Expenses; Limitation of Personal Liability

Indemnification

Under the NRS, a corporation may indemnify any person who was or is a party or is threatened to be made a party to any threatened, pending or completed action, suit or proceeding, whether civil, criminal, administrative or investigative, except an action by or in the right of the corporation, by reason of the fact that the person is or was a director, officer, employee or agent of the corporation, or is or was serving at the request of the corporation as a director, officer, employee or agent of another corporation, partnership, joint venture, trust or other enterprise, against expenses, including attorneys' fees, judgments, fines and amounts paid in settlement actually and reasonably incurred by the person in connection with the action, suit or proceeding if the person is not liable or acted in good faith in a manner which he or she

The comparable provision of the DGCL is substantially the same as the described provision of the NRS. Under the DGCL, a corporation may indemnify any person who was or is a party or is threatened to be made a party to any threatened, pending or completed action, suit or proceeding, whether civil, criminal, administrative or investigative (other than an action by or in the right of the corporation) because that person is or was a director, officer, employee or agent of the corporation, or is or was serving at the request of the corporation as a director, officer, employee or agent of another corporation, partnership, joint venture, trust or other enterprise, against expenses (including attorneys' fees), judgments, fines and amounts paid in settlement actually and reasonably incurred by the person in connection with such

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(NRS)**

reasonably believed to be in or not opposed to the best interest of the corporation and, with respect to any criminal action or proceeding, had no reasonable cause to believe the conduct was unlawful.

With respect to actions by or in the right of the corporation, no indemnification shall be made with respect to any claim, issue or matter as to which such person shall have been adjudged to be liable to the corporation unless and only to the extent that the court in which such action or suit is brought shall determine upon application that, despite the adjudication of liability but in view of all the circumstances of the case, such person is fairly and reasonably entitled to indemnification for such expenses which such court shall deem proper.

Under the NRS, a director or officer who is successful, on the merits or otherwise in defending any proceeding subject to the Nevada corporate statutes' indemnification provisions shall be indemnified against expenses (including attorneys' fees) actually and reasonably incurred by such person in connection therewith.

The Nevada bylaws provide that TapImmune will, to the fullest extent and in the manner permitted by Nevada law, indemnify each person it may indemnify pursuant thereto.

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Delaware Bylaws
(DGCL)**

action, suit or proceeding if (a) the person acted in good faith and in a manner the person reasonably believed to be in or not opposed to the best interests of the corporation, and (b) with respect to any criminal action or proceeding, had no reasonable cause to believe the person's conduct was unlawful.

With respect to actions by or in the right of the corporation, no indemnification shall be made with respect to any claim, issue or matter as to which such person shall have been adjudged to be liable to the corporation unless and only to the extent that the Court of Chancery or the court in which such action or suit is brought shall determine upon application that, despite the adjudication of liability but in view of all the circumstances of the case, such person is fairly and reasonably entitled to indemnification for such expenses which such court shall deem proper.

Under the DGCL, a director or officer who is successful, on the merits or otherwise in defending any proceeding subject to the Delaware corporate statutes' indemnification provisions shall be indemnified against expenses (including attorneys' fees) actually and reasonably incurred by such person in connection therewith.

The Delaware certificate of incorporation and Delaware bylaws provide that TapImmune Delaware will indemnify its directors and officers to the fullest extent permitted by Delaware law, subject to the standards set forth in the Delaware certificate of incorporation.

Advancement of Expenses

Under the NRS, the articles of incorporation, bylaws or an agreement made by the corporation may provide that the corporation must pay advancements of expenses in advance of the final disposition of the action, suit or proceedings upon receipt of an undertaking by or on behalf of the director, officer, employee, or agent of the corporation to repay the amount if it is ultimately determined that he or she is not entitled to be indemnified by the corporation.

The Nevada bylaws provide that, to the fullest and broadest extent permitted by law, TapImmune will indemnify all persons whom it may indemnify. The Nevada bylaws do not include a provision regarding advancement of expenses.

The DGCL provides that expenses incurred by an officer or director of the corporation in defending any civil, criminal, administrative or investigative action, suit or proceeding may be paid by the corporation in advance of the final disposition of such action, suit or proceeding upon receipt of an undertaking by or on behalf of such director or officer to repay such amount if it is ultimately determined that such person is not entitled to be indemnified by the corporation as authorized under the indemnification laws of Delaware.

The Delaware bylaws include a provision that TapImmune Delaware will pay expenses of an officer or director incurred in defending a civil or criminal action, suit or proceeding in advance of the final disposition of such action, suit or proceeding upon receipt of an undertaking by or on behalf of

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such individual to repay such amount if it is ultimately determined by a court of competent jurisdiction that such individual is not entitled to be indemnified by us.

Limitation on Personal Liability of Directors

Under the NRS, unless the articles of incorporation provide otherwise, neither a director nor an officer of a Nevada corporation will be held personally liable to the corporation, its stockholders or its creditors unless the director or officer committed both a breach of fiduciary duty and such breach was accompanied by intentional misconduct, fraud or knowing violation of law.

The Nevada articles of incorporation and the Nevada bylaws do not contain any provisions that depart from the provisions of the NRS.

The DGCL does not statutorily limit the personal liability of a director, but does permit a corporation to adopt provisions in its certificate of incorporation to limit or eliminate the personal liability of a director for breach of fiduciary duty as a director. However, a corporation's certificate of incorporation may not limit or eliminate a director's personal liability (a) for any breach of the director's duty of loyalty to the corporation or its stockholders, (b) for acts or omissions not in good faith or involving intentional misconduct or a knowing violation of law, (c) for the payment of unlawful dividends, stock repurchases or redemptions, or (d) for any transaction in which the director received an improper personal benefit.

The Delaware certificate of incorporation provides that director liability is limited to the fullest extent permitted by Delaware law. Delaware law is more extensive in the enumeration of actions under which a director's personal liability may not be eliminated.

Anti-Takeover Statutes

Business Combination Statute

The NRS generally prohibits an "interested stockholder" from engaging in a "business combination" such as a merger or consolidation with a corporation for two years after the person first became an interested stockholder unless the combination or the transaction is approved by the board of directors before the person first became an interested stockholder. An "interested stockholder" is generally defined as the beneficial owner of 10% or more of a corporation's voting power. A Nevada corporation may elect not to be governed by these provisions in its original articles of incorporation, or it may adopt an amendment to its articles of incorporation expressly electing not to be governed by these provisions, if such amendment is approved by the affirmative vote of a majority of the disinterested shares entitled to vote.

Section 203 of the DGCL is Delaware's business combination statute. Section 203 is designed to protect publicly traded Delaware corporations, such as TapImmune Delaware, from hostile takeovers, by prohibiting a Delaware corporation from engaging in a "business combination" such as a merger or consolidation with any "interested stockholder" for three years following the time that person becomes an interested stockholder. An "interested stockholder" is generally defined as the beneficial owner of 15% or more of a corporation's voting stock (which is higher than the 10% threshold set by the NRS). Unlike the NRS, under the DGCL this provision will not apply if the business combination is approved by the holders of two-thirds of the corporation's voting stock not owned by the interested stockholder. This provision also does not apply if (i) the transaction which resulted in the individual becoming an interested stockholder is approved by the corporation's board of directors prior to the date the interested stockholder acquired such 15% interest, (ii) upon consummation of the

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TapImmune has not opted out of the Nevada business combination statute.

transaction which resulted in the stockholder becoming an interested stockholder, the interested stockholder owned at least 85% of the outstanding voting stock of the corporation at the time the transaction commenced, or (iii) a stockholder acquires a 15% interest inadvertently and divests itself of such ownership and would not have been a 15% stockholder in the preceding three years but for the inadvertent acquisition of ownership. A corporation may elect not to be governed by Section 203 with an express provision in its original certificate of incorporation or an express provision in its certificate of incorporation or bylaws resulting from a stockholders' amendment approved by at least a majority of the outstanding voting shares.

TapImmune Delaware has not opted out of the provisions of Section 203 of the DGCL. Nevada law and Delaware law provide for different thresholds in determining whether a person is an "interested stockholder." Under Delaware law, since the threshold is higher, TapImmune Delaware will be able to engage in certain transactions with stockholders that would otherwise be prohibited under Nevada law.

Control Share Acquisition Statute

The NRS limits the rights of persons acquiring a controlling interest in a Nevada corporation with 200 or more stockholders of record, at least 100 of whom have Nevada addresses, and that does business in Nevada. Under the NRS, an acquiring person that acquires a controlling interest in such a corporation may not exercise voting rights on any control shares unless voting rights are conferred by a majority vote of the disinterested stockholders of the corporation at a special or annual meeting of the stockholders. If the control shares are given full voting rights and the acquiring person acquires control shares with at least a majority of the voting power, any stockholder (other than the acquiring person) that does not vote in favor of authorizing voting rights for the control shares is entitled to demand payment for the fair value of such person's shares. The control share acquisition statute does not apply if the corporation opts out of such provision in the articles of incorporation or bylaws in effect on the tenth day following the acquisition of a controlling interest by an acquiring person.

TapImmune has not opted out of the control share provisions of the NRS.

Delaware does not have a control share acquisition statute and, consistent with Delaware law, neither the Delaware certificate of incorporation nor the Delaware bylaws will contain a provision similar to the NRS control share acquisition statute.

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Amendments to Charter and Bylaws

Amendments to the Charter

Subject to certain exceptions, the NRS provides that an amendment to a corporation's articles of incorporation generally requires that, after adopting of an amendment by the board of directors, it must be approved by the stockholders holding shares entitling them to exercise at least a majority of the voting power, or such greater proportion of voting power as may be required for a class or series of shares or required by the articles of incorporation or bylaws.

If an amendment adversely affects any preference or right given to any class or series of outstanding shares, the amendment must be approved by the holders of shares representing a majority of the voting power of such class or series. Whenever the articles of incorporation require for action the vote of a greater number or proportion than is required by Nevada law, the provision of the articles of incorporation requiring such greater vote cannot be altered, amended or repealed except by such greater vote.

The Nevada articles of incorporation do not contain any provisions that depart from the provisions of the NRS.

The DGCL provides that an amendment to a corporation's certificate of incorporation must be adopted by a resolution of the board of directors, and that the stockholders must approve the amendment by a majority of outstanding shares entitled to vote (and a majority of the outstanding shares of each class entitled to vote, if any), unless a greater percentage vote is required by the certificate of incorporation.

The DGCL further provides that if an amendment would (i) increase or decrease the aggregate number of authorized shares of a class, (ii) increase or decrease the par value of shares of a class, or (iii) alter or change the powers, preferences or special rights of a particular class or series of stock so as to affect them adversely, the class or series so affected will be given the power to vote as a class notwithstanding the absences of any specifically enumerated power in the certificate of incorporation.

The Delaware certificate of incorporation generally provides for amendment as provided by statute.

Amendment of Bylaws

The NRS provides that, unless otherwise prohibited by any bylaw adopted by the stockholders, the directors may adopt, amend or repeal any bylaw, including any bylaw adopted by the stockholders. The articles of incorporation may grant the authority to adopt, amend or repeal bylaws exclusively to the directors.

The Nevada bylaws provide that the board of directors is authorized to alter, amend or repeal any provisions of the Nevada bylaws.

The DGCL states that the power to adopt, amend or repeal a corporation's bylaws shall be vested in the stockholders entitled to vote, provided that a corporation's certificate of incorporation may confer such power on the board of directors, although the power vested in the stockholders is not divested or limited where the board of directors also has such power.

The Delaware certificate of incorporation provides that the board of directors is authorized to alter, amend or repeal any provision in the Delaware bylaws. The Delaware bylaws provide that the stockholders or the board of directors (if such power is conferred on the board in the certificate of incorporation) may alter, amend or repeal the bylaws, but the power conferred on the board will not divest or limit the power of the stockholders to adopt, amend or repeal bylaws.

Miscellaneous

Nomination of Director Candidates by Stockholders and Stockholder Proposals

The Nevada bylaws provide that in order to make a nomination or bring a proposal before the annual meeting of stockholders, a stockholder must be a stockholder of record at the time of giving of notice of such annual meeting by or at the direction of the board of directors and at the time of the annual meeting, must be entitled to vote at such annual meeting, must comply with the procedures in the bylaws as to such nominations, and such proposal must otherwise be a proper matter for stockholder action.

To be timely, a stockholder's notice must generally be delivered to the secretary at TapImmune's principal executive offices 120 days prior to the first anniversary of the preceding year's annual meeting. If the annual meeting is called for a date that is not within 30 days before or 60 days after such anniversary date, in order to be timely, such stockholder's notice must generally be received no later than the 10th day following the day on which notice of the date of the annual meeting was mailed, whichever first occurs, or if a special stockholders meeting is called for the purpose of electing directors, not later than the 10th day following the day on which notice of the date of the special meeting was mailed.

A stockholder's notice must set forth, as to the stockholder giving the notice: the name and address of such stockholder and all persons acting in concert with the stockholder, as they appear on TapImmune's books, the class or series and number of shares of TapImmune which are owned beneficially and of record by such stockholder and such other persons acting in concert with the stockholder. If the stockholder's notice relates to a proposal of business other than a director nomination, such notice shall also set forth a brief description of the business proposed, the reasons for conducting such business, any material interest of such stockholder, if any, in such business, the text of the proposal and a description of all agreements, arrangements and understandings between the stockholder, if any, and any other person related to such business proposal.

As to any proposed nominee, the stockholder's notice must also set forth: all information relating to such nominee as would be required to be disclosed in a proxy statement or other filing required in

The Delaware bylaws provide that in order to make a nomination or bring a proposal before the annual meeting of stockholders, a stockholder must be a stockholder of record at the time of giving of notice of such annual meeting by or at the direction of the board of directors and at the time of the annual meeting, must be entitled to vote at such annual meeting, must comply with the procedures in the bylaws as to such nominations, including by giving timely updates and supplements to the secretary of TapImmune Delaware and such proposal must otherwise be a proper matter for stockholder action.

To be timely, a stockholder's notice must generally be delivered to the secretary at TapImmune Delaware's principal executive offices not earlier than the close of business on the 120th day and not later than the close of business on the 90th day prior to the first anniversary of the preceding year's annual meeting, subject to changes if the annual meeting date is advanced more than 30 days before or delayed more than 60 days after the anniversary date of the preceding year's annual meeting

A stockholder's notice must set forth, as to the stockholder giving the notice and the beneficial owner, if any, on whose behalf the nomination or proposal is made: the name and address of such stockholder, as they appear on TapImmune Delaware's books, of such beneficial owner, if any, and of their respective affiliates or associates or others acting in concert with them, the class or series and number of shares of TapImmune Delaware which are, directly or indirectly, owned beneficially and of record by such stockholder, such beneficial owner and their respective affiliates or associates or others acting in concert with them, certain details about all ownership interests in TapImmune Delaware capital stock by the stockholder and any beneficial owner, and any rights to vote TapImmune Delaware capital stock, and any other information relating to such stockholder and beneficial owner, if any, that would be required to be disclosed in a proxy statement or other filings required to be made in connection with solicitations of proxies for, as applicable, the proposal and/or for the election of directors in a contested election pursuant to Section 14 of the Exchange Act and the rules and regulations promulgated thereunder.

**Nevada Articles of Incorporation and
Nevada Bylaws
(NRS)**

connection with a contested election pursuant to Section 14 of the Exchange Act and the rules and regulations promulgated thereunder, a description of all direct and indirect compensation and any other material relationships, between or among such stockholder, if any, or others acting in concert therewith, on the one hand, and each proposed nominee, on the other hand, and information on the nominee's background and qualifications.

**Delaware Certificate of Incorporation and
Delaware Bylaws
(DGCL)**

As to any proposed nominee, the stockholder's notice must also set forth: all information relating to such nominee as would be required to be disclosed in a proxy statement or other filing required in connection with a contested election pursuant to Section 14 of the Exchange Act and the rules and regulations promulgated thereunder, a description of all direct and indirect compensation and any other material relationships, between or among such stockholder and beneficial owner, if any, and their respective affiliates and associates, or others acting in concert therewith, on the one hand, and each proposed nominee, and his or her respective affiliates and associates, or others acting in concert therewith, on the other hand and a questionnaire completed by the proposed nominee containing, among other things, information on the nominee's background and qualifications and representations concerning such nominee's compliance with TapImmune Delaware's corporate governance policies, voting commitments, reimbursement arrangements, and other matters.

If the stockholder's notice relates to a proposal of business other than a director nomination, such notice shall also set forth a brief description of the business proposed, the reasons for conducting such business, any material interest of such stockholder and beneficial owner, if any, in such business, the text of the proposal and a description of all agreements, arrangements and understandings between the stockholder, the beneficial owners, if any, and any other person related to such business proposal.

The Delaware bylaws and Nevada bylaws do not differ materially regarding nominations of director candidates and stockholder proposals.

Declaration and Payment of Dividends

Under the NRS, a corporation may make distributions to its stockholders, including by the payment of dividends, provided that, after giving effect to the distribution, the corporation would be able to pay its debts as they become due and the corporation's total assets would not be less than the sum of its total liabilities plus any amount needed, if the corporation were to be dissolved at the time of the distribution, to satisfy the preferential rights of stockholders whose rights are superior to those receiving the distribution.

The comparable provision of the DGCL is significantly different than the described provision of the NRS. Unless further restricted in the certificate of incorporation, the DGCL permits a corporation to declare and pay dividends only out of surplus (defined as the excess of paid-in par value per shares or stated capital), or if no surplus exists, out of net profits for the fiscal year in which the dividend is declared and/or the preceding year, as long as the amount of capital of the corporation following the declaration and payment of the dividend is not less than the aggregate amount of

**Nevada Articles of Incorporation and
Nevada Bylaws
(NRS)**

The Nevada articles of incorporation and the Nevada bylaws do not contain any provisions that depart from the provisions of the NRS.

**Delaware Certificate of Incorporation and
Delaware Bylaws
(DGCL)**

the capital represented by the issued and outstanding stock of all classes having a preference upon the distribution of assets. In addition, the DGCL generally provides that a corporation may not redeem or repurchase its shares if such redemption or repurchase would impair the capital of the corporation.

The Delaware certificate of incorporation provide that the holders of the Common Stock shall be entitled to receive dividends if declared by the board of directors, out of any assets of this corporation legally available therefor.

Dissent and Appraisal Rights

Under the NRS, a stockholder of a Nevada corporation has the right to dissent from, and to obtain payment of the fair value of his shares in the event of: (1) the consummation of a plan of merger to which the corporation is a party if (a) approval by the stockholders is required for the merger or the articles of incorporation, regardless of whether the stockholder is entitled to vote on the plan of merger or (b) the corporation is a subsidiary and is merged with its parent; (2) the consummation of a plan of conversion to which the corporation is a party as the corporation whose subject owner's interests will be converted; (3) the consummation of a plan of exchange to which the corporation is a party as the corporation whose subject owner's interests will be acquired, if the stockholder's shares are to be acquired in the plan of exchange; or (4) any corporate action taken pursuant to a vote of the stockholders to the extent that the articles of incorporation, bylaws or a resolution of the board of directors provides that voting or non-voting stockholders are entitled to dissent and obtain payment for their shares.

Notwithstanding the paragraph above, unless the articles of incorporation provide otherwise, stockholders have no right of dissent with respect to a plan of merger, conversion or exchange in favor of stockholders of any class or series that: (a) is a "covered security" under Section 18(b)(1)(A) or (B) of the Securities Act, or (b) is traded in an organized market and held by at least 2,000 stockholders, and has a market value of at least \$20 million, exclusive of the value of such shares held by the corporation's subsidiaries, senior executives, directors and beneficial stockholders owning more than 10 percent of such shares. Notwithstanding the foregoing, dissenters' rights are available to

Under the DGCL, a stockholder of a Delaware corporation who has not voted in favor of, nor consented in writing to, a merger or consolidation in which the corporation is participating generally has the right to an appraisal of the fair value of the stockholder's shares of stock, subject to specified procedural requirements. The DGCL does not confer appraisal rights, however, if the corporation's stock is either listed on a national securities exchange or held of record by more than 2,000 holders.

Even if a corporation's stock meets the foregoing requirements, however, the DGCL provides that appraisal rights generally will be permitted if stockholders of the corporation are required to accept for their stock in any merger, consolidation or similar transaction anything other than (1) shares of the corporation surviving or resulting from the transaction, or depository receipts representing shares of the surviving or resulting corporation, (2) shares of any other corporation, or depository receipts representing shares of the other corporation, which shares or depository receipts are listed on a national securities exchange or held of record by more than 2,000 holders, (3) cash in lieu of fractional shares or fractional depository receipts, or (4) any combination of the foregoing.

Nevada Articles of Incorporation and Nevada Bylaws (NRS)	Delaware Certificate of Incorporation and Delaware Bylaws (DGCL)
<p>stockholders if the stockholders are required to accept anything other than cash or shares of any class or series of shares of any corporation, or any other proprietary interest of any other entity, in exchange for their shares, provided that the standards set forth in item (a) or (b) in the preceding sentence are satisfied with respect to their shares at the time the corporate action becomes effective.</p>	
<p>The Nevada articles of incorporation and the Nevada bylaws do not contain any provisions regarding appraisal rights.</p>	<p>The Delaware certificate of incorporation and the Delaware bylaws do not contain any provisions regarding appraisal rights.</p>
<u>Interested Party Transactions</u>	
<p>Under the NRS, a contract or transaction between a corporation and one or more of its directors or officers, or between a corporation and any other organization in which one or more of its directors or officers are directors or officers, or are financially interested, is not void or voidable solely for that reason, if one or more of the following circumstances exist: (1) the director's or officer's interest is known to the board of directors and the transaction is approved by the board in good faith without counting the vote or votes of the interested director or officer; (2) the common interest is known to the stockholders, and they approve or ratify the transaction in good faith by a majority vote of stockholders; (3) the common interest is not known to the interested director or officer at the time the transaction is brought before the board; or (4) the transaction is fair to the corporation at the time it is authorized or approved.</p>	<p>The comparable provision of the DGCL is substantially the same as the described provision of the NRS regarding interested party transactions, except that the DGCL provides that the fact that the common interest is not known to the director or officer at the time the transaction is brought before the board is not sufficient to overcome the presumption that such a transaction is void or voidable solely because it is an interested party transaction.</p>
<u>Renouncement of Corporate Opportunity</u>	
<p>The NRS provides that, subject to any limitations in its articles of incorporation, a corporation may renounce in its articles of incorporation or by action by the board of directors any interest or expectancy to participate in specified business opportunities or specified classes or categories of business opportunities that are presented to the corporation or one or more of its officers, directors or stockholders.</p>	<p>The DGCL permits a corporation to renounce in advance, either in its certificate of incorporation or by action of the board of directors, any interest in specific corporate opportunities or classes or categories of corporate opportunities, which in effect permits a corporation to limit the scope of the opportunities to which it lays claim, even in advance of when those opportunities arise.</p>
<p>The Nevada articles of incorporation do not contain any provisions addressing renouncement of corporate opportunities.</p>	<p>The Delaware certificate of incorporation does not contain a provision renouncing, in advance, corporate opportunities.</p>
<u>Forum Selection; Exclusive Jurisdiction</u>	
<p>The Nevada articles of incorporation and Nevada bylaws do not contain any provisions regarding forum selection.</p>	<p>The Delaware certificate of incorporation and the Delaware bylaws provide that unless TapImmune Delaware consents in writing to the selection of an</p>

**Nevada Articles of Incorporation and
Nevada Bylaws
(NRS)**

**Delaware Certificate of Incorporation and
Delaware Bylaws
(DGCL)**

alternative forum, the Court of Chancery of the State of Delaware will be the sole and exclusive forum for: (1) any derivative action or proceeding brought on behalf of the corporation; (2) any action asserting a claim of breach of a fiduciary duty owed by any director, officer or other employee of the corporation to TapImmune Delaware or the stockholders; (3) any action asserting a claim arising pursuant to any provision of the DGCL, the Delaware certificate of incorporation or the Delaware bylaws; and (4) any action asserting a claim governed by the internal affairs doctrine.

This provision may limit a stockholder's ability to bring a claim in a judicial forum (other than in a Delaware court) that it finds preferable for disputes with TapImmune Delaware and its directors, officers or other employees.

Voting by Proxyholder

Your proxyholder (one of the individuals named on your proxy card) will vote your common stock in accordance with your instructions. Unless you give specific instructions to the contrary, your common stock will be voted for the reincorporation of TapImmune from the State of Nevada to the State of Delaware pursuant to the plan of conversion.

Required Vote; Recommendation of Board of Directors

The affirmative vote of the holders of a majority of the outstanding shares of TapImmune common stock on the record date for the 2018 Annual Meeting is required for approval of the reincorporation of TapImmune from the State of Nevada to the State of Delaware pursuant to the plan of conversion. A failure to submit a proxy card or vote at the 2018 Annual Meeting, an abstention or a "broker non-vote" will have the same effect as a vote against the approval of this proposal.

TAPIMMUNE'S BOARD OF DIRECTORS UNANIMOUSLY RECOMMENDS THAT THE STOCKHOLDERS VOTE "FOR" PROPOSAL 4 TO APPROVE THE REINCORPORATION FROM THE STATE OF NEVADA TO THE STATE OF DELAWARE PURSUANT TO THE PLAN OF CONVERSION.

PROPOSAL 5

**APPROVAL OF AN AMENDMENT TO INCREASE THE NUMBER OF SHARES AVAILABLE FOR
ISSUANCE UNDER THE 2014 OMNIBUS STOCK OWNERSHIP PLAN BY 6,616,666 SHARES**

Summary

TapImmune is asking its stockholders to approve an amendment to its 2014 Omnibus Stock Ownership Plan, or the TapImmune Plan, to increase the shares authorized to be issued thereunder from 1,383,334 to 8,000,000 shares.

The aggregate number of shares of TapImmune's common stock currently authorized pursuant to the TapImmune Plan is 1,383,334 shares. As of August 21, 2018, 398,659 shares of common stock had been issued under the TapImmune Plan, of which 377,826 were issued pursuant to restricted stock awards and 20,833 shares were issued pursuant to option exercises. Options covering an additional 439,467 shares granted under the TapImmune Plan remain outstanding. Without amendment, TapImmune would not have sufficient shares available under the TapImmune Plan to make future awards as currently there are only 559,670 shares remaining available for future awards under the TapImmune Plan (plus shares subject to outstanding awards that might in the future be returned to the TapImmune Plan as a result of cancellations or expirations of awards).

On May 14, 2018, the TapImmune board of directors approved an amendment to the TapImmune Plan in connection with the merger, subject to stockholder approval increasing the number of shares authorized for issuance under the TapImmune Plan by 6,616,666 shares from 1,383,334 to 8,000,000 shares and recommended that the amendment to the TapImmune Plan be submitted to the TapImmune stockholders for their approval.

Proposals 1, 2, 3a, 3b, 4 and 5 are conditioned upon each other, and the approval of each such proposal is a condition to the completion of the merger. Therefore, the completion of the merger and the private placement transaction cannot proceed without the approval of Proposals 1, 2, 3a, 3b, 4 and 5.

The proposed amendment increasing the number of shares authorized for issuance under the TapImmune Plan ensures TapImmune's ability to continue to grant stock options and other awards, which are vital to TapImmune's ability to attract and retain outstanding and highly skilled individuals in the extremely competitive labor markets in which the combined company must compete. The combined company's employees will be its most valuable asset, and such awards are crucial to its ability to motivate employees to achieve the combined company's goals. TapImmune believes strongly that the approval of the amendment to the TapImmune Plan, as proposed, is instrumental to the continued success of the combined company.

The following table presents the shares covered by the options contemplated to be awarded under the TapImmune Plan, to TapImmune's named executive officers, and to its non-employee directors pursuant to the terms of its current Director Compensation Program.

New TapImmune Plan Amendment Benefits

Name and Position	Number of Shares	Dollar Value
Peter L. Hoang President and Chief Executive Officer ⁽¹⁾	—	—
Dr. Glynn Wilson Chairman of the Board and Strategic Advisor ⁽²⁾	—	\$300,000
Michael J. Loiacono Chief Financial Officer, Secretary and Treasurer	—	—
Executive Group (3 persons) ⁽¹⁾⁽²⁾	—	\$300,000
Non-Executive Director Group-directors (other than the executive officers) as a group (five persons) ⁽³⁾	—	\$200,000
Non-executive officers, employee group (2 persons)	—	—

(1) Pursuant to the terms of his employment agreement with TapImmune, Mr. Hoang is to receive the following awards subject to sufficient shares being available under our TapImmune Plan:

- On the first anniversary of his employment with TapImmune, and subject to certain conditions, Mr. Hoang shall be eligible to receive a grant of stock options to purchase the number of shares equal to one percent (1%) of the then-outstanding common stock of TapImmune at an exercise price equal to the fair market value of the common stock at the time of such grant. The options granted, if made, shall be immediately vested; and
 - On the second and third anniversaries of Mr. Hoang's employment agreement, and subject to certain conditions, Mr. Hoang shall be eligible to receive, on each such date, an additional grant of stock options to purchase the number of shares equal to one percent (1%) of the then-outstanding common stock of TapImmune under the Plan at an exercise price equal to the fair market value of the common stock at the time of such grant, provided that certain requirements are satisfied. These options if made, shall be subject to such further vesting conditions, including performance criteria, as mutually agreed to by Mr. Hoang and the board.
- (2) Pursuant to the terms of his amended employment agreement with TapImmune, on the first anniversary of the execution of the amendment to Dr. Wilson's employment agreement, Dr. Wilson shall be eligible to receive, subject to certain conditions, a grant of immediately vested restricted common stock from the Plan equal to \$300,000 based upon the closing price immediately before the first anniversary date.
- (3) In connection with service on the TapImmune board of directors and consistent with TapImmune's revised non-employee director compensation program, each non-employee director is to be awarded \$40,000 in restricted common stock under the TapImmune Plan in connection with the annual meeting as part of their annual board retainer; provided, however, the three non-employee directors who have provided resignations from TapImmune's board of directors subject to consummation of the merger will receive a pro-rated portion of the \$40,000 of restricted common stock based on the number of days that each such person served as a director during the calendar year ending December 31, 2018. See the section entitled "*Director Compensation — Director Compensation Plan*" beginning on [page 177](#) of this proxy statement. The number of shares to be issued is to be based on the closing price of TapImmune's common stock the day before the 2018 Annual Meeting. As such, the number of shares will not be able to be determined until such time as the contemplated awards are made at the time of the 2018 Annual Meeting. Given the limited availability of shares under the TapImmune Plan, such awards will be made if sufficient shares remain available and, if not, only if Proposal 5 is approved by the TapImmune stockholders.

Unless indicated in the above table, no awards are currently contemplated to be made to TapImmune's named executive officers.

Vote Required and Board of Directors' Recommendation

Approval of the amendment to the TapImmune Plan requires the affirmative vote of the stockholders. The proposal will be approved if the number of votes cast in favor of the item by the stockholders entitled to vote exceeds the number of votes cast in opposition to the item. Abstentions and broker non-votes will not be counted as votes cast on an item and, therefore, will not affect the outcome of these proposals. Shares represented by properly executed and unrevoked proxies will be voted at the 2018 Annual Meeting in accordance with the directions of stockholders indicated in their proxies. If no specification is made, shares represented by properly executed and unrevoked proxies will be voted in accordance with the specific recommendations of the board of directors set forth above. Even if the amendment to the TapImmune Plan is approved, the board of directors may, pursuant to the terms of the TapImmune Plan and subject to any applicable exchange where our stock may be listed, make any other changes to the TapImmune Plan that it feels would be in our and our stockholders' best interests.

Because each of our directors and executive officers are eligible to participate in the TapImmune Plan, the approval of the amendment to the TapImmune Plan impacts each of our directors and executive officers and thus each of our directors and executive officers has a personal interest in this proposal and its approval by our stockholders.

THE BOARD OF DIRECTORS UNANIMOUSLY RECOMMENDS A VOTE “FOR” PROPOSAL 5 TO APPROVE THE AMENDMENT TO TAPIMMUNE’S 2014 OMNIBUS STOCK OWNERSHIP PLAN.**Summary of the Plan**

The following is a summary of the principal features of the TapImmune Plan and its operation. Because it is not a complete description of all of the terms and conditions of the TapImmune Plan, the summary is qualified in its entirety by reference to the full text of the TapImmune Plan, which has been filed with the SEC on Form 8-K on September 5, 2017.

Background and Purpose of the TapImmune Plan

The TapImmune Plan is intended to continue to attract, motivate and retain employees, consultants and non-employee directors and to encourage their stock ownership in TapImmune thereby aligning their interests with those of our stockholders. The purpose of the TapImmune Plan is to give us a competitive advantage in attracting, retaining and motivating officers, employees, non-employee directors, and consultants, and to provide us and our subsidiaries with a stock plan that could provide incentives linked to our financial results and business and to increases in stockholder value.

The TapImmune Plan will expire at the end of its ten-year term on March 19, 2024.

Administration of the Plan

The board of directors is authorized to appoint a committee of at least two non-employee members of the Board, or the Committee, to administer the TapImmune Plan. To make grants to certain of TapImmune’s officers and key employees, the members of this committee must qualify as “non-employee directors” under Rule 16b-3 of the Exchange Act, and as “outside directors” under Section 162(m) of the Internal Revenue Code (so that TapImmune can receive a federal tax deduction for certain compensation paid under the TapImmune Plan). The board of directors has delegated general administrative authority for the TapImmune Plan to the compensation committee of the board of directors, and the compensation committee is the “Committee” for purposes of this Proposal 5.

Subject to the terms of the TapImmune Plan, the Committee has the discretion to select the employees, consultants and directors who will receive awards under the TapImmune Plan, to determine the terms and conditions of such awards (for example, the number of shares subject to an award, the exercise price, and vesting schedule), to interpret the provisions of the TapImmune Plan and outstanding awards, to amend outstanding awards (including the authority to accelerate vesting), to extend an option’s post-termination exercise period (but not beyond the original option term), and to adopt, interpret, amend or revoke rules for the administration, interpretation and application of the Plan.

Except to the extent the board of directors has reserved the authority to review and approve grants to named executive officers or to approve and ratify other actions of the Committee, the Committee may delegate any part of its authority and powers under the Plan to one or more of our directors and/or officers, but only the Committee itself can make awards that are intended to qualify as performance-based compensation under Section 162(m) or to participants who are our executive officers or otherwise subject to Section 16 of the Exchange Act. References to the Committee in this proposal include the Committee and any directors or officers to whom the Committee properly delegates authority.

Authorized Shares

Under the TapImmune Plan, an aggregate of 1,383,334 shares of our common stock may be issued pursuant to awards.

If an award is settled in cash, or is cancelled, terminates, expires, or lapses for any reason (with the exception of the termination of a tandem stock appreciation right upon exercise of the related option, or the termination of a related option upon exercise of the corresponding tandem stock appreciation right), any shares subject to such award again shall be available for subsequent awards under the TapImmune Plan. Shares that are exchanged by a participant or withheld by us as full or partial payment in connection with

any award under the TapImmune Plan, as well as any shares exchanged by a participant or withheld by us or one of our affiliates to satisfy the tax withholding obligations related to any Award, shall be available for subsequent awards under the TapImmune Plan. To the extent that shares are delivered pursuant to the exercise of a stock appreciation right or option granted under the TapImmune Plan, the number of underlying shares as to which the exercise related shall be counted against the applicable share limits above, as opposed to only counting the shares issued. (For purposes of clarity, if a stock appreciation right relates to 100,000 shares and is exercised at a time when the payment due to the participant is 15,000 shares, 100,000 shares shall be charged against the applicable share limits under the TapImmune Plan with respect to such exercise.)

In the event that any dividend or other distribution (whether in the form of cash, our common stock, other securities, or other property), recapitalization, stock split, reverse stock split, reorganization, merger, consolidation, split-up, spin-off, combination, repurchase, or exchange of our common stock or other securities, or other change in our corporate structure affecting our common stock occurs such that an adjustment is determined by the Committee (in its sole discretion) to be appropriate in order to prevent dilution or enlargement of the benefits or potential benefits intended to be made available under the TapImmune Plan, the Committee shall, in such manner as it may deem equitable, adjust the number and class of shares (or other securities) available for issuance under the TapImmune Plan and the number, class, and price of shares (or other securities) subject to outstanding awards.

Eligibility to Receive Plan Awards

The Committee selects the employees (including executive officers), consultants and directors who will be granted awards under the TapImmune Plan. As of June 15, 2017, TapImmune had two officers and employees, including all of its named executive officers who are still serving in that capacity, and five non-employee directors who were eligible to receive awards under the Plan. The actual number of individuals who will receive future awards under the TapImmune Plan cannot be determined in advance because the Committee has the discretion to select the participants.

Types of Awards Granted under the Plan

The TapImmune Plan permits the grant of the following types of incentive awards: (1) stock options, (2) stock bonuses, (3) restricted stock, (4) restricted stock units, (5) dividend equivalents and (6) other stock based awards (each, an award).

Stock Options. A stock option is the right to acquire shares of common stock at a fixed exercise price for a fixed period of time. Under the TapImmune Plan, the Committee may grant nonqualified stock options. The Committee will determine the number of shares covered by each option. The exercise price of the shares subject to each option is set by the Committee but generally cannot be less than 100% of the fair market value on the date of grant. The fair market value of TapImmune common stock is generally the last quoted sales price for the shares traded on the NASDAQ Capital Market on the applicable date.

An option granted under the TapImmune Plan cannot generally be exercised until it becomes vested. The Committee establishes the vesting schedule of each option at the time of grant. The Committee may, in its discretion, condition the vesting of any option granted under the TapImmune Plan on satisfaction of (i) any minimum period of continued employment or other continued service with TapImmune the Committee deems appropriate, or (ii) satisfaction of one or more performance goals the Committee deems appropriate, or (iii) a combination of service vesting and satisfaction of performance goals set by the Committee. After an option is granted, the Committee may, in its sole discretion, modify or accelerate the vesting of the option.

Options vest and become exercisable at the times and on the terms established by the Committee at the time of grant. Options granted under the TapImmune Plan expire at the times established by the Committee, but not later than 10 years after the grant date. The Committee may determine the effect of termination of employment or service on the rights and benefits under options and in doing so may make distinctions based upon the cause of termination or other factors.

The exercise price of each option granted under the TapImmune Plan must be paid in full in cash or its equivalent at the time of exercise. The Committee also may permit payment through the tender of shares that are already owned by the participant or restricted stock valued at fair market value at time of exercise,

or, unless otherwise determined by the Committee, a broker-assisted exercise program, as permitted by Regulation T of the Federal Reserve System.

Stock Appreciation Rights. Awards of stock appreciation rights may be granted in tandem with or in connection to all or any part of an option, either concurrently with the grant of an option or at any time thereafter during the term of the option, or may be granted independently of options. The Committee has complete discretion to determine the number of stock appreciation rights granted to any employee, consultant or director. The Committee also determines the terms of stock appreciation rights, except that the exercise price of a stock appreciation right that is granted independently of an option may not be less than 100% of the fair market value of the shares on the date of grant and the exercise price of a stock appreciation right that is granted in tandem with or in connection to an option may not be less than the exercise price of the related option. In addition, the Committee may determine the effect of termination of employment or service on the rights and benefits under stock appreciation rights and in doing so may make distinctions based upon the cause of termination or other factors.

A stock appreciation right granted in tandem with an option will entitle the participant to exercise the stock appreciation right by surrendering to us a portion of the unexercised related option. The participant will receive in exchange from us an amount equal to the excess of the fair market value of the shares on the date of exercise of the stock appreciation right covered by the surrendered portion of the related option over the exercise price of the shares covered by the surrendered portion of the related option. When a stock appreciation right granted in tandem with an option is exercised, the related option, to the extent surrendered, will cease to be exercisable. A stock appreciation right granted in connection with an option will be exercisable until, and will expire no later than, the date on which the related option ceases to be exercisable or expires. A stock appreciation right granted in connection with an option will automatically be deemed exercised after the related option is exercised.

Stock appreciation rights may also be granted independently of options. Such a stock appreciation right will entitle the participant, upon exercise, to receive from us an amount equal to the excess of the fair market value of the shares on the date of exercise over the fair market value of the shares on the date of grant. A stock appreciation right granted without a related option will be exercisable, in whole or in part, at such time as the Committee will specify in the stock appreciation right agreement. Stock appreciation rights granted under the TapImmune Plan expire at the times established by the Committee, but not later than ten years after the date of grant. Our obligation arising upon the exercise of a stock appreciation right may be paid in shares, in cash, or any combination thereof, as the Committee may determine.

Stock Bonuses. The TapImmune Plan also permits the Committee to grant awards of shares of TapImmune's common stock to eligible employees or consultants, other than its executive officers.

Restricted Stock and Restricted Stock Units. The Committee may also grant restricted stock awards, consisting of shares of our common stock that vest in accordance with the terms and conditions established by the Committee. Restricted stock units represent a promise to deliver shares of our common stock, or an amount of cash or property equal to the underlying shares, at a future date. The Committee will determine the number of shares subject to a restricted stock award or restricted stock unit award granted to any employee, consultant or director, and the other terms of the award (including the purchase price, if any, and transfer restrictions).

In determining whether an award of restricted stock or restricted stock units should be made, and/or the vesting schedule for any such award, the Committee may impose whatever conditions to vesting as it determines to be appropriate or determine that fully-vested shares should be awarded. The Committee may, in its discretion, condition the vesting of any restricted stock or restricted stock units granted under the TapImmune Plan on satisfaction of (i) any minimum period of continued employment or other continued service with TapImmune the Committee deems appropriate, or (ii) satisfaction of one or more performance goals the Committee deems appropriate, or (iii) a combination of service vesting and satisfaction of performance goals set by the Committee. For example, the Committee may determine to grant an Award of restricted stock or restricted stock units that will vest only if the participant continues employment and certain performance goals established by the Committee are satisfied.

Dividend Equivalents. The Committee may also provide that awards of restricted stock or restricted stock units include rights to receive dividends or dividend equivalents based on the amount of dividends

paid on outstanding shares of our common stock, provided that as to any dividend equivalent rights granted in connection with an award granted under the TapImmune Plan that is subject to performance-based vesting requirements, no dividend equivalent payment will be made unless the related performance-based vesting conditions of the Award are satisfied (or, in the case of a restricted stock or similar Award where the dividend must be paid as a matter of law, the dividend payment will be subject to forfeiture or repayment, as the case may be, if the related performance-based vesting conditions are not satisfied).

Other Stock Based Awards. The Committee may also, in its discretion, grant other forms of stock-based Awards which are denominated in, valued, in whole or in part, by reference to, or otherwise based on or related our common stock. The purchase, exercise, exchange or conversion of other stock-based awards granted under the TapImmune Plan shall be on such terms and conditions and by such methods as shall be specified by the Committee.

Performance Goals. Awards under the TapImmune Plan may be made subject to performance conditions as well as time-vesting conditions. Awards that are intended to qualify as performance-based compensation under Section 162(m) of the Internal Revenue Code may include performance conditions that are established and administered in accordance with the requirements of Section 162(m) of the Internal Revenue Code and based on an objective formula or standard utilizing one or more of the following factors and any objectively verifiable adjustment(s) thereto permitted and pre-established by the Committee in accordance with Section 162(m) of the Internal Revenue Code: annual revenue, cash position, earnings per share, individual objectives, net income, operating cash flow, operating income, regulatory approvals, return on assets, return on investment, return on sales, stock price and total stockholder return. Performance goals may differ from participant to participant and from award to award.

Change in Control. Change in Control is defined in the TapImmune Plan as follows:

(i) the acquisition by any Person of “beneficial ownership” of 20% or more of the outstanding shares of either (A) the then-outstanding shares of common stock (“Outstanding Company Common Stock”) or (B) the common stock entitled to vote generally in the election of directors (the “Outstanding Company Voting Securities”); provided, however, that, the following acquisitions shall not constitute a Change in Control: (1) any acquisition directly from TapImmune, (2) any acquisition by TapImmune, (3) any acquisition by any employee benefit plan (or related trust) sponsored or maintained by TapImmune or any entity controlled by TapImmune or (4) any acquisition by any entity pursuant to a transaction that complies with Sections (iii) (A), (B) and (C) below; or

(ii) individuals who, as of the date hereof, constitute the Board (the “Incumbent Board”) cease for any reason to constitute at least a majority of the Board of Directors of TapImmune; provided, however, that any individual becoming a director subsequent to the date hereof whose election, or nomination for election by our stockholders, was approved by a vote of at least a majority of the directors then comprising the Incumbent Board shall be considered as though such individual were a member of the Incumbent Board, but excluding, for this purpose, any such individual whose initial assumption of office occurs as a result of an actual or threatened election contest with respect to the election or removal of directors or other actual or threatened solicitation of proxies or consents by or on behalf of a Person other than the Board; or

(iii) consummation of a reorganization, merger, statutory share exchange or consolidation or similar corporate transaction involving TapImmune and/or any entity controlled by TapImmune, or a sale or other disposition of all or substantially all of the assets of TapImmune, or the acquisition of assets or stock of another entity by TapImmune or any entity controlled by TapImmune (each, a “Business Combination”), in each case, unless, following such Business Combination, (A) all or substantially all of the individuals and entities that were the beneficial owners of the Outstanding Company Common Stock immediately prior to such Business Combination beneficially own, directly or indirectly, more than 60% of the then-outstanding shares of common stock and the combined voting power of the then-outstanding voting securities entitled to vote generally in the election of directors, as the case may be, of the corporation resulting from such Business Combination (including, without limitation, an entity that, as a result of such transaction, owns TapImmune or all or substantially all of TapImmune’s assets either directly or through one or more subsidiaries) in

substantially the same proportions as their ownership, immediately prior to such Business Combination of the Outstanding Company Common Stock, (B) no person (excluding any entity resulting from such Business Combination or any employee benefit plan (or related trust) of TapImmune or such entity resulting from such Business Combination) beneficially owns, directly or indirectly, 40% or more of, respectively, the then-outstanding shares of common stock of the corporation resulting from such Business Combination or the combined voting power of the then-outstanding voting securities of such corporation, except to the extent that such ownership existed prior to the Business Combination, and (C) at least a majority of the members of the Board of Directors of the entity resulting from such Business Combination were members of the Incumbent Board at the time of the execution of the initial agreement, or of the action of the Board, providing for such Business Combination; or

(iv) approval by the stockholders of TapImmune of a complete liquidation or dissolution of TapImmune.

In the event of a “change of control” of TapImmune, the Committee may provide for the successor corporation to either assume or provide a substitute award for each outstanding stock option and stock appreciation right or other award which is service-vested. If the successor corporation assumes or provides a replacement award and the participant is terminated by the successor corporation for reasons other than a voluntary termination initiated by the participant during the 24-month period following the change of control, then such participant’s options and stock appreciation rights will immediately vest and become exercisable as to all of the shares subject to such award.

In the event the successor corporation refuses to assume the outstanding stock option or stock appreciation rights or other stock awards, or to provide substitute awards which are service-vested, the Committee may notify affected participants that the options or stock appreciation rights under the TapImmune Plan will immediately vest and become exercisable as to all of the shares subject to such Award in connection with the merger. The Committee may also, in the Committee’s discretion, provide that any stock options and stock appreciation rights which have not been exercised by the effective date may be cancelled in exchange for the right to receive a cash payment from us equal to the excess of the value of the merger consideration to be paid to stockholders over the exercise price for the option or stock appreciation rights, and that such options and stock appreciation rights will terminate upon the completion of the change of control and receipt of such cash payments.

Termination of Employment. When the participant’s employment with TapImmune is terminated for any reason, the participant’s then-unvested stock options are forfeited and vested options shall remain exercisable until the 90th day following termination of employment of service, as applicable.

If any shares of restricted stock are forfeited or if any stock option (and related stock appreciation right, if any) terminates without being exercised, is exercised or settled for cash, the shares subject to such awards shall again be available for distribution in connection with awards under the TapImmune Plan.

Limited Transferability of Awards. Awards granted under the TapImmune Plan generally may not be sold, transferred, pledged, assigned, or otherwise alienated or hypothecated, other than by will or by the applicable laws of descent and distribution.

Amendment and Termination of the Plan

The Board generally may amend, suspend or terminate the TapImmune Plan at any time and for any reason, subject to stockholder consent (i) in the case required under the listing requirements of a national securities exchange on which our stock is listed, or (ii) to the extent the amendment would result in a reduction in the option price of any option, cancellation of an option where the option exercise price exceeds the fair market value in exchange for cash or another award (other than in a Change in Control), or any other action that would be treated as a repricing under the applicable Nasdaq listing rules. No amendment may alter or impair the rights of a participant with respect to an outstanding award without his or her consent; provided that such consent shall not be required if the amendment, (a) is required or advisable in order for us, the TapImmune Plan or the award to satisfy applicable law, to comply with any stock exchange rules, to meet the requirements of any accounting standard or to avoid any adverse accounting treatment, (b) in connection with any change of control event, is in our or our stockholders best

interests, or (c) does not materially decrease the value of such awards. In addition, no amendment may be made that would cause a qualified performance-based award to cease to qualify as performance-based compensation for purposes of Section 162(m) of the Internal Revenue Code.

Unless terminated earlier by the board of directors, the TapImmune Plan will terminate on the tenth anniversary of its effective date, or March 19, 2024.

Federal Income Tax Consequences

The following is a brief summary of the general federal income tax consequences to U.S. taxpayers and TapImmune with respect to the grant, vesting and exercise of awards granted under the TapImmune Plan. This summary does not purport to be complete and does not discuss the tax consequences of a participant's death, the tax consequences of an Award that is subject to but does not satisfy the deferred compensation rules of Section 409A of the Internal Revenue Code, or the tax laws of any locality, state or foreign country in which the participant may reside. Tax consequences for any particular individual may be different.

Nonqualified Stock Options. No taxable income is recognized when a nonqualified stock option is granted to a participant. Upon exercise of a nonqualified stock option with respect to vested shares, the participant will recognize ordinary income in an amount equal to the excess of the fair market value (on the exercise date) of the shares purchased over the exercise price of the option. Any taxable income recognized in connection with exercise of a nonqualified stock option would be added to the tax basis of the shares and, with respect to an employee, is subject to tax withholding by TapImmune. Any additional gain or loss recognized upon any later disposition of the shares would be either long-term or short-term capital gain or loss, depending on how long the stock was held.

Special federal income tax rules apply if TapImmune's common stock is used to pay all or part of the option exercise price, and different rules than those described above will apply if unvested shares are purchased on exercise of the option.

Stock Appreciation Rights. No taxable income is recognized when a stock appreciation right is granted to a participant. Upon exercise of a stock appreciation right, the participant will recognize ordinary income in an amount equal to the amount of cash received and the fair market value of any shares received by the participant as of the payment date. Any additional gain or loss recognized upon any later disposition of the shares would be either long-term or short-term capital gain or loss, depending on how long the stock was held.

Restricted Stock. No taxable income is generally recognized when a restricted stock award is granted to a participant if the shares of restricted stock are subject to vesting requirements which make the shares subject to a "substantial risk of forfeiture" within the meaning of Section 83 of the Code. For this purpose, the award is subject to a substantial risk of forfeiture to the extent the shares will be forfeited in the event that the participant ceases to provide services to us. As a result of this substantial risk of forfeiture, the participant will not recognize ordinary income at the time of award. Instead, the participant will recognize ordinary income on the dates when the shares are no longer subject to a substantial risk of forfeiture, or when the shares become transferable, if earlier. The participant's ordinary income is measured as the difference between the amount paid for the shares, if any, and the fair market value of the shares on the date the shares are no longer subject to forfeiture.

An eligible participant who may accelerate his or her recognition of ordinary income with respect to a restricted stock award, if any, and begin his or her capital gains holding period by timely filing (i.e., within thirty days of the award) an election with the IRS pursuant to Section 83(b) of the Code. In such event, the ordinary income recognized, if any, is measured as the difference between the amount paid for the shares, if any, and the fair market value of the shares on the date of the award, and the capital gain holding period commences on such date.

Restricted Stock Units. No taxable income is generally recognized when restricted stock units are granted to a participant if the shares are subject to vesting requirements. Upon vesting (or at grant as to any shares that are vested at grant), the participant will generally recognize income in an amount equal to the excess of the fair market value of the shares over any amount the participant paid for the shares.

Tax Effect for the Company. TapImmune generally will be entitled to a tax deduction in connection with an Award under the Plan in an amount equal to the ordinary income realized by a participant at the time the participant recognizes such income (for example, upon the exercise of a nonqualified stock option). Special rules limit the deductibility of compensation paid to our chief executive officer and to certain of our other executive officers. If compensation attributable to Awards to such individuals is not “performance-based” within the meaning of Section 162(m) of the Internal Revenue Code, we may not be permitted to deduct compensation paid to such individuals to the extent that aggregate non-performance-based compensation exceeds \$1,000,000 per individual in any tax year. Furthermore, if an award is accelerated under the TapImmune Plan in connection with a “change in control” (as this term is used under the Internal Revenue Code), TapImmune may not be permitted to deduct the portion of the compensation attributable to the acceleration (“parachute payments”) if it exceeds certain threshold limits under the Internal Revenue Code (and certain related excise taxes may be triggered).

Application of Code section 409A. Code Section 409A imposes an additional 20% tax and interest on an individual receiving nonqualified deferred compensation under a plan that fails to satisfy certain requirements. For purposes of Code Section 409A, “nonqualified deferred compensation” includes equity-based incentive programs, including some stock options, stock appreciation rights and stock unit programs. Generally speaking, Code Section 409A does not apply to stock options granted at fair market value if no deferral is provided beyond exercise, stock appreciation rights or restricted stock awards. In addition, Code Section 409A will not be applied to most restricted stock unit awards unless the delivery of the shares or other value is delayed after the award becomes vested.

Effect of Other Laws. The above summary relates to U.S. federal income tax consequences only. The acquisition, ownership or disposition of shares of common stock may also have tax consequences under various state, local and foreign laws. Awards made pursuant to the TapImmune Plan are not subject to the Employee Retirement Income Security Act of 1974, as amended.

The foregoing is only a summary of the effect of U.S. federal income taxation upon awardees and TapImmune with respect to the grant and exercise of awards under the TapImmune Plan. It does not purport to be complete and does not discuss the tax consequences arising in the context of the employee’s death or the income tax laws of any municipality, state or foreign country in which the employee’s income or gain may be taxable.

Accounting Treatment

TapImmune accounts for option grants made to officers and other employees under the Plan in accordance with Financial Accounting Standards Board Accounting Standards Codification Topic 718 *Compensation — Stock Compensation*. Compensation cost is recognized for all option grants based on the grant date fair value estimated in accordance with the provisions of Topic 718. TapImmune amortizes compensation cost on a straight-line basis over the requisite service period of the grant for the portion of the grant that is expected to vest. TapImmune estimates forfeitures; both at the date of grant as well as throughout the vesting period, based on our historical experience and future expectations.

Equity Compensation Plan Information

The following table summarizes the equity compensation plans under which TapImmune's equity securities may be issued as of December 31, 2017:

	(a) Number of Securities to be Issued Upon Exercise of Options	(b) Weighted Average Exercise Price of Outstanding Options	(c) Number of Securities Remaining Available for Future Issuance Under Equity Compensation Plans (Excluding Securities Reflected in Column (a))
Equity compensation plans approved by stockholders:			
2014 Omnibus Stock Option Plan ⁽¹⁾	536,200	\$7.28	837,500
Equity compensation plans not approved by stockholders ⁽²⁾			
	—	—	—
Totals	<u>536,200</u>	<u>\$7.28</u>	<u>837,500</u>

(1) TapImmune's 2014 Omnibus Stock Option Plan was approved by its stockholders at the 2017 annual meeting held on August 29, 2017.

(2) TapImmune does not have any equity compensation plans not approved by stockholders.

Voting by Proxyholder

Your proxyholder (one of the individuals named on your proxy card) will vote your common stock in accordance with your instructions. Unless you give specific instructions to the contrary, your common stock will be voted for the approval of the amendment to increase the number of shares available for issuance under the 2014 Omnibus Stock Ownership Plan by 6,616,666 shares.

Required Vote; Recommendation

The affirmative vote of the holders of a majority of the shares of TapImmune common stock present in person or represented by proxy and entitled to vote on such matter at the 2018 Annual Meeting is required for approval of the amendment to increase the number of shares available for issuance under the 2014 Omnibus Stock Ownership Plan by 6,616,666 shares. A "broker non-vote" will have no effect on the outcome of this proposal, while an abstention will have the same effect as a vote against the approval of this proposal.

TAPIMMUNE'S BOARD OF DIRECTORS UNANIMOUSLY RECOMMENDS THAT TAPIMMUNE STOCKHOLDERS VOTE "FOR" PROPOSAL 5 TO APPROVE THE AMENDMENT TO INCREASE THE NUMBER OF SHARES AVAILABLE FOR ISSUANCE UNDER THE 2014 OMNIBUS STOCK OWNERSHIP PLAN BY 6,616,666 SHARES.

PROPOSAL 6

ELECTION OF DIRECTORS

TapImmune’s bylaws currently provide that the number of directors constituting TapImmune’s board of directors shall be not less than one nor more than ten. TapImmune’s board of directors may establish the number of directors within this range. There are seven directors presently serving on TapImmune’s board of directors, and all of the directors are nominated for re-election at the 2018 Annual Meeting. If elected, each of the directors will hold office until the next annual meeting of stockholders and until their successor is elected and qualified; provided, however, that if the merger is completed, the board of directors of TapImmune will be reconstituted as set forth in the merger agreement. See “*The Merger Agreement — Directors and Officers Following the Merger*” on page [90](#).

Voting by Proxyholder

Your proxyholder (one of the individuals named on your proxy card) will vote your common stock in accordance with your instructions. If you are a stockholder of record, unless you mark your proxy card to withhold authority to vote, your common stock will be voted for the election of the nominees named in this proxy statement. Each nominee has agreed to serve and TapImmune expects that each of the nominees will be able to serve if elected. However, if any nominee is unavailable for election, your proxyholder may vote your common stock to elect a substitute nominee proposed by TapImmune’s board of directors.

If you are a beneficial owner of shares held in “street name” and you do not provide your broker with voting instructions, under the SRO rules governing brokers, your broker may not vote your shares on the election of directors.

Director Nominees

Information about each nominee is set forth below:

Name	Age	Position with TapImmune
Dr. Glynn Wilson*	71	Chairman of the Board
Peter L. Hoang	46	President, Chief Executive Officer and a Director
Sherry Grisewood*	65	Independent Director
David Laskow-Pooley	63	Independent Director
Mark Reddish*	63	Independent Director
Joshua Silverman*	47	Independent Director
Frederick Wasserman	63	Independent Director

* These directors have executed resignations to take effect only if the merger is consummated.

Glynn Wilson, Ph.D., Chairman of the Board

Dr. Wilson has served as a director since February 2005 and served as chairman since July 2009. Dr. Wilson currently serves as a strategic advisor to TapImmune. Dr. Wilson served as Chief Executive Officer between July 2009 and September 2017 and served as our President between November 2015 and September 2017 (except between July 2016 and April 2017 when a former officer served as President), following which Mr. Hoang was appointed to serve as President and Chief Executive Officer. Prior to joining us, Dr. Wilson was President and Chief Scientific Officer of Auriga Pharmaceuticals, a public specialty pharmaceutical company. Dr. Wilson was Research Area Head, Cell and Molecular Biology in Advanced Drug Delivery at Ciba-Geigy Pharmaceuticals from 1984 – 1989 and Worldwide Head of Drug Delivery at SmithKline Beecham from 1989 to 1994. He was the Chief Scientific Officer at Tacora Corporation from 1994 to 1997 and was the Vice-President, R&D, at Access Pharmaceuticals from 1997 to 1998. Dr. Wilson was President and Chief Scientific Officer of Auriga Pharmaceuticals, a public specialty pharmaceutical company from 2004 until 2006. He was a faculty member at Rockefeller University, New York, in the laboratory of the Nobel Laureates, Sanford Moore and William Stein, from 1974 to 1979.

He is a recognized leader in the development of drug delivery systems and has been involved in taking lead products & technologies from concept to commercialization. Dr. Wilson has a Ph. D. in Biochemistry and conducted medical research at The Rockefeller University, New York.

Dr. Wilson brings an extensive background of success in corporate management and product development with tenures in both major multinational pharmaceutical companies and start-up pharmaceutical/biotech organizations.

Peter L. Hoang, President and Chief Executive Officer

Mr. Hoang has served as a director since September 2017. Mr. Hoang also serves as our President and Chief Executive Officer, positions which he commenced, September 22, 2017 succeeding Dr. Wilson, who remains as our Chairman. Prior to joining us, Mr. Hoang served as Senior Vice President of Business Development and Strategy at Bellicum Pharmaceuticals from November 2014 to March 2017, as the Managing Director of Innovations at The University of Texas MD Anderson Cancer Center, where he headed the new venture formation and development effort for the institution from September 2012 to November 2014. Before joining MD Anderson, Mr. Hoang served as a senior investment banker, most recently as Managing Director of healthcare mergers & acquisitions advisory for CIT Group from November 2010 to March 2012. Mr. Hoang has also served in the M&A departments at Oppenheimer, J.P. Morgan, Merrill Lynch, and Deutsche Bank. He earned an M.B.A. with high honors distinction from the Anderson School of Management at UCLA and a B.A. from Yale University.

Mr. Hoang brings over twenty years of investment banking, venture capital, immuno-oncology and public company executive management experience to us.

Sherry Grisewood, Director

Ms. Grisewood has served as a director since March 2013. Between December 2012 and June 2017, Ms. Grisewood was associated with Dawson James Securities Inc., first as Managing Director, Corporate Finance until September 2015 and most recently as Managing Partner, Life Science Research. Prior to joining Dawson James, over a 12-year period as an investment banker Ms. Grisewood led Lifesciences specialty investment banking practices for two New York-based investment banks and acted as an independent strategic advisor and consultant in life sciences. Prior to consulting for investment banks, Ms. Grisewood served as Director of Research for a mid-tier brokerage company and a leading independent investment research company. She currently serves on the Board of Mobitech Regenerative Medicine, a private medical device company, and has served as a Board member of BRTI Life Sciences and Conception Technology, both private medical device companies. Ms. Grisewood is a member of the American Society of Gene and Cell Therapy, the Tissue Engineering and Regenerative Medicine Society International, Women in Bio and the CFA Institute. Ms. Grisewood holds a Bachelor of Science degree in Life Science from Ramapo College of New Jersey.

Ms. Grisewood has over 30 years of securities industry experience in a range of investment banking, advisory and research-related activities and Ms. Grisewood brings a wealth of knowledge about the securities and biomedical industries to us. Ms. Grisewood has participated in over 70 transaction-related projects involving initial public offerings, secondary offerings, PIPE's, private equity, M&A and licensing transactions. These deals and projects represented US, Canadian, Scandinavian, UK, Chinese and Australian clients with advanced therapeutic technologies and delivery systems in the life sciences such as those addressing nucleic acid therapeutics, regenerative medicine, immune-therapy, CNS diseases, or leading-edge device technologies for life science special situations.

David Laskow-Pooley, Director

Mr. Laskow-Pooley has served as a director since March 2015. Mr. Laskow-Pooley is a Co-Founder and has been serving as CEO of LREsystem Ltd., a UK-based medical device company, since September 2017. He is also a Co-founder of Pharmafor Ltd, a small company incubator based in the UK. From April 2012 to April 2018, he served as CEO of LondonPharma Ltd, a clinical stage company re-purposing approved drugs through novel drug delivery technologies. Mr. Laskow-Pooley was formerly Managing Director (UK) of Nasdaq-listed drug discovery platform company, OSI, where he was employed from 2002

to 2004. Mr. Laskow-Pooley also was part of the corporate team that developed and launched Tarceva for the treatment of lung cancer with marketing partners Roche and Genentech. Mr. Laskow-Pooley is a pharmacist with more than 40 years of experience in the Pharmaceutical, Diagnostic and Device sectors, and has had a distinguished career in multinational pharmaceutical companies including Glaxo SmithKline and Abbott, in addition to Life Technologies (Biotech Life Sciences) and Amersham, now GE Healthcare (Diagnostic Imaging). Mr. Laskow-Pooley currently serves on the board of Neurovive Pharmaceutical AB (Nasdaq STO: NVP and OTCQX: NEVPF), a mitochondrial medicine company based in Sweden. He also serves on the boards of Pharmafor Ltd. and LREsystem, Ltd., both UK private companies. Mr. Laskow-Pooley attended the Sunderland School of Pharmacy and received his B.Sc. degree in Pharmacy.

Mr. Laskow-Pooley brings extensive experience to our Board in the pharmaceutical industry, and with start-up and early stage pharmaceutical/biotech organizations.

Mark Reddish, Director

Mr. Reddish has served as a director since April 2012. Mr. Reddish joined TapImmune as Vice-President of Product Development between November 2011, and February 2012. Mr. Reddish previously served as Vice President of Product Development and Principal Investigator, Biodefense at ID Biomedical, Bothell, WA, where he was employed from 1998 to 2005. At Biomira Inc. (renamed Oncothyreon), where he was senior director of Research Immunology from 1991 to 1998, he was responsible for development of their FDA approved tumor marker assays (CA15-3, CA-125, CA19-9, PSA) and lead early research and clinical development of their immunotherapeutic vaccine program. Mr. Reddish has a degree in Biology from Bates College.

Mr. Reddish brings thirty-five years of biomedical experience ranging from clinical and academic research to industrial product development and has already brought significant value and insight to us. Mr. Reddish has over 50 publications in the areas of immunology and microbiology and a number of issued and pending patents in the area of vaccine technologies.

Frederick Wasserman, Director

Mr. Wasserman has served as a director since January 2016. Mr. Wasserman is a business executive with over 35 years of business experience, having served at various companies in roles including Chief Executive Officer, President, Chief Operating Officer and Chief Financial Officer. Mr. Wasserman is currently the President of FGW Partners LLC, Pennington, NJ, where he has been employed since 2007. Mr. Wasserman currently serves on the boards of directors of DHL Holdings Corp, MAM Software Group, Inc., and SMTC Corporation. Mr. Wasserman was employed as a certified public accountant from 1976 to 1989. He earned a Bachelor of Science degree from The Wharton School at The University of Pennsylvania in 1976.

Mr. Wasserman brings to our Board an extensive array of business and industry experience as well as experience as a director of public companies.

Joshua Silverman, Director

Mr. Silverman has served as a director since November 2016. Mr. Silverman is the co-founder and Managing Member of Parkfield Funding LLC, an investment and consulting firm, since August 1, 2016. Mr. Silverman was a former Principal and Managing Partner of Iroquois Capital Management, LLC (“Iroquois”), where he served as Co-Chief Investment Officer of Iroquois from 2003 until August 1, 2016. From 2000 to 2003, Mr. Silverman served as Co-Chief Investment Officer of Vertical Ventures, LLC, a merchant bank. Prior to forming Iroquois, Mr. Silverman was a Director of Joele Frank, a boutique consulting firm specializing in mergers and acquisitions. Previously, Mr. Silverman served as Assistant Press Secretary to the President of the United States. In the past five years, Mr. Silverman has served on the boards of directors of Neurotrope, Inc., MGT Capital Investments Inc., National Holdings Corporation, Alanco Technologies Inc., Protagenic Therapeutics, Inc. and WPCS International Incorporated. Mr. Silverman received his B.A. from Lehigh University in 1992.

Mr. Silverman brings to our Board extensive public company board experience, and financial and investment experience, including with pre-revenue biotechnology companies.

Required Vote; Recommendation of Board of Directors

If a choice is specified on the Proxy by the stockholder, the shares will be voted as specified. If no specification is made, the shares will be voted FOR the director nominees. Election of each director nominee will require the affirmative vote of a plurality of the votes cast at the 2018 Annual Meeting.

TAPIMMUNE'S BOARD OF DIRECTORS UNANIMOUSLY RECOMMENDS THAT TAPIMMUNE STOCKHOLDERS VOTE "FOR" PROPOSAL 6 TO ELECT THE SEVEN NOMINEES FOR ELECTION TO TAPIMMUNE'S BOARD OF DIRECTORS FOR A ONE-YEAR TERM.

PROPOSAL 7

ADVISORY VOTE ON EXECUTIVE COMPENSATION

As part of its commitment to TapImmune stockholders and in accordance with Section 14A of the Exchange Act, TapImmune’s board of directors is submitting a say-on-pay proposal for stockholder consideration this year. TapImmune submits say-on-pay proposals for stockholder consideration annually and the next such stockholder advisory vote will be held at the 2019 annual meeting of stockholders.

Executive compensation is an important matter for stockholders. The core of TapImmune’s executive compensation philosophy and practice continues to be to pay-for-performance. Executive officers are compensated in a manner consistent with TapImmune’s strategy, competitive practice, sound corporate governance principles and stockholder interests and concerns. TapImmune believes the compensation program is strongly aligned with the long-term interests of stockholders. Compensation of the executive officers is designed to enable TapImmune to attract and retain talented and experienced senior executives to lead TapImmune successfully in a competitive environment.

The compensation of the named executive officers is described on pages [182](#) to [188](#) of this proxy statement, which includes TapImmune’s Compensation Discussion and Analysis, or the CD&A. The CD&A provides additional details on executive compensation, including TapImmune’s compensation philosophy and objectives, and the fiscal 2017 compensation of the named executive officers.

This vote is not intended to address any specific item of compensation, but rather the overall compensation of TapImmune’s named executive officers, and the strategy, practice and policies described in this proxy statement. Accordingly, TapImmune stockholders are being asked to indicate their support for the compensation of TapImmune’s named executive officers as described in this proxy statement by approving the following advisory resolution:

“RESOLVED, that the TapImmune Inc. stockholders approve, on a non-binding advisory basis, the compensation of the named executive officers as disclosed in the proxy statement for the 2018 Annual Meeting of Stockholders pursuant to the compensation disclosure rules of the Securities and Exchange Commission (which disclosure includes the Compensation Discussion and Analysis, the Summary Compensation Table for fiscal year 2017, and the other related tables and disclosures).”

As indicated above, the stockholder vote on this resolution will not be binding on TapImmune or TapImmune’s board of directors, and will not be construed as overruling any decision by TapImmune or by TapImmune’s board of directors. The vote will not be construed to create or imply any change to TapImmune’s fiduciary duties or those of TapImmune’s board of directors, or to create or imply any additional fiduciary duties for TapImmune or TapImmune’s board of directors. Although this advisory vote is non-binding, the Compensation Committee and the board of directors of TapImmune will review and consider the voting results when making future decisions regarding TapImmune’s executive compensation. It is expected that the next say-on-pay vote will occur at the 2019 annual meeting of stockholders.

Voting by Proxyholder

Your proxyholder (one of the individuals named on your proxy card) will vote your common stock in accordance with your instructions. Unless you give specific instructions to the contrary, your common stock will be voted for the approval of TapImmune’s 2017 executive compensation.

Required Vote; Recommendation

Ratification of the compensation of the named executive officers requires the affirmative vote of the holders of a majority of the shares of TapImmune common stock present in person or represented by proxy and entitled to vote on such matter at the 2018 Annual Meeting. A “broker non-vote” will have no effect on the outcome of this proposal, while an abstention will have the same effect as a vote against the approval of this proposal.

TAPIMMUNE’S BOARD OF DIRECTORS UNANIMOUSLY RECOMMENDS THAT TAPIMMUNE STOCKHOLDERS VOTE “FOR” PROPOSAL 7 TO APPROVE, ON A NON-BINDING ADVISORY BASIS, TAPIMMUNE’S 2017 EXECUTIVE COMPENSATION.

PROPOSAL 8**RATIFICATION OF APPOINTMENT OF INDEPENDENT REGISTERED ACCOUNTING FIRM**

Pursuant to its charter, the Audit Committee has appointed the firm Marcum LLP, or Marcum, New York, New York, to serve as TapImmune's independent registered public accounting firm for the fiscal year ending December 31, 2018. While the Audit Committee is solely responsible for the appointment, compensation, retention and oversight of the independent registered public accounting firm, the Audit Committee and TapImmune's board of directors are requesting that the stockholders ratify this appointment. If the stockholders ratify this appointment, the Audit Committee, in its discretion, may appoint a different independent registered public accounting firm at any time during the year if it believes that doing so would be in the best interests of the stockholders. If the stockholders do not ratify this appointment, the Audit Committee may reconsider, but might not change, its appointment.

Marcum has audited TapImmune's financial statements annually beginning with the fiscal year ending December 31, 2014. Representatives of Marcum are expected to be present at the 2018 Annual Meeting with the opportunity to make a statement if they desire to do so and are expected to be available to respond to appropriate questions.

Voting by Proxyholder

Your proxyholder (one of the individuals named on your proxy card) will vote your common stock in accordance with your instructions. Unless you give specific instructions to the contrary, your common stock will be voted for the ratification of the appointment of Marcum as TapImmune's independent registered public accounting firm for the fiscal year ending December 31, 2018.

Required Vote; Recommendation

Ratification of the appointment of Marcum as TapImmune's independent registered public accounting firm requires the affirmative vote of the holders of a majority of the shares of TapImmune common stock present in person or represented by proxy and entitled to vote on such matter at the 2018 Annual Meeting. An abstention will have the same effect as a vote against the approval of this proposal. A "broker non-vote" will not exist as to this proposal.

TAPIMMUNE'S BOARD OF DIRECTORS UNANIMOUSLY RECOMMENDS THAT TAPIMMUNE STOCKHOLDERS VOTE "FOR" PROPOSAL 8 TO RATIFY THE APPOINTMENT OF MARCUM AS TAPIMMUNE'S INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM FOR THE FISCAL YEAR ENDING DECEMBER 31, 2018.

PROPOSAL 9**APPROVAL OF POSSIBLE ADJOURNMENT OF THE 2018 ANNUAL MEETING*****General***

If TapImmune fails to receive a sufficient number of votes to approve Proposals 1, 2, 3a, 3b, 4 or 5, TapImmune may propose to adjourn the 2018 Annual Meeting, if a quorum is present, for a period of not more than 30 days for the purpose of soliciting additional proxies to approve Proposals 1, 2, 3a, 3b, 4 or 5. TapImmune currently does not intend to propose adjournment at the 2018 Annual Meeting if there are sufficient votes to approve Proposals 1, 2, 3a, 3b, 4 or 5.

Vote Required; Recommendation of Board of Directors

The affirmative vote of the holders of a majority of the shares of TapImmune common stock present in person or represented by proxy and entitled to vote on the matter at the 2018 Annual Meeting is required to approve the adjournment of the 2018 Annual Meeting for the purpose of soliciting additional proxies to approve Proposals 1, 2, 3a, 3b, 4 or 5. A “broker non-vote” will have no effect on the outcome of this proposal, while an abstention will have the same effect as a vote against the approval of this proposal.

TAPIMMUNE’S BOARD OF DIRECTORS UNANIMOUSLY RECOMMENDS THAT TAPIMMUNE STOCKHOLDERS VOTE “FOR” PROPOSAL 9 TO ADJOURN THE 2018 ANNUAL MEETING, IF NECESSARY, IF A QUORUM IS PRESENT, TO SOLICIT ADDITIONAL PROXIES IF THERE ARE NOT SUFFICIENT VOTES IN FAVOR OF PROPOSALS 1, 2, 3A, 3B, 4 OR 5.

TAPIMMUNE’S BUSINESS

For a description of TapImmune’s business, please refer to the section entitled “*Item 1. Business*” set forth in TapImmune’s Annual Report on Form 10-K for the year ended December 31, 2017, which document is attached as Annex B-1 to this proxy statement.

TAPIMMUNE LEGAL PROCEEDINGS

TapImmune is not aware of any legal proceedings contemplated by any government authority or any other party involving TapImmune. As of the date of this proxy statement, no director, officer or affiliate is (i) a party averse to us in any legal proceeding, or (ii) has an adverse interest to us in any legal proceeding.

TAPIMMUNE’S PROPERTY

For a description of TapImmune’s property, please refer to the section entitled “*Item 2. Properties*” set forth in TapImmune’s Annual Report on Form 10-K for the year ended December 31, 2017, which document is attached as Annex B-1 to this proxy statement.

MARKER'S BUSINESS

Overview

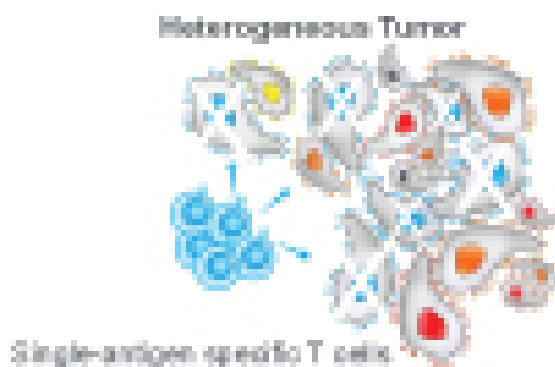
Marker is a clinical-stage immuno-oncology company focused on the development and commercialization of cell-based immunotherapies for the treatment of hematological malignancies and solid tumor indications, including, but not limited to, lymphoma, acute myeloid leukemia (AML), and multiple myeloma (MM). Marker's technology is based on the selective expansion of non-engineered, tumor-specific T cells that recognize tumor associated antigens (i.e. tumor targets) and kill tumor cells expressing those targets. Once infused into patients, this population of T cells recognizes multiple tumor targets to produce broad spectrum anti-tumor activity. Because Marker does not genetically engineer its T cells, when compared to current engineered CAR-T and TCR-based approaches, its products (i) are significantly less expensive and easier to manufacture, (ii) appear to be markedly less toxic, and (iii) are associated with meaningful clinical benefit. As a result, Marker believes its portfolio of T cell therapies has a compelling therapeutic product profile, as compared to current gene-modified CAR-T and TCR-based therapies.

Immuno-oncology, which utilizes a patient's own immune system to combat cancer, is one of the most actively pursued areas of research by biotechnology and pharmaceutical companies today. Interest and excitement about immunotherapy is driven by compelling efficacy data in cancers with historically bleak outcomes, and the potential to achieve a cure or functional cure for some patients. Harnessing the power of the immune system is an important component of fighting cancerous cells in the body. Marker's MultiTAA T cell therapy platform identifies and selects for effectively all T cells that are specific for any peptide from the antigens that Marker targets (e.g., WT1, MAGE-A4, PRAME, Survivin, NY-ESO-1, and SSSX2). Marker's in-vitro manufacturing process promotes proliferation of very rare cancer-killing T cells to augment their anti-tumor properties and provide benefit to patients following their infusion. By using the multi-antigen targeted approach, Marker's proprietary technology can kill heterogeneous tumor cell populations more effectively than single-antigen targeted approaches, thereby reducing the likelihood of tumor escape and potentially increasing the durability of a patient's response to therapy.

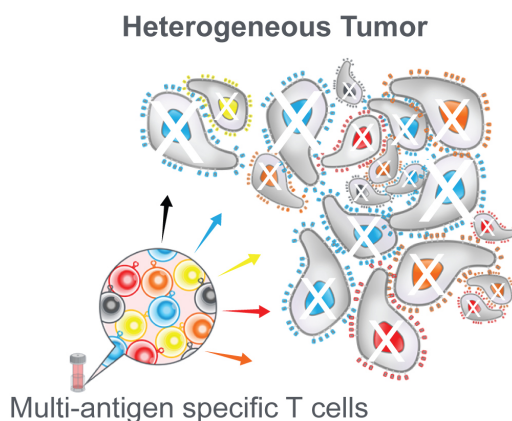
Marker believes that its therapy presents a promising innovation in immuno-oncology. Marker's therapy has been developed through its collaboration with the Cell and Gene Therapy Center at BCM, founded by Malcolm K. Brenner, M.D., Ph.D., a recognized pioneer in immuno-oncology. Marker's founders include Drs. Malcolm Brenner M.D., PhD, Ann Leen, PhD., Juan Vera, M.D., Helen Heslop, M.D., DSc (Hon) and Cliona Rooney, PhD, who have significant experience in this field.

Multi Tumor-Associated Antigen (MultiTAA) Approach

By their nature, cancers are heterogeneous in their expression of antigens, meaning that a tumor generally consists of individual cancer cells that express different antigens, and each of those antigens can be present at a different level that can change over time. If a therapy targets only a single antigen, it is vulnerable to evolutionary escape mechanisms.



Even if the single-antigen specific therapy can eliminate all the tumor cells expressing the targeted antigen, the residual tumor cells that do not express that antigen may survive and expand. In addition, tumor cells may also downregulate or mutate the targeted antigen, thus becoming invisible to the T cell therapy. Both phenomena create a transformed tumor that is impervious to that therapy. This process is referred to as antigen-negative tumor immune escape. Marker's solution to the problem of tumor heterogeneity was to develop T cell products that simultaneously attack multiple tumor-expressed antigens and thereby enable more complete initial tumor targeting, thus minimizing the subsequent opportunity for the cancer to engage escape mechanisms. Of note, data suggest this strategy may be responsible for recruitment and activation of unique cancer-killing cells from the patient's own immune repertoire to participate in cancer eradication, further minimizing the possibility for tumor cell escape.



Marker's proprietary MultiTAA T cell platform may have meaningful advantages over current CAR-T and TCR cell therapy approaches. Compared to current gene-modified T cell therapies, Marker's programs are characterized by the following:

- **Demonstrated clinical benefit, without the need for lymphodepletion before infusion:** In its Phase I lymphoma study, Marker saw complete responses, or CRs, in 50–60% of its evaluable patients. Marker believes it is significant that no patient with a CR has subsequently relapsed with disease, whereas typically 30% or more of patients with CR in reported CAR-T studies relapse within one year. In patient results to date, observed therapeutic responses appear to be highly durable, with some patients being relapse-free beyond two years.
- **Non-gene-modified:** Unlike CAR-T and TCR approaches, Marker's therapy requires no genetic modification of T cells, a costly and complex process that significantly complicates the manufacturing of a patient product. Marker believes its therapy can be manufactured at a fraction of the cost of a gene-modified T cell product, with substantially reduced complexity of manufacturing.
- **Low incidence rate of adverse events:** In approximately 60 patients treated to date, Marker has seen only one grade III adverse reaction possibly related to its therapy. This appears to compare favorably with published CD19 CAR-T studies, wherein up to 95% of patients had associated grade III or higher adverse events during treatment. Marker believes that it is notable that there have been no cases of cytokine-release syndrome (CRS), or related serious adverse events (SAEs), in patients treated with its therapy to date.
- **Capable of addressing a broad repertoire of cancer cells:** While CAR-T and TCR therapies generally target a single epitope, Marker's manufacturing process selects for T cells that are specific for multiple peptides derived from several targeted antigens. Deep gene sequencing of Marker products shows that a typical patient dose usually consists of approximately 4,000 unique T cell clonotypes targeting up to five different tumor-associated antigens. In layman's terms, the five antigen targets can be recognized by a very wide range of T cells, facilitating robust killing of targeted cancer cells.

- **Appears to consistently drive endogenous immune responses:** Marker consistently sees evidence of “epitope spreading” in its patients, meaning that Marker’s therapy is potentially inducing an enhanced response by the patient’s own T cells (specific for an expanded set of tumor-associated antigens beyond those targeted by Marker’s infused product). Marker’s correlative analyses show significant expansion of endogenous T cells, other than those present in the Marker product, in the months following the infusion of Marker’s product. This phenomenon, also known as “antigen spreading,” is potentially important in generating a durable response for a patient, because it enables the killing of tumors that do not express any antigens not initially targeted by Marker’s product.

Background and History of Cancer Immunotherapies

Despite advances in options for treatment, cancer continues to be one of the main causes of death in developed countries. Historically, cancer therapy has been constrained to surgery, radiation, and chemotherapy. More recently, advances in our understanding of the immune system’s role in cancer immune surveillance have led to immunotherapy becoming an important treatment approach. Cancer immunotherapy began with treatments that nonspecifically activated the immune system and had limited efficacy and/or significant toxicity. In contrast, newer immunotherapy treatments can activate specific, potent immune cells, leading to improved efficacy and safety. Within the immunotherapy category, treatments have included cytokine therapies, antibody therapies, and adoptive cell therapies.

In 1996, Leach, Krummel and Allison reported that monoclonal antibodies, or mAbs, blocking CTLA-4 could treat tumors in animal models. Subsequently, mAbs that targeted CTLA-4 and PD-1 became known as “immune checkpoint inhibitors”, or ICIs. Immune checkpoints are a means by which cancer cells are able to inhibit or turn down the body’s immune response to cancer. By interfering with these cloaking mechanisms, ICIs have shown an ability to activate T cells, shrink tumors, and improve patient survival. Recent clinical data from checkpoint inhibitors such as ipilimumab, nivolumab and pembrolizumab have confirmed both the validity of this approach and the importance of T cells as promising tools for the treatment of cancer.

Despite these many advances, there persists a significant unmet need in cancer therapeutics. We believe that the use of human cells as a therapeutic modality to re-engage the immune system will be the next significant advancement in the treatment of cancer. These cellular therapies may avoid the long-term side effects associated with current treatments and have the potential to be effective regardless of the type of previous treatments patients have experienced.

T Cell Therapy Overview

The field of adoptive cell transfer, or ACT, is currently comprised primarily of CAR and TCR engineered T cells and has emerged from principles of basic immunology to become a paradigm-shifting clinical immunotherapy. T cell therapy has evolved as one of the most promising branches of immunotherapy. T cell immunotherapy involves the infusion of immune cells into a patient. Immune cells used for immunotherapy treatments can either be collected from the patient (autologous) or harvested from a donor (allogenic). The cells are retrieved and mixed with specific antigens, then cultured to proliferate to reach a sufficient number before infusion into the patient. Upon infusion, the cells are capable of targeting and eliminating cancerous cells. Unlike chemotherapy, which is unable to distinguish between healthy and malignant cells, T cells produced for immunotherapy are able to selectively attack cancer cells that express the target antigen(s). This leads to a more effective treatment platform with fewer side effects. In addition, because of immunological memory, these infused T cells remain in the body for long periods of time, thus leading to longer and more durable responses.

TCRs and CARs have distinct signaling properties and antigen sensitivities. TCRs recognize peptide fragments from proteins expressed either inside the cell or on the cell surface. CARs are programmed to recognize a specific cell surface protein. Because CARs are specific for a single antigen, or more precisely a single epitope within the single antigen, they are very narrowly focused and come with limitations. While it is true that they may eliminate the tumor cells that express the target antigen, when applying a CAR-T cell product to a specific antigen of a heterogeneous disease, CAR-T cells may leave behind tumor cells that do not express the target antigen, which can lead to tumor relapse due to immune escape.

Marker's approach is to avoid genetic engineering by relying upon the native T cell receptor, which has evolved over millions of years to provide T cells with an exquisite capacity to recognize and kill cancer cells. Use of the native T cell receptor is the bedrock of Marker's versatile immunotherapy, which is intended to provide a cost-effective and non-toxic strategy to target multiple tumor antigens and lead to durable responses. The process entails expanding tumor-specific T cells from patients, or a patient's hematopoietic stem cell donor. This is achieved by *in vitro* manipulation consisting of co-culturing antigen presenting cells (called dendritic cells) with patient (or donor) peripheral blood mononuclear cells, or PBMCs. As a source of antigen, Marker uses overlapping peptide libraries spanning each of several immunogenic target antigens that are typically associated with certain types of cancer. These peptides are 15 amino acids in length, overlapping by 11 amino acids and span the entire length of each of the target antigens. This typical footprint of peptides allows Marker to induce both CD4 (helper) and CD8 (cytotoxic) T cells. Following manufacture, these cells are frozen and stored for later infusion. Once infused, the natural characteristics of T cells take over and the T cells multiply in quantity, when they encounter the targeted antigens expressed by cancer cells, forming an army of T cells that kill the targeted cancer cells.

Process Development and Manufacturing

Marker is advancing two products through clinical development. Mixed Antigen Peptide Pool, or MAPP, T cells, which are currently used for patients with lymphoma, multiple myeloma and selected solid tumors, is an autologous product that targets the NY-ESO-1, PRAME, MAGE-A4, Survivin and SSX2 antigens. Leukemia Antigen Peptide Pool, or LAPP, T cells, which are used for patients with AML, is an allogeneic product targeting the WT1, NY-ESO-1, PRAME, and Survivin antigens using the blood of the stem cell donor as a source of the cells used for therapy. While the blood source and the antigens for stimulation differ between the LAPP and the MAPP products, the manufacturing process for each product is otherwise identical.

In the manufacturing process, blood is drawn from either the individual patient (in the case of the autologous MAPP T cells) or from the allogeneic stem cell transplant donor (in the case of the allogeneic LAPP T cells). For most other cell immunotherapies, blood must be collected using a process known as apheresis, in which a patient must go to a dedicated center with specialized apheresis equipment to undergo a lengthy and sometimes painful procedure in order to draw an adequate quantity of source blood. In contrast, production of Marker's product requires relatively small amounts of blood for source material (100-400 ml), and can be drawn from a patient using a simple needle-and syringe-based approach at any outpatient facility.

Although the T cells that are selected and expanded by the Marker process exist in a patient's circulating blood, these T cells are often present at very low frequencies. More importantly, researchers at BCM believe that these T cells are adversely affected by the suppressive tumor microenvironment. It is a well-accepted concept that cancers not only evade immune detection but often actively suppress the function of the human immune system. Marker's manufacturing and culturing process is intended to (i) identify the T cells specific to the antigens that Marker intends to target, (ii) restore these T cells to functionality with respect to their anti-tumor capability and (iii) to expand the population of those T cells specific for Marker's targets to achieve the required patient dose.

After blood is drawn, the required component cells, including monocytes and PBMCs, are extracted from the blood, isolated and cryopreserved. Sufficient numbers of cryopreserved monocytes and PBMCs are taken to be used to manufacture a patient-specific product. These cells are placed inside a G-Rex[®] manufacturing device and combined with an experimentally optimized cocktail of GMP-grade cytokines that is used to restore and enhance the functional capability of the cultured T cells.

In addition, libraries of overlapping peptides (pepmix) spanning the target antigens are combined and added to the cell culture. Each peptide within the pepmix represents a small segment of a target antigen, which a T cell might recognize. Each library represents the entire protein sequence of a target antigen, with each peptide in the pepmix overlapping significantly with the peptides adjacent to it within the antigen's protein sequence. This overlapping structure ensures that Marker can isolate, activate and expand any T cell that is specific for any segment of every antigen it targets in the unique genetic background of every patient.

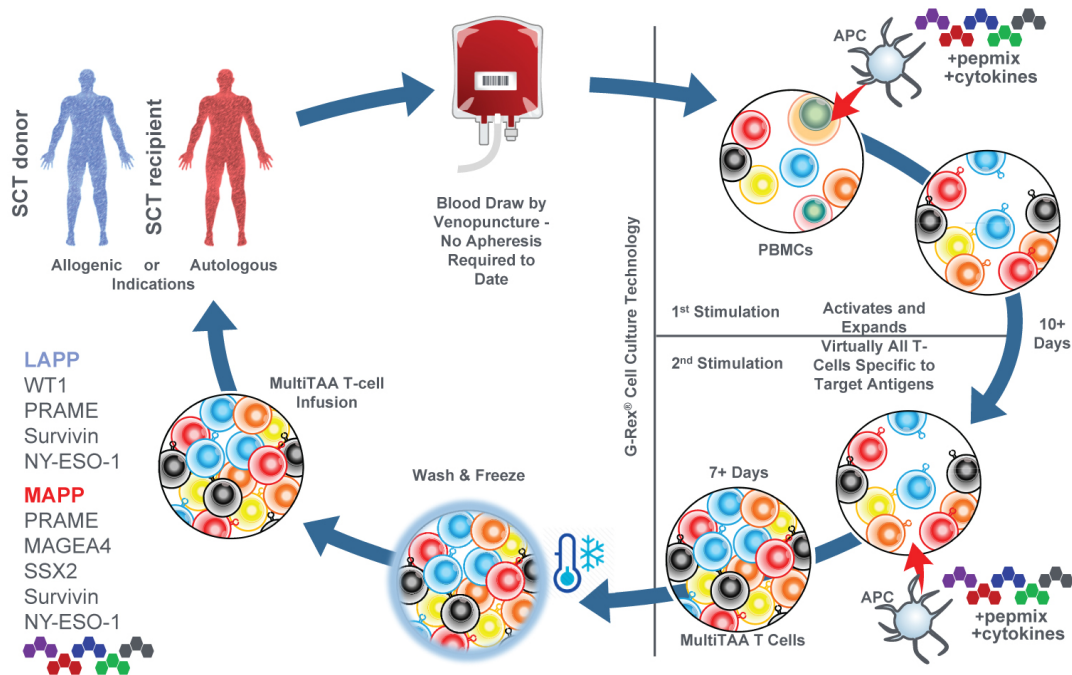
The G-Rex[®] is a cell culture device manufactured by Wilson Wolf used by many cell therapy developers, both in commercial and academic settings. The device allows a user to introduce cells, media

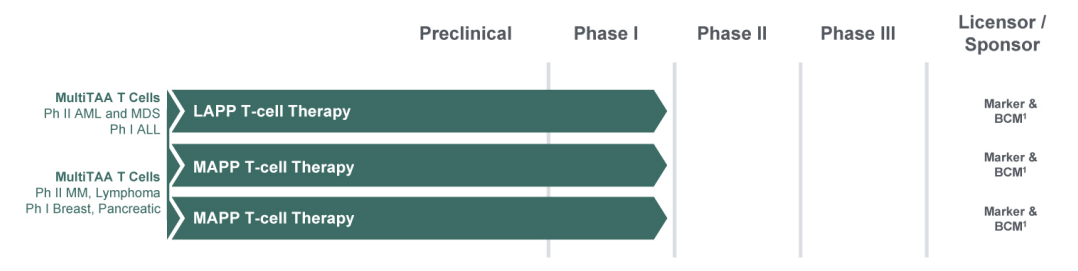
and other reagents into a cell culture chamber, which has a gas-permeable membrane at its bottom. The cells settle on this gas-permeable membrane through which oxygen and carbon dioxide are exchanged (i.e. the cells are allowed to breathe), while nutrients required for cell expansion are obtained from the medium above the cells. This system allows for the highly robust growth of cells in culture, by providing them with superior access to oxygen and nutrients for growth. Cells manufactured in the device grow efficiently without need for further manipulation or agitation by a technician, scientist or automated system.

Inside the G-Rex[®], PBMCs are co-cultured with dendritic cells that have been exposed to the stimulating pepmixes. This results in the selective expansion of T cells that specifically recognize the target antigens and the loss of other non-specific T cell populations. At the end of the manufacturing process, the resulting product is a mix of helper (CD4) and cytotoxic (CD8) T cells that recognize the antigens that Marker is targeting.

Once cell manufacturing is complete, the product is tested for identity, sterility, phenotype and safety before it is released for infusion into a patient. Sampling of product indicates that, on average, approximately 4,000 different T cell clonotypes are present in a typical 5-antigen-specific patient product.

Upon release of the final patient product, the cells are frozen and transported to the site where the cells will be administered. The standard dose for patients with lymphoma, AML or myeloma ranges from 5–20 million cells per meter squared (typically 10–40 million cells per adult patient). These cell doses represent a significantly smaller dose of cells, when compared to CAR-T or TCR therapies. As a result, Marker’s therapy requires only a very small infusion volume (less than 10 ml) that can be done within minutes at an outpatient center. Because Marker’s therapies have generated only one grade 3 adverse event that was considered to be possibly related to its T cells in approximately 60 patients dosed, patients do not need to be hospitalized and monitored overnight. Instead, Marker’s patients are evaluated for any immediate infusion-related reactions and can then usually be discharged within two hours.



Clinical-stage MultiTAA T Cell Therapy**(1) Baylor College of Medicine**

Marker's main product candidates, MAPP and LAPP, identify and select for substantially all T cells that are specific for any peptide derived from the targeted antigens, thereby recognizing and killing heterogeneous tumors more effectively than single-antigen targeted approaches. These product candidates are currently in Phase I clinical trials for lymphoma, AML/myelodysplastic syndromes (MDS), and MM at BCM and each of these programs is ready for initiation of Phase II. BCM has also initiated Phase I trials in acute lymphocytic leukemia, breast and pancreatic cancers.

In lymphoma, MAPP T cell therapy is currently in a Phase I trial that has treated 13 patients with active disease ("lymphoma active group"), of which 11 patients had follow-up date beyond 3 months post-infusion, and 17 patients in remission ("lymphoma adjuvant group"). No SAEs or CRS have been observed in any of these patients.

Of the 11 patients in the lymphoma active group, 6 patients demonstrated a complete response, 1 patient has durable stable disease and 4 patients had transient disease stabilization (range 5–9 months). None of the complete responders has subsequently progressed after receiving MAPP T cells. The duration of response for the complete responders ranged from 5 months to over 2 years (ongoing). Of the 17 patients in the lymphoma adjuvant group, 15 patients are in a continuing complete response, as of the date of data cutoff. The duration of response for these patients ranged from 3 to 37 months.

In post-transplant r/r AML, a setting where currently the only available alternative therapy is a donor lymphocyte infusion (DLI), Marker has seen significant therapeutic benefit for patients, without causing graft-versus-host disease (GVHD)—a frequent side effect of DLIs. LAPP T cell therapy is currently in a Phase I trial that has treated 5 patients with active disease ("AML/MDS active group") after allogeneic hematopoietic stem cell transplant (HSCT), and 8 patients in remission after HSCT ("AML/MDS adjuvant group"), of which 7 patients were evaluable. One patient had a transient elevation in liver enzymes. Otherwise there were no possibly/probably related SAEs, nor episodes of CRS.

Of the 5 evaluable patients in the AML/MDS active group, 1 patient demonstrated a complete response, 1 patient demonstrated a partial response, and 1 patient demonstrated ongoing stable disease. The duration of response for the complete or partial response patients ranged from 7 to 11 months. Of the 7 evaluable patients in the AML/MDS adjuvant group, 5 patients demonstrated a continued complete response. The duration of response for these patients ranged from 8 to 20 months.

MAPP T cell therapy is also being evaluated in a Phase I/II trial for patients with MM. One arm of this trial assessed patients who received MAPP T cells more than 90 days after an autologous stem cell transplant, or ASCT, while a second arm assessed patients who received MAPP T cells within 90 days of ASCT. Marker has not seen a meaningful difference in response rates or durability between the two arms, and intends to standardize future trials based upon a protocol wherein patients will receive MAPP T cells immediately post ASCT.

Of the patients evaluated in the MM trial, there were 7 patients with residual active disease, 6 of whom were evaluable with greater than 3 months of available follow-up date. Of these evaluable patients, 2 patients demonstrated complete responses and 2 patients demonstrated partial responses. The duration of

response ranged from 4 to 22 months. Additionally, there were 7 patients treated in remission after ASCT and all were evaluable. All patients remain in continuing complete response and none have subsequently progressed. The duration of response for these patients ranged from 4 to 22 months.

Company History

Marker filed its original Certificate of Formation as Marker Therapeutics LLC with the State of Delaware on October 22, 2015. On June 1, 2017, Marker converted to a corporation in the State of Delaware and filed its certificate of formation which, among other things, changed its name to Marker Therapeutics, Inc., set the authorized number of shares of common stock to 23,222,224 shares, par value \$0.0001 per share, and authorized 10,000 shares of preferred stock, \$0.0001 par value per share.

Marker's principal executive offices are located at 33 5th Avenue NW, Suite 800, New Brighton, MN 55112, and its telephone number at that address is 651-628-9259. Marker does not have a company website.

Recent Development

On May 15, 2018, TapImmune announced that it had entered into a definitive merger agreement to acquire Marker. The proposed transaction will be a merger-of-equals under which the stockholders of TapImmune and Marker will each own 50% of the combined company, prior to any issuance of additional shares in the contemplated private placement transaction.

Combined Company Strategy

The goal of TapImmune and Marker in creating the combined company is to be the leader in the development and commercialization of transformative and best-in-class immunotherapies for the treatment of hematological malignancies and solid tumors. The combined company will be developing a portfolio of highly-differentiated T cell therapies utilizing its MultiTAA platform that has the potential to significantly disrupt the current cell therapy landscape, while substantially improving survival and quality of life for patients with cancers.

Key elements of the combined company strategy currently include:

- ***Expedite clinical development, regulatory approval, and commercialization of the combined company's lead product candidates.***

Based on results in the Phase I clinical trials conducted at BCM, the combined company plans to advance its lead product candidates into Phase II clinical trials. Following the consummation of the merger, the combined company intends to transfer the existing INDs of BCM to the combined company, in order to facilitate the initiation of company-sponsored clinical trials in r/r AML and in lymphoma. The combined company expects to finalize its clinical trial protocols in the second half of 2018 and will begin site enrollments for multi-center Phase II clinical trials prior to the end of year.

The combined company plans to initiate a Phase II clinical trial in r/r AML in the second quarter of 2019 and a Phase II clinical trial in r/r Non-Hodgkin's Lymphoma, or NHL, by mid-year 2019. The combined company anticipates that product manufacturing in support of those clinical trials will be conducted at BCM within its GMP cell manufacturing facility.

In 2019, the combined company expects to begin the technology transfer process and begin the planning and implementation of additional GMP manufacturing capacity that would be capable of supporting the combined company's manufacturing needs with respect to pivotal trials. If the results of its Phase II studies are positive, the combined company will explore potential avenues to achieve regulatory approval for the use of its products in these indications, including any potential avenues for accelerated approval. The FDA may grant accelerated approval for product candidates for serious conditions that fill an unmet medical need based on a surrogate or intermediate endpoint. The combined company believes that an accelerated approval strategy may be warranted given the limited options available for patients with r/r AML post-transplant. However, if the FDA grants accelerated approval, confirmatory trials will be required by the FDA.

- ***Continue collaboration with the combined company's partners, and increase the combined company's internal research and development activities, to improve and develop adoptive cell therapy technologies.***

The combined company intends to finalize a strategic alliance with BCM, in which the combined company would sponsor selected research at the institution in support of the Marker's technology. In conjunction with this strategic alliance, BCM will conduct selected Phase I clinical trials using the combined company's technology. If data from these early clinical trials appear positive, the combined company will consider the therapeutic and commercial potential for such therapies to be advanced as new products for the combined company.

In addition, the combined company plans to use BCM facilities to enable the process development and manufacturing required to support its Phase II clinical trials of Marker's product candidates. Outside of its relationship with BCM, the combined company will invest in its research and development and CMC capabilities to enhance its ability to conduct process development to optimize its manufacturing process, product quality and commercial scalability.

The combined company believes that its G-Rex[®] based manufacturing process is highly robust and scalable, and it will continue to invest resources in further refining the manufacturing process to create a product with highly attractive commercial attributes. The combined company plans to engage Wilson Wolf in discussions to further customize the G-Rex[®] to optimally match the combined company's manufacturing requirements, as well as to develop a scalability plan to drive efficiencies for a commercial product.

- ***Invest in the combined company's platform to maximize the beneficial outcomes for cancer patients.***

The combined company plans to explore new product opportunities by expanding and/or customizing the antigens the combined company targets, in order to expand the indications in which the combined company's products may be used, including solid tumors or other hematologic malignancies. Additionally, the combined company's research and development efforts may include the exploration of dosing and/or frequency of product administration and the relationship of these factors with potential therapeutic benefit.

- ***Leverage the combined company's relationships with its founding institutions, scientific founders and other scientific advisors.***

The combined company's world renowned scientific founders and scientific advisors have made seminal contributions to major discoveries in the field of immuno-oncology, and have significant experience in oncology, immunology and cell therapy. The combined company intends to be a science-driven company in its strategic decision-making and thus it intends to significantly leverage the knowledge, experience and advice of its scientific founders and advisors, as well as the institutional expertise of BCM, the Mayo Clinic and our other major institutional partners, to advance its therapies through the clinic and into commercialization.

Upon completion of the merger, the newly reconstituted board and management of the combined company intends to carefully evaluate the combined company's therapeutic products and programs, and determine the future strategy and the proper allocation of resources to best maximize stockholder value in the combined company. In conjunction with this strategic review, the reconstituted board and management may de-emphasize or terminate therapeutic products or programs, as appropriate. The reconstituted board and management expect that this strategic review will be a high priority after consummation of the merger, and will continue on an ongoing basis.

Intellectual Property

The combined company seeks to protect and enhance the proprietary technology, inventions, and improvements that are commercially important to its business by seeking, maintaining, and defending patent rights, whether developed internally or licensed from third parties. The combined company also seeks to protect its proprietary position by, among other methods, filing patent applications in the United States and in jurisdictions outside of the United States directed to its proprietary technology, inventions, improvements and product candidates that are important to the development and implementation of its

business. The combined company also relies on trade secrets and know-how relating to its proprietary technology and product candidates, continuing innovation, and in-licensing opportunities to develop, strengthen and maintain its proprietary position in the field of immuno-oncology. The combined company also plans to rely on regulatory protection afforded through orphan drug designations, data exclusivity, market exclusivity and patent term extensions when available, as well as contractual agreements with our academic and commercial partners.

To achieve this objective, a strategic focus for Marker has been to identify and license key patents and patent applications that serve to enhance Marker's intellectual property and technology position. Marker's intellectual property portfolio currently includes patent applications having: (1) claims directed to methods of generating multi-antigen specific T cell products; and (2) claims directed to therapeutic uses of such multi-antigen specific T cell products. Marker believes its patent portfolio, together with its efforts to develop and patent next generation technologies, provides it with a substantial intellectual property position. However, the area of patent and other intellectual property rights in biotechnology is an evolving one with many risks and uncertainties. Currently, all of Marker's intellectual property rights are licensed from BCM.

Baylor College of Medicine

Exclusive License Agreement

On March 16, 2018, Marker entered into an Exclusive License Agreement, or the BCM license agreement, with BCM, under which Marker received a worldwide, exclusive license to BCM's rights in and to three patent families to develop and commercialize MultiTAA product candidates in exchange for partial ownership, royalties and milestone payments.

The following is a list of patents and patent applications that Marker has licensed from BCM under the BCM license agreement:

Exclusive license to BCM's Patent Applications and Patents:

<u>Title</u>	<u>Country</u>	<u>Application No.</u>	<u>Filing/Issue Date</u>	<u>Patent Number (if issued)</u>
GENERATION OF CTL LINES WITH SPECIFICITY AGAINST MULTIPLE TUMOR ANTIGENS	US	61/236,261	Filed: 24-Aug-2009	N/A
GENERATION OF CTL LINES WITH SPECIFICITY AGAINST MULTIPLE TUMOR ANTIGENS OR MULTIPLE VIRUSES	US	15/246,241	Filed: 24-Aug-2016	
GENERATION OF CTL LINES WITH SPECIFICITY AGAINST MULTIPLE TUMOR ANTIGENS OR MULTIPLE VIRUSES	PCT	PCT/US2010/046505	Filed: 24-Aug-2010	N/A
GENERATION OF CTL LINES WITH SPECIFICITY AGAINST MULTIPLE TUMOR ANTIGENS OR MULTIPLE VIRUSES	EP	EP 10814245.6	Filed: 24-Aug-2010 Issued: 21-Sep-2016	EP Patent No. 2470644
GENERATION OF CTL LINES WITH SPECIFICITY AGAINST MULTIPLE TUMOR ANTIGENS OR MULTIPLE VIRUSES	CH	10814245.6	Filed: 24-Aug-2010	EP Patent No. 2470644

<u>Title</u>	<u>Country</u>	<u>Application No.</u>	<u>Filing/Issue Date</u>	<u>Patent Number (if issued)</u>
GENERATION OF CTL LINES WITH SPECIFICITY AGAINST MULTIPLE TUMOR ANTIGENS OR MULTIPLE VIRUSES	DE	10814245.6	Filed: 24-Aug-2010	EP Patent No. 2470644
GENERATION OF CTL LINES WITH SPECIFICITY AGAINST MULTIPLE TUMOR ANTIGENS OR MULTIPLE VIRUSES	DK	10814245.6	Filed: 24-Aug-2010	EP Patent No. 2470644
GENERATION OF CTL LINES WITH SPECIFICITY AGAINST MULTIPLE TUMOR ANTIGENS OR MULTIPLE VIRUSES	FR	10814245.6	Filed: 24-Aug-2010	EP Patent No. 2470644
GENERATION OF CTL LINES WITH SPECIFICITY AGAINST MULTIPLE TUMOR ANTIGENS OR MULTIPLE VIRUSES	GB	10814245.6	Filed: 24-Aug-2010	EP Patent No. 2470644
GENERATION OF CTL LINES WITH SPECIFICITY AGAINST MULTIPLE TUMOR ANTIGENS OR MULTIPLE VIRUSES	IE	10814245.6	Filed: 24-Aug-2010	EP Patent No. 2470644
GENERATION OF CTL LINES WITH SPECIFICITY AGAINST MULTIPLE TUMOR ANTIGENS OR MULTIPLE VIRUSES	NL	10814245.6	Filed: 24-Aug-2010	EP Patent No. 2470644
GENERATION OF CTL LINES WITH SPECIFICITY AGAINST MULTIPLE TUMOR ANTIGENS OR MULTIPLE VIRUSES	NO	10814245.6	Filed: 24-Aug-2010	EP Patent No. 2470644
GENERATION OF CTL LINES WITH SPECIFICITY AGAINST MULTIPLE TUMOR ANTIGENS OR MULTIPLE VIRUSES	SE	10814245.6	Filed: 24-Aug-2010	EP Patent No. 2470644
GENERATION OF CTL LINES WITH SPECIFICITY AGAINST MULTIPLE TUMOR ANTIGENS OR MULTIPLE VIRUSES	EP	EP 16180607.0	Filed: 24-Aug-2010	
PEPMIXES TO GENERATE MULTIVIRAL CTLs WITH BROAD SPECIFICITY	US	61/596,875	Filed: 09-Feb-2012	N/A
PEPMIXES TO GENERATE MULTIVIRAL CTLs WITH BROAD SPECIFICITY	PCT	PCT/US2013/025342	Filed: 08-Feb-2013	N/A

<u>Title</u>	<u>Country</u>	<u>Application No.</u>	<u>Filing/Issue Date</u>	<u>Patent Number (if issued)</u>
PEPMIXES TO GENERATE MULTIVIRAL CTLs WITH BROAD SPECIFICITY	US	14/377,825	Filed: 08-Aug-2014	
PEPMIXES TO GENERATE MULTIVIRAL CTLs WITH BROAD SPECIFICITY	US	15/905,176	Filed: 26-Feb-2018	
PEPMIXES TO GENERATE MULTIVIRAL CTLs WITH BROAD SPECIFICITY	EP	EP 13746524.1	Filed: 08-Feb-2013	
IMMUNOGENIC ANTIGEN IDENTIFICATION FROM A PATHOGEN AND CORRELATION TO CLINICAL EFFICACY	US	62/220,884	Filed: 18-Sep-2015	N/A
IMMUNOGENIC ANTIGEN IDENTIFICATION FROM A PATHOGEN AND CORRELATION TO CLINICAL EFFICACY	PCT	PCT/US2016/052487	Filed: 19-Sep-2016	N/A
IMMUNOGENIC ANTIGEN IDENTIFICATION FROM A PATHOGEN AND CORRELATION TO CLINICAL EFFICACY	US	15/759,501	Filed: 12-Mar-2018	
IMMUNOGENIC ANTIGEN IDENTIFICATION FROM A PATHOGEN AND CORRELATION TO CLINICAL EFFICACY	AU	2016324479	Filed: 19-Sep-2016	
IMMUNOGENIC ANTIGEN IDENTIFICATION FROM A PATHOGEN AND CORRELATION TO CLINICAL EFFICACY	EP	16847545.7	Filed: 19-Sep-2016	
IMMUNOGENIC ANTIGEN IDENTIFICATION FROM A PATHOGEN AND CORRELATION TO CLINICAL EFFICACY	IL	258090	Filed: 19-Sep-2016	
IMMUNOGENIC ANTIGEN IDENTIFICATION FROM A PATHOGEN AND CORRELATION TO CLINICAL EFFICACY	SG	11201802204S	Filed: 19-Sep-2016	

Exclusive license to BCM's Subject Technology:

1. "Generation of CTL Lines with Specificity Against Multiple Tumor Antigens or Multiple Viruses"
2. "Pepmixes to Generate Multiviral CTLs with Broad Specificity"
3. "Immunogenic Antigen Identification from a Pathogen and Correlation to Clinical Efficacy"

In partial consideration for the exclusive rights granted under the BCM license agreement, Marker agreed to issue 1,200,000 shares of Marker common stock to BCM valued at approximately \$5.0 million at the time of issuance. Additional consideration includes a royalty paid on net sales by Marker to BCM according to the royalty schedule in the BCM license agreement. The royalty fee schedule is based on aggregate net sales in four different ranges: (1) less than \$500M, (2) \$500M to \$1.0B, (3) \$1.0B and over, and (4) \$2.0B and over. The corresponding royalty percentages range from 0.65% to 5.0% — increasing in proportion to the aggregate net sales. The royalty fee may be reduced in the event that Marker must pay additional royalties with respect to third-party owned patent rights or technology necessary for the use, manufacture or sale of a licensed product. Marker also agreed to pay BCM one-time milestone payments upon the occurrence of nine particular milestones relating to completion of the first dosing in clinical trials for a first and second distinct product, receipt of approval from the FDA, and hitting certain net sales goals. Under the agreement, Marker may be obligated to make aggregate milestone payments of up to \$64.85 million. Marker is also responsible for sublicensing fees. In addition, under the agreement Marker is responsible for reimbursing BCM for patent-related expenses incurred prior to the execution of the license agreement of approximately \$82,000. Marker will be responsible for filing, prosecuting and maintaining all patent applications and patents included in the licensed patent rights and all such related legal costs incurred after the date of the agreement, except such legal costs shall be reduced on a pro-rata basis on a patent or patent application basis should BCM license such patent or patent application in additional fields of use to any third party.

In addition, upon a liquidity event (as defined in the BCM license agreement, but which shall not include the merger) of the licensee under the BCM license agreement (which, if the merger is consummated, the licensee shall be the combined company), BCM will receive a liquidity incentive payment of 0.5% of the liquidity event proceeds (as defined in the BCM license agreement) received by such licensee or its stockholders in the liquidity event.

Marker has agreed to indemnify BCM and certain persons affiliated with BCM against claims and liabilities directly or indirectly related to or arising out of the design, process, manufacture or use by any third party of the licensed products, even though such claims and liabilities result in whole or in part from the negligence of the BCM indemnified parties or are based upon doctrines of strict liability or product liability, but not claims or liabilities arising from the gross negligence or intentional misconduct of any such BCM indemnified parties.

Unless terminated sooner, the license will expire on a licensed product-by-product basis and country by country basis, on the later of (i) the date of expiration of the last valid claim of patent rights to expire that covers the sale of such licensed product in such country, or (ii) the first date following the tenth anniversary of the first commercial sale of first licensed product by Marker in such country. After such expiration, but not termination, the licenses granted to Marker shall survive and become a perpetual, paid-in-full license in such country with respect to such licensed product.

Marker has the right in its sole discretion to terminate the license agreement upon 60 days' written notice to BCM. BCM has the right to terminate the agreement upon material default or failure of Marker of its overall obligation to perform any of the terms, covenants or provisions of the license agreement, including failure to make timely payment, taken as a whole, and which default or failure remains uncured thirty days after written notice from BCM of such material default or failure to correct such default or failure. Notwithstanding the foregoing, if a material default or failure is not susceptible to cure within the 30-day cure period, BCM's right to terminate shall be suspended if, and for so long as, (i) Marker has provided BCM with a written plan that is reasonably calculated to effect a cure, (ii) such plan is reasonably acceptable to BCM, in its sole but reasonable discretion, and (iii) Marker commits to and does carry out such plan; provided, however, that, unless mutually agreed to by the parties in such plan, such suspension of

BCM's right to terminate shall not extend beyond 60 days after the original cure period. In addition, either party's right to terminate the license agreement shall be tolled for so long as dispute resolution procedures are being pursued by the allegedly breaching party in good faith, and if it is finally and conclusively determined that the allegedly breaching party is in material breach, then the breaching party shall have the right to cure within 30 days after such determination. BCM also has the right to terminate the agreement if Marker shall (i) become involved in insolvency, dissolution, bankruptcy or receivership proceedings affecting the operation of its business, (ii) make an assignment of all or substantially all of its assets for the benefit of creditors, or (iii) if a receiver or trustee is appointed for Marker and Marker shall, after the expiration of 30 days following any of the enumerated events, have been unable to secure a dismissal, stay or other suspension of such proceedings.

In the event of termination of the license agreement, but not expiration, all rights to the subject technology and patent rights thereunder shall revert to BCM, except to the extent necessary to exercise any surviving right or license thereunder. Marker may sell any licensed products actually in its possession at the effective date of termination, provided that Marker continues to pay to BCM royalties on all such sales in accordance with the license agreement and otherwise complies with the terms of the license agreement, and sells all such licensed products within six months after the effective date of the termination.

The combined company's commercial success will depend in part on its ability to obtain and maintain patent and other proprietary protection for its technology, inventions, improvements, and know-how related to the business; to defend and enforce proprietary rights, including any patents that the combined company may own in the future; to preserve the confidentiality of its trade secrets and other intellectual property; to obtain and maintain licenses to use intellectual property owned by third parties; and to operate without infringing the valid and enforceable patents and other proprietary rights of third parties. The combined company's ability to stop third parties from making, using, selling, offering to sell, or importing its products may depend on the extent to which it has rights under valid and enforceable patents or trade secrets that cover these activities — in other words, the rights obtained under exclusive license arrangements such as those pursuant to the BCM license agreement. With respect to both licensed and company-owned intellectual property, the combined company cannot be sure that patents will be granted with respect to any of its pending patent applications or with respect to any patent applications filed in the future, nor can the combined company be sure that any of its existing patents or any patents that may be granted in the future will be commercially useful in protecting its commercial products and methods of manufacturing the same. The combined company may rely, in some circumstances, on trade secrets to protect its technology. However, trade secrets can be difficult to protect.

Marker seeks to protect its proprietary technology and processes, in part, by entering into confidentiality agreements with relevant employees, consultants, scientific advisors, and contractors. Marker also seeks to preserve the integrity and confidentiality of its data and trade secrets by maintaining physical security of the premises and physical and electronic security of the information technology systems. While Marker has confidence in these individuals, organizations, and systems, agreements or security measures may be breached, and Marker may not have adequate remedies for any breach. In addition, trade secrets may otherwise become known or be independently discovered by competitors. To the extent that the consultants, contractors or collaborators use intellectual property owned by others in their work for Marker, disputes may arise as to the rights in related or resulting know-how and inventions.

**TAPIMMUNE'S MANAGEMENT'S DISCUSSION AND ANALYSIS OF
FINANCIAL CONDITION AND RESULTS OF OPERATIONS**

For TapImmune's management's discussion and analysis of financial condition and results of operations, please refer to Item 7 set forth in TapImmune's Annual Report on Form 10-K for the year ended December 31, 2017, which document is attached as Annex B-1 to this proxy statement, and Item 2 set forth in TapImmune's Quarterly Report on Form 10-Q for the quarter ended June 30, 2018, which is attached as Annex B-2 to this proxy statement.

MARKER'S MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

The following should be read in conjunction with Marker's audited condensed consolidated financial statements and related notes for the year ended December 31, 2017 and Marker's unaudited condensed consolidated interim financial statements and related notes for the six months ended June 30, 2018.

Results of Operations

In this discussion of Marker's results of operations and financial condition, amounts, other than per-share amounts, have been rounded to the nearest thousand dollars.

For the Year Ended December 31, 2017

We recorded a net loss of \$277,000 or (\$0.05) basic and diluted per share during the year ended December 31, 2017.

Operating Expenses

Operating expenses incurred during the year ended December 31, 2017 were \$277,000.

Significant changes in operating expenses are outlined as follows:

- General and administrative expenses were \$223,000 during the year ended December 31, 2017, which were primarily due to legal fees associated with the Series A preferred stock financing discussed below.
- Research and development expenses were \$54,000 during the year ended December 31, 2017, which were primarily for lab supplies purchased to support research and development activities of the Company.

Liquidity and Capital Resources

Cash Flows

The following table summarizes our cash flows for the year ended December 31, 2017:

Net Cash provided by (used in):

Operating activities	\$(291,000)
Financing activities	365,000
Net increase in cash	<u>\$ 74,000</u>

Financings

Our financing activities during the year ended December 31, 2017 were as follows:

On June 5, 2017, we entered into a Series A Preferred Stock Purchase Agreement with an investor pursuant to which we received proceeds of \$3.0 million. The Company issued 1,500,000 shares of Series A preferred stock at a purchase price of \$2.00 per share.

On November 2, 2017, we entered into a Stock Repurchase Agreement with same investor. We repurchased 1,500,000 shares of Series A preferred stock from this investor at a purchase price of \$2.6 million. These 1,500,000 shares of Series A preferred stock were retired.

During the year ended December 31, 2017, Mr. Wilson loaned an additional \$46,000 to us. The loan was paid back entirely on June 26, 2017.

Additionally, we incurred a capital distribution of \$10,000.

Future Capital Requirements

As of December 31, 2017, we had cash of \$85,000 and working capital of \$85,000.

As discussed above, virtually all of our activities in 2017 were devoted to the financing discussed above. We will require additional capital to conduct any operations.

Six Months Ended June 30, 2018 Compared to Six Months Ended June 30, 2017

Marker recorded a net loss of \$5.1 million or (\$0.48) basic and diluted per share during the six months ended June 30, 2018 compared to a net loss of \$0.2 million or (\$0.15) basic and diluted per share during the six months ended June 30, 2017. The change in net loss period over the period was due to the following changes:

Operating Expenses

Operating expenses incurred during the six months ended June 30, 2018 were \$5.2 million compared to \$0.2 million in the prior period. Significant changes in operating expenses are outlined as follows:

- Research and development costs during the six months ended June 30, 2018 were \$4.9 million compared to \$0.1 million during the prior year period.

On March 16, 2018, we entered into a License Agreement (the “Agreement”) with Baylor College of Medicine (“BCM”). Under the terms of the Agreement, we were required to make an equity award as an upfront payment, and will be required to make additional payments upon the achievement of certain milestones. As partial consideration for the license, we issued 1,200,000 shares of common stock with a fair value of approximately \$5.0 million to BCM. In accordance with ASC 730-10-25-1, Research and Development, costs incurred in obtaining technology licenses are charged to research and development expense if the technology licensed has not reached technological feasibility and has no alternative future use. The technology licensed by us requires substantial completion of research and development, and regulatory and marketing approval efforts in order to reach technological feasibility. As such, for the six months ended June 30, 2018, the purchase price of the acquired license was classified as research and development.

- General and administrative expenses were \$0.2 million during the six months ended June 30, 2018 and 2017. General and administrative expenses during the six months ended June 30, 2018 were primarily due to legal fees associated with the proposed merger with TapImmune Inc. General and administrative expenses during the six months ended June 30, 2017 were primarily due to legal fees associated with financing transactions.

Liquidity and Capital Resources

Cash Flows

The following table summarizes Marker’s cash flows for the six months ended June 30, 2018 and 2017:

	Six Months Ended June 30,	
	2018	2017
Net Cash provided by (used in):		
Operating activities	\$(108,000)	\$ (169,000)
Financing activities	\$ 100,000	\$3,036,000
Net (decrease) increase in cash	<u>\$ (8,000)</u>	<u>\$2,867,000</u>

Financings

Marker’s financing activities during the six months ended June 30, 2018 and 2017 were as follows:

On June 11, 2018, Marker’s Chief Executive Officer, John Wilson loaned Marker \$100,000 to enable it to pay transaction expenses.

On June 5, 2017, Marker entered into a Series A Preferred Stock Purchase Agreement with an investor pursuant to which Marker received proceeds of \$3.0 million. Marker issued 1,500,000 shares of Series A preferred stock at a purchase price of \$2.00 per share.

During the six months ended June 30, 2017, Mr. Wilson loaned additional \$46,000 to Marker. The loan was paid back entirely on June 26, 2017.

Additionally, Marker incurred a capital distribution of \$10,000.

Future Capital Requirements

As of June 30, 2018, we had cash of \$77,000 and working capital of (\$96,000).

As discussed above, virtually all of Marker's activities in 2018 were devoted to the proposed merger with TapImmune Inc. Marker will require additional capital to conduct any operations.

UNAUDITED PRO FORMA CONDENSED COMBINED FINANCIAL INFORMATION

The following unaudited pro forma condensed combined financial information was prepared using the acquisition method of accounting under United States generally accepted accounting principles (“U.S. GAAP”), and gives effect to the transaction between TapImmune Inc. (“TapImmune”), Timberwolf Merger Sub, Inc. (“Merger Sub”), and Marker Therapeutics, Inc. (“Marker”) to be accounted for as an asset acquisition for accounting purposes. The transaction was accounted for as an asset acquisition in accordance with FASB ASC 805-50 and FASB ASC 350 as the majority of the fair value of the assets acquired was concentrated in a group of similar assets, and the acquired assets did not have outputs or employees.

The following unaudited pro forma condensed combined financial statements are based on TapImmune’s historical financial statements and Marker’s historical financial statements, as adjusted, to give effect to TapImmune’s asset acquisition of Marker. The unaudited pro forma condensed combined statements of operations for the six months ended June 30, 2018 and the year ended December 31, 2017 give effect to these transactions as if they had occurred on January 1, 2017. The unaudited pro forma condensed combined balance sheet as of June 30, 2018 gives effect to these transactions as if they had occurred on June 30, 2018.

The unaudited pro forma condensed combined financial information is based on the assumptions and adjustments that are described in the accompanying notes.

The unaudited pro forma condensed combined financial information does not give effect to the potential impact of current financial conditions, regulatory matters, operating efficiencies or other savings or expenses that may be associated with the integration of the two companies. The unaudited pro forma condensed combined financial information is preliminary and has been prepared for illustrative purposes only and is not necessarily indicative of the financial position or results of operations in future periods or the results that actually would have been realized had TapImmune and Marker been a combined company during the specified periods. The actual results reported in periods following the transaction may differ significantly from those reflected in the pro forma financial information presented herein for a number of reasons, including, but not limited to, differences between the assumptions used to prepare this pro forma financial information.

The assumptions and estimates underlying the unaudited adjustments to the pro forma condensed combined financial statements are described in the accompanying notes, which should be read together with the pro forma condensed combined financial statements.

The unaudited pro forma condensed combined financial statements should be read together with TapImmune’s historical financial statements, which are included in TapImmune’s latest annual report on Form 10-K filed with the Securities and Exchange Commission (“SEC”) on March 23, 2018 and the June 30, 2018 results included in TapImmune’s report on Form 10-Q filed with the SEC on August 9, 2018, and Marker’s historical information included herein.

Pro Forma Condensed Combined Balance Sheet as of June 30, 2018
(in thousands, except share and per share amounts)

	TapImmune	Marker	Pro Forma Adjustments	Note 3	Pro Forma Combined
ASSETS					
Current assets					
Cash and cash equivalents	\$ 7,783	\$ 77	\$ 61,100	(e)	\$ 68,960
Prepaid expense and other current assets	109	—	—		109
Total current assets	7,892	77	61,100		69,069
Intangible assets	—	—	—		—
Total assets	\$ 7,892	\$ 77	\$ 61,100		\$ 69,069
LIABILITIES AND STOCKHOLDERS' EQUITY					
Current liabilities					
Accounts payable	\$ 3,595	\$ 73	\$ 1,250	(c)	\$ 4,918
Loan payable to related party	—	100	—		100
Warrant liability	147	—	—		147
Promissory note	5	—	—		5
Total current liabilities	3,747	173	1,250		5,170
Total liabilities	3,747	173	1,250		5,170
Commitments and contingencies					
Stockholders' equity (deficit)					
Common Stock, \$.001 par value	14	1	(1)	(b)	44
			30	(a)	
Additional paid-in-capital	170,288	5,322	(30)	(a)	348,799
			(5,322)	(b)	
			117,441	(b)	
			61,100	(e)	
Accumulated deficit	(166,157)	(5,419)	5,419	(b)	(284,944)
			(117,537)	(b)	
			(1,250)	(c)	
Total stockholders' equity (deficit)	4,145	(96)	59,850		63,899
Total liabilities and stockholders' equity	\$ 7,892	\$ 77	\$ 61,100		\$ 69,069

Pro Forma Condensed Combined Statement of Operations — Six Months Ended June 30, 2018
(in thousands, except share and per share amounts)

	TapImmune	Marker	Pro Forma Adjustments	Note 3	Pro Forma Combined
Revenues:					
Grant income	\$ 206	\$ —	\$ —		\$ 206
Total revenues	206	—	—		206
Operating expenses:					
Research and development	3,426	—	—		3,426
Research and development – licensed acquired	—	4,948	—		4,948
General and administrative	4,651	181	—		4,832
Total operating expenses	8,077	5,129	—		13,206
Loss from operations	(7,871)	(5,129)	—		(13,206)
Change in fair value of warrant liabilities	(138)	—	—		(138)
Total other income/(expense)	(138)	—	—		(138)
Net loss	<u>\$ (8,009)</u>	<u>\$ (5,129)</u>	<u>\$ —</u>		<u>\$ (13,138)</u>
Net loss per share:					
Basic and diluted	<u>\$ (0.71)</u>				<u>\$ (0.31)</u>
Weighted average number of shares	<u>11,233,755</u>		<u>31,124,271</u>	(d)	<u>42,358,026</u>

Pro Forma Condensed Combined Statement of Operations — Year Ended December 31, 2017
(in thousands, except share and per share amounts)

	TapImmune	Marker	Pro Forma Adjustments	Note 3	Pro Forma Combined
Revenues:					
Grant income	\$ —	\$ —	\$ —		\$ —
Total revenues	<u>—</u>				<u>—</u>
Operating expenses:					
Research and development	5,251	223	—		5,474
General and administrative	6,412	54	—		6,466
Total operating expenses	<u>11,663</u>	<u>277</u>	<u>—</u>		<u>11,940</u>
Loss from operations	<u>(11,663)</u>	<u>(277)</u>	<u>—</u>		<u>(11,940)</u>
Change in fair value of warrant liabilities	6	—	—		6
Debt extinguishment gain	492	—	—		492
Grant income	183	—	—		183
Total other income/(expense)	<u>681</u>	<u>—</u>	<u>—</u>		<u>681</u>
Net loss	<u>\$ (10,982)</u>	<u>\$ (277)</u>	<u>\$ —</u>		<u>\$ (11,259)</u>
Net loss per share:					
Basic and diluted	<u>\$ (1.16)</u>				<u>\$ (0.28)</u>
Weighted average number of shares	<u>9,453,483</u>		<u>31,124,271</u>	(d)	<u>40,577,754</u>

Notes to the Unaudited Pro Forma Condensed Combined Financial Information**Note 1 — Description of Transaction and Basis of Presentation**

The unaudited pro forma condensed combined financial information was prepared in accordance with U.S. GAAP and pursuant to the rules and regulations of SEC Regulation S-X and presents the pro forma financial position and results of operations of the combined companies based upon the historical data of TapImmune and Marker.

For the purposes of the unaudited pro forma combined financial information, the accounting policies of TapImmune and Marker are aligned with no differences. Accordingly, no effect has been provided for the pro forma adjustments described in Note 4, “Pro forma adjustments.”

Description of Transaction**Merger Agreement**

On May 15, 2018, we and our wholly owned subsidiary, (formed for purposes of the Merger) Timberwolf Merger Sub, Inc., a Delaware corporation (“Merger Sub”), and Marker, entered into an Agreement and Plan of Merger and Reorganization (the “Merger Agreement”). Subject to the terms and conditions set forth in the Merger Agreement, MergerSub will merge with and into Marker (the “Merger”), with Marker surviving the Merger as a wholly owned subsidiary of TapImmune (the “Surviving Corporation”).

At the effective time of the Merger (the “Effective Time”), each outstanding share of Marker’s common stock will be converted into the right to receive (i) shares of TapImmune’s common stock, par value \$0.001 per share (“TapImmune Common Stock”), in an amount equal to the exchange ratio calculated pursuant to the Merger Agreement (the “Stock Exchange Ratio”), and (ii) warrants to purchase TapImmune Common Stock, in an amount equal to the exchange ratio calculated pursuant to the Merger Agreement (the “Warrant Exchange Ratio”).

The Merger Agreement contains certain termination rights for both us and Marker and provides for the payment of a termination fee of \$1,500,000 by us to Marker upon termination of the Merger Agreement under specified circumstances. In connection with a termination of the Merger Agreement under specified circumstances involving competing transactions, a willful, intentional and material breach of the non-solicitation obligations by us, a change in our board of directors’ recommendation of the Merger to the stockholders or other triggering events, we may be required to pay Marker reimbursement for certain fees and expenses up to \$500,000. In connection with a termination of the Merger Agreement under specified circumstances involving the failure of Marker stockholders to approve the Merger Agreement within 24 hours of signing the Merger Agreement, intentional and material breach of the non-solicitation obligations by Marker or other triggering events, Marker may be required to pay our reimbursement for certain fees and expenses up to \$500,000. The Merger Agreement may also be terminated by either us or Marker if the merger has not been consummated by September 15, 2018, subject to an extension of an additional 60 days if our proxy statement is being reviewed or commented upon by the SEC.

Following the Merger, the board of directors of the Company will consist of six directors and will be comprised of (i) three members designated by Marker, and (ii) three members designated by us.

Private Placement

On June 8, 2018, in connection with, and in furtherance of, the Merger Agreement, we entered into Securities Purchase Agreements for a private placement with a select group of institutional and accredited investors (the “Purchasers”). Pursuant to the Securities Purchase Agreements, the Purchasers have agreed to purchase 17,500,000 shares of the Company’s common stock, par value \$0.001, at \$4.00 per share, for gross offering proceeds of \$70 million. Each share of common stock will be issued with a warrant to purchase 0.75 additional shares of the Company’s common stock at an exercise price of \$5.00 per share for an aggregate of 13,125,000 Warrants. In accordance with NASDAQ Stock Market Rule 5635, the completion of the issuance and sale of the common stock and Warrants pursuant to the Securities Purchase Agreements is subject to the approval of the private placement by the Company’s stockholders. The

Warrants will be immediately exercisable upon issuance at closing and will have a term of five years. Subject to obtaining shareholder approval of the private placement, the issuance and sale of the common stock and Warrants pursuant to the Securities Purchase Agreements is expected to close concurrently with our merger with Marker.

Basis of Presentation

TapImmune has concluded that the transaction represents a transaction that will be accounted for as an asset acquisition in accordance with FASB ASC 805-50 and FASB ASC 350 as the majority of the fair value of the assets acquired was concentrated in a group of similar assets, and the acquired assets did not have outputs or employees. The assets acquired had not yet received regulatory approval, the \$117.4 million purchase price for Marker's intangible assets will be expensed in the Company's statement of operations on the consummation of the transaction. In addition, the potential milestone payments are not yet considered probable, and no milestone payments have been accrued in this pro forma financial statement at June 30, 2018.

Note 2 — Preliminary purchase price allocation

For pro forma purposes, the fair value of Marker's common shares used in determining the purchase price was \$8.62 per share based on the closing price of TapImmune common shares on the Nasdaq Capital Market on August 31, 2018.

The following is the preliminary estimate of the fair value assets acquired and the liabilities assumed by TapImmune in the merger, reconciled to the purchase price transferred (in thousands):

	<u>Dr (Cr)</u>
Cash and cash equivalents	\$ 77
Accounts payable	(73)
Loan payable to related party	(100)
Research and development expense	117,537
Total consideration	<u>\$117,441</u>

The following table illustrates the effect of change in TapImmune's ordinary shares price and the resulting impact on the estimated total purchase price and estimated and research and development expense (in thousands, except per share amounts):

<u>Change in stock price</u>	<u>Share price</u>	<u>Estimated purchase price</u>	<u>Estimated research and development expense</u>
Increase of 10%	\$ 9.48	\$ 129,185	\$ 129,281
Decrease of 10%	\$ 7.76	\$ 105,697	\$ 105,793
Increase of 20%	\$ 10.34	\$ 140,929	\$ 141,025
Decrease of 20%	\$ 6.90	\$ 93,953	\$ 94,049
Increase of 30%	\$ 11.21	\$ 152,674	\$ 152,770
Decrease of 30%	\$ 6.03	\$ 82,209	\$ 82,305
Increase of 50%	\$ 12.93	\$ 176,162	\$ 176,258
Decrease of 50%	\$ 4.31	\$ 58,721	\$ 58,817

Note 3 — Pro forma adjustments

The pro forma adjustments are based on our preliminary estimates and assumptions that are subject to change. The estimated issuance of shares is based upon a preliminary exchange ratio that will be subject to change as well. The following adjustments have been reflected in the unaudited pro forma condensed combined financial information:

- (a) Represents the issuance of 13,624,271 shares of TapImmune and the issuance of 17,500,000 shares for gross offering proceeds of \$70 million (estimated net proceeds of \$61.1 million) and its effect on the ordinary shares and additional paid in capital accounts (in thousands).

	Common Shares	Additional Paid in Capital
Issuance of 13,624,271 shares	\$13	\$(13)
Issuance of 17,500,000 private placement shares	17	(17)
	\$30	\$(30)

- (b) Represents the elimination of the historical equity of Marker's equity and the initial allocation of excess purchase price to research and development expense, as follows (in thousands):

Total consideration	\$117,441 ^(y)
Common Stock, \$.001 par value	(1)
Additional paid-in-capital	(5,322)
Accumulated deficit	5,419
Research and development expense	<u>\$117,537</u>

(y) Consideration of \$117.4 million represents the market value (\$8.62 per share as of August 31, 2018) on approximately 13.6 million common shares of Marker.

- (c) Reflects an adjustment of approximately \$1.3 million for the estimated transaction costs for both TapImmune and Marker, such as adviser fees, legal and accounting expenses that were not incurred as of June 30, 2018.
- (d) Represents the increase in the weighted average shares due to the issuance of 6,812,136 ordinary shares in connection with the Merger.
- (e) Represents the issuance of 17,500,000 shares for gross offering proceeds of \$70 million (estimated net proceeds of \$61.1 million) in connection with the June 8, 2018 private placement. Each share of common stock will be issued with a warrant to purchase 0.75 additional shares of the Company's common stock at an exercise price of \$5.00 per share for an aggregate of 13,125,000 warrants. We have not assessed the warrant to determine if such warrant should be recorded as a derivative in accordance with ASC Topic 815, *Derivatives and Hedging*.

AUDITOR AND AUDIT COMMITTEE MATTERS**Report of the Audit Committee of the Board of Directors**

The information contained in this report shall not be deemed to be “soliciting material” or to be “filed” with the Securities and Exchange Commission, nor shall such information be incorporated by reference into any future filing under the Securities Act of 1933 or the Securities Exchange Act of 1934, except to the extent that we specifically incorporate it by reference in such filing.

The following is the report of the Audit Committee with respect to our audited financial statements for the fiscal year ended December 31, 2017, and the notes thereto.

Review with Management

The Audit Committee reviewed and discussed with management our audited financial statements for the fiscal year ended December 31, 2017 and the notes thereto. Management represented to the Audit Committee that our financial statements were prepared in accordance with generally accepted accounting principles.

Review and Discussions with Independent Registered Public Accounting Firm

The Audit Committee discussed with Marcum the matters required to be discussed by Auditing Standard No. 1301, Communications with Audit Committees, issued by the Public Company Accounting Oversight Board (“PCAOB”), which includes, among other items, matters related to the conduct of the audit of our financial statements.

The Audit Committee also received and reviewed written disclosures and the letter from Marcum as required by applicable requirements of the PCAOB regarding the independent accountant’s communications with the Audit Committee concerning independence and has discussed with Marcum their independence from us.

Conclusion

Based on the review and discussions referred to above, the Audit Committee recommended to our Board of Directors that our audited financial statements be included in our Annual Report on Form 10-K for the year ended December 31, 2017 for filing with the Securities and Exchange Commission.

Submitted by: THE AUDIT COMMITTEE OF THE BOARD OF DIRECTORS
Sherry Grisewood (Chairwoman)
David Laskow-Pooley
Frederick Wasserman

Fees Paid to the Independent Registered Public Accounting Firm

Marcum LLP served as our independent registered public accounting firm and audited our financial statements for the fiscal years ended December 31, 2017 and December 31, 2016. Aggregate fees for professional services rendered to us by our auditor are set forth below:

	Year Ended December 31, 2017	Year Ended December 31, 2016
Audit Fees	\$ 114,000	\$ 194,800
Audit Related Fees	—	—
Tax Fees	18,000	68,300
All Other Fees	—	—
	<u>\$ 132,000</u>	<u>\$ 263,100</u>

Audit Fees

Audit fees are the aggregate fees billed for professional services rendered by our independent auditors for the audit of our annual financial statements, the review of the financial statements included in each of our quarterly reports and services provided in connection with statutory and regulatory filings or engagements.

Audit-Related Fees

Audit related fees are the aggregate fees billed by our independent auditors for assurance and related services that are reasonably related to the performance of the audit or review of our financial statements and are not described in the preceding category.

Tax Fees

Tax fees are billed by our independent auditors for tax compliance, tax advice and tax planning.

All Other Fees

All other fees include fees billed by our independent auditors for products or services other than as described in the immediately preceding three categories.

Policy on Pre-Approval of Services Performed by Independent Auditors

It is our Audit Committee's policy to pre-approve all audit and permissible non-audit services performed by the independent auditors. The Audit Committee approved all services that our independent accountants provided to us in the past two fiscal years.

CORPORATE GOVERNANCE

Information About the Board of Directors and its Committees

Leadership Structure of the Board of Directors

Our property, affairs and business are under the general management of our board of directors as provided by the laws of the State of Nevada and our bylaws. Our bylaws and corporate governance guidelines do not require that our Chairman and Chief Executive Officer positions be separate but such positions are currently separated between Dr. Wilson as our Chairman and Peter Hoang as our Chief Executive Officer and President.

The board of directors conducts its business through meetings of the full Board and through committees of the board. The board of directors has appointed standing audit, compensation and nominating and governance Committees of the board of directors comprised of independent directors. The independent members of our board meet during board meetings in separate executive session without any member of management present.

The board periodically reviews the size of the board and recommends any changes it determines to be appropriate given our needs. Under our Bylaws, the number of members on the Board may be increased or decreased by resolution of the board.

Independence of Directors

Our common stock is listed on a national securities exchange, the Nasdaq Capital Market. Accordingly, in determining whether our directors are independent, we are required to comply with the rules of the Nasdaq Capital Market. We also expect to continue to comply with securities and other laws and regulations regarding the independence of directors, including those adopted under Section 301 of the Sarbanes-Oxley Act and Rule 10A-3 under the Securities and Exchange Act of 1934 with respect to the independence of Audit Committee members. The Nasdaq Capital Market listing standards define an “independent director” as a person other than an executive officer or employee of the company or any other individual having a relationship which, in the opinion of the issuer’s board of directors, would interfere with the exercise of independent judgement in carrying out the responsibilities of a director. The board has affirmatively determined that each of the following directors, constituting a majority of the board, is independent within the meaning of the Nasdaq Capital Market listing standards:

Sherry Grisewood
David Laskow-Pooley
Mark Reddish
Joshua Silverman
Frederick Wasserman

Such independence definition includes a series of objective tests, including that the director is not an executive officer employee of the company and has not engaged in various types of business dealings with the company. In addition, as further required by the Nasdaq Capital Market listing standards, the board has made a subjective determination as to each independent director that no relationships exist which, in the opinion of the board, would interfere with the exercise of independent judgment in carrying out the responsibilities of a director.

Term of Office

Our directors are appointed for a one-year term to hold office until the next annual meeting of our stockholders or until they resign or are removed from the board in accordance with our bylaws. Our officers are appointed by our board of directors and hold office until they resign or are removed from office by the board of directors.

Code of Ethics and Business Conduct

We have adopted a Code of Ethics and Business Conduct that applies to all directors and officers. The code describes the legal, ethical and regulatory standards that must be followed by our directors and officers and sets forth high standards of business conduct applicable to each director and officer. A copy of the code can be viewed on our website at <http://tapimmune.com/investors/briefcase/>.

Board Composition

Our directors and executive officers and their respective ages as of the date of this annual report are as follows:

<u>Name</u>	<u>Age</u>	<u>Position with TapImmune</u>
Dr. Glynn Wilson	71	Chairman of the Board
Peter L. Hoang	46	President, Chief Executive Officer and a Director
Sherry Grisewood	65	Independent Director
David Laskow-Pooley	63	Independent Director
Mark Reddish	63	Independent Director
Joshua Silverman	47	Independent Director
Frederick Wasserman	63	Independent Director
Michael J. Loiacono	52	Chief Financial Officer and Chief Accounting Officer

Selection of Nominees for the Board of Directors

Our nominating and corporate governance committee will consider candidates recommended by stockholders. To recommend director candidates, stockholders should submit their suggestions in writing to the chairman of the nominating and corporate governance committee, c/o our Secretary, providing the candidate's name, biographical data and other relevant information, together with consent from the suggested candidate to serve on our board of directors if nominated and elected.

Board Committees

Our board of directors has three standing committees — the audit committee, the compensation committee, and the nominating and corporate governance committee. Each of our committees operates pursuant to a written charter which, as in effect from time to time, may be found on our website at www.tapimmune.com. Each of the committees is composed of independent directors, consistent with the independence standards defined by the SEC and NASDAQ. Each committee has the right to retain its own legal and other advisors. Each committee operates under a written charter adopted by the board, which is available at tapimmune.com/investors/briefcase/

The following table reflects the current membership of each board committee:

<u>Name</u>	<u>Committee Membership</u>		
	<u>Audit Committee</u>	<u>Compensation Committee</u>	<u>Nominating and Corporate Governance Committee</u>
Sherry Grisewood	Chair	√	
David Laskow-Pooley	√	Chair	√
Mark Reddish		√	√
Joshua Silverman			
Frederick Wasserman	√		Chair
Glynn Wilson			

Audit Committee

Our board of directors has established an audit committee which functions pursuant to a written charter last amended by our board of directors in July 2016. The audit committee members currently consist of Ms. Sherry Grisewood, Mr. David Laskow-Pooley and Mr. Frederick Wasserman with Ms. Grisewood serving as Chair. The Board has affirmatively determined that each such person met the independence requirements for audit committee purposes based on the more stringent independence standards imposed by applicable Nasdaq Capital Market and SEC rules. In addition, the board of directors has determined that Ms. Grisewood is an “audit committee financial expert” as that term is defined in Item 407(d)(5) of Regulation S-K promulgated under the Securities and Exchange Act of 1934. In March 2004, the Audit Committee adopted a written charter which was modified in November 2015 and amended in July 2016. We believe that its Audit Committee Charter complies with the requirements related to Sarbanes-Oxley. The audit committee met five times during 2017.

The Audit Committee has the sole authority to engage and discharge, review the independence, qualifications, activities and compensation of our independent registered certified public accountants. The audit committee reports to the board the appointment of the independent registered certified public accountants. The audit committee must assure regular rotation of the lead and concurring audit partners. The audit committee is responsible for the oversight of our financial policies, control procedures, accounting staff, and reviews and approves our financial statements. The audit committee is responsible for the review of transactions between us and our officers, directors or entity in which our officers or directors have a material interest. The audit committee must develop and maintain procedures for the submission of complaints and concerns about accounting and auditing matters. The audit committee must assure CEO and CFO certifications meet their obligations by performing a review and evaluation of our disclosure controls and procedures. The audit committee has the authority to engage the services of an outside advisor when required. The audit committee must receive reports from the independent registered certified public accountants on critical accounting policies, significant accounting judgments and estimates, off-balance sheet transactions and non-Generally Accepted Accounting Principles financial measures.

Compensation Committee

Our board of directors has established a compensation committee which functions pursuant to a written charter last amended by our board of directors in July 2016. The members of the compensation committee are David Laskow-Pooley, Mark Reddish and Sherry Grisewood. Mr. Laskow-Pooley serves as chair of the committee. The compensation committee met or acted by written consent once during 2017. The compensation committee is responsible for establishing the compensation of our directors, Chief Executive Officer and all other executive officers, including salaries, bonuses, severance arrangements, and other executive officer benefits. The compensation committee also administers our various incentive and stock option plans and designates both the persons receiving awards and the amounts and terms of the awards.

Nominating and Governance Committee

Our board of directors has established a nominating and corporate governance committee which functions pursuant to a written charter last amended by our board of directors in July 2016. The members of the nominating and corporate governance committee are David Laskow-Pooley, Mark Reddish and Frederick Wasserman. Mr. Wasserman serves as Chair of the nominating and corporate governance committee. The nominating and corporate governance committee met or acted by written consent once during 2017.

The nominating and corporate governance committee has not established specific minimum age, education, and years of business experience or specific types of skills for potential director candidates, but, in general, expects qualified candidates will have ample experience and a proven record of business success and leadership. The nominating and corporate governance committee will consider as candidates for director individuals who possess a high level of ethics, integrity and values, and who are committed to representing the long-term interests of our stockholders. Such candidates must be able to make a significant contribution to the governance of TapImmune by virtue of their business and financial expertise, educational and professional background. The business discipline that may be sought at any given time will

vary depending on the needs and strategic direction of TapImmune, and the disciplines represented by incumbent directors. In evaluating candidates for nomination as a director, the nominating and corporate governance committee will also consider other criteria, including geographical representation, independence, practical wisdom, mature judgment and having sufficient time to devote to the affairs of TapImmune in order to carry out the responsibilities of a director. One or more of our directors is required to possess the education or experience required to qualify as an audit committee financial expert as defined in the applicable rules of the Securities and Exchange Commission. The nominating and corporate governance committee does not have a formal policy with respect to diversity; however, the board of directors and the nominating and corporate governance committee believe that it is essential that the members of the board of directors represent diverse viewpoints and a diverse mix of the specific criteria above. The entire board of directors is polled for suggestions as to individuals meeting the aforementioned criteria. Research may also be performed to identify qualified individuals. To date, we have not engaged third parties to identify or evaluate or assist in identifying potential nominees.

Stockholder Recommendation of Nominees. The board does not currently have a policy with regard to the consideration of any director candidates recommended by stockholders. Given our current size, stage of development, and size of the board, the board believes that it is not currently appropriate to establish a separate policy for stockholders to submit such recommendations. Notwithstanding the lack of a formal policy regarding security holder nominations, the board may from time to time consider candidates proposed for consideration for service on our board by stockholders. The nominating and corporate governance committee will consider qualified director nominees recommended by stockholders when such recommendations are submitted in accordance with applicable law, rule or regulation regarding director nominations. Stockholders may submit candidates for nomination to our board of directors by writing to: Nominating and Governance Committee of the Board of Directors, TapImmune Inc., 5 West Forsyth Street — Suite 200, Jacksonville, FL 32202.

When submitting a nomination to us for consideration, a stockholder must provide certain information about each person whom the stockholder proposes to nominate for election as a director, including: (i) the name, age, business address and residence address of the person; (ii) the principal occupation or employment of the person; (iii) the class or series and number of shares of our capital stock owned beneficially or of record by the person; and (iv) any other information relating to the person that would be required to be disclosed in a proxy statement or other filings required to be made in connection with solicitations of proxies for election of directors pursuant to Section 14 of the Securities Exchange Act of 1934, or the Exchange Act, and the rules and regulations promulgated thereunder. Such notice must be accompanied by the proposed nominee's written consent to be named as a nominee and to serve as a director if elected. The board has not set any specific minimum qualifications that must be met by a nominee presented for consideration to the board by a security holder. A board member may become aware of a potential nominee and present such nominee to the full Board for consideration at a board meeting. The board would evaluate the candidate and determine whether such person should be considered for board service based on a variety of criteria including but not limited to, whether the individual has experience in our industry, potential conflicts, and the person's ability to work with existing Board members and expected contributions. The board would evaluate a nominee submitted by a security holder in the same or similar manner as one recommended by the nominating and corporate governance committee.

Information Regarding Meetings of the Board and Committees

Meetings of the Board of Directors

In 2017, our board of directors met five times. Our board of directors adopted various resolutions pursuant to five unanimous written consents in lieu of a meeting during the year ended December 31, 2017. Five board members attended 100% of the aggregate of (i) meetings of our board of directors during the year and (ii) the total number of meetings of all committees on our board of directors on which the incumbent directors served. One director attended 80% of the aggregate of (i) the meetings of our board of directors during the year and (ii) the total number of meetings of all committees of our board of directors on which the incumbent directors served. Two directors attended one meeting each, which was 100% of the total number of meetings during which the director served, due to one director leaving the board during the year and one director joining the board during the year.

Risk Oversight

Our board of directors oversees our stockholders' and other stakeholders' interest in our long-term health and overall success and financial strength. Risk is inherent with every business, and how well a business manages risk can ultimately determine its success. We face a number of risks, including economic risks, environmental and regulatory risks, and others, such as the impact of competition. Management is responsible for the day-to-day management of risks, while our board of directors, as a whole and through its committees, has the responsibility of satisfying itself that the risk management processes designed and implemented by management are adequate and functioning as designed.

Our board of directors believes that establishing the right "tone at the top" and that full and open communication between management and our board of directors are essential for effective risk management and oversight. Senior management regularly attends board meetings and is available to address any questions or concerns raised by our board on risk management-related and other matters. Our board also holds strategic planning sessions with senior management to discuss strategies, key challenges, and risks and opportunities.

While our entire board of directors is ultimately responsible for risk oversight, our board committees assist our board of directors in fulfilling its oversight responsibilities in certain areas of risk. Our audit committee assists our board in the areas of financial reporting, internal controls and compliance with legal and regulatory requirements and discusses policies with respect to risk assessment and risk management. Risk assessment reports are provided annually by management to our audit committee. Our compensation committee assists our board with respect to the management of risk arising from our compensation policies and programs. Our nominating and corporate governance committee assists our board with respect to the management of risk associated with board organization, membership and structure, succession planning for our directors and executive officers, and corporate governance.

DIRECTOR COMPENSATION

Director Compensation in Fiscal 2017

The following table sets forth information relating to compensation earned or paid to our directors for their services as directors in the fiscal year ended December 31, 2017, and excludes compensation paid to our directors for their services as executive officers:

Director Compensation Table					
Name ⁽¹⁾	Fees Earned or Paid in Cash	Stock Awards ⁽²⁾	Option Awards ⁽²⁾	All Other Compensation	Total
Glynn Wilson ⁽³⁾	—	—	—	—	—
Peter Hoang ⁽³⁾	—	—	—	—	—
Sherry Grisewood	\$ 40,000	\$40,000	—	—	\$80,000
David Laskow-Pooley	\$ 40,000	\$40,000	—	—	\$80,000
Mark Reddish	\$ 40,000	\$40,000	—	—	\$80,000
Joshua Silverman	\$ 40,000	\$40,000	—	—	\$80,000
Frederick Wasserman	\$ 40,000	\$40,000	—	—	\$80,000

- (1) The above table excludes a former director and officer, Dr. John Bonfiglio. Dr. Bonfiglio received no compensation during 2017 as a director.
- (2) As of the end of the year directors Wilson, Hoang, Grisewood, Laskow-Pooley, Reddish, Silverman and Wasserman have aggregate options to acquire 168,167, 0, 12,500, 12,500, 12,875, 12,500, 12,500 and 12,500, respectively and there are no stock awards outstanding for any non-employee director.
- (3) There was no amount paid to Dr. Wilson or Mr. Hoang for their services as directors given their services to us as executive officers. See Summary Compensation Table.

Director Compensation Plan

Employee Directors

The Director compensation program (the “Director Compensation Program”) provides that employee Directors receive no additional compensation in connection with their board service.

Non-employee directors

On March 9, 2017 the board of directors approved changes to the Director Compensation Program for non-employee directors which provided for the following compensation for our non-employee directors:

- An annual retainer of \$80,000, in lieu of any per board or committee meeting fees (including telephonic meetings), or committee chair fees. The annual retainer is payable as follows:
 - (i) half in cash (\$40,000) to be paid in four equal quarterly payments at the end of each calendar quarter, provided such director is still serving as a director, and
 - (ii) half (\$40,000) to be paid in restricted common stock under the 2014 Omnibus Stock Ownership Plan (the “Plan”) at the time of TapImmune’s annual stockholder meeting in which directors are elected, with such shares determined based on the closing price for TapImmune’s shares on the day preceding the annual meeting and which shall be immediately vested. To the extent any per meeting fees were paid in 2017 to our non-employee directors under the prior non-employee director compensation plan, such fees were deducted from the cash portion of the quarterly payments until fully accounted for.

The following components of the Director Compensation Program applicable to non-employee directors remain in place:

- An initial grant upon joining the Board of 12,500 stock options under the TapImmune Plan;
- Reimbursement of reasonable expenses incurred; and
- Eligibility for discretionary awards under the TapImmune Plan.

In connection with the merger and the reconstitution of the board of directors under the merger agreement, three non-employee directors have provided resignations from service on TapImmune's board of directors and committees that will take effect only if the merger is consummated. On July 8, 2018, the TapImmune board of directors, with the consent of Marker, approved the following modifications to the Director Compensation Program as it will apply to the three non-employee directors who will not be continuing to serve on the TapImmune board of directors, or the non-continuing directors, if the merger is consummated:

- with respect to the \$40,000 of the annual retainer payable in cash in four equal quarterly payments at the end of each calendar quarter, to the extent that the closing of the merger occurs in the middle of a calendar quarter, each of the three non-continuing directors shall receive a pro-rated portion of the cash payment for such calendar quarter based on the number of days that each such person served as a director during such quarter;
- with respect to the \$40,000 of the annual retainer to be paid in restricted common stock on the date of the 2018 Annual Meeting, in lieu of receiving such amount of restricted common stock for all of calendar year 2018, each of the three non-continuing directors shall receive a pro-rated portion of the \$40,000 of restricted common stock based on the number of days that each such person served as a director during the calendar year ending December 31, 2018;
- if the merger does not close for any reason, so that the contingent resignations submitted by the non-continuing directors do not become effective, then each of the non-continuing directors will be entitled to receive the shares of restricted common stock that they were otherwise due to receive under the Director Compensation Program for all of calendar year 2018; and
- if the merger closes, the non-continuing directors shall not be due any additional compensation of any nature under the Director Compensation Program, other than the reimbursement of reasonable expenses incurred, except as expressly set forth above.

CERTAIN RELATIONSHIPS AND RELATED PARTY TRANSACTIONS

SEC rules require us to disclose any transaction or currently proposed transaction in which we are a participant and in which any related person has or will have a direct or indirect material interest involving an amount that exceeds the lesser of \$120,000 or one percent (1%) of the average of TapImmune's total assets as of the end of last two completed fiscal years. A related person is any executive officer, director, nominee for director, or holder of 5% or more of TapImmune's common stock, or an immediate family member of any of those persons.

Review and Approval of Related Person Transactions

In order to ensure that material transactions and relationships involving a potential conflict of interest for any of our executive officers or directors are in our best interests, under the Code of Ethics and Business Conduct, or Code of Ethics, adopted by the board of directors for all of our employees and directors, all such conflicts of interest are required to be reported to the audit committee of the board of directors, and the approval of the audit committee must be obtained in advance for us to enter into any such transaction or relationship. Pursuant to the Code of Ethics, none of our officers or employees may, on our behalf, authorize or approve any transaction or relationship, or enter into any agreement, in which such officer, director or any member of his or her immediate family, may have a personal interest without such audit committee approval. Further, none of our officers or employees may, on our behalf, authorize or approve any transaction or relationship, or enter into any agreement, if they are aware that one of our executive officers or directors, or any member of any such person's family, may have a personal interest in such transaction or relationship, without such audit committee approval.

Our audit committee reviews all conflict of interest transactions involving our executive officers and directors, pursuant to its charter.

In the course of their review of a related party transaction, the Audit Committee considers:

- the nature of the related person's interest in the transaction;
- the material terms of the transaction, including, without limitation, the amount and type of transaction;
- the importance of the transaction to us;
- the importance of the transaction to the related person;
- whether the transaction would impair the judgment of the director or executive officer to act in our best interests; and
- any other matters the audit committee deems appropriate.

Any member of the audit committee who has a conflict of interest with respect to a transaction under review may not participate in the deliberations or vote respecting approval of the transaction, provided, however, that such director may be counted in determining the presence of a quorum.

Institutional Investor-Transactions

TapImmune has several institutional investors, who currently beneficially own in excess of five percent (5%) of our current outstanding stock. The institutional investors have participated in TapImmune's financings in 2016 and 2017 as follows:

2016 Private Placement-Warrant Exercise-Warrant Restructuring.

2016 Private Placement

In August 2016, TapImmune completed a private placement of units with certain accredited investors. The units consisted of (i) one share of the TapImmune's common stock, par value \$0.001 per share and (ii) one five-year warrant to purchase one share of TapImmune common stock for \$6.00. TapImmune issued and sold an aggregate of 520,833 units at a purchase price per unit of \$4.80 for an aggregate of \$2.5 million.

Warrant Exercises

Simultaneously with the closing of the 2016 private placement, holders of an aggregate of 583,333 outstanding Series C Warrants and 416,666 Series C-1 Warrants, each providing for the purchase of one share of Company common stock for \$6.00 per share, entered into binding commitments to exercise their warrants for an aggregate exercise price of \$6.0 million.

Warrant Restructuring

Simultaneous with the closing of the 2016 private placement, TapImmune and holders of an aggregate of 3,096,665 outstanding Series A Warrants, Series A-1 Warrants, Series C Warrants, Series C-1 Warrants, Series D Warrants, Series D-1 Warrants, Series E Warrants and Series E-1 Warrants entered into Warrant Amendment Agreements, in which they agreed to amend the terms of the outstanding series warrants to remove provisions from the outstanding series warrants that had previously caused them to be classified as a derivative liability as opposed to equity. In consideration for such amendment and the exercise of the Series C Warrants and Series C-1 Warrants, TapImmune issued an aggregate of 750,000 additional shares of common stock to such warrant holders and new five-year warrants, the Series F Warrants, to purchase 1,000,000 shares of Company common stock at an exercise price of \$7.20 per share.

2017 Private Placement-Warrant Exercises and Repricings***Private Placement Transaction***

In June 2017, TapImmune entered into subscription agreements with certain accredited investors relating to a private placement of units, or the 2017 private placement. In the private placement transaction, TapImmune issued 1,503,491 shares of common stock for \$3.97 per share and issued five-year warrants to purchase an equal number of shares of common stock, at an exercise price of \$3.97 per share, for \$0.125 per PIPE Warrant, with one common share and one PIPE Warrant being sold together as a unit for a total of \$4.095 per Unit.

In connection with the 2017 private placement, TapImmune agreed that investors who purchase units in the 2017 private placement and who also purchased units in the private placement that closed in August 2016 (which units included warrants to purchase common stock at \$6.00 per share) could have the exercise price for their warrants issued in that transaction reduced from \$6.00 per share to \$3.97 per share upon payment to TapImmune of \$0.125 for each share subject to the investor's 2016 warrant. Investors in the 2017 private placement paid such amount with respect to their 2016 warrants to purchase an aggregate of 265,573 shares of common stock. The warrants to purchase an aggregate of 387,614 shares of common stock that were issued to all of the other investors in the 2016 private placement transaction (those who did not participate in the 2017 private placement) had the exercise price reduced from \$6.00 per share to \$3.97 per share without the payment of any additional consideration.

Exercise and Repricing of Warrants Held by Existing Institutional Investors

In June 2017, certain existing institutional stockholders of TapImmune who hold various outstanding warrants to purchase Company common stock, entered into warrant exercise agreements, in which TapImmune agreed to reduce the exercise price for a portion of the investors' existing Series E warrants from \$15.00 per share to \$3.97 per share, provided that the investors exercise such portion of the warrants immediately. Pursuant to the warrant exercise agreements, such warrant holders agreed to exercise Series E warrants to purchase an aggregate of 167,926 shares of TapImmune common stock for aggregate gross proceeds of approximately \$666,666, with the exercise price for 75% of the remainder of the investors' Series E warrants to purchase 186,555 shares of TapImmune common stock being reduced from \$15.00 per share to \$4.50 per share. The remaining 25% of such investors' Series E warrants to purchase an aggregate of 62,185 shares of TapImmune common stock retained their current exercise price. Additionally, the exercise prices for 75% of such investors' Series C, Series D and Series F warrants were reduced to \$4.00 per share from their current exercise prices of: \$6.00 per share for Series C warrants (for 313,750 shares out of a total of 418,333 shares subject to their Series C warrants); \$9.00 per share for Series D warrants (for 312,500 shares out of a total of 416,666 shares subject to their Series D warrants); and \$7.20 per share for Series F warrants (for 292,500 shares out of a total of 390,000 shares subject to their Series F warrants). The remainder of the investors' Series C, Series D and Series F warrants retained their current exercise prices.

2018 Private Placement-Stock Purchase Agreement

On May 18, 2018, TapImmune closed on the sale of 1,300,000 shares of common stock for \$2.40 per share pursuant to a Common Stock Purchase Agreement with an existing accredited investor in a private placement under Rule 506 of Regulation D pursuant to the terms of a common stock purchase agreement. Aggregate gross proceeds were approximately \$3.1 million.

2018 Private Placement-Warrant Exercise

On May 18, 2018, TapImmune and certain existing institutional investors, who are holders of various warrants to purchase shares of TapImmune common stock, closed on warrant exercise agreements in which TapImmune agreed to reduce the exercise price for a portion of the investors' previously purchased Series C, Series D, Series E and Series F warrants from \$6.00, \$9.00, \$15.00 and \$7.20, respectively per share to \$2.50 per share, provided that the investors exercise such warrants for cash immediately, which they did, for 782,506 shares and aggregate proceeds of approximately \$2.0 million. The shares of common stock underlying the exercised warrants are registered for resale under the Form S-3 Registration Statement (File no. 333-220538) declared effective by the SEC on December 29, 2017.

Promissory Note-Officer

TapImmune had an outstanding promissory note in the amount of \$23,000 owed to Dr. Glynn Wilson, currently strategic advisor and Chairman of TapImmune. The promissory note bore no interest charges and had no fixed repayment terms. During the year ended December 31, 2016, the note was paid in full.

Employment of Executive Officer Family Member

Effective July 16, 2018, TapImmune hired Tsvetelina Pencheva Hoang, Ph.D. as Vice President of Research and Development at a salary of \$225,000. Dr. Hoang is the spouse of Mr. Hoang, our Chief Executive Officer and President. Since this was a related party transaction, the audit committee has reviewed and approved the hiring of Dr. Hoang at a meeting on July 9, 2018 subject to the approval of Marker, as required by the merger agreement. Marker has provided this approval.

Repayment of Merger Transaction Expenses

In connection with the pending consummation of the Merger, should the proposals be approved for the same, Mr. John Wilson will join our board of directors and will be reimbursed amounts Mr. Wilson loaned to Marker for expenses of Marker in connection with the merger. Such amounts are not expected to exceed \$120,000.

COMPENSATION DISCUSSION AND ANALYSIS

2017 Executive Compensation

For the fiscal year ended December 31, 2017, the principal components of compensation for our executive officers were:

- Annual base salary;
- Bonus;
- Stock Awards;
- Option Awards; and
- Other benefits.

Annual Base Salary

Base salary is designed to attract and retain experienced executive officers who can drive the achievement of our goals. While the initial base salary for our executive officers was determined by an assessment based upon the responsibilities of the position, the expected contribution of the position to our business, the experience and skill required for the position, and competition in the marketplace for the talent; the factors used in determining increases in base salary include individual performance, changes in role and/or responsibility and changes in the competitive market environment. The compensation committee periodically reviews the base salary for each executive officer.

Bonus

TapImmune awarded discretionary bonuses to the named executive officers during 2017. TapImmune expects to establish a bonus plan for the executive officers for 2018 and executive officers and employees may also be considered for discretionary bonuses by the compensation committee and recommended at the discretion of the compensation committee for approval by our board of directors.

Long-Term Equity Incentive Compensation

TapImmune awards long-term equity incentive awards to executive officers, including the named executive officers, as part of a total compensation package. These awards are consistent with our pay for performance principles and align the interests of the executive officers to the interests of our stockholders. The compensation committee reviews and approves the amount of each award to be granted to each named executive officer. Long-term equity incentive awards are made pursuant to the 2014 Omnibus Stock Ownership Plan.

Our long-term equity incentives are currently in the form of options to acquire our common stock. Stock option awards provide our executive officers with the right to purchase shares of its common stock at a fixed exercise price for a period of up to ten years under the 2014 Omnibus Stock Ownership Plan. Stock options are granted under the 2014 Omnibus Stock Ownership Plan at a price not less than the prevailing market value at the time of grant and will have realizable value only if our stock price increases. Stock options are earned on the basis of continued service to TapImmune and generally vest over a number of years or based upon other specific performance based criteria.

Our long-term equity incentives also can be in the form of restricted share awards of our common stock under the 2014 Omnibus Stock Ownership Plan. Restricted stock awards provide our executive officers with the shares of our common stock subject to certain restrictions and/or vesting requirements. Restricted stock shares will be earned on the basis of continued service to TapImmune and will vest as set forth in the separate award agreements.

The compensation committee determines the amount and features of the stock options and/or restricted stock, if any, to be awarded to executive officers. The compensation committee evaluates a number of criteria, including the past service of each such executive officer to TapImmune, the present and potential contributions of such executive officer to our success and such other factors as the compensation

committee shall deem relevant in connection with accomplishing the purposes of the 2014 Omnibus Stock Ownership Plan, including the executive officer's current stock holdings, years of service, position with TapImmune and other factors. The compensation committee does not expect to apply a formula assigning specific weights to any of these factors when making its determination.

Other Benefits

Retirement Benefits. We do not currently have any retirement plan in place for our executive officers or employees.

Health and Welfare Benefits. All full-time employees, including our named executive officers, may participate in our health and welfare benefit programs, including medical, dental and vision care coverage as may be provided and applicable to all employees.

Perquisites. Because we provide limited perquisites to our executive officers, we do not believe these perquisites and other personal benefits constitute a material component of the executive officers' compensation packages.

Employment Agreements

During 2017, we had employment agreements in effect with Mr. Peter Hoang, Dr. Glynn Wilson and Mr. Michael J. Loiacono. We amended the employment agreement with Dr. Wilson to provide for a change in his role from President and Chief Executive Officer to a strategic advisor. See "*Employment Agreements*". We entered into employment agreements with these officers to ensure that they would perform their respective roles with the TapImmune for an extended period of time. In addition, we also considered the critical nature of each of their positions and our need to retain them when we committed to these agreements. See "*Employment Contracts and Change in Control Arrangements*" below.

2017 Bonus Plan

On July 6, 2017, the board of directors approved the 2017 bonus program for Dr. Wilson and Mr. Loiacono as recommended by the compensation committee. Under such bonus program, Dr. Wilson and Mr. Loiacono were eligible for bonuses of up to \$102,500 and \$60,000, respectively, equaling up to 50% and 30%, of their respective base salaries, each a bonus target.

The bonuses payable to Dr. Wilson were to be based upon the achievement of the following objectives:

- (i) up to 40% of the bonus target for meeting scientific, technical and clinical objectives;
- (ii) up to 20% of the bonus target for financial performance and corporate objectives related to our raising capital; and
- (iii) up to 40% of the bonus target designated to be discretionary as determined by the board.

The bonuses payable to Mr. Loiacono were to be based upon the achievement of the following objectives:

- (i) up to 33.3% of the bonus target for meeting corporate and operational objectives;
- (ii) up to 33.3% of the bonus target for financial performance objectives including related to our raising capital; and
- (iii) up to 33.3% of the bonus target designated to be discretionary as determined by the board.

The bonuses were to be paid in a combination of cash and common stock at the discretion of the compensation committee.

Because Mr. Hoang joined TapImmune in September 2017, his employment agreement with us provided that any bonus for 2017 would be at the discretion of the board.

Compensation Practices and Risk

Overview of Compensation Program

The compensation committee of our board of directors is responsible for establishing and evaluating our policies governing the compensation of our executive officers, including our named executive officers. The compensation committee reviews and proposes recommendations to the board of directors regarding the compensation to be paid to the Chief Executive Officer. In addition, the compensation committee reviews and approves the compensation to be paid to all other executive officers. The compensation committee ensures that the total compensation paid to our executive officers is fair, reasonable and competitive.

Compensation Objective

Our executive compensation programs are designed to achieve the following objectives:

- Attract and retain talented and experienced executive officers;
- Motivate and reward executive officers whose knowledge, skills, performance and business relationships are critical to our success;
- Align the interests of our executive officers and stockholders by motivating executive officers to ultimately increase stockholder value;
- Compensate our executive officers to manage our business to meet our short term and long-range goals;
- Ensure fairness among the executive officers by recognizing the contributions each executive officer makes to our success; and
- Provide a competitive compensation package which includes some pay for performance factors.

Role of Others in Compensation Decisions

The compensation committee makes all of the decisions with respect to the compensation received by our executive officers other than our chief executive officer which the compensation committee reviews and proposes recommendations to the board of directors. The compensation committee meets outside the presence of all of our executive officers to consider appropriate compensation recommendations for our chief executive officer. For all other executive officers, the compensation committee meets outside the presence of all executive officers except for our chief executive officer. Our chief executive officer periodically reviews each of the other executive officers' performance with the compensation committee and makes recommendations to the compensation committee with respect to any appropriate changes in base salary, bonus and grants of long-term equity incentive awards for the executive officers, excluding himself. Based in part on these recommendations and other considerations, the compensation committee reviews and approves such compensation arrangements of our executive officers other than our chief executive officer. The compensation committee also annually analyzes the chief executive officer's performance and determines his salary, annual cash bonus and grants of long-term equity incentive awards and makes recommendations to the board of directors. The compensation committee reviews and makes recommendations to the board of directors regarding all new equity related incentive plans for senior management.

Consideration of Stockholder Advisory Vote on Executive Compensation

The compensation committee also expects to consider the results of our stockholder advisory vote on executive compensation. The board of directors determined that stockholder advisory votes on executive compensation will be submitted to stockholders of TapImmune annually until the next required advisory vote on the frequency of conducting advisory votes on executive compensation.

Clawback Policy

In order to further align management's interests with those of stockholders and to support our governance practices, the board of directors adopted a recoupment policy applicable to annual bonuses and other short-term and long-term incentive compensation based on financial targets, or incentive compensation, received by current and former executive officers of TapImmune and such other senior executives/employees of TapImmune who may from time to time be deemed subject to the policy by the board of directors, or covered executive. The policy provides that if, as a result of a restatement of our financial statements due to our material noncompliance with any financial reporting requirement under the securities laws, a covered executive received more incentive compensation than the covered executive would have received absent the incorrect financial statements, TapImmune shall recover said excess incentive compensation (defined as the excess of (i) the actual amount of incentive compensation paid to the covered executive over (ii) the incentive compensation that would have been paid based on the restated financial results during the three-year period preceding the date on which TapImmune is required to prepare such restatement). The policy also provides that if the board of directors makes a determination in its sole discretion that a Covered Executive engaged in misconduct (as defined below), the board of directors may require reimbursement or forfeiture of all or part of the incentive compensation received by the covered executive. The board of directors may use its judgment in determining the amount to be recovered. Misconduct is defined as (i) conviction of a felony, (ii) material breach of any agreement with TapImmune, (iii) material breach of any TapImmune policy or code, (iv) act of theft, embezzlement or fraud, (v) misrepresentation or misstatement of financial or performance results, and (vi) any other act or event that the board of directors has determined that recoupment is appropriate.

2017 Compensation Decisions

We believe that the total compensation paid to our named executive officers for the fiscal year ended December 31, 2017 achieved the overall objectives of our executive compensation program. In accordance with our overall objectives, we believe executive compensation for 2017 was competitive with other similarly-sized companies. The compensation committee took the following key compensation actions in 2017:

Determination of Annual Base Salaries:

The compensation committee did not authorize, recommend or approve any changes in the annual base salaries for any of TapImmune's named executive officers during 2017, except Dr. Wilson's annual base salary was reduced in connection with the amendment to his employment agreement.

Determination of Equity Awards:

During the year ended December 31, 2017, we made equity awards to certain of our named executive officers. See "*Summary Compensation Table*" below.

Determination of Bonuses:

The Compensation Committee awarded discretionary bonuses for 2017 to the named executive officers pursuant to the terms of their employment agreements. The bonuses awarded to our named executive officers were paid in cash and immediately vested shares of our common stock issued under our 2014 Omnibus Stock Ownership Plan. See "*Summary Compensation Table*" below:

Summary Compensation Table

The following table sets forth the compensation earned by our executive officers for their services as executive officers during our fiscal years ended December 31, 2017 and December 31, 2016:

Summary Compensation Table							
Name and Principal Position	Year	Salary (\$)	Bonus (\$)	Stock Awards (\$)	Option Awards (\$)	All Other Compensation (\$)	Total (\$)
Peter Hoang ⁽¹⁾ <i>CEO and Principal Executive Officer</i>	2017	90,625	11,300	795,000	—	—	896,925
Glynn Wilson ⁽²⁾ <i>Strategic Advisor, Former CEO and Principal Executive Officer</i>	2017	261,340	25,600	318,000	—	—	604,940
	2016	276,200	110,000	191,000	—	49,200	626,400
Michael J. Loiacono ⁽³⁾ <i>Chief Financial Officer, Chief Accounting Officer and Principal Accounting Officer</i>	2017	200,000	30,000	—	—	—	230,000
	2016	66,900	10,000	—	308,700	21,600	407,200

- (1) Mr. Hoang became TapImmune's Chief Executive Officer and President on September 22, 2017 and entered into an employment agreement. See "Employment Agreements" below. The salary for Mr. Hoang reflects the portion of the year he served us in the capacity as an officer from the time his employment became effective. The stock award represents the fair market value of an award of 250,000 shares under the TapImmune Plan (based upon the fair value of \$3.18 per share on the date of issuance) issued to Mr. Hoang upon commencement of his employment pursuant to the terms of his employment agreement.
- (2) The amount reflected as salary paid to Dr. Wilson during 2017 was paid pursuant to the terms of the employment agreement with Dr. Wilson, (as amended on September 2017) when Dr. Wilson transitioned to a strategic advisor role and Mr. Hoang became TapImmune's Chief Executive Officer and President. See "Employment Agreements". At the time of the amendment, Dr. Wilson was issued 110,000 shares of common stock that vested immediately under the TapImmune Plan and the amount in the table reflects the fair value of the award on the date of issuance based on \$3.18 per share.
- (3) The amount reflected as salary in the table for to Mr. Loiacono during 2017 was based upon the terms of his employment agreement. See "Employment Agreements."

The amounts represent fees paid or accrued by us to the executive officers during the past year pursuant to various employment agreements, as between us and the executive officers, which are described below. Our executive officers are also reimbursed for any out-of-pocket expenses incurred in connection with corporate duties. We presently have no pension, annuity, life insurance, profit sharing or similar benefit plans.

Executive Officers and Key Employees

We are led by a team of executives that are chosen by the board of directors. Currently, we have two executive officers, set forth below is biographical information for executive officers and certain identified key employees.

Peter L. Hoang, President and Chief Executive Officer.

Mr. Hoang's biography is included above under Proposal 6 "Election of Directors".

Michael J. Loiacono, Chief Financial Officer

Mr. Loiacono has served as our Chief Financial Officer, Secretary and Treasurer since August 25, 2016. Prior to joining us as our Chief Financial Officer, Mr. Loiacono was responsible for the company's strategic development to include new products and services, new market penetration and maximizing gross

and net revenues at FCTI, Inc. Between 2006 and 2013, Mr. Loiacono served as Chief Financial Officer of Global Access Corp, a publicly-traded company until it was acquired by FCTI, Inc. At Global Access, Michael oversaw the overall financial strategy of the company, including capital raises, mergers & acquisitions, corporate finance, treasury, financial planning and analysis, accounting, investor relations, external auditing and was responsible for Global Access' corporate strategy function. Prior to FCTI/Global Access, Michael held various positions of increasing responsibility in finance management through several private and publicly-traded organizations. Michael attended Rutgers University, Business School where he received his B.S. degree.

Michael J. Loiacono has more than 25 years of financial management experience, which includes public company services as a chief financial officer.

Outstanding Equity Awards

The following table sets forth information as at December 31, 2017 relating to outstanding equity awards for each named executive officer:

Outstanding Equity Awards at Year End Table ⁽³⁾					
Name	Number of Securities Underlying Unexercised Options (exercisable)	Number of Securities Underlying Unexercised Options (unexercisable)	Number of Securities Underlying Unexercised Unearned Options	Option Exercise Price	Option Expiration Date
Glynn Wilson	166,667	—	—	\$ 7.26	12/11/2025
<i>Strategic Advisor</i>	1,333 ⁽¹⁾	—	—	\$204.00 ⁽²⁾	10/14/2019
	133 ⁽¹⁾	—	—	\$204.00 ⁽²⁾	2/16/2021
Michael J. Loiacono	27,546	26,621	—	\$ 5.70	8/25/2026
<i>Chief Financial Officer; Chief Accounting Officer and Principal Accounting Officer</i>					

- (1) The plan under which these shares were issued was approved by the board of directors and the stockholders in 2009 but did not come into effect until February 22, 2010.
- (2) Effective February 16, 2011, the option exercise price was reduced to \$204.00.
- (3) Share amounts reflected in this table have been adjusted to reflect the one for twelve reverse split that occurred on September 15, 2016, unless such share awards occurred after the date of the reverse split.

Employment Contracts and Change of Control

Employment Agreements

Peter Hoang

TapImmune and Mr. Hoang entered into an Employment Agreement on September 22, 2017 pursuant to which Mr. Hoang agreed to serve as TapImmune's President and Chief Executive Officer and which provides that Mr. Hoang's base salary will be \$362,500 per year. The term of the agreement is for three years and will be automatically extended for an additional 12 months unless terminated by Mr. Hoang or TapImmune.

In connection with the execution of Mr. Hoang's employment agreement he will be granted 250,000 shares of restricted stock, all of which immediately vested under the TapImmune Plan. Additionally, on the first anniversary of his employment agreement, Mr. Hoang shall, subject to certain conditions, be eligible to receive a grant of stock options to purchase the number of shares equal to one percent (1%) of the then-outstanding common stock of TapImmune under the TapImmune Plan at an exercise price equal to the fair market value of the common stock at the time of such grant, provided that certain requirements are satisfied. The options granted, if made, shall be immediately vested. In addition, on the second and third anniversaries of the employment agreement, Mr. Hoang shall, subject to certain conditions, be eligible to

receive, on each such date, an additional grant of stock options to purchase the number of shares equal to one percent (1%) of the then-outstanding common stock of TapImmune under the TapImmune Plan at an exercise price equal to the fair market value of the common stock at the time of such grant, provided that certain requirements are satisfied. These options if made, shall be subject to such further vesting conditions, including performance criteria, as mutually agreed to by Mr. Hoang and the board.

Dr. Glynn Wilson

Dr. Glynn Wilson has been a longstanding executive of TapImmune and was appointed as TapImmune's Executive Chairman on July 1, 2009. TapImmune and Dr. Wilson entered into a new employment agreement on November 12, 2015, which was subsequently amended on July 18, 2016 and September 22, 2017. As a result of the most recent amendment where Dr. Wilson transitioned the role of President and Chief Executive Officer to Mr. Peter Hoang on September 22, 2017, Dr. Wilson agreed to serve as TapImmune's Strategic Advisor until December 31, 2018. The amended employment agreement provided that Dr. Wilson's annual base salary is \$205,000. In connection with entering into the September 22, 2017 amendment, Dr. Wilson received equity awards under our Plan consisting of an award of 100,000 shares of unregistered common stock, which immediately vested. In addition, upon the first anniversary of the execution of September 22, 2017 amendment, Dr. Wilson will be eligible to receive, subject to certain conditions, an additional grant of restricted common stock equal to \$300,000.

Michael Loiacono

On August 25, 2016, TapImmune entered into an Employment Agreement with Michael Loiacono, which provides that Mr. Loiacono's base salary will be \$200,000 per year. Pursuant to that agreement, Mr. Loiacono agreed to serve as our Chief Financial Officer and Chief Accounting Officer. The term of the agreement is for two years and will be automatically extended for an additional 12 months prior to the end of the term, or no later than ninety (90) days prior to the end of any such successive 12-month term unless terminated by Mr. Loiacono or TapImmune.

In connection with the execution of Mr. Loiacono's employment agreement, he was granted equity awards under the TapImmune Plan consisting of stock options to purchase 54,167 shares of TapImmune common stock at an exercise price of \$5.70 per share equal to the fair market value of the common stock on the day immediately preceding the execution of the employment agreement, with 6,250 shares vesting immediately and the remaining shares vesting in 36 equal monthly installments of 1,331 shares on the last day of each of the 36 months following the grant date.

Similar Employment Agreement Terms of Named Executive Officers

Each of the named executive officers is eligible to receive an annual performance bonus of up to 50% of their base salary payable in immediately vested shares of common stock or cash at the board's discretion. In addition, each of the named executive officers is eligible to participate in TapImmune's benefit plans, and is entitled to vacation, sick leave and reimbursement of appropriate business expenses.

If a named executive officer's employment is terminated by us for Cause (as defined in their respective employment agreements) or by a named executive officer during the term of the agreement, he will be entitled to receive his accrued compensation of (i) then-current annual base salary through the date of termination; (ii) any reimbursable expenses for which he has not yet been reimbursed as of the date of termination; and (iii) any other rights and vested benefits (if any) provided under employee benefit plans and programs of TapImmune, determined in accordance with the applicable terms and provisions of such plans and programs.

If a named executive officer's employment is terminated by us without "Cause" or by him for "Good Reason" (as defined in their respective employment agreements), subject to his execution of a release of claims against us, and in addition to the payment of the accrued compensation, TapImmune is obligated to make additional severance payments to such named executive officer within 60 days after his termination date equal to 2/3 (in the case of Dr. Wilson), twelve months (in the case of Mr. Hoang) or six months (in the case of Mr. Loiacono) of his annual base salary, as in effect at the termination date, plus any earned but unpaid bonus.

Upon a non-renewal of Mr. Hoang's employment agreement by TapImmune at the end of the term, Mr. Hoang will be entitled to be paid 12 months of his annual base salary over a twelve-month period.

The employment agreements of the named executive officers also contain change in control provisions providing that if the named executive officers' employment with TapImmune is terminated by TapImmune without Cause or by them for Good Reason (in the case of Dr. Wilson, Mr. Hoang and Mr. Loiacono) during the period of ninety (90) days (in the case of Dr. Wilson and Mr. Loiacono) or six months (in the case of Mr. Hoang) following a Change in Control (as that term is defined below) of TapImmune, in lieu of the additional severance payments described above, the named executive officers will be entitled to receive a severance payment equal to the sum of (i) 2/3 of (in the case of Dr. Wilson), eighteen (18) months of (in the case of Mr. Hoang), eight (8) months of (in the case of Mr. Loiacono) their respective annual base salary, at the higher of the base salary rate in effect on the date of termination or the base salary rate in effect immediately before the effective date of the Change of Control (in the case of Dr. Wilson, Mr. Hoang and Mr. Loiacono), and (ii) their performance bonus for the year which includes the effective date of the Change in Control, payable at the target level of performance, which will be paid in a single lump sum after his execution and non-revocation of the release (in the case of Dr. Wilson, Mr. Hoang and Mr. Loiacono). In addition, they will also receive in the same payment the amount of any performance bonus that, as of the date of termination, has been earned by the named executive officers but has not yet been paid by TapImmune (in the case of Dr. Wilson, Mr. Hoang and Mr. Loiacono). If the named executive officers hold any stock options or other stock awards granted under the TapImmune Plan which are not fully vested at the time their employment with TapImmune is terminated by TapImmune without Cause during the period of ninety (90) days (in the case of Dr. Wilson, and Mr. Loiacono) or six months (in the case of Mr. Hoang) following a Change in Control, such equity awards shall become fully vested as of the termination date. For purposes of the employment agreement, the term "Change in Control" means a transaction or series of transactions which constitutes a sale of control of TapImmune, a change in effective control of TapImmune, or a sale of all or substantially all of the assets of TapImmune, or a transaction which qualifies as a "change in ownership" or "change in effective control" of TapImmune or a "change in ownership of substantially all of the assets" of TapImmune under the standards set forth in Treasury Regulation section 1.409A-3(i)(5) (in the case of Dr. Wilson, Mr. Hoang and Mr. Loiacono).

The named executive officer employment agreements contain customary covenants regarding confidentiality and works for hire. During their employment term and for a period of 12 months thereafter, Dr. Wilson, Mr. Hoang and Mr. Loiacono covenant not to compete with us and not to solicit any of our customers, vendors or employees.

Dr. Wilson, Mr. Hoang's and Mr. Loiacono's employment agreements also provide that each of the payments and benefits under the agreements are subject to compliance with Section 409A of the Code and it includes time of payment language intended to comply with Section 409A requirements.

The foregoing summary of the employment agreements of our named executive officers is qualified in its entirety by the specific terms of the employment agreements of the named executive officers previously filed with the SEC which are incorporated herein by reference.

**SECURITY OWNERSHIP OF PRINCIPAL STOCKHOLDERS
AND MANAGEMENT OF TAPIMMUNE**

The following table sets forth the amount and percentage of the outstanding shares of TapImmune common stock, which, according to the information supplied to TapImmune, are beneficially owned by (i) each person known by TapImmune to be the beneficial owner of more than 5% of outstanding shares of TapImmune common stock, (ii) each director and nominee for director, (iii) each of TapImmune's named executive officers and (iv) all current directors and executive officers as a group. Unless otherwise indicated, the address for each of the stockholders in the table below is c/o TapImmune Inc., 5 W. Forsyth Street, Suite 200, Jacksonville, FL 32202. Except for information based on Schedules 13G and 13D, as indicated in the footnotes, beneficial ownership is stated as of August 21, 2018.

The number of shares beneficially owned by each entity, person, director, executive officer or selling stockholder is determined in accordance with the rules of the SEC, and the information is not necessarily indicative of beneficial ownership for any other purpose. Under such rules, beneficial ownership includes any shares over which the individual has sole or shared voting power or investment power as well as any shares that the individual has the right to acquire within 60 days of August 21, 2018 through the exercise of any stock option, warrants or other rights. Except as otherwise indicated, and subject to applicable community property laws, the persons named in the table have sole voting and investment power with respect to all shares of common stock held by that person.

The percentage of shares beneficially owned is based on 13,710,544 shares of TapImmune common stock outstanding as of August 21, 2018. Shares of TapImmune common stock subject to options that are currently vested or exercisable or that will become vested or exercisable within 60 days after August 21, 2018, are deemed to be beneficially owned by the person holding such options for the purpose of computing the percentage of ownership of such person but are not treated as outstanding for the purpose of computing the percentage of any other person.

The following table specifically excludes all of the common stock issuable on the exercise of the warrants as a result of there being a 4.99% equity blocker which prevents the holders of the warrants from exercising the warrants for common stock if such conversion or exercise would result in such holder's ownership at any given time exceeding 4.99% of TapImmune's outstanding common stock (which blocker may be waived by the holder upon 60 days' prior notice to TapImmune).

NAME OF BENEFICIAL OWNER	Total Beneficial Ownership ⁽¹⁾	Percentage of TapImmune Common Stock Beneficially Owned	After Giving Effect to the Merger Percentage of Common Stock Beneficially Owned ⁽²⁾
5% and Greater Stockholders			
Eastern Capital Limited ⁽³⁾	5,300,000	34.5%	11.4%
Executive Officers and Directors			
Peter L Hoang, Chief Executive Officer, President and Director ⁽⁴⁾	179,711	1.3%	*
David Laskow-Pooley Director ⁽⁵⁾	25,615	*	*
Frederick Wasserman, Director ⁽⁶⁾	25,615	*	*
Mark Reddish, Director ⁽⁷⁾⁽¹¹⁾	44,879	*	*
Sherry Grisewood, Director ⁽⁸⁾⁽¹¹⁾	27,985	*	*
Joshua Silverman, Director ⁽⁹⁾⁽¹¹⁾	394,515	2.8%	*
Dr. Glynn Wilson, Chairman ⁽¹⁰⁾⁽¹¹⁾	326,350	2.4%	*
Michael J. Loiacono, Chief Financial Officer ⁽¹²⁾	35,532	*	*
All executive officers and directors as a group (8 persons)	1,060,202	7.5%	2.3%

* Less than one percent (1%)

- (1) Under Rule 13d-3, a beneficial owner of a security includes any person who, directly or indirectly, through any contract, arrangement, understanding, relationship, or otherwise has or shares: (i) voting power, which includes the power to vote, or to direct the voting of shares; and (ii) investment power, which includes the power to dispose or direct the disposition of shares. Certain shares may be deemed to be beneficially owned by more than one person (if, for example, persons share the power to vote or the power to dispose of the shares). In addition, shares are deemed to be beneficially owned by a person if the person has the right to acquire the shares (for example, upon exercise of an option) within 60 days of the date as of which the information is provided. In computing the percentage ownership of any person, the amount of shares outstanding is deemed to include the amount of shares beneficially owned by such person (and only such person) by reason of these acquisition rights except with respect to the securities purchase agreements entered into with investors in connection with, and conditioned upon, the merger and the merger consideration which is conditioned upon the vote of our stockholders at the 2018 Annual Meeting. As a result, the percentage of outstanding shares of any person as shown in this table does not necessarily reflect the person's actual ownership or voting power with respect to the number of shares of common stock actually outstanding as of August 21, 2018.
- (2) The percentage ownership of each such person immediately upon the consummation of the merger is based on 44,921,088 common shares outstanding consisting of (i) 27,421,088 shares of common stock of the combined company assumed to be outstanding upon the consummation of the merger, assuming the merger had closed on August 21, 2018, and (ii) 17,500,000 shares of common stock to be issued in connection with TapImmune's contemplated private placement transaction occurring contemporaneously with the merger.
- (3) All information is based upon the Schedule 13D/A jointly filed with the Securities and Exchange Commission by Eastern Capital Limited, Portfolio Services LTD. and Kenneth B. Dart, on May 16, 2018. Eastern Capital Limited beneficially owns 3,633,333 shares of Common Stock and 1,666,667 shares of Common Stock issuable upon exercise of the Series A-1 Warrant, Series D-1 Warrant, Series E-1 Warrant or the Series F-1 Warrant. Eastern Capital Limited has shared voting and dispositive power of the shares it beneficially owns with its parent, Portfolio Services Ltd. and Kenneth B. Dart. All warrants are subject to a limit of exercise to the extent (and only to the extent) that Eastern Capital Limited or any of its affiliates would beneficially own in excess of 49.9% of the common stock after giving effect to such exercise. The address of Eastern Capital Limited is 10 Market St. #773 Camana Bay, Grand Cayman KY1-1206, Cayman Islands.
- (4) Represents 179,711 shares directly owned by Mr. Hoang.
- (5) Includes 13,115 shares directly owned by Mr. Laskow-Pooley and 12,500 shares subject to stock options exercisable through August 2018 awarded pursuant to the Director Compensation Program. Excludes \$40,000 in shares to be awarded as part of the Director Compensation Program in connection with continued service through and including TapImmune's 2018 Annual Meeting.
- (6) Includes 13,115 shares directly owned by Mr. Wasserman and 12,500 shares subject to stock options exercisable through August 2018 awarded pursuant to the Director Compensation Program. Excludes \$40,000 in shares to be awarded as part of the Director Compensation Program in connection with continued service through and including TapImmune's 2018 Annual Meeting.
- (7) Includes 32,004 shares directly owned by Mr. Reddish and 12,875 shares subject to currently exercisable stock options exercisable through August 2018 awarded pursuant to the Director Compensation Program. Excludes the \$40,000 in shares (or pro rata portion thereof) to be awarded as part of the Director Compensation Program in connection with continued service through and including TapImmune's 2018 Annual Meeting. See the section entitled "*Director Compensation—Director Compensation Plan*" beginning on page [177](#) of this proxy statement.
- (8) Includes 15,485 shares directly owned by Ms. Grisewood and 12,500 shares subject to stock options exercisable through August 2018 awarded pursuant to the Director Compensation Program. Excludes the \$40,000 in shares (or pro rata portion thereof) to be awarded as part of the Director Compensation Program in connection with continued service through and including TapImmune's 2018 Annual Meeting. See the section entitled "*Director Compensation—Director Compensation Plan*" beginning on page [177](#) of this proxy statement.

- (9) Includes 13,115 shares directly owned by Mr. Silverman and 9,899 shares subject to stock options exercisable through August 2018 awarded pursuant to the Director Compensation Program. In addition, includes 153,333 shares and currently exercisable warrants to acquire 218,168 shares held indirectly by Mr. Silverman through JNS Holdings Group, LLC. Excludes the \$40,000 in shares (or pro rata portion thereof) to be awarded as part of the Director Compensation program in connection with continued service through and including TapImmune's 2018 Annual Meeting. See the section entitled "*Director Compensation — Director Compensation Plan*" beginning on page [177](#) of this proxy statement.
- (10) Includes 158,217 shares directly owned by Dr. Wilson, and 168,133 shares subject to stock options exercisable through August 2018.
- (11) Directors Wilson, Reddish, Grisewood and Silverman have provided resignations from service on our board of directors and committees that will take effect only if the merger is approved by our stockholders at the 2018 Annual Meeting and thereafter consummated. See the section entitled "*The Merger Agreement — Directors and Officers Following the Merger*" beginning on page [90](#) of this proxy statement.
- (12) Includes 35,532 shares subject to currently exercisable stock options owned by Mr. Loiacono and excludes 18,635 shares subject to options that have not yet vested.

SECTION 16(a) BENEFICIAL OWNERSHIP REPORTING COMPLIANCE

During the year ended December 31, 2017, the executive officers and directors of TapImmune filed with the SEC on a timely basis, all required reports relating to transactions involving equity securities of TapImmune beneficially owned by them. TapImmune has relied solely on the written representation of its executive officers and directors and copies of the reports they have filed with the Commission in providing this information.

WHERE YOU CAN FIND MORE INFORMATION

TapImmune files reports, proxy statements and other information with the SEC as required by the Exchange Act. You can find, copy and inspect information TapImmune files at the SEC's public reference room at 100 F Street, N.E., Room 1580, Washington, D.C. 20549. You can call the SEC at 1-800-SEC-0330 for further information about the public reference room. You can review TapImmune's electronically filed reports, proxy and information statements on the SEC's web site at <http://www.sec.gov> or on TapImmune's web site at <http://www.TapImmune.com>. Information included on TapImmune's web site is not a part of this proxy statement.

TapImmune's Annual Report on Form 10-K for the year ended December 31, 2017, as filed with the SEC is accessible free of charge on the SEC's website at www.sec.gov. It contains audited financial statements covering the fiscal years ended December 31, 2017 and 2016. You can request a copy of TapImmune's Annual Report on Form 10-K free of charge by calling (904) 516-5436 or by mailing a request to TapImmune's Corporate Secretary, 5 W. Forsyth Street, Suite 200, Jacksonville, FL 32202. Please include your contact information with the request. A copy of TapImmune's Annual Report on Form 10-K for the year ended December 31, 2017 also is attached as Annex B-1 to this proxy statement.

You should rely only on the information contained in this proxy statement or on information to which TapImmune has referred you. TapImmune has not authorized anyone else to provide you with any information. TapImmune provided the information concerning TapImmune, and Marker provided the information concerning Marker, appearing in this proxy statement.

HOUSEHOLDING

TapImmune has adopted a procedure called “householding,” which the SEC has approved. Under this procedure, we deliver a single copy of the Notice and, if applicable, our proxy materials to multiple stockholders who share the same address unless we have received contrary instructions from one or more of such stockholders. This procedure reduces our printing costs, mailing costs, and fees. Stockholders who participate in householding will continue to be able to access and receive separate proxy cards. Upon written or oral request, we will deliver promptly a separate copy of the Notice and, if applicable, our proxy materials to any stockholder at a shared address to which we delivered a single copy of any of these materials. To receive a separate copy, or, if a stockholder is receiving multiple copies, to request that we only send a single copy of the Notice and, if applicable, our proxy materials, such stockholder may contact us at the following address:

TapImmune Inc.
Attention: Investor Relations
5 W. Forsyth Street — Suite 200
Jacksonville, FL 32202

Street name stockholders may contact their broker, bank or other nominee to request information about householding.

FUTURE STOCKHOLDER PROPOSALS

Stockholders may present proper proposals for inclusion in our proxy statement and for consideration at next year’s annual meeting of stockholders by submitting their proposals in writing to our Secretary in a timely manner. For a stockholder proposal to be considered for inclusion in our proxy statement for our 2019 annual meeting of stockholders, our Secretary must receive the written proposal at our principal executive offices not later than April 10, 2019. In addition, stockholder proposals must comply with the requirements of Rule 14a-8 regarding the inclusion of stockholder proposals in company-sponsored proxy materials. Stockholder proposals should be addressed to:

TapImmune Inc.
Attention: Secretary
5 W. Forsyth Street — Suite 200
Jacksonville, FL 32202

Our amended and restated bylaws also establish an advance notice procedure for stockholders who wish to present a proposal before an annual meeting of stockholders but do not intend for the proposal to be included in our proxy statement. Our amended and restated bylaws provide that the only business that may be conducted at an annual meeting of stockholders is business that is (i) specified in our proxy materials with respect to such meeting, (ii) otherwise properly brought before such meeting by or at the direction of our board of directors, or (iii) properly brought before such meeting by a stockholder of record entitled to vote at the annual meeting who has delivered timely written notice to our Secretary, which notice must contain the information specified in our amended and restated bylaws. To be timely for our 2019 annual meeting of stockholders, our Secretary must receive the written notice at our principal executive offices:

- not earlier than January 30, 2019; and
- not later than April 10, 2019.

In the event that we hold our 2019 annual meeting of stockholders more than 30 days before or more than 60 days after the one-year anniversary of the 2018 Annual Meeting, notice of a stockholder proposal that is not intended to be included in our proxy statement must be received no earlier than the close of business on the 120th day before our 2019 annual meeting of stockholders and no later than the close of business on the later of the following two dates:

- the 90th day prior to our 2019 annual meeting of stockholders; or
- the 10th day following the day on which public announcement of the date of 2019 annual meeting of stockholders is first made.

If a stockholder who has notified us of his, her or its intention to present a proposal at an annual meeting does not appear to present his, her or its proposal at such annual meeting, we are not required to present the proposal for a vote at such annual meeting.

HOW TO ATTEND THE MEETING AND VOTE IN PERSON

Please come to the Hyatt Regency Jacksonville Riverfront, 225 East Coastline Drive, Jacksonville, FL 32202, USA at 9:00 a.m., local time, on October 16, 2018 to attend the meeting and vote in person.

TAPIMMUNE FINANCIAL STATEMENTS

For audited financial statements of TapImmune, please refer to the section entitled “*Financial Statements*” set forth in TapImmune’s Annual Report on Form 10-K for the year ended December 31, 2017, which document is attached as Annex B-1 to this proxy statement.

For unaudited financial statements of TapImmune for the quarter ended June 30, 2018, please refer to the section entitled “*Item 1. Financial Statements (Unaudited)*” and the corresponding financial statements and notes appearing in TapImmune’s Quarterly Report on Form 10-Q for the quarter ended June 30, 2018.

MARKER THERAPEUTICS, INC.
FINANCIAL STATEMENTS
DECEMBER 31, 2017

MARKER THERAPEUTICS, INC.

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REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Shareholders and Board of Directors of
Marker Therapeutics, Inc.

Opinion on the Financial Statements

We have audited the accompanying balance sheets of Marker Therapeutics, Inc. (the “Company”) as of December 31, 2017, the related statements of operations, stockholders’ equity and cash flow for the year in the period ended December 31, 2017, and the related notes (collectively referred to as the “financial statements”). In our opinion, the financial statements present fairly, in all material respects, the financial position of the Company as of December 31, 2017, and the results of its operations and its cash flow for the year in the period ended December 31, 2017, in conformity with accounting principles generally accepted in the United States of America.

Explanatory Paragraph — Going Concern

The accompanying financial statements have been prepared assuming that the Company will continue as a going concern. As more fully described in Note 2, the Company has a significant working capital deficiency, has incurred significant losses and needs to raise additional funds to meet its obligations and sustain its operations. These conditions raise substantial doubt about the Company’s ability to continue as a going concern. Management’s plans in regard to these matters are also described in Note 2. The financial statements do not include any adjustments that might result from the outcome of this uncertainty.

Basis for Opinion

These financial statements are the responsibility of the Company’s management. Our responsibility is to express an opinion on the Company’s financial statements based on our audit. We are a public accounting firm registered with the Public Company Accounting Oversight Board (United States) (“PCAOB”) and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audit in accordance with the standards of the PCAOB and in accordance with auditing standards generally accepted in the United States of America. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement, whether due to error or fraud. The Company is not required to have, nor were we engaged to perform, an audit of its internal control over financial reporting. As part of our audit we are required to obtain an understanding of internal control over financial reporting but not for the purpose of expressing an opinion on the effectiveness of the Company’s internal control over financial reporting. Accordingly, we express no such opinion.

Our audit included performing procedures to assess the risks of material misstatement of the financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements. Our audit also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the financial statements. We believe that our audit provides a reasonable basis for our opinion.

/s/ Marcum LLP

Marcum LLP

We have served as the Company’s auditor since 2018.

New York, NY

September 7, 2018

MARKER THERAPEUTICS, INC.
BALANCE SHEET

	<u>December 31, 2017</u>
ASSETS	
Current assets	
Cash and cash equivalents	\$ 85,059
Total current assets	<u>85,059</u>
TOTAL ASSETS	<u>\$ 85,059</u>
LIABILITIES AND STOCKHOLDERS' EQUITY	
Current liabilities	
Accounts payable to related party	\$ 335
Total current liabilities	<u>335</u>
Total liabilities	<u>335</u>
Commitments and contingencies	
Preferred stock, \$0.0001 par value; 10,000,000 shares authorized of which 8,500,000 have been designated as Series A Preferred Stock; 0 shares issued and outstanding as of December 31, 2017	—
Stockholders' equity	
Common stock, \$0.0001 par value; 23,222,224 shares authorized; 10,000,002 shares issued and outstanding as of December 31, 2017	1,000
Additional paid-in capital	374,000
Accumulated deficit	<u>(290,276)</u>
Total stockholders' equity	<u>84,724</u>
TOTAL LIABILITIES AND STOCKHOLDERS' EQUITY	<u>\$ 85,059</u>

The accompanying notes are an integral part of these financial statements.

MARKER THERAPEUTICS, INC.
STATEMENT OF OPERATIONS

	Year Ended December 31, 2017
Operating expenses:	
Research and development	\$ 54,392
General and administrative	223,010
Total operating expenses	<u>277,402</u>
Loss from operations	(277,402)
Net loss	\$ (277,402)
Net loss per share, basic and diluted	<u>\$ (0.05)</u>
Weighted average common shares outstanding, basic and diluted	<u>5,863,015</u>

The accompanying notes are an integral part of these financial statements.

MARKER THERAPEUTICS, INC.
STATEMENT OF STOCKHOLDERS' EQUITY

	Member Units		Series A preferred stock		Common stock		Additional paid-in capital	Accumulated Deficit	Total stockholders' Equity
	Shares	Amount	Shares	Amount	Shares	Amount			
Balance as of January 1, 2017	10,000,002	\$ —	—	\$ —	—	\$ —	\$ 10,000	\$ (12,874)	\$ (2,874)
Issuance of Series A preferred stock for cash	—	—	1,500,000	1,500	—	—	2,998,500	—	3,000,000
Repurchase of Series A preferred stock	—	—	(1,500,000)	(1,500)	—	—	(2,623,500)	—	(2,625,000)
Capital distribution	—	—	—	—	—	—	(10,000)	—	(10,000)
Conversion from LLC to Corporation	(10,000,002)	—	—	—	10,000,002	1,000	(1,000)	—	—
Net loss	—	—	—	—	—	—	—	(277,402)	(277,402)
Balance as of December 31, 2017	—	\$ —	—	\$ —	10,000,002	\$1,000	\$ 374,000	\$ (290,276)	\$ 84,724

The accompanying notes are an integral part of these financial statements.

MARKER THERAPEUTICS, INC.
STATEMENT OF CASH FLOWS

	<u>Year Ended December 31, 2017</u>
Cash flows from operating activities	
Net loss	\$ (277,402)
Increase (decrease) in cash resulting from changes in assets and liabilities:	
Prepaid expenses	5,356
Accounts payable	<u>(18,902)</u>
Net cash used in operating activities	(290,948)
Cash flows from financing activities	
Proceeds from issuance of Series A preferred stock	3,000,000
Repurchase of Series A preferred stock	(2,625,000)
Proceeds from issuance of loan to related party	46,000
Repayment of loan payable to related party	(46,000)
Capital distribution	<u>(10,000)</u>
Net cash provided by financing activities	365,000
Net increase in cash and cash equivalents ,	74,052
Cash and cash equivalents, at the beginning of the period	<u>11,007</u>
Cash and cash equivalents, at the end of the period	<u>\$ 85,059</u>
Supplemental disclosure of cash flow information:	
Cash paid for interest	<u>\$ —</u>
Supplemental disclosure of noncash investing and financing activities:	
Conversion from LLC to Corporation	<u>\$ 1,000</u>

The accompanying notes are an integral part of these financial statements.

MARKER THERAPEUTICS, INC.
NOTES TO FINANCIAL STATEMENTS

Note 1 — Organization, Plan of Business Operations

Marker Therapeutics Inc. (the “Company”) was formed as Marker Therapeutics, LLC on December 11, 2015, by John Wilson and the members of the Baylor College of Medicine (“BCM”) research team, with the goal of licensing from BCM certain technology being developed for BCM by the research team. BCM has a policy that any technology license requires the approval of the researchers working on the subject technology, so Marker had the first right to license the technology, subject to finding outside financing and negotiating mutually acceptable terms with BCM. At December 31, 2017, the Company did not have a license to the technology being developed for BCM by the research team. Accordingly, all research by the BCM research team during the year ending December 31, 2017 was conducted at BCM facilities under the auspices of BCM.

The Company may seek to obtain additional capital through the sale of debt or equity financings or other arrangements to fund its research and development activities as well as its operations; however, there can be no assurance that the Company will be able to raise needed capital under acceptable terms, if at all. The sale of additional equity may dilute existing stockholders and newly issued shares may contain senior rights and preferences compared to currently outstanding shares of common stock. Issued debt securities may contain covenants and limit the Company’s ability to pay dividends or make other distributions to stockholders. If the Company is unable to obtain such additional financing, future operations would need to be scaled back or discontinued.

Note 2 — Liquidity, Financial Condition and Management’s Plans

The Company has had limited operating activities to date, substantially all of which have been devoted to seeking financing to fund future research and development activities. The Company has financed its operations since inception using proceeds received from capital contributions made by its stockholders and proceeds in financing transactions.

Notwithstanding, the Company has no revenues, limited capital resources and is subject to all of the risks and uncertainties that are typical of an early stage enterprise. Significant uncertainties include, among others, whether the Company will be able to raise the capital it needs to finance its longer-term operations and whether such operations, if launched, will enable the Company to sustain operations as a profitable enterprise.

The Company’s working capital needs are influenced by the level of operations, and generally decrease with higher levels of revenue. The Company had cash of approximately \$85,000 and working capital approximately \$85,000 at December 31, 2017. The Company expects to incur losses into the foreseeable future as it undertakes its efforts to execute its business plans.

The Company will require significant additional capital to sustain its short-term operations and make the investments it needs to execute its longer-term business plan. The Company’s existing liquidity is not sufficient to fund its operations and anticipated capital expenditures for the foreseeable future. The Company is currently seeking to obtain additional debt or equity financing, however there are currently no commitments in place for further financing nor is there any assurance that such financing will be available to the Company on favorable terms, if at all.

Because of recurring operating losses, net operating cash flow deficits, and an accumulated deficit, there is substantial doubt about the Company’s ability to continue as a going concern for one year from the issuance of the financial statements. The financial statements have been prepared assuming the Company will continue as a going concern. The Company has not made adjustments to the accompanying financial statements to reflect the potential effects on the recoverability and classification of assets or liabilities should the Company be unable to continue as a going concern.

MARKER THERAPEUTICS, INC.
NOTES TO FINANCIAL STATEMENTS

Note 3 — Summary of Significant Accounting Policies

Basis of Presentation

The Company maintains its books of account and prepares financial statements in accordance with Generally Accepted Accounting Principles in the United States of America (“U.S. GAAP”). The Company’s fiscal year ends on December 31.

Use of Estimates

The preparation of financial statements in conformity with accounting principles generally accepted in the United States (U.S. GAAP) requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenue and expenses during the reporting period. The most significant estimates in the Company’s financial statements relate to the valuation of preferred and common stock, the valuation of stock options and the valuation allowance of deferred tax assets resulting from net operating losses. These estimates and assumptions are based on current facts, historical experience and various other factors believed to be reasonable under the circumstances, the results of which form the basis for making judgments about the carrying values of assets and liabilities and the recording of expenses that are not readily apparent from other sources. Actual results could differ from those estimates.

Cash and Cash Equivalents

As of December 31, 2017, the Company had cash balances deposited at major financial institutions. Cash balances are considered subject to minimal credit risk as the balances are with high credit quality financial institutions. Cash and cash equivalents include cash in readily available checking and money market accounts.

Research and Development

All research and development costs are expensed as incurred. Research and development costs consist primarily of lab supplies purchased for the research being conducted in the BCM labs and license agreement expenses.

The Company incurred costs of approximately \$54,000 on research and development for the year ended December 31, 2017.

Income Taxes

The Company follows the asset and liability method of accounting for income taxes. Under this method, deferred tax assets and liabilities are recognized for the future tax consequences attributable to differences between the financial statement carrying amounts of assets and liabilities and their respective tax balances. Potential deferred tax assets and liabilities are measured using enacted tax rates expected to apply to the taxable income in the years in which those differences are expected to be recovered or settled. The effect on potential deferred tax assets and liabilities of a change in tax rates is recognized in the statement of operations in the period that includes the date of allowances against deferred tax assets.

Tax benefits are recognized only for tax positions that are more likely than not to be sustained upon examination by tax authorities. The amount recognized is measured as the largest amount of benefit that is greater than 50 percent likely to be realized upon settlement. A liability for “unrecognized tax benefits” is recorded for any tax benefits claimed in the Company’s tax returns that do not meet these recognition and measurement standards. As of December 31, 2017, no liability for unrecognized tax benefits was required to be reported. The guidance also discusses the classification of related interest and penalties on income taxes. The Company’s policy is to record interest and penalties on uncertain tax positions as a component of income tax expense. No interest or penalties were recorded during the years ended December 31, 2017.

MARKER THERAPEUTICS, INC.
NOTES TO FINANCIAL STATEMENTS

Loss per Common Share

Basic loss per share include only the weighted average common shares outstanding, without consideration of potentially dilutive securities. Diluted loss per share include the weighted average common shares outstanding and any potentially dilutive common stock equivalent shares in the calculation.

New Accounting Pronouncements

From time to time, new accounting pronouncements are issued by the Financial Accounting Standards Board (“FASB”) or other standard setting bodies that we adopt as of the specified effective date. Unless otherwise discussed, we do not believe that the impact of recently issued standards that are not yet effective will have a material impact on our financial position or results of operations upon adoption.

Recently Adopted Accounting Pronouncements***Going Concern***

In August 2014, the FASB issued ASU No. 2014-15, “Presentation of Financial Statements-Going Concern”, which defines management’s responsibility to assess an entity’s ability to continue as a going concern, and requires related footnote disclosures if there is substantial doubt about its ability to continue as a going concern. ASU No. 2014-15 is effective for the Company for the fiscal year ending on December 31, 2016, with early adoption permitted. The Company adopted ASU 2014-15 as of December 31, 2017 in its financial statements and related disclosures, which did not have a material impact on its results of operations, cash flows or financial position.

Note 4 — Fair Value Measurements

The accounting guidance defines fair value, establishes a consistent framework for measuring fair value and expands disclosure for each major asset and liability category measured at fair value on either a recurring or nonrecurring basis. Fair value is defined as an exit price, representing the amount that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants. As such, fair value is a market-based measurement that should be determined based on assumptions that market participants would use in pricing an asset or liability. As a basis for considering such assumptions, the accounting guidance establishes a three-tier fair value hierarchy, which prioritizes the inputs used in measuring fair value as follows:

- Level 1: Observable inputs such as quoted prices in active markets
- Level 2: Inputs, other than the quoted prices in active markets, that are observable either directly or indirectly; and
- Level 3: Unobservable inputs in which there is little or no market data, which require the reporting entity to develop its own assumptions

There were no assets or liabilities measured at fair value as of December 31, 2017.

Note 5 — Outstanding Debt

Between January and May 2017, the Company’s Chief Executive Officer, John Wilson loaned the Company \$46,000.

In July 2017, the Company made an aggregate payment of \$46,000.

Note 6 — Net Loss per Share Applicable to Common Stockholders

Basic loss per common share is computed by dividing net loss by the weighted average number of common shares outstanding during the reporting period. Diluted loss per common share is computed similar to basic loss per common share except that it reflects the potential dilution that could occur if dilutive securities or other obligations to issue common stock were exercised or converted into common stock.

MARKER THERAPEUTICS, INC.
NOTES TO FINANCIAL STATEMENTS

Note 7 — Related Party Transactions*Wilson Wolf Manufacturing*

John Wilson, the Company's Chief Executive Officer, owns 100% of Wilson Wolf Manufacturing, which is a supplier of the Company.

During the year ended December 31, 2017, expenses incurred related to Wilson Wolf Manufacturing were approximately \$23,000, which were recorded as part of general and administrative costs.

Note 8 — Temporary Equity*Preferred Stock*

The Company has authorized up to 10,000,000 shares of preferred stock, \$0.0001 par value per share, for issuance. The preferred stock will have such rights, privileges and restrictions, including voting rights, dividend conversion rights, redemption privileges and liquidation preferences, as shall be determined by the Company's board of directors upon its issuance. 10,000,000 shares of preferred stock were initially designated as Series A preferred stock.

The Series A preferred stock holders control the Board. Consequently, the Series A preferred shareholders could force a deemed liquidation event by virtue of their Board control. As such, redemption of the Series A, upon a deemed liquidation event, is not solely within the control of the Company. Therefore, the Series A preferred stock was classified in temporary equity.

2017 Preferred Stock Transactions

On June 5, 2017, the Company entered into a Series A Preferred Stock Purchase Agreement with an investor pursuant to which the Company received proceeds of \$3.0 million. The Company issued 1,500,000 shares of Series A preferred stock at a purchase price of \$2.00 per share.

On November 2, 2017, the Company entered into a Stock Repurchase Agreement with same investor. The Company repurchased 1,500,000 shares of Series A preferred stock at a purchase price of \$2.6 million.

Due to the repurchase of the 1,500,000 shares of Series A preferred stock, such shares were automatically retired and may not be reissued. Accordingly, the number of shares designated as Series A preferred stock was reduced to 8,500,000, none of which are issued and outstanding.

Note 9 — Stockholders' Equity*Common Stock*

The Company has authorized 23,222,224 shares of common stock, \$0.0001 par value per share, for issuance. Each share of common stock is entitled to one vote. Common stock owners are entitled to dividends when funds are legally available and declared by the Board.

2017 Common Stock Transactions

On June 1, 2017, the Company converted from an limited liability company (the "Prior Entity") to a Delaware corporation in accordance with Section 265 of the Delaware General Corporation Law. The Company issued 10,000,002 shares of common stock, par value \$0.0001, in exchange for all outstanding membership interests.

Note 10 — Stock Options Plans

The Company has reserved 2,222,222 shares of common stock for issuance to officers, directors, employees and consultants of the Company pursuant to its 2017 Equity Incentive Plan. Of such reserved shares of common stock, none have been issued pursuant to restricted stock purchase agreements, no options to purchase shares have been granted, and all 2,222,222 shares of common stock remain available for issuance.

MARKER THERAPEUTICS, INC.
NOTES TO FINANCIAL STATEMENTS

Note 11 — Income Taxes

On December 22, 2017, the U.S. government enacted comprehensive tax legislation commonly referred to as the Tax Cuts and Jobs Act (the “Tax Act”), which makes broad and complex changes to the U.S. tax code. Certain of these changes may be applicable to the Company, including but not limited to, reducing the U.S. federal corporate tax rate from 35 percent to 21 percent, creating a new limitation on deductible interest expense, eliminating the corporate alternative minimum tax (“AMT”), modifying the rules related to uses and limitations of net operating loss carryforwards generated in tax years ending after December 31, 2017, and changing the rules pertaining to the taxation of profits earned abroad. Changes in tax rates and tax laws are accounted for in the period of enactment. The Tax Act reduces the corporate tax rate to 21 percent, effective January 1, 2018. Consequently, the Company has recorded a decrease related to deferred tax assets, exclusive of the corresponding change in the valuation allowance, for the six months from June 1, 2017 to December 31, 2017. Due to the full valuation allowance on the deferred tax assets, there is no net adjustment to deferred tax expense or benefit due to the reduction of the corporate tax rate.

As of December 31, 2017, the Company has net operating loss carryforwards of approximately \$35,000 available to reduce future taxable income, if any, for Federal and state income tax purposes. The U.S. federal and state net operating loss carryforwards will begin to expire in 2037 for federal purposes and state purposes.

Under the Internal Revenue Code (“IRC”) Section 382, annual use of the Company’s net operating loss carryforwards to offset taxable income may be limited based on cumulative changes in ownership. The Company has not completed an analysis to determine whether any such limitations have been triggered as of December 31, 2017. The Company has no income tax affect due to the recognition of a full valuation allowance on the expected tax benefits of future loss carry forwards based on uncertainty surrounding realization of such assets.

The tax effects of the temporary differences and carry forwards that give rise to deferred tax assets consist of the following:

	For the six months from June 1, 2017 to December 31, 2017
Deferred tax assets:	
Net operating loss carryforwards	\$ 10,146
Total deferred tax assets	10,146
Valuation allowance	(10,146)
Deferred tax assets, net of allowance	<u>\$ —</u>

A reconciliation of the statutory income tax rates and the Company’s effective tax rate is as follows:

	For the six months from June 1, 2017 to December 31, 2017
Statutory Federal Income Tax Rate	(34.0)%
State Taxes, Net of Federal Tax Benefit	(6.5)%
Federal tax rate change	11.7%
Change in Valuation Allowance	28.8%
Income Taxes Provision (Benefit)	<u>—%</u>

The Company’s major tax jurisdictions are the United States and Minnesota. The Company’s tax year will remain open starting 2017 for examination by the Federal and state tax authorities from the date of utilization of the net operating loss. The Company does not have any tax audits pending.

MARKER THERAPEUTICS, INC.
NOTES TO FINANCIAL STATEMENTS

Note 12 — Commitments and Contingencies

Litigation

The Company is not a party to any material legal proceedings and is not aware of any pending or threatened claims. From time to time, the Company may be subject to various legal proceedings and claims that arise in the ordinary course of its business activities.

Note 13 — Subsequent Events

Merger Agreement

On May 15, 2018, the Company entered into an Agreement and Plan of Merger and Reorganization (the “Merger Agreement”) with the Company, TapImmune Inc. (“TapImmune”), and Timberwolf Merger Sub, Inc. (“Merger Sub”). Subject to the terms and conditions set forth in the Merger Agreement, Merger Sub will merge with and into Marker (the “Merger”), with Marker surviving the Merger as a wholly-owned subsidiary of TapImmune (the “Surviving Corporation”).

At the effective time of the Merger (the “Effective Time”), each outstanding share of the Company’s common stock will be converted into the right to receive (i) shares of TapImmune’s common stock, par value \$0.001 per share (“TapImmune Common Stock”), in an amount equal to the exchange ratio calculated pursuant to the Merger Agreement (the “Stock Exchange Ratio”), and (ii) warrants to purchase TapImmune Common Stock, in an amount equal to the exchange ratio calculated pursuant to the Merger Agreement (the “Warrant Exchange Ratio”).

The Merger Agreement contains customary representations, warranties and covenants made by TapImmune and the Company, including covenants relating to obtaining the requisite approvals of the stockholders of TapImmune and the Company, indemnification of directors and officers, and TapImmune’s and the Company’s conduct of their respective businesses between the date of signing of the Merger Agreement and the closing of the Merger.

The issuance of TapImmune Common Stock and other transactions contemplated by the Merger Agreement are subject to approval by TapImmune’s stockholders. The Merger is subject to other customary closing conditions, including, among other things, the accuracy of the representations and warranties, subject generally to an overall material adverse effect qualification, compliance by the parties with their respective covenants and no existence of any law or order preventing the Merger and related transactions.

The Merger Agreement contains certain termination rights for both TapImmune and the Company and provides for the payment of a termination fee of \$1,500,000 by TapImmune to the Company upon termination of the Merger Agreement under specified circumstances. In connection with a termination of the Merger Agreement under specified circumstances involving competing transactions, a willful, intentional and material breach of the non-solicitation obligations by us, a change in our board of directors’ recommendation of the Merger to the stockholders or other triggering events, TapImmune may be required to pay the Company reimbursement for certain fees and expenses up to \$500,000. In connection with a termination of the Merger Agreement under specified circumstances involving the failure of the Company stockholders to approve the Merger Agreement within 24 hours of signing the Merger Agreement, intentional and material breach of the non-solicitation obligations by the Company or other triggering events, the Company may be required to pay our reimbursement for certain fees and expenses up to \$500,000. The Merger Agreement may also be terminated by either us or the Company if the merger has not been consummated by September 15, 2018, subject to an extension of an additional 60 days if our proxy statement is being reviewed or commented upon by the SEC.

Following the Merger, the board of directors of TapImmune will consist of six directors and will be comprised of (i) three members designated by the Company, and (ii) three members designated by TapImmune.

MARKER THERAPEUTICS, INC.
NOTES TO FINANCIAL STATEMENTS

BCM License Agreement

On March 16, 2018, the Company entered into a License Agreement (the “Agreement”) with BCM. As partial consideration for the license, the Company issued to BCM 1,200,000 shares of common stock, with a fair value of approximately \$5.0 million (10.71% of \$46.2 million).

Additional Loan from Related Party

On June 11, 2018, the Company’s Chief Executive Officer, John Wilson loaned the Company \$100,000 to enable it to pay transaction expenses.

MARKER THERAPEUTICS, INC.

**FINANCIAL STATEMENTS
(UNAUDITED)**

JUNE 30, 2018

MARKER THERAPEUTICS, INC.

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MARKER THERAPEUTICS, INC.
CONDENSED BALANCE SHEET
(Unaudited)

	June 30, 2018	December 31, 2017
ASSETS		
Current assets		
Cash and cash equivalents	\$ 77,244	\$ 85,059
Total current assets	77,244	85,059
TOTAL ASSETS	\$ 77,244	\$ 85,059
LIABILITIES AND STOCKHOLDERS' EQUITY		
Current liabilities		
Accounts payable (including related party of \$8,482)	\$ 73,413	\$ 335
Loan payable to related party	100,000	—
Total current liabilities	173,413	335
Total liabilities	173,413	335
Commitments and contingencies		
Series A preferred stock, \$0.0001 par value; 10,000,000 shares authorized; 0 shares issued and outstanding as of June 30, 2018 and December 31, 2017	—	—
Stockholders' equity (deficiency)		
Common stock, \$0.0001 par value; 23,222,224 shares authorized; 11,200,002 and 10,000,002 shares issued and outstanding as of June 30, 2018 and December 31, 2017, respectively	1,120	1,000
Additional paid-in capital	5,321,900	374,000
Accumulated deficit	(5,419,189)	(290,276)
Total stockholders' equity (deficiency)	(96,169)	84,724
TOTAL LIABILITIES AND STOCKHOLDERS' EQUITY	\$ 77,244	\$ 85,059

The accompanying notes are an integral part of these unaudited financial statements.

MARKER THERAPEUTICS, INC.
CONDENSED STATEMENT OF OPERATIONS
(Unaudited)

	Six Months Ended	
	June 30, 2018	June 30, 2017
Operating expenses:		
General and administrative	\$ 180,893	\$ 188,476
Research and development – license	4,948,020	—
Research and development	—	53,627
Total operating expenses	<u>5,128,913</u>	<u>242,103</u>
Loss from operations	<u>(5,128,913)</u>	<u>(242,103)</u>
Net loss	<u>\$ (5,128,913)</u>	<u>\$ (242,103)</u>
Net loss per share, basic and diluted	\$ (0.48)	\$ (0.15)
Weighted average common shares outstanding, basic and diluted	<u>10,709,394</u>	<u>1,657,459</u>

The accompanying notes are an integral part of these unaudited financial statements.

MARKER THERAPEUTICS, INC.

CONDENSED STATEMENT OF STOCKHOLDERS' EQUITY
(Unaudited)

	Common stock		Additional paid-in capital	Accumulated Deficit	Total stockholders' Equity
	Shares	Amount			
Balance as of January 1, 2018	10,000,002	\$1,000	\$ 374,000	\$ (290,276)	\$ 84,724
Issuance of common stock to acquire license	1,200,000	120	4,947,900	—	4,948,020
Net loss	—	—	—	(5,128,913)	(5,128,913)
Balance as of June 30, 2018	<u>11,200,002</u>	<u>\$1,120</u>	<u>\$5,321,900</u>	<u>\$(5,419,189)</u>	<u>\$ (96,169)</u>

The accompanying notes are an integral part of these unaudited financial statements.

MARKER THERAPEUTICS, INC.
CONDENSED STATEMENT OF CASH FLOWS
(Unaudited)

	Six Months Ended	
	June 30, 2018	June 30, 2017
Cash flows from operating activities		
Net loss	\$(5,128,913)	\$ (242,103)
Adjustments to reconcile net loss to net cash used in operating activities:		
Research and development license expenses	4,948,020	—
Increase in cash resulting from changes in assets and liabilities:		
Prepaid expenses	—	5,356
Accounts payable	73,078	67,306
Net cash used in operating activities	(107,815)	(169,441)
Cash flows from financing activities		
Proceeds from issuance of Series A preferred stock	—	3,000,000
Proceeds from issuance of loan to related party	100,000	46,000
Capital distribution	—	(10,000)
Net cash provided by (used in) financing activities	100,000	3,036,000
Net (decrease) increase in cash and cash equivalents ,	(7,815)	2,866,559
Cash and cash equivalents, at the beginning of the period	85,059	11,007
Cash and cash equivalents, at the end of the period	\$ 77,244	\$2,877,566
Supplemental disclosure of cash flow information:		
Cash paid for interest	\$ —	\$ —

The accompanying notes are an integral part of these unaudited financial statements.

MARKER THERAPEUTICS, INC.
NOTES TO CONDENSED FINANCIAL STATEMENTS
(Unaudited)

Note 1 — Organization, Plan of Business Operations

Marker Therapeutics Inc. (the “Company”) was formed as Marker Therapeutics, LLC on December 11, 2015, by John Wilson and the members of the Baylor College of Medicine (“BCM”) research team, with the goal of licensing from BCM certain technology being developed for BCM by the research team. BCM has a policy that any technology license requires the approval of the researchers working on the subject technology, so Marker had the first right to license the technology, subject to finding outside financing and negotiating mutually acceptable terms with BCM.

The Company may seek to obtain additional capital through the sale of debt or equity financings or other arrangements to fund its research and development activities as well as its operations; however, there can be no assurance that the Company will be able to raise needed capital under acceptable terms, if at all. The sale of additional equity may dilute existing stockholders and newly issued shares may contain senior rights and preferences compared to currently outstanding shares of common stock. Issued debt securities may contain covenants and limit the Company’s ability to pay dividends or make other distributions to stockholders. If the Company is unable to obtain such additional financing, future operations would need to be scaled back or discontinued.

Note 2 — Liquidity, Financial Condition and Management’s Plans

The Company has had limited operating activities to date, substantially all of which have been devoted to seeking financing to fund future research and development activities. The Company has financed its operations since inception using proceeds received from capital contributions made by its stockholders and proceeds in financing transactions.

Notwithstanding, the Company has no revenues, limited capital resources and is subject to all of the risks and uncertainties that are typical of an early stage enterprise. Significant uncertainties include, among others, whether the Company will be able to raise the capital it needs to finance its longer-term operations and whether such operations, if launched, will enable the Company to sustain operations as a profitable enterprise.

The Company’s working capital needs are influenced by the level of operations, and generally decrease with higher levels of revenue. The Company had cash of approximately \$77,000 and working capital deficit of approximately \$96,000 at June 30, 2018. The Company expects to incur losses into the foreseeable future as it undertakes its efforts to execute its business plans.

The Company will require significant additional capital to sustain its short-term operations and make the investments it needs to execute its longer-term business plan. The Company’s existing liquidity is not sufficient to fund its operations and anticipated capital expenditures for the foreseeable future. The Company is currently seeking to obtain additional debt or equity financing, however there are currently no commitments in place for further financing nor is there any assurance that such financing will be available to the Company on favorable terms, if at all.

Because of recurring operating losses, net operating cash flow deficits, and an accumulated deficit, there is substantial doubt about the Company’s ability to continue as a going concern for one year from the issuance of the financial statements. The financial statements have been prepared assuming the Company will continue as a going concern. The Company has not made adjustments to the accompanying financial statements to reflect the potential effects on the recoverability and classification of assets or liabilities should the Company be unable to continue as a going concern.

Note 3 — Summary of Significant Accounting Policies

Basis of Presentation

The Company maintains its books of account and prepares financial statements in accordance with accounting principles generally accepted in the United States of America (“GAAP”). The Company’s fiscal

MARKER THERAPEUTICS, INC.
NOTES TO CONDENSED FINANCIAL STATEMENTS
(Unaudited)

year ends on December 31st. The accompanying unaudited condensed financial statements have been prepared in accordance with “GAAP” for interim financial information. Accordingly, since they are interim statements, the accompanying unaudited condensed financial statements do not include all of the information and notes required by GAAP for annual financial statements, but in the opinion of the Company’s management, reflect all adjustments consisting of normal, recurring adjustments, that are necessary for a fair presentation of the financial position, results of operations and cash flows for the interim periods presented. Interim results are not necessarily indicative of results for a full year. The condensed financial statements and notes should be read in conjunction with the financial statements and notes for the period ended December 31, 2017.

Use of Estimates

In preparing condensed financial statements in conformity with U.S. GAAP, management is required to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements, as well as the reported amounts of expenses during the reporting period. Due to inherent uncertainty involved in making estimates, actual results reported in future periods may be affected by changes in these estimates. On an ongoing basis, the Company evaluates its estimates and assumptions. These estimates and assumptions include valuing equity securities in license purchase.

Significant Accounting Policies

There have been no material changes in the Company’s significant accounting policies to those previously disclosed in the 2017 Annual Report.

New Accounting Pronouncements

From time to time, new accounting pronouncements are issued by the Financial Accounting Standards Board (“FASB”) or other standard setting bodies that we adopt as of the specified effective date. Unless otherwise discussed, we do not believe that the impact of recently issued standards that are not yet effective will have a material impact on our financial position or results of operations upon adoption.

Recent Adopted Accounting Pronouncements

In January 2017, the FASB issued ASU No. 2017-01, “Business Combinations (Topic 805) Clarifying the Definition of a Business”, The amendments in this ASU clarify the definition of a business with the objective of adding guidance to assist entities with evaluating whether transactions should be accounted for as acquisitions (or disposals) of assets or businesses. The definition of a business affects many areas of accounting including acquisitions, disposals, goodwill, and consolidation. The guidance is effective for annual periods beginning after December 15, 2017, including interim periods within those periods. Early adoption is permitted, including for interim or annual periods for which the financial statements have not been issued or made available for issuance. The Company adopted this guidance on January 1, 2018 and the adoption of ASU 2017-01 did not have a material impact on the Company’s condensed financial statements.

Note 4 — Merger Agreement

On May 15, 2018, the Company entered into an Agreement and Plan of Merger and Reorganization (the “Merger Agreement”) with the Company, TapImmune Inc. (“TapImmune”), and Timberwolf Merger Sub, Inc. (“Merger Sub”). Subject to the terms and conditions set forth in the Merger Agreement, Merger Sub will merge with and into Marker (the “Merger”), with Marker surviving the Merger as a wholly owned subsidiary of TapImmune (the “Surviving Corporation”).

MARKER THERAPEUTICS, INC.
NOTES TO CONDENSED FINANCIAL STATEMENTS
(Unaudited)

At the effective time of the Merger (the “Effective Time”), each outstanding share of the Company’s common stock will be converted into the right to receive (i) shares of TapImmune’s common stock, par value \$0.001 per share (“TapImmune Common Stock”), in an amount equal to the exchange ratio calculated pursuant to the Merger Agreement (the “Stock Exchange Ratio”), and (ii) warrants to purchase TapImmune Common Stock, in an amount equal to the exchange ratio calculated pursuant to the Merger Agreement (the “Warrant Exchange Ratio”).

The Merger Agreement contains customary representations, warranties and covenants made by TapImmune and the Company, including covenants relating to obtaining the requisite approvals of the stockholders of TapImmune and the Company, indemnification of directors and officers, and TapImmune’s and the Company’s conduct of their respective businesses between the date of signing of the Merger Agreement and the closing of the Merger.

The issuance of TapImmune Common Stock and other transactions contemplated by the Merger Agreement are subject to approval by TapImmune’s stockholders. The Merger is subject to other customary closing conditions, including, among other things, the accuracy of the representations and warranties, subject generally to an overall material adverse effect qualification, compliance by the parties with their respective covenants and no existence of any law or order preventing the Merger and related transactions.

The Merger Agreement contains certain termination rights for both TapImmune and the Company and provides for the payment of a termination fee of \$1,500,000 by TapImmune to the Company upon termination of the Merger Agreement under specified circumstances. In connection with a termination of the Merger Agreement under specified circumstances involving competing transactions, a willful, intentional and material breach of the non-solicitation obligations by us, a change in our board of directors’ recommendation of the Merger to the stockholders or other triggering events, TapImmune may be required to pay the Company reimbursement for certain fees and expenses up to \$500,000. In connection with a termination of the Merger Agreement under specified circumstances involving the failure of the Company stockholders to approve the Merger Agreement within 24 hours of signing the Merger Agreement, intentional and material breach of the non-solicitation obligations by the Company or other triggering events, the Company may be required to pay our reimbursement for certain fees and expenses up to \$500,000. The Merger Agreement may also be terminated by either us or the Company if the merger has not been consummated by September 15, 2018, subject to an extension of an additional 60 days if our proxy statement is being reviewed or commented upon by the SEC.

Following the Merger, the board of directors of the TapImmune will consist of six directors and will be comprised of (i) three members designated by the Company, and (ii) three members designated by us.

If the proposed merger with TapImmune Inc. is not consummated, Marker will continue being a virtual company with no operations. Marker will need to seek other sources of funding in order to build its operations.

Note 5 — Licenses Acquired

On March 16, 2018, the Company entered into a License Agreement (the “Agreement”) with BCM. Under the terms of the Agreement, the Company was required to make equity awards as upfront payments and payments upon the achievement of certain milestones. As partial consideration for the license, the Company issued 1,200,000 shares of common stock at fair value of approximately \$5.0 million to BCM.

In accordance with ASC 730-10-25-1, Research and Development, costs incurred in obtaining technology licenses are charged to research and development expense if the technology licensed has not reached technological feasibility and has no alternative future use. The licenses purchased by the Company require substantial completion of research and development, regulatory and marketing approval efforts in order to reach technological feasibility. As such, for the six months ended June 30, 2018, the purchase price of licenses acquired was classified as research and development-licenses acquired in the Condensed Statements of Operations.

MARKER THERAPEUTICS, INC.
NOTES TO CONDENSED FINANCIAL STATEMENTS
(Unaudited)

This transaction was accounted for as an asset acquisition pursuant to ASU 2017-01, *Business Combinations (Topic 805): Clarifying the Definition of a Business*, as the majority of the fair value of the assets acquired was concentrated in a group of similar assets, and the acquired assets did not have outputs or employees.

Note 6 — Outstanding Debt

On June 11, 2018, the Company's Chief Executive Officer, John Wilson loaned the Company \$100,000 to enable it to pay transaction expenses.

During the six months ended June 30, 2017, Mr. Wilson loaned additional \$46,000 (the "Loan") to the Company. The Loan was paid back entirely on June 26, 2017.

As of June 30, 2018, the outstanding debt balance was \$100,000. No debt was outstanding as of December 31, 2017.

Note 7 — Net Loss per Share Applicable to Common Stockholders

Basic loss per common share is computed by dividing net loss by the weighted average number of common shares outstanding during the reporting period. Diluted loss per common share is computed similar to basic loss per common share except that it reflects the potential dilution that could occur if dilutive securities or other obligations to issue common stock were exercised or converted into common stock.

Note 8 — Related Party Transactions

Wilson Wolf Manufacturing

John Wilson, the Company's Chief Executive Officer, owns 100% of Wilson Wolf Manufacturing, which is a supplier of the Company.

During the six months ended June 30, 2018 and 2017, expenses incurred related to Wilson Wolf Manufacturing were approximately \$8,000 and \$11,000, respectively, which were recorded as part of general and administrative costs.

Note 9 — Temporary Equity

Preferred Stock

The Company has authorized up to 10,000,000 shares of preferred stock, \$0.0001 par value per share, for issuance. The preferred stock will have such rights, privileges and restrictions, including voting rights, dividend conversion rights, redemption privileges and liquidation preferences, as shall be determined by the Company's board of directors upon its issuance.

The Series A preferred stock holders control the Board. Consequently, the Series A preferred shareholders could force a deemed liquidation event by virtue of their Board control. As such, redemption of the Series A, upon a deemed liquidation event, is not solely within the control of the Company. Therefore, the Series A preferred stock was classified in temporary equity.

On June 5, 2017, the Company entered into a Series A Preferred Stock Purchase Agreement with an investor pursuant to which the Company received proceeds of \$3.0 million. The Company issued 1,500,000 shares of Series A preferred stock at a purchase price of \$2.00 per share.

There was no preferred stock outstanding as of June 30, 2018 and December 31, 2017.

MARKER THERAPEUTICS, INC.
NOTES TO CONDENSED FINANCIAL STATEMENTS
(Unaudited)

Note 10 — Stockholders' Equity

Common Stock

The Company has authorized 23,222,224 shares of common stock, \$0.0001 par value per share, for issuance. Each share of common stock is entitled to one vote. Common stock owners are entitled to dividends when funds are legally available and declared by the Board.

2018 Common Stock Transactions

On March 16, 2018, the Company entered into a License Agreement (the "Agreement") with BCM. The Company issued 1,200,000 shares of common stock at fair value of approximately \$5.0 million.

Note 11 — Commitments and Contingencies

Litigation

The Company is not a party to any material legal proceedings and is not aware of any pending or threatened claims. From time to time, the Company may be subject to various legal proceedings and claims that arise in the ordinary course of its business activities.

Note 12 — Subsequent Events

Subsequent events have been evaluated through September 7, 2018, which is the date the financial statements were available to be issued. All appropriate subsequent event disclosures, if any, have been made in the notes to the unaudited condensed financial statements.

**AGREEMENT AND PLAN OF MERGER
AND REORGANIZATION**

among

TAPIMMUNE INC.,

a Nevada corporation;

TIMBERWOLF MERGER SUB, INC., and

MARKER THERAPEUTICS, INC.

Dated as of May 15, 2018

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AGREEMENT AND PLAN OF MERGER AND REORGANIZATION

THIS AGREEMENT AND PLAN OF MERGER AND REORGANIZATION (this “*Agreement*”) is made and entered into as of May 15, 2018, by and among **TAPIMMUNE INC.**, a Nevada corporation (“*TapImmune*”), **TIMBERWOLF MERGER SUB, INC.**, a Delaware corporation (“*Merger Sub*”), and **MARKER THERAPEUTICS, INC.**, a Delaware corporation (“*Marker*”). TapImmune, Merger Sub and Marker may each be referred to herein individually as a “*Party*” and collectively as the “*Parties*.” Certain capitalized terms used in this Agreement are defined in Exhibit A.

RECITALS

A. TapImmune and Marker intend to effect a merger of Merger Sub with and into Marker (the “*Merger*”) in accordance with this Agreement and the DGCL. Upon consummation of the Merger, Merger Sub will cease to exist, and Marker will become a wholly-owned Subsidiary of TapImmune.

B. The Parties intend that the Merger qualify as a “reorganization” under the provisions of Section 368(a) of the Code and the Treasury Regulations promulgated thereunder.

C. The TapImmune Board of Directors (i) has determined that the Merger is fair to, and in the best interests of, TapImmune and the TapImmune Stockholders, (ii) has deemed advisable and approved this Agreement, the Merger, the TapImmune Stockholder Matters, and the other actions contemplated by this Agreement, and (iii) has determined to recommend that the TapImmune Stockholders vote to approve the TapImmune Stockholder Matters, including the issuance of the Marker Merger Shares and the Marker Merger Warrants to the Marker Stockholders.

D. The Board of Directors of Merger Sub (i) has determined that the Merger is fair to, and in the best interests of, Merger Sub and its sole stockholder, (ii) has deemed advisable and approved this Agreement, the Merger, and the applicable Contemplated Transactions, and (iii) has determined to recommend that the stockholder of Merger Sub vote to adopt this Agreement and thereby approve the Merger and the applicable Contemplated Transactions.

E. The Marker Board of Directors (i) has determined that the Merger is advisable and fair to, and in the best interests of, Marker and the Marker Stockholders, (ii) has deemed advisable and approved the Marker Stockholder Matters and other actions contemplated by this Agreement, and (iii) has determined to recommend that the Marker Stockholders vote to adopt this Agreement and thereby approve the Marker Stockholder Matters.

F. In order to induce TapImmune and Merger Sub to enter into this Agreement and to cause the Merger to be consummated, the officers and directors of Marker and the Marker Stockholders, in each case, listed on Schedule A hereto, are executing concurrently with the execution and delivery of this Agreement, voting and lock-up agreements in favor of TapImmune in the form substantially attached hereto as Exhibit B (the “*Marker Stockholder Voting and Lock-Up Agreements*”).

G. In order to induce Marker to enter into this Agreement and to cause the Merger to be consummated, the officers and directors of TapImmune and the TapImmune Stockholders, in each case, listed on Schedule B hereto, are executing voting and lock-up agreements in favor of Marker concurrently with the execution and delivery of this Agreement in the form substantially attached hereto as Exhibit C (the “*TapImmune Stockholder Voting and Lock-Up Agreements*”).

H. TapImmune intends to close the TapImmune Closing Financing in the amount of at least \$25 million contemporaneously with the Closing.

I. The Parties expect the Merger to be accounted for as an asset acquisition by TapImmune in accordance with FASB Accounting Standards Update 2017-01 — Business Combinations (Topic 805): Clarifying the Definition of a Business.

AGREEMENT

The parties to this Agreement, intending to be legally bound, agree as follows:

ARTICLE 1 DESCRIPTION OF TRANSACTION

1.1. Structure of the Merger. Upon the terms and subject to the conditions set forth in this Agreement and in accordance with the DGCL, at the Effective Time, (a) Merger Sub shall be merged with and into Marker, and (b) the separate existence of Merger Sub shall cease and Marker will continue its corporate existence under the DGCL as the surviving corporation in the Merger (the “*Surviving Corporation*”).

1.2. Effects of the Merger. The Merger shall have the effects set forth in this Agreement and in the applicable provisions of the DGCL. As a result of the Merger, Marker will become a wholly-owned Subsidiary of TapImmune.

1.3. Closing; Effective Time. Unless this Agreement is earlier terminated pursuant to the provisions of Section 9.1, and subject to the satisfaction or waiver of the conditions set forth in Article 6, Article 7 and Article 8, the closing of the Merger (the “*Closing*”) shall take place at the offices of Seyfarth Shaw LLP, 700 Milam, Suite 1400, Houston, Texas 77002, as promptly as practicable (but in no event later than the second Business Day following the satisfaction or waiver of the last to be satisfied or waived of the conditions set forth in Article 6, Article 7 and Article 8, other than those conditions that by their nature are to be satisfied at the Closing, but subject to the satisfaction or waiver of each of such conditions), or at such other time, date and place as TapImmune and Marker may mutually agree in writing; *provided, however*, that if TapImmune is not prepared to close the TapImmune Closing Financing at such time, TapImmune has the right, in its sole discretion to delay the Closing for up to twenty (20) calendar days. The date on which the Closing actually takes place is referred to as the “*Closing Date*.” At the Closing, the Parties hereto shall cause a certificate of merger (the “*Certificate of Merger*”) to be executed, acknowledged and filed with the Secretary of State of the State of Delaware in accordance with the applicable requirements of the DGCL and shall make all other filings or recordings required under the DGCL. The Merger will become effective at such time as the Certificate of Merger has been duly filed with the Secretary of State of the State of Delaware or at such later time as may be specified in such Certificate of Merger with the consent of TapImmune and Marker (the time as of which the Merger becomes effective being referred to as the “*Effective Time*”).

1.4. Certificate of Incorporation and Bylaws; Directors and Officers. At the Effective Time:

(a) the certificate of incorporation of the Surviving Corporation shall be amended and restated in its entirety to read as set forth in Exhibit D until thereafter amended as provided by the DGCL and such certificate of incorporation;

(b) the certificate of incorporation of TapImmune shall be the certificate of incorporation of TapImmune immediately prior to the Effective Time, until thereafter amended as provided by the DGCL and such certificate of incorporation; *provided, however*, that at the Effective Time, TapImmune shall file one or more amendments to its certificate of incorporation or a certificate of conversion and new certificate of incorporation, as applicable, to the extent approved by the holders of TapImmune Common Stock as contemplated by Section 5.3, to (i) change the name of TapImmune to “Marker Therapeutics, Inc.,” (ii) increase the authorized shares of TapImmune Common Stock, (iii) effect the Reincorporation of TapImmune to Delaware, (iv) if deemed necessary by the Parties, effect the Reverse Stock Split, and (v) make such other changes as are mutually agreeable to TapImmune and Marker;

(c) the bylaws of the Surviving Corporation shall be amended and restated in their entirety to read identically to the bylaws of Merger Sub as in effect immediately prior to the Effective Time, until thereafter amended in accordance with the terms of such bylaws, the certificate of incorporation of the Surviving Corporation and the DGCL;

(d) prior to the Closing, but to be effective at the Closing, the Board of Directors of TapImmune shall (i) increase the size of the Board of Directors of TapImmune to eight (8) directors, (ii) take such action (including securing resignations of the existing members of the Board of Directors other than

those designated by TapImmune as set forth in Schedule C-1 hereto) necessary to cause the Board of Directors of TapImmune to be constituted as set forth on Schedule C-1 hereto and (iii) secure the resignations of the existing members of the committees of the Board of Directors of TapImmune. Promptly following the Closing, the Board of Directors of TapImmune, as re-constituted in accordance with this Section 1.4(d), shall take such action necessary to cause the committees of the Board of Directors of TapImmune to be constituted as set forth on Schedule C-2 hereto; and

(e) the directors and officers of the Surviving Corporation, each to hold office in accordance with the certificate of incorporation and bylaws of the Surviving Corporation, shall be agreed to by the Parties prior to the filing with the SEC of the Proxy Statement.

1.5. Conversion of Marker Securities and Issuance of Marker Merger Warrants; Additional Merger Warrants.

(a) At the Effective Time, by virtue of the Merger and without any further action on the part of TapImmune, Merger Sub, Marker or any Marker Stockholder:

(i) each share of Marker Common Stock or Marker Preferred Stock held as treasury stock or held or owned by Marker, TapImmune, or Merger Sub, immediately prior to the Effective Time shall be canceled and retired and shall cease to exist, and no consideration shall be delivered in exchange therefor; and

(ii) subject to Section 1.5(c), each share of Marker Common Stock outstanding immediately prior to the Effective Time (excluding shares to be canceled pursuant to Section 1.5(a)(i) and Dissenting Shares), shall be converted solely into the right to receive (x) a number of shares of TapImmune Common Stock equal to the Stock Exchange Ratio, plus (y) a number of Marker Merger Warrants to purchase shares of TapImmune Common Stock equal to the Warrant Exchange Ratio, plus (z) a number of Additional Merger Warrants, if any, on the terms and at the ratio described in Section 1.5(d) below (collectively, the “*Merger Consideration*”); provided, however, that notwithstanding anything to the contrary herein, (1) each stockholder of Marker set forth on Schedule D (Unaccredited Investors) hereto, and (2) each other stockholder of Marker with respect to whom the Parties have, after the date hereof, mutually agreed (without any further amendment to this Agreement) does not meet the definition of an “accredited investor” as defined in Rule 501(a) of Regulation D promulgated under the Securities Act shall, in each case, in lieu of such portion of the Merger Consideration that such stockholder would otherwise be entitled to receive under this Section 1.5(a)(ii), be paid a cash payment per share equal to the product obtained by multiplying the closing price of TapImmune Common Stock on the NASDAQ Capital Market on the Closing Date by the Stock Exchange Ratio.

(b) If any shares of Marker Common Stock outstanding immediately prior to the Effective Time are unvested or are subject to a repurchase option or the risk of forfeiture under any applicable restricted stock purchase agreement or other agreement with Marker, then the shares of TapImmune Common Stock issued in exchange for such shares of Marker Common Stock will to the same extent be unvested or subject to the same repurchase option or risk of forfeiture, and the book-entry shares of TapImmune Common Stock shall accordingly be marked with appropriate legends. Marker shall take all actions that may be necessary to ensure that, from and after the Effective Time, TapImmune is entitled to exercise any such repurchase option or other right set forth in any such restricted stock purchase agreement or other agreement.

(c) No fractional shares of TapImmune Common Stock shall be issued in connection with the Merger, and no certificates or scrip for any such fractional shares shall be issued. Any holder of Marker Common Stock who would otherwise be entitled to receive a fraction of a share of TapImmune Common Stock (after aggregating all fractional shares of TapImmune Common Stock issuable to such holder) shall, in lieu of such fraction of a share and upon surrender by such holder of a letter of transmittal in accordance with Section 1.7 and accompanying documents as required therein, be paid in cash the dollar amount (rounded to the nearest whole cent), without interest, determined by multiplying such fraction by the closing price of a share of TapImmune Common Stock on The NASDAQ Capital Market (or such other NASDAQ market on which the TapImmune Common Stock then trades) on the date the Merger becomes effective.

(d) If the value of the Maverick Merger Shares is less than \$30 million, as valued using the Financing Commitment Price, then an additional number of warrants to purchase shares of Timberwolf Common Stock (the “*Additional Merger Warrants*”) shall be issued as Merger Consideration, in the form set forth on Exhibit F, except they will be exercisable for a period beginning on the first anniversary of the Closing Date and ending on the fifth anniversary of the Closing Date at an exercise price per share of \$0.01, with the aggregate number of Additional Merger Warrants to be determined pursuant to the following formula:

$$Z = \frac{\$30,000,000 - ((X)(Y))}{X}$$

where

Z = the number of Maverick Merger Warrants to be issued at an exercise price of \$0.01;

X = Financing Commitment Price; and

Y = the number of Maverick Merger Shares to be issued as Merger Consideration.

Accordingly, if the value of the Maverick Merger Shares is less than \$30 million using the Financing Commitment Price, with respect to the Additional Merger Warrants to be issued pursuant to Section 1.5(a)(ii)(z), each share of Maverick Common Stock shall receive a number of Additional Merger Warrants to purchase shares of Timberwolf Common Stock at an exercise price of \$0.01 per share equal to the following ratio:

$$\frac{Z}{\text{Maverick Outstanding Shares}}$$

(e) No fractional Marker Merger Warrants or Additional Merger Warrants shall be issued. In lieu of fractional Marker Merger Warrants or Additional Merger Warrants, each Marker Stockholder who would otherwise be entitled to a fraction of a warrant will receive a number of whole Marker Merger Warrants or Additional Merger Warrants determined by rounding up or down to the nearest whole number.

(f) Each share of common stock, \$0.001 par value per share, of Merger Sub issued and outstanding immediately prior to the Effective Time shall be converted into and exchanged for one validly issued, fully paid and nonassessable share of common stock, \$0.0001 par value per share, of the Surviving Corporation. Each stock certificate of Merger Sub evidencing ownership of any such shares shall, as of the Effective Time, evidence ownership of such shares of common stock of the Surviving Corporation.

(g) If, between the time of calculating the Stock Exchange Ratio and the Effective Time, the outstanding shares of Marker Capital Stock or TapImmune Common Stock have been changed into, or exchanged for, a different number of shares or a different class, by reason of any stock dividend, subdivision, reclassification, recapitalization, split (including the Reverse Stock Split to the extent such split has not previously been taken into account in calculating the Exchange Ratio), combination or exchange of shares, the Stock Exchange Ratio shall be correspondingly adjusted to provide the holders of Marker Common Stock the same economic effect as contemplated by this Agreement prior to such event.

1.6. Closing of Marker’s Transfer Books. At the Effective Time: (a) all shares of Marker Common Stock outstanding immediately prior to the Effective Time shall be treated in accordance with Section 1.5(a), and all holders of certificates representing shares of Marker Capital Stock that were outstanding immediately prior to the Effective Time shall cease to have any rights as Marker Stockholders; and (b) the stock transfer books of Marker shall be closed with respect to all shares of Marker Capital Stock outstanding immediately prior to the Effective Time. No further transfer of any such shares of Marker Capital Stock shall be made on such stock transfer books after the Effective Time. If, after the Effective Time, a valid certificate previously representing any shares of Marker Capital Stock outstanding immediately prior to the Effective Time (a “*Marker Stock Certificate*”) is presented to the Exchange Agent or to the Surviving Corporation, such Marker Stock Certificate shall be canceled and shall be exchanged as provided in Section 1.5 and Section 1.7.

1.7. Surrender of Certificates.

(a) On or prior to the Closing Date, TapImmune and Marker shall agree upon and select a reputable bank, transfer agent or trust company to act as exchange agent in the Merger (the “*Exchange Agent*”). At the Effective Time, TapImmune shall deposit with the Exchange Agent: (i) the aggregate number of book-entry shares and Marker Merger Warrants and Additional Merger Warrants, if any, representing the Merger Consideration issuable to Marker Stockholders pursuant to Section 1.5(a), and (ii) cash sufficient to make the payments described in Section 1.5(a)(ii) and the payments in lieu of fractional shares in accordance with Section 1.5(c). The book-entry shares of TapImmune Common Stock, Marker Merger Warrants, Additional Merger Warrants, if any, and cash amounts so deposited with the Exchange Agent, together with any dividends or distributions received by the Exchange Agent with respect to such shares, are referred to collectively as the “*Exchange Fund*.”

(b) Promptly after the Effective Time, the Parties shall cause the Exchange Agent to mail to the Persons who were record holders of Marker Stock Certificates immediately prior to the Effective Time, as set forth on the Allocation Certificate: (i) a letter of transmittal in customary form; and (ii) instructions for effecting the surrender of Marker Stock Certificates in exchange for book-entry shares of TapImmune Common Stock, Marker Merger Warrants and Additional Merger Warrants, if any. Upon surrender of a Marker Stock Certificate to the Exchange Agent for exchange, together with a duly executed letter of transmittal and such other documents as may be reasonably required by the Exchange Agent: (A) the holder of such Marker Stock Certificate shall be entitled to receive in exchange therefor one or more book-entry shares representing the portion of the Merger Consideration (in a number of whole shares of TapImmune Common Stock) that such holder has the right to receive pursuant to the provisions of Section 1.5(a) (and cash in lieu of any fractional share of TapImmune Common Stock pursuant to the provisions of Section 1.5(c)), or, in the case of the stockholders of Marker set forth on Schedule D hereto, cash, pursuant to the provisions of Section 1.5; and (B) upon delivery of such consideration to the applicable holder in accordance with Section 1.5, the Marker Stock Certificate so surrendered shall be canceled. Until surrendered as contemplated by this Section 1.7(b), each Marker Stock Certificate shall be deemed, from and after the Effective Time, to represent only the right to receive shares of TapImmune Common Stock (and cash in lieu of any fractional share of TapImmune Common Stock), or, in the case of the stockholders of Marker set forth on Schedule D hereto, cash. If any Marker Stock Certificate has been lost, stolen or destroyed, TapImmune may, in its discretion and as a condition precedent to the delivery of any shares of TapImmune Common Stock (or, in the case of the stockholders of Marker set forth on Schedule D hereto, cash) require the owner of such lost, stolen or destroyed Marker Stock Certificate to provide an applicable affidavit with respect to such Marker Stock Certificate and post a bond indemnifying TapImmune against any claim suffered by TapImmune related to the lost, stolen or destroyed Marker Stock Certificate or any TapImmune Common Stock issued in exchange therefor as TapImmune may reasonably request.

(c) No dividends or other distributions declared or made with respect to TapImmune Common Stock with a record date after the Effective Time shall be paid to the holder of any unsurrendered Marker Stock Certificate with respect to the shares of TapImmune Common Stock that such holder has the right to receive in the Merger until such holder surrenders such Marker Stock Certificate or an affidavit of loss or destruction in lieu thereof in accordance with this Section 1.7 (at which time such holder shall be entitled, subject to the effect of applicable abandoned property, escheat or similar laws, to receive all such dividends and distributions, without interest).

(d) Any portion of the Exchange Fund that remains undistributed to holders of Marker Stock Certificates six (6) months after the Closing Date shall be delivered to TapImmune upon demand, and any holders of Marker Stock Certificates who have not theretofore surrendered their Marker Stock Certificates in accordance with this Section 1.7 shall thereafter look only to TapImmune for satisfaction of their claims for TapImmune Common Stock (or, in the case of the stockholders of Marker set forth on Schedule D hereto, cash), cash in lieu of fractional shares of TapImmune Common Stock and any dividends or distributions with respect to shares of TapImmune Common Stock.

(e) Each of the Exchange Agent, TapImmune and the Surviving Corporation shall be entitled to deduct and withhold from any consideration deliverable pursuant to this Agreement to any holder of

any Marker Stock Certificate such amounts as are required to be deducted or withheld from such consideration under the Code or under any other applicable Legal Requirement and shall be entitled to request any reasonably appropriate Tax forms, including an IRS Form W-9 (or the appropriate IRS Form W-8, as applicable), from any recipient of payments hereunder. To the extent such amounts are so deducted or withheld, and remitted to the appropriate Tax authority, such amounts shall be treated for all purposes under this Agreement as having been paid to the Person to whom such amounts would otherwise have been paid.

(f) No party to this Agreement shall be liable to any holder of any Marker Stock Certificate or to any other Person with respect to any shares of TapImmune Common Stock (or dividends or distributions with respect thereto) or for any cash amounts delivered to any public official pursuant to any applicable abandoned property law, escheat law or similar Legal Requirement.

1.8. Appraisal Rights.

(a) Notwithstanding any provision of this Agreement to the contrary, shares of Marker Capital Stock that are outstanding immediately prior to the Effective Time (other than shares canceled pursuant to Section 1.5(a)(i)) and are held by a Marker Stockholder who has not voted in favor of adoption of this Agreement or consented thereto in writing and who has properly exercised and perfected appraisal rights for such shares of Marker Common Stock in accordance with the DGCL (collectively, the “*Dissenting Shares*”) shall not be converted into or represent the right to receive the portion of the Merger Consideration attributable to such Dissenting Shares, but instead shall be entitled to only such rights as are granted by Section 262 of the DGCL; *provided, however*, that if after the Effective Time, such stockholder fails to perfect or effectively withdraws or otherwise loses such holder’s appraisal rights under the DGCL or if a court of competent jurisdiction determines that such holder is not entitled to the relief provided by Section 262 of the DGCL, such shares of Marker Common Stock shall be deemed to be converted into and to have become exchangeable for, as of the Effective Time, the right to receive the portion of the Merger Consideration attributable to such Dissenting Shares upon their surrender in the manner provided in Section 1.5, without interest thereon.

(b) Marker shall give TapImmune prompt written notice of any demands by dissenting stockholders received by Marker, withdrawals of such demands and any other instruments served on Marker and any material correspondence received by Marker in connection with such demands. Marker and TapImmune shall jointly participate in all negotiations and proceedings with respect to such demands except as limited by applicable Legal Requirements. Neither Marker nor TapImmune will, except with prior written consent of the other, make any payment with respect to, or settle or offer to settle, any such demands, unless and to the extent required to do so under applicable Legal Requirements.

1.9. Further Action. If, at any time after the Effective Time, any further action is determined by the Surviving Corporation to be necessary or desirable to carry out the purposes of this Agreement or to vest the Surviving Corporation with full right, title and possession of and to all rights and property of Marker, then the officers and directors of the Surviving Corporation shall be fully authorized, and shall use their commercially reasonable efforts (in the name of Marker, in the name of Merger Sub and otherwise) to take such action.

1.10. Tax Consequences. For federal income Tax purposes, the Merger is intended to constitute a reorganization within the meaning of Section 368(a) of the Code and the Treasury Regulations promulgated thereunder. The parties to this Agreement adopt this Agreement as a “plan of reorganization” within the meaning of Treasury Regulations Section 1.368-2(g).

1.11. Certificates.

(a) TapImmune will prepare and delivery to Marker at least two Business Days prior to the Closing Date, a certificate signed by the Chief Financial Officer (CFO) (or if there is no CFO, the principal accounting officer) of TapImmune in a form reasonably acceptable to Marker, which sets forth a true and complete list, as of immediately prior to the Effective Time of the number of

TapImmune Outstanding Shares and each component thereof (broken down by outstanding shares of TapImmune Common Stock, TapImmune Options, TapImmune Warrants, and other relevant securities, if any) (“*TapImmune Outstanding Securities Certificate*”).

(b) Marker will prepare and deliver to TapImmune at least two Business Days prior to the Closing Date a certificate signed by the Chief Financial Officer of Marker in a form reasonably acceptable to TapImmune, which sets forth a true and complete list, as of immediately prior to the Effective Time of: (a) the record holders of Marker Common Stock; (b) the number of shares of Marker Common Stock owned; and (c) the portion of the Merger Consideration each such holder is entitled to receive pursuant to Section 1.5 (the “*Allocation Certificate*”).

ARTICLE 2 REPRESENTATIONS AND WARRANTIES OF MARKER

Marker represents and warrants to TapImmune and Merger Sub as follows, except as set forth in the written disclosure schedule delivered by Marker to TapImmune (the “*Marker Disclosure Schedule*”) (it being understood that the representations and warranties in this Article 2 are qualified by: (a) any exceptions and disclosures set forth in the section or subsection of the Marker Disclosure Schedule corresponding to the particular section or subsection in this Article 2 in which such representation and warranty appears; (b) any exceptions or disclosures explicitly cross-referenced in such section or subsection of the Marker Disclosure Schedule by reference to another section or subsection of the Marker Disclosure Schedule; and (c) any exceptions or disclosures set forth in any other section or subsection of the Marker Disclosure Schedule to the extent it is reasonably apparent from the wording of such exception or disclosure that such exception or disclosure qualifies such representation and warranty). The inclusion of any information in the Marker Disclosure Schedule shall not be deemed to be an admission or acknowledgement, in and of itself, that such information is required by the terms hereof to be disclosed, is material, has resulted in or would result in a Marker Material Adverse Effect, or is outside the Ordinary Course of Business.

2.1. Subsidiaries; Due Organization; Organizational Documents.

(a) Marker has no Subsidiaries and does not own any capital stock of, or any equity interest of any nature in, any other Entity. Marker has not agreed nor is obligated to make, nor is bound by any Contract under which it may become obligated to make, any future investment in or capital contribution to any other Entity. Marker has not, at any time, been a general partner of, or has otherwise been liable for any of the debts or other obligations of, any general partnership, limited partnership or other Entity.

(b) Marker is a corporation duly organized, validly existing and in good standing under the laws of the jurisdiction of its incorporation and has all necessary power and authority: (i) to conduct its business in the manner in which its business is currently being conducted; (ii) to own and use its assets in the manner in which its assets are currently owned and used; and (iii) to perform its obligations under all Marker Contracts.

(c) Marker is qualified to do business as a foreign corporation and is in good standing under the laws of all jurisdictions where the nature of its business requires such qualification other than in jurisdictions where the failure to be so qualified would not constitute a Marker Material Adverse Effect. Section 2.1(c) of the Marker Disclosure Schedule sets forth each jurisdiction in which Marker is qualified to do business.

(d) Each director and officer of Marker as of the date of this Agreement is set forth in Section 2.1(d) of the Marker Disclosure Schedule.

(e) Marker has delivered or made available to TapImmune accurate and complete copies of (i) the Certificate of Incorporation, bylaws and other charter and organizational documents, including all currently effective amendments thereto for Marker, and any predecessor documents from Marker’s original formation as a limited liability company, and (ii) any code of conduct or similar policy adopted by Marker or by the Marker Board of Directors or any committee thereof. Marker has not taken any action in breach or violation of any of the provisions of its Certificate of Incorporation,

bylaws or other charter or organizational documents nor is in breach or violation of any of the material provisions of its Certificate of Incorporation, bylaws or other charter or organizational documents, except as would not reasonably be expected to have, individually or in the aggregate, a Marker Material Adverse Effect.

2.2. Authority; Vote Required.

(a) Marker has all necessary corporate power and authority to enter into and to perform its obligations under this Agreement. The Marker Board of Directors has: (i) determined that the Merger is fair to, and in the best interests of Marker and Marker Stockholders; (ii) duly authorized and approved by all necessary corporate action, the execution, delivery and performance of this Agreement and the Contemplated Transactions; (iii) recommended the approval of the Marker Stockholder Matters by the Marker Stockholders and directed that the Marker Stockholder Matters be submitted for consideration by Marker Stockholders in connection with the solicitation of the Required Marker Stockholder Vote; and (iv) approved the Marker Stockholder Voting and Lock-Up Agreements and the transactions contemplated thereby. This Agreement has been duly executed and delivered by Marker and, assuming the due authorization, execution and delivery by TapImmune and Merger Sub, constitutes the legal, valid and binding obligation of Marker, enforceable against Marker in accordance with its terms, subject to: (A) laws of general application relating to bankruptcy, insolvency and the relief of debtors; and (B) rules of law governing specific performance, injunctive relief and other equitable remedies.

(b) The affirmative vote of the holders of 66-2/3% of the shares of Marker Common Stock, as outstanding on the record date for the written consent in lieu of a meeting pursuant to Section 228 of the DGCL approving the Marker Stockholder Matters, in the form attached hereto as Exhibit E (each, an “**Marker Stockholder Written Consent**” and collectively, the “**Marker Stockholder Written Consents**”) and entitled to vote thereon (collectively, the “**Required Marker Stockholder Vote**”), is the only vote of the holders of any class or series of Marker Capital Stock necessary to approve the Marker Stockholder Matters. The shares of Marker Capital Stock covered by the Marker Stockholder Voting and Lock-Up Agreements are sufficient to obtain the Required Marker Stockholder Vote.

2.3. Non-Contravention; Consents.

(a) The execution and delivery of this Agreement by Marker does not, and the performance of this Agreement by Marker will not, (i) conflict with or violate the Certificate of Incorporation or bylaws of Marker; (ii) subject to obtaining the Required Marker Stockholder Vote and compliance with the requirements set forth in Section 2.3(b) below, conflict with or violate any Legal Requirement applicable to Marker or by which its properties is bound or affected, except for any such conflicts or violations that would not constitute a Marker Material Adverse Effect; or (iii) except as listed on this Section 2.3(a) of the Marker Disclosure Schedule, require Marker to make any filing with or give any notice or make any payment to a Person, or obtain any Consent from a Person, or result in any breach of or constitute a default (or an event that with notice or lapse of time or both would become a default) under, or impair Marker’s rights or alter the rights or obligations of any third party under, or give to others any rights of termination, amendment, acceleration or cancelation of, or result in the creation of an Encumbrance on any of the properties or assets of Marker pursuant to, in each case, any Marker Material Contract.

(b) No material Consent or order of, or registration, declaration or filing with, any Governmental Body is required by or with respect to Marker in connection with the execution and delivery of this Agreement or the consummation of the Contemplated Transactions, except for (i) the filing of the Certificate of Merger with the Secretary of State of the State of Delaware pursuant to the DGCL, and (ii) such Consents, orders, registrations, declarations and filings as may be required under applicable federal and state securities laws.

2.4. Capitalization.

(a) The authorized capital stock of Marker as of the date of this Agreement consists of: (i) 23,222,224 shares of common stock, par value \$0.0001 per share (the “**Marker Common Stock**”), of which 11,200,002 shares are issued and outstanding as of the date of this Agreement; and

(ii) 10,000,000 shares of preferred stock, par value \$0.0001 per share, of which 10,000,000 shares are designated as Series A Preferred Stock, of which no shares are issued and outstanding as of the date of this Agreement (the “**Marker Preferred Stock**”). Marker does not hold any of its capital stock in treasury, other than 1,500,000 shares of Marker Preferred Stock which has been repurchased and are held in treasury. All of the outstanding shares of Marker Capital Stock have been duly authorized and validly issued, and are fully paid and nonassessable. Section 2.4(a) of the Marker Disclosure Schedule lists, as of the date of this Agreement (i) each record holder of issued and outstanding Marker Capital Stock and the number and type of shares of Marker Capital Stock held by such holder.

(b) Except for the Marker 2017 Equity Incentive Plan, as amended (the “**2017 Marker Plan**”), Marker does not have any stock option plan or any other plan, program, agreement or arrangement providing for any equity-based compensation for any Person. Marker has reserved 2,222,222 shares of Marker Common Stock for issuance under the 2017 Marker Plan. As of the date of this Agreement, of such reserved shares of Marker Common Stock, no options to purchase shares have been granted or are currently outstanding, and 2,222,222 shares of Marker Common Stock remain available for future issuance pursuant to the 2017 Marker Plan.

(c) There is no: (i) outstanding subscription, option, call, warrant or right (whether or not currently exercisable) to acquire any shares of the capital stock or other securities of Marker; (ii) outstanding security, instrument or obligation that is or may become convertible into or exchangeable for any shares of the capital stock or other securities of Marker; (iii) stockholder rights plan (or similar plan commonly referred to as a “poison pill”) or Contract under which Marker is or may become obligated to sell or otherwise issue any shares of its capital stock or any other securities; or (iv) condition or circumstance that may give rise to or provide a basis for the assertion of a claim by any Person to the effect that such Person is entitled to acquire or receive any shares of capital stock or other securities of Marker. There are no outstanding or authorized stock appreciation, phantom stock, profit participation, restricted stock units, equity-based or other similar rights with respect to Marker.

(d) (i) None of the outstanding shares of Marker Capital Stock are entitled or subject to any preemptive right, right of repurchase or forfeiture, right of participation, right of maintenance or any similar right; (ii) none of the outstanding shares of Marker Capital Stock are subject to any right of first refusal in favor of Marker; (iii) there are no outstanding bonds, debentures, notes or other indebtedness of Marker having a right to vote on any matters on which the Marker Stockholders have a right to vote; (iv) there is no Marker Contract to which Marker is a party relating to the voting or registration of, or restricting any Person from purchasing, selling, pledging or otherwise disposing of (or from granting any option or similar right with respect to), any shares of Marker Capital Stock. Marker is not under any obligation, or is bound by any Contract pursuant to which it may become obligated, to repurchase, redeem or otherwise acquire any outstanding shares of Marker Capital Stock or other securities.

(e) All outstanding shares of Marker Capital Stock have been issued and granted, as applicable, in material compliance with all applicable securities laws and other applicable Legal Requirements.

2.5. Financial Statements.

(a) Section 2.5(a) of the Marker Disclosure Schedule includes true and complete copies of (i) Marker’s unaudited balance sheets at December 31, 2016 and December 31, 2017 and (ii) Marker’s unaudited statements of income, cash flow and stockholders’ equity for the years ended December 31, 2016 and December 31, 2017 (collectively, the “**Marker Financials**”). The Marker Financials (a) are in accordance with the books and records of Marker; (b) present fairly in all material respects the financial condition of Marker as of the date thereof; (c) present fairly and accurately in all material respects the results of the operations of Marker for the period covered by such statements; and (d) were prepared on a cash basis, historically and consistently applied, which is a basis of accounting other than the United States generally accepted accounting principles (“**GAAP**”). The Marker Financials do not include any material assets or omit to state any material liability, absolute or contingent, or other facts, the inclusion or omission of which render the Marker Financials, in light of the circumstances in which they are made, misleading.

(b) Marker maintains a system of internal accounting controls designed to provide reasonable assurance that: (i) transactions are executed in accordance with management's general or specific authorizations; (ii) transactions are recorded as necessary to permit preparation of financial statements on a cash basis; (iii) access to assets is permitted only in accordance with management's general or specific authorization; and (iv) the recorded accountability for assets is compared with the existing assets at reasonable intervals and appropriate action is taken with respect to any differences. Marker maintains internal control over financial reporting that provides reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements.

(c) Section 2.5(c) of the Marker Disclosure Schedule lists, and Marker has delivered to TapImmune, accurate and complete copies of the documentation creating or governing, all securitization transactions and "off-balance sheet arrangements" (as defined in Item 303(c) of Regulation S-K under the Exchange Act) effected by Marker since January 1, 2016.

(d) Since January 1, 2016, there have been no formal internal investigations regarding financial reporting or accounting policies and practices discussed with, reviewed by or initiated at the direction of the chief executive officer, chief financial officer or general counsel of Marker, Marker's Board of Directors or any committee thereof. Since January 1, 2016, neither Marker nor its independent auditors have identified (i) any significant deficiency or material weakness in the system of internal accounting controls utilized by Marker, (ii) any fraud, whether or not material, that involves Marker's management or other employees who have a role in the preparation of financial statements or the internal accounting controls utilized by Marker, or (iii) any claim or allegation regarding any of the foregoing.

2.6. Absence of Changes. Except as set forth in Section 2.6 of the Marker Disclosure Schedule, between January 1, 2017 and the date of this Agreement, Marker has conducted its business in the Ordinary Course of Business and there has not been (a) any event that has had a Marker Material Adverse Effect or (b) any action, event or occurrence that would have required consent of TapImmune pursuant to Section 4.3(b) of this Agreement had such action, event or occurrence taken place after the execution and delivery of this Agreement.

2.7. Title to Assets. Except with respect to material Marker IP Rights, which are covered in Section 2.9, Marker owns, and has good and valid title to, or, in the case of leased properties and assets, valid leasehold interests in, all tangible properties or assets and equipment used or held for use in its business or operations or purported to be owned by it, in each case, free and clear of any Encumbrances, except for: (i) any lien for current Taxes not yet due and payable or for Taxes that are being contested in good faith and for which adequate reserves have been made on the Marker Unaudited Balance Sheet; (ii) minor liens that have arisen in the Ordinary Course of Business and that do not (in any case or in the aggregate) materially detract from the value of the assets subject thereto or materially impair the operations of Marker; and (iii) liens listed in Section 2.7 of the Marker Disclosure Schedule.

2.8. Real Property; Leaseholds. Marker does not currently own and has never owned any real property or any interest in real property, except for the leaseholds created under the real property leases (including any amendments thereto) identified in Section 2.8 of the Marker Disclosure Schedule (the "**Marker Leases**"), which are each in full force and effective, with no existing material default thereunder. Marker has delivered or made available to TapImmune accurate and complete copies of the Marker Leases.

2.9. Intellectual Property.

(a) To Marker's Knowledge, Marker, owns, has validly licensed, or has the right to use all Marker IP Rights, except for any failure to own, license or have the right to use that would not constitute a Marker Material Adverse Effect.

(b) Section 2.9(b) of the Marker Disclosure Schedule is an accurate, true and complete listing of all Marker Registered IP owned by Marker.

(c) Section 2.9(c) of the Marker Disclosure Schedule accurately identifies (i) all material Marker IP Rights licensed to Marker (other than (A) any non-customized software that (1) is so licensed solely in executable or object code form pursuant to a non-exclusive, internal use software license and other

Intellectual Property associated with such software or (2) is not incorporated into, or material to the development, manufacturing, or distribution of, any of Marker's products or services (B) any Intellectual Property licensed ancillary to the purchase or use of equipment, reagents or other materials, and (C)(1) agreements between Marker and its respective employees and consultants or (2) non-disclosure or other template agreements entered into in the Ordinary Course of Business); (ii) the corresponding Marker Contracts pursuant to which such Marker IP Rights are licensed to Marker; (iii) whether the license or licenses granted to Marker are exclusive or non-exclusive; and (iv) whether any funding, facilities or personnel of any Governmental Body were used, directly or indirectly, to develop or create, in whole or in part, such Marker IP Rights.

(d) Section 2.9(d) of the Marker Disclosure Schedule accurately identifies each material Marker Contract pursuant to which any Person (other than Marker) has been granted any license or option to obtain a license under, or otherwise has received or acquired any right (whether or not currently exercisable) or interest in, any Marker IP Rights (other than (i) any non-disclosure or other template agreements entered into in the Ordinary Course of Business, and/or (ii) other non-exclusive licenses entered into in the Ordinary Course of Business). Except for the Baylor License Agreement, Marker is not bound by, and no Marker IP Rights are subject to, any Contract containing any covenant or other provision that in any way limits or restricts the ability of Marker to use, exploit, assert or enforce any Marker IP Rights anywhere in the world, in each case as would materially limit the business of Marker as currently conducted or planned to be conducted.

(e) Except as identified on Section 2.9(e) of the Marker Disclosure Schedule, to the Knowledge of Marker, Marker exclusively owns all right, title, and interest to and in the Marker IP Rights (other than (i) Marker IP Rights exclusively and non-exclusively licensed to Marker, as identified in Section 2.9(c) of the Marker Disclosure Schedule, (ii) any non-customized software that (A) is licensed to Marker solely in executable or object code form pursuant to a non-exclusive, internal use software license and other Intellectual Property associated with such software and (B) is not incorporated into, or material to the development, manufacturing, or distribution of, any of Marker's products or services and (iii) any Intellectual Property licensed ancillary to the purchase or use of equipment, reagents or other materials), in each case, free and clear of any Encumbrances (other than Permitted Encumbrances). Without limiting the generality of the foregoing:

(i) All documents and instruments necessary to register or apply for or renew registration of all Marker Registered IP that is solely owned by Marker has been validly executed, delivered and filed in a timely manner with the appropriate Governmental Body except for any such failure, individually or collectively, that would not constitute a Marker Material Adverse Effect.

(ii) Each Person who is or was an employee or contractor of Marker and who is or was involved in the creation or development of any Marker IP Rights has signed a written agreement containing an assignment of such Intellectual Property to Marker and confidentiality provisions protecting trade secrets and confidential information of Marker. To the Knowledge of Marker, no current or former stockholder, officer, director, employee or contractor of Marker has any claim, right (whether or not currently exercisable), or interest to or in any Marker IP Rights. To the Knowledge of Marker, no employee or contractor of Marker is (a) bound by or otherwise subject to any Contract restricting him or her from performing his or her duties for Marker or (b) in breach of any Contract with any current or former employer or other Person concerning Marker IP Rights or confidentiality provisions protecting trade secrets and confidential information comprising Marker IP Rights.

(iii) Except as set forth on Section 2.9(e)(iii) of the Marker Disclosure Schedule, no funding, facilities or personnel of any Governmental Body were used, directly or indirectly, to develop or create, in whole or in part, any Marker IP Rights in which Marker has an ownership interest.

(iv) Marker has taken reasonable steps to maintain the confidentiality of and otherwise protect and enforce its rights in all proprietary information that Marker holds, or purports to hold, as a trade secret.

(v) Except as set forth on Section 2.9(e)(v) of the Marker Disclosure Schedule, Marker has not assigned or otherwise transferred ownership of, or agreed to assign or otherwise transfer ownership of, any Marker IP Rights to any other Person.

(vi) To the Knowledge of Marker, the Marker IP Rights constitute all Intellectual Property necessary for Marker to conduct its business as currently conducted or planned to be conducted.

(vii) To the Knowledge of Marker, the consummation of the transactions contemplated by this Agreement will neither result in the modification, cancellation, termination, suspension of, or acceleration of any payments with respect to any Marker IP Rights Agreements, nor give any third party to any such Marker IP Rights Agreement the right to do any of the foregoing. Following the Closing, TapImmune will be permitted to exercise all of the rights of Marker under such agreements to the same extent, in all material respects, Marker would have been able had the transactions contemplated by this Agreement not occurred and without the payment of any additional amounts or consideration other than ongoing fees, royalties or payments that Marker would otherwise be required to pay.

(f) Marker has delivered, or made available to TapImmune, a complete and accurate copy of all Marker IP Rights Agreements. Marker is not a party to any Contract that, as a result of such execution, delivery and performance of this Agreement, will cause the grant of any license or other right to any Marker IP Rights or impair the right of Marker or the Surviving Corporation and its Subsidiaries to use, sell or license or enforce any Marker IP Rights or portion thereof, except for the occurrence of any such grant or impairment that would not individually or in the aggregate, reasonably be expected to result in a Marker Material Adverse Effect. With respect to each of the Marker IP Rights Agreements: (i) each such agreement is valid and binding on Marker and in full force and effect; (ii) Marker has not received any notice of termination or cancellation under such agreement, or received any notice of breach or default under such agreement, which breach has not been cured or waived; and (iii) neither Marker, and to the Knowledge of Marker, nor any other party to any such agreement, is in breach or default thereof in any material respect.

(g) The manufacture, marketing, license, sale or intended use of any product or service currently approved or sold or under preclinical or clinical development by Marker, to the Knowledge of Marker, does not violate or constitute a breach of any license or agreement between Marker and any third party Marker has disclosed in correspondence to TapImmune the third-party patents and patent applications found during all freedom to operate searches that were conducted by Marker or third parties related to any product or technology currently licensed or sold or under development by Marker. To the Knowledge of Marker, (i) no third party is infringing upon or misappropriating, or violating any license or agreement with Marker relating to, any Marker IP Rights and, (ii) Marker does not infringe or misappropriate any Intellectual Property right of any other party, nor have any claims been made that Marker infringes or misappropriates any Intellectual Property right of any other party. There is no current or, to the Knowledge of Marker, pending challenge, claim or Legal Proceeding (including opposition, interference or other proceeding in any patent or other government office) contesting the validity, enforceability, ownership or right to use, sell, license or dispose of any Marker IP Rights, nor has Marker received any written notice asserting that the manufacture, marketing, license, sale or intended use of any product or service currently approved or sold or under preclinical or clinical development by Marker conflicts with or infringes or misappropriates or will conflict with or infringe or misappropriate the rights of any other Person.

(h) Each item of Marker IP Rights that is Marker Registered IP that is solely owned by Marker is and at all times has been filed and maintained in compliance with all applicable Legal Requirements and all filings, payments and other actions required to be made or taken to maintain such item of Marker Registered IP in full force and effect have been made by the applicable deadline, except for any failure to perform any of the foregoing, individually or collectively, that would not constitute a Marker Material Adverse Effect.

(i) To the Knowledge of Marker, (i) no trademark (whether registered or unregistered) or trade name owned, used, or applied for by Marker conflicts or interferes with any trademark (whether registered or unregistered) or trade name owned, used, or applied for by any other Person, and (ii) none of the goodwill associated with or inherent in any trademark (whether registered or unregistered) in which Marker has or purports to have an ownership interest has been impaired.

(j) (i) Except as set forth in Section 2.9(j) of the Marker Disclosure Schedule, Marker is not bound by any Contract to indemnify, defend, hold harmless, or reimburse any other Person with respect to

any Intellectual Property infringement, misappropriation, or similar claim, and (ii) Marker has not ever assumed, or agreed to discharge or otherwise take responsibility for, any existing or potential liability of another Person for infringement, misappropriation, or violation of any Intellectual Property right, which assumption, agreement or responsibility remains in force as of the date of this Agreement.

2.10. Material Contracts.

(a) Section 2.10(a) of the Marker Disclosure Schedule lists the following Marker Contracts, effective as of the date of this Agreement (each, a “**Marker Material Contract**” and collectively, the “**Marker Material Contracts**”):

(i) each Marker Contract relating to any material bonus, deferred compensation, severance, incentive compensation, pension, profit-sharing or retirement plans, or any other employee benefit plans or arrangements;

(ii) each Marker Contract relating to the employment of, or the performance of employment-related services by, any Person, including any employee, consultant or independent contractor, or entity providing employment related, consulting or independent contractor services, not terminable by Marker on 90 calendar days’ or less notice without liability, except to the extent general principles of wrongful termination law may limit Marker’s or its successor’s ability to terminate employees at will;

(iii) each Marker Contract relating to any agreement or plan, including any stock option plan, stock appreciation right plan or stock purchase plan, any of the benefits of which will be increased, or the vesting of benefits of which will be accelerated, by the occurrence of any of the Contemplated Transactions (either alone or in conjunction with any other event, such as termination of employment), or the value of any of the benefits of which will be calculated on the basis of any of the Contemplated Transactions;

(iv) each Marker Contract relating to any agreement of indemnification or guaranty not entered into in the Ordinary Course of Business;

(v) each Marker Contract containing (A) any covenant limiting the freedom of Marker or the Surviving Corporation to engage in any line of business or compete with any Person, (B) any most-favored pricing arrangement, (C) any exclusivity provision, or (D) any non-solicitation provision;

(vi) each Marker Contract relating to capital expenditures and requiring payments after the date of this Agreement in excess of \$20,000 pursuant to its express terms and not cancelable without penalty;

(vii) each Marker Contract relating to the disposition or acquisition of material assets or any ownership interest in any Entity;

(viii) each Marker Contract relating to any mortgages, indentures, loans, notes or credit agreements, security agreements or other agreements or instruments relating to the borrowing of money or extension of credit in excess of \$20,000 or creating any material Encumbrances with respect to any assets of Marker or any loans or debt obligations with officers or directors of Marker;

(ix) each Marker Contract relating to: (A) any distribution agreement (identifying any that contain exclusivity provisions); (B) any agreement involving provision of services or products with respect to any pre-clinical or clinical development activities of Marker; (C) any dealer, distributor, joint marketing, alliance, joint venture, cooperation, development or other agreement currently in force under which Marker has continuing obligations to develop or market any product, technology or service, or any agreement pursuant to which Marker has continuing obligations to develop any Intellectual Property that will not be owned, in whole or in part, by Marker; or (D) any Contract to license any third party to manufacture or produce any product, service or technology of Marker or any Contract to sell, distribute or commercialize any products or service of Marker, in each case, except for Marker Contracts entered into in the Ordinary Course of Business;

(x) each Marker Contract with any Person, including any financial advisor, broker, finder, investment banker or other Person, providing advisory services to Marker in connection with the Contemplated Transactions;

(xi) each Marker IP Rights Agreement other than those that are immaterial;

(xii) each Marker Lease; or

(xiii) any other Marker Contract that is not terminable at will (with no penalty or payment) by Marker and (A) which involves payment or receipt by Marker after the date of this Agreement under any such agreement, Contract or commitment of more than \$20,000 in the aggregate, or obligations after the date of this Agreement in excess of \$20,000 in the aggregate, or (B) that is material to the business or operations of Marker.

(b) Marker has delivered or made available to TapImmune accurate and complete (except for applicable redactions thereto) copies of all Marker Material Contracts, including all amendments thereto. There are no Marker Material Contracts that are not in written form. Marker has not, and to Marker's Knowledge, as of the date of this Agreement no other party to a Marker Material Contract has, breached, violated or defaulted under, or received notice that it has breached, violated or defaulted under, any of the terms or conditions of any Marker Material Contract in such manner as would permit any other party to cancel or terminate any such Marker Material Contract, or would permit any other party to seek damages that constitutes a Marker Material Adverse Effect. As to Marker, as of the date of this Agreement, each Marker Material Contract is valid, binding, enforceable and in full force and effect, subject to: (i) laws of general application relating to bankruptcy, insolvency and the relief of debtors; and (ii) rules of law governing specific performance, injunctive relief and other equitable remedies.

2.11. Undisclosed Liabilities. As of the date of this Agreement, Marker has no liability, indebtedness, obligation, expense, claim, deficiency, guaranty or endorsement of any kind, whether accrued, absolute, contingent, matured, or unmatured (whether or not required to be reflected in the Marker Financials) (each a "**Liability**"), except for: (a) Liabilities identified as such in the "liabilities" column of the Marker Unaudited Balance Sheet; (b) normal and recurring current Liabilities that have been incurred by Marker since the date of the Marker Unaudited Balance Sheet in the Ordinary Course of Business and that are not in excess of \$20,000 in the aggregate; (c) Liabilities for performance in the Ordinary Course of Business of obligations of Marker under Marker Contracts, including the reasonably expected performance of such Marker Contracts in accordance with their terms (which would not include, for example, any instances of breach or indemnification); (d) Liabilities incurred in connection with the Contemplated Transactions; and (e) Liabilities listed in Section 2.11 of the Marker Disclosure Schedule.

2.12. Compliance; Permits; Restrictions.

(a) Marker is, and since December 11, 2015 has been, in compliance with all applicable Legal Requirements except for any non-compliance that would not constitute a Marker Material Adverse Effect. No investigation, claim, suit, proceeding, audit or other action by any Governmental Body or authority is pending or, to the Knowledge of Marker, threatened against Marker. There is no Contract, judgment, injunction, order or decree binding upon Marker which (i) has or would reasonably be expected to have the effect of prohibiting or materially impairing any current business practice of Marker, any acquisition of material property by Marker or the conduct of business by Marker as currently conducted, (ii) would reasonably be expected to have an adverse effect on Marker's ability to comply with or perform any covenant or obligation under this Agreement, or (iii) would reasonably be expected to have the effect of preventing, delaying, making illegal or otherwise interfering with the Merger or any of the Contemplated Transactions.

(b) Marker holds all required Governmental Authorizations which are material to the operation of the business of Marker (the "**Marker Permits**") as currently conducted. Section 2.12(b) of the Marker Disclosure Schedule identifies each Marker Permit. As of the date of this Agreement, Marker is in material compliance with the terms of the Marker Permits. No action, proceeding, revocation proceeding, amendment procedure, writ, injunction or claim is pending or, to the Knowledge of

Marker, threatened, which seeks to revoke, limit, suspend, or materially modify any Marker Permit. The rights and benefits of each material Marker Permit will be available to the Surviving Corporation immediately after the Effective Time on terms substantially identical to those enjoyed by Marker immediately prior to the Effective Time.

(c) There are no proceedings pending or, to the Knowledge of Marker, threatened with respect to an alleged violation by Marker of the Federal Food, Drug, and Cosmetic Act (“*FDCA*”), Food and Drug Administration (“*FDA*”) regulations adopted thereunder, the Controlled Substances Act or any other similar Legal Requirements promulgated by the FDA or other comparable Governmental Body responsible for regulation of the development, clinical testing, manufacturing, sale, marketing, distribution and importation or exportation of drug products (“*Drug Regulatory Agency*”).

(d) Marker holds no Governmental Authorizations issuable by any Drug Regulatory Agency. Marker holds no Governmental Authorizations issuable by any Governmental Body. Marker has made available to TapImmune all information requested by TapImmune in Marker’s possession or control relating, to the extent they exist, the development, clinical testing, manufacturing, importation and exportation of the Marker Product Candidates, including complete copies of the following (to the extent there are any): (x) copies of all investigational new drug applications (INDs) submitted to the FDA, and all supplements to and amendments of such INDs; new drug applications; adverse event reports; clinical study reports and material study data; inspection reports, notices of adverse findings, warning letters, filings and letters and other written correspondence to and from any Drug Regulatory Agency; and meeting minutes with any Drug Regulatory Agency; and (y) similar notices, letters, filings, correspondence and meeting minutes with any other Governmental Body.

(e) Since December 11, 2015, Marker has not received any notices, correspondence or other communications from any Drug Regulatory Agency requiring, or to the Knowledge of Marker threatening to initiate, the termination or suspension of any clinical studies conducted by or on behalf of, or sponsored by, Marker or in which Marker or its current products or product candidates, including the Marker Product Candidates, have participated.

(f) To the Knowledge of Marker, no debarment or exclusionary claims, actions, proceedings or investigations in respect of their business or products are pending or threatened against Marker or its officers, employees or agents. Marker is not the subject of any pending, or to the Knowledge of Marker, threatened investigation in respect of its business or products by the FDA pursuant to its “Fraud, Untrue Statements of Material Facts, Bribery, and Illegal Gratuities” Final Policy set forth in 56 Fed. Reg. 46191 (September 10, 1991) and any amendments thereto. To the Knowledge of Marker, Marker has not committed any acts, made any statement, or failed to make any statement, in each case in respect of its business or Marker Product Candidates that would violate the FDA’s “Fraud, Untrue Statements of Material Facts, Bribery, and Illegal Gratuities” Final Policy, and any amendments thereto. Neither Marker, and to the Knowledge of Marker, nor any of its officers, employees or agents has been convicted of any crime or engaged in any conduct that would reasonably be expected to result in a debarment or exclusion (i) under 21 U.S.C. Section 335a or (ii) any similar applicable Legal Requirement.

2.13. Tax Matters.

(a) Except as set forth in Section 2.13(a) of the Marker Disclosure Schedule, (i) Marker has timely filed all income Tax Returns and other material Tax Returns that it was required to file under applicable Legal Requirements, (ii) to the Knowledge of Marker, all such Tax Returns were correct and complete in all material respects and have been prepared in material compliance with all applicable Legal Requirements, (iii) Marker is not currently the beneficiary of any extension of time within which to file any Tax Return, and (iv) no claim has ever been made by an authority in a jurisdiction where Marker does not file Tax Returns that it is subject to taxation by that jurisdiction.

(b) All material Taxes due and owing by Marker on or before the date hereof (whether or not shown on any Tax Return) have been paid. Any unpaid Taxes of Marker have been reserved for on the Marker Unaudited Balance Sheet. Except as set forth in Section 2.13(b) of the Marker Disclosure Schedule, since the date of the Marker Unaudited Balance Sheet, Marker has not incurred any Liability for Taxes outside the Ordinary Course of Business or otherwise inconsistent with past custom and practice.

(c) Marker has withheld and paid all Taxes required to have been withheld and paid in connection with any amounts paid or owing to any employee, independent contractor, creditor, stockholder or other third party, if any.

(d) There are no Encumbrances for Taxes (other than Taxes not yet due and payable or Taxes that are being contested in good faith and for which adequate reserves have been made on Marker's Unaudited Balance Sheet) upon any of the assets of Marker.

(e) Except as set forth in Section 2.13(e) of the Marker Disclosure Schedule, no material deficiencies for Taxes with respect to Marker have been claimed, proposed or assessed by any Governmental Body in writing. There are no pending (or, based on written notice, threatened) audits, assessments or other actions for or relating to any liability in respect of Taxes of Marker. No issues relating to Taxes of Marker were raised by the relevant Tax authority in any completed audit or examination that would reasonably be expected to result in a material amount of Taxes in a later taxable period. Marker has delivered or made available to TapImmune complete and accurate copies of all federal income Tax and all other material Tax Returns of Marker (and predecessors) for all taxable years remaining open under the applicable statute of limitations, and complete and accurate copies of all examination reports and statements of deficiencies assessed against or agreed to by Marker (and predecessors), with respect to federal income Tax and all other material Taxes. Marker (and its predecessors) has not waived any statute of limitations in respect of Taxes or agreed to any extension of time with respect to a Tax assessment or deficiency, nor has any request been made in writing for any such extension or waiver.

(f) All material elections with respect to Taxes affecting Marker as of the date hereof are set forth on Section 2.13(f) of the Marker Disclosure Schedule. Marker has not (i) agreed, nor is it required to make, any adjustment under Section 481(a) of the Code by reason of a change in accounting method or otherwise; (ii) elected at any time to be treated as an S corporation within the meaning of Sections 1361 or 1362 of the Code; or (iii) made any of the foregoing elections nor is required to apply any of the foregoing rules under any comparable provision of state, local or foreign law.

(g) Marker has not been a United States real property holding corporation within the meaning of Section 897(c)(2) of the Code during the applicable period specified in Section 897(c)(1)(A)(ii) of the Code.

(h) Marker is not a party to any Tax allocation, Tax sharing or similar agreement (including indemnity arrangements), other than commercial contracts entered into in the Ordinary Course of Business with vendors, customers and landlords, the primary purpose of which does not relate to Taxes.

(i) Marker has never been a member of an affiliated group filing a consolidated, combined or unitary Tax Return (other than a group the common parent of which is Marker) for federal, state, local or foreign Tax purposes. Marker does not have any Liability for the Taxes of any Person (other than Marker) under Treasury Regulations Section 1.1502-6 (or any similar provision of state, local, or foreign law), as a transferee or successor, by Contract, or otherwise.

(j) Marker has not distributed stock of another Person, or has had its stock distributed by another Person, in a transaction that was purported or intended to be governed in whole or in part by Section 355 of the Code or Section 361 of the Code.

(k) Marker is not a partner for Tax purposes with respect to any joint venture, partnership, or, to the Knowledge of Marker, other arrangement or Contract which is treated as a partnership for Tax purposes.

(l) Marker will not be required to include any item of income in, or exclude any item of deduction from, taxable income for any period (or any portion thereof) ending after the Closing Date as a result of any (i) installment sale or other open transaction disposition made on or prior to the Closing Date, (ii) agreement with any Tax authority (including any closing agreement described in Section 7121 of the Code or any similar provision of state, local or foreign law) made or entered into on or prior to the Closing Date, (iii) prepaid amount or (iv) election under Section 108(i) of the Code.

(m) Marker has not entered into any transaction identified as a “listed transaction” for purposes of Treasury Regulations Sections 1.6011-4(b)(2) or 301.6111-2(b)(2).

(n) Marker has not taken any action, nor has any Knowledge of any fact or circumstance, that would reasonably be expected to prevent the Contemplated Transactions from qualifying as a reorganization within the meaning of Section 368(a) of the Code.

2.14. Employee and Labor Matters; Benefit Plans.

(a) Section 2.14(a) of the Marker Disclosure Schedule lists, as of the date of this Agreement, all written and describes all non-written employee benefit plans (as defined in Section 3(3) of ERISA) and all bonus, equity-based, retention, incentive, deferred compensation, retirement or supplemental retirement, profit sharing, severance, golden parachute, disability, life or accident insurance, paid time off, vacation, cafeteria, dependent care, medical care, employee assistance program, education or tuition assistance programs, fringe or employee benefit, and all other compensation, plans, programs, agreements or arrangements, including but not limited to any employment, consulting, independent contractor, severance or executive compensation agreements or arrangements (other than regular salary or wages), written or otherwise, which are currently in effect relating to any present or former employee, independent contractor or director of Marker or any Marker Affiliate, or which is maintained by, administered or contributed to by, or required to be contributed to by, Marker or any Marker Affiliate, or under which Marker or any Marker Affiliate has incurred or may incur any liability (each, a “**Marker Employee Plan**”).

(b) With respect to each Marker Employee Plan, if any, Marker has made available to TapImmune a true and complete copy of, to the extent applicable, (i) such Marker Employee Plan, (ii) the three most recent annual reports (Form 5500) as filed with the Internal Revenue Service, (iii) each currently effective trust agreement related to such Marker Employee Plan, (iv) the most recent summary plan description, prospectus or similar employee summary for each Marker Employee Plan, (v) the most recent Internal Revenue Service determination or opinion letter or analogous ruling under foreign law issued with respect to any Marker Employee Plan, (vi) all material notices, letters or other correspondence to or from any Governmental Body or agency thereof within the last three years; (vii) all non-discrimination tests for the most recent three plan years; and (viii) all material written agreements and Contracts currently in effect, including (without limitation) administrative service agreements, group annuity contracts, and group insurance contracts.

(c) Each Marker Employee Plan, if any, that is intended to be qualified under Section 401(a) of the Code has received a favorable determination or may rely on a favorable opinion letter with respect to such qualified status from the Internal Revenue Service. To the Knowledge of Marker, nothing has occurred that would reasonably be expected to adversely affect the qualified status of any such Marker Employee Plan or the exempt status of any related trust.

(d) Each Marker Employee Plan, if any, has been operated and maintained in compliance, in all material respects, with its terms and, both as to form and operations, with all applicable Legal Requirements, including the Code and ERISA. Neither Marker nor any Marker Affiliate is subject to any Liability or penalty under Sections 4976 through 4980 of the Code or Title I of ERISA with respect to any of the Marker Employee Plans. All contributions required to be made by Marker or any Marker Affiliate to any Marker Employee Plan have been made on or before their due dates (and no further contributions will be due or will have accrued thereunder as of the Closing Date, other than contributions accrued in the Ordinary Course of Business consistent with past practice).

(e) No suit, administrative proceeding, action or other litigation has been initiated against, or to the Knowledge of Marker, is threatened, against or with respect to any Marker Employee Plan, including any audit or inquiry by the IRS, United States Department of Labor or other Governmental Body.

(f) Neither Marker nor any Marker Affiliate has announced its intention to modify or amend any Marker Employee Plan or adopt any arrangement or program which, once established, would come within the definition of a Marker Employee Plan.

(g) No Marker Employee Plan is subject to Title IV or Section 302 of ERISA or Section 412 of the Code, and neither Marker nor any Marker Affiliate has ever maintained, contributed to or partially or completely withdrawn from, or incurred any obligation or liability with respect to, any such plan. No Marker Employee Plan is a Multiemployer Plan, and neither Marker nor any Marker Affiliate has ever contributed to or had an obligation to contribute, or incurred any liability in respect of a contribution, to any Multiemployer Plan. No Marker Employee Plan is a Multiple Employer Plan.

(h) No Marker Employee Plan provides for medical or death benefits beyond termination of service or retirement, other than (i) pursuant to COBRA or an analogous state law requirement or (ii) death or retirement benefits under a Marker Employee Plan qualified under Section 401(a) of the Code. Neither Marker nor any Marker Affiliate sponsors or maintains any self-funded employee benefit plan. No Marker Employee Plan is subject to any Legal Requirement of any foreign jurisdiction outside of the United States.

(i) To the Knowledge of Marker, no payment pursuant to any Marker Employee Plan or other arrangement to any “service provider” (as such term is defined in Section 409A of the Code and the United States Treasury Regulations and IRS guidance thereunder) from Marker, including the grant, vesting or exercise of any stock option, would subject any Person to tax pursuant to Section 409A of the Code, whether pursuant to the Contemplated Transactions or otherwise.

(j) Marker has paid all wages, bonuses, commissions and other benefits and sums due (and all required taxes, insurance, social security and withholding thereon), including all accrued vacation, accrued sick leave, accrued benefits and accrued payments to its employees and former employees and individuals performing services as independent contractors or consultants, other than accrued amounts representing wages, bonuses, or commission entitlements due for the current pay period or for the reimbursement of legitimate expenses. Marker is in material compliance with all of its bonus, commission and other compensation plans and has paid any and all amounts required to be paid under such plans, including any and all bonuses and commissions (or pro rata portion thereof) that may have accrued or been earned through the calendar quarter preceding the Effective Time, and is not liable for any payments, taxes or penalties for failure to comply with any of the terms or conditions of such plans or the laws governing such plans.

(k) Marker is and has been in compliance in all material respects with all state and federal labor and employment laws, including those relating to wages, hours, collective bargaining, unemployment compensation, workers compensation, equal employment opportunity, discrimination, harassment, retaliation, immigration control, employee classification, the federal and state WARN Acts, information privacy and security, payment and withholding of Taxes and continuation coverage with respect to group health plans, except where any non-compliance, individually or the aggregate, has not had and would not reasonably be expected to have a Marker Material Adverse Effect. Marker: (i) has withheld and reported all amounts required by law or by agreement to be withheld and reported with respect to wages, salaries and other payments to employees, (ii) is not liable for any arrears of wages, severance pay or any Taxes or any penalty of any material amount for failure to comply with any of the foregoing, and (iii) is not liable for any payment to any trust or other fund governed by or maintained by or on behalf of any Governmental Body, with respect to unemployment compensation benefits, social security or other benefits or obligations for employees (other than routine payments to be made in the normal course of business and consistent with past practice). There are no actions, suits, claims or administrative matters pending, or to the Knowledge of Marker, threatened or reasonably anticipated against Marker relating to any employee, employment agreement, independent contractor, independent contractor agreement or Marker Employee Plan. There are no pending or, to the Knowledge of Marker, threatened or reasonably anticipated claims or actions against Marker or any trustee of Marker under any worker’s compensation policy or long-term disability policy. Marker is not a party to a conciliation agreement, consent decree or other agreement or order with any federal, state, or local agency or Governmental Body with respect to employment practices.

(l) Except as noted on Section 2.14(l) of the Marker Disclosure Schedule, (i) all individuals employed by Marker are employed at-will and Marker has no employment or other agreements that contain any severance, change in control, or termination pay liabilities, and all agreements with

independent contractors or consultants may be terminated by Marker without penalty or liability with 30 days or less notice, and (ii) no current or former independent contractor of Marker would reasonably be deemed to be a misclassified employee. Except as set forth on Section 2.14(l) of the Marker Disclosure Schedule, no independent contractor is eligible to participate in any Marker Employee Plan. Marker has no material liability with respect to any misclassification of: (A) any Person as an independent contractor rather than as an employee, (B) any employee leased from another employer, or (C) any employee currently or formerly classified as exempt from overtime wages. Marker has not taken any action which would constitute a “plant closing” or “mass layoff” within the meaning of the WARN Act or similar state or local law, issued any notification of a plant closing or mass layoff required by the WARN Act or similar state or local law, or incurred any liability or obligation under WARN or any similar state or local law that remains unsatisfied. No terminations of employees of Marker prior to the Closing would trigger any notice or other obligations under the WARN Act or similar state or local law.

(m) No employee of Marker is covered by an effective or pending collective bargaining agreement or similar labor agreement. There has not been any activity on behalf of any labor organization or employee group to organize any such employees. There is not, and no employee of Marker has threatened, any labor dispute, work stoppage, labor strike or lockout against Marker. There are no (i) unfair labor practice charges or complaints against Marker pending before the National Labor Relations Board or any other labor relations tribunal or authority and, to the Knowledge of Marker, no such charges or complaints are threatened, (ii) representation claims or petitions pending before the National Labor Relations Board or any other labor relations tribunal or authority or (iii) grievances or pending arbitration proceedings against Marker that arose out of or under any collective bargaining agreement.

(n) There is no Contract or arrangement to which Marker or any Marker Affiliate is a party or by which it is bound to compensate any of its current or former employees, independent contractors or directors for additional income or excise taxes paid pursuant to Sections 409A or 4999 of the Code.

(o) Neither Marker nor any Marker Affiliate is a party to any Contract that has resulted or would reasonably be expected to result, separately or in the aggregate, in the payment of (i) any “excess parachute payment” within the meaning of Section 280G of the Code or (ii) any amount the deduction for which would be disallowed under Section 162(m).

(p) Except as set forth in Section 2.14(p) of the Marker Disclosure Schedule, none of the execution and delivery of this Agreement, or the consummation of the Contemplated Transactions or any termination of employment or service or any other event in connection therewith or subsequent thereto will, individually or together or with the occurrence of some other event, (i) result in any payment (including severance, unemployment compensation, golden parachute, bonus or otherwise) becoming due to any employee, independent contractor or director of Marker, (ii) materially increase or otherwise enhance any benefits otherwise payable by Marker, (iii) result in the acceleration of the time of payment or vesting of any such benefits, except as required under Section 411(d)(3) of the Code, (iv) increase the amount of compensation due to any Person by Marker or (v) result in the forgiveness in whole or in part of any outstanding loans made by Marker to any Person.

2.15. Environmental Matters. Marker is in material compliance with all applicable Environmental Laws, which compliance includes the possession by Marker of all permits and other Governmental Authorizations required under applicable Environmental Laws and compliance with the terms and conditions thereof other than any failure to be in compliance or possess any such permits and authorized that is not a Marker Material Adverse Effect. Marker has not received since December 11, 2015 any written notice or other communication (in writing or otherwise), whether from a Governmental Body, citizens group, employee or otherwise, that alleges that Marker is not in compliance with any Environmental Law, and, to the Knowledge of Marker, there are no circumstances that may prevent or interfere with Marker’s compliance with any Environmental Law in the future. To the Knowledge of Marker: (i) no current or prior owner of any property leased or controlled by Marker has received since December 11, 2015 any written notice or other communication relating to property owned or leased at any time by Marker, whether from a Governmental Body, citizens group, employee or otherwise, that alleges that such current or prior owner or Marker is not in compliance with or has violated any Environmental Law relating to such property and (ii) neither it has any material liability under any Environmental Law.

2.16. Insurance.

(a) Marker does not currently have and has not had any insurance policies relating to the business, assets, liabilities and operations of Marker. There is no pending workers' compensation or other claim under or based upon any insurance policy of Marker.

(b) Marker does not currently have and has not had directors' and officers' liability insurance.

2.17. Legal Proceedings; Orders.

(a) There is no pending Legal Proceeding, and, to the Knowledge of Marker, no Person has threatened in writing to commence any Legal Proceeding: (i) that involves Marker, or to the Knowledge of Marker, any director or officer of Marker (in his or her capacity as such) or any of the material assets owned or used by Marker; or (ii) that challenges, or that would reasonably be expected to have the effect of preventing, delaying, making illegal or otherwise interfering with, the Contemplated Transactions, in each case, except for any Legal Proceedings that would not constitute a Marker Material Adverse Effect. To the Knowledge of Marker, no event has occurred, and no claim, dispute or other condition or circumstance exists, that will, or that would reasonably be expected to, give rise to or serve as a basis for the commencement of any such Legal Proceeding.

(b) There is no order, writ, injunction, judgment or decree to which Marker, or any of the material assets owned or used by Marker, is subject. To the Knowledge of Marker, no officer of Marker is subject to any order, writ, injunction, judgment or decree that prohibits such officer of Marker from engaging in or continuing any conduct, activity or practice relating to the business of Marker or to any material assets owned or used by Marker.

2.18. Inapplicability of Anti-takeover Statutes. The Marker Board of Directors has taken and will take all actions necessary to ensure that the restrictions applicable to business combinations contained in Section 203 of the DGCL are, and will be, inapplicable to the execution, delivery and performance of this Agreement and the Marker Stockholder Voting and Lock-Up Agreements and to the consummation of the Contemplated Transactions. No other state takeover statute or similar Legal Requirement applies or purports to apply to the Merger, this Agreement, the Marker Stockholder Voting and Lock-Up Agreements or any of the other Contemplated Transactions.

2.19. No Financial Advisor. Except as set forth on Section 2.19 of the Marker Disclosure Schedule, no broker, finder or investment banker is entitled to any brokerage fee, finder's fee, opinion fee, success fee, transaction fee or other fee or commission in connection with the Contemplated Transactions based upon arrangements made by or on behalf of Marker.

2.20. Bank Accounts; Deposits.

(a) Section 2.20 of the Marker Disclosure Schedule provides accurate information with respect to each account maintained by or for the benefit of Marker at any bank or other financial institution, including the name of the bank or financial institution, the account number, the balance as of December 31, 2017 and the names of all individuals authorized to draw on or make withdrawals from such accounts.

(b) All deposits of Marker (including those set forth on the Marker Unaudited Balance Sheet) which are individually more than \$20,000 or more than \$45,000 in the aggregate are fully refundable to Marker.

2.21. Disclosure. The information supplied by Marker for inclusion in the Proxy Statement (including any information based on Marker Financials) will not, as of the date of the Proxy Statement or as of the date such information is first mailed to TapImmune Stockholders, (i) contain any untrue statement of any material fact or (ii) omit to state any material fact necessary in order to make such information, in the light of the circumstances under which such information is provided, not false or misleading.

2.22. Related Party Transactions. Except as set forth in Section 2.22 of the Marker Disclosure Schedule, since January 1, 2016 there are no obligations of Marker to, or Contracts or arrangements with, current or former Affiliates, officers, directors, stockholders or employees of Marker or their respective Affiliates or family members other than (a) for payment of ordinary course salaries and bonuses for services

rendered, (b) reimbursement of customary and reasonable expenses incurred on behalf of Marker, and (c) benefits due under a Marker Employee Plan and ordinary course fringe benefits listed in Section 2.14(a) of the Marker Disclosure Schedule. To Marker's Knowledge, no officer, director or employee of Marker or Marker Stockholder is directly interested in any Marker Material Contract. Except as set forth in Section 2.22 of the Marker Disclosure Schedule, neither Marker nor any of its Affiliates, directors, officers or employees (x) possess, directly or indirectly, any financial interest in, or is a director, officer or employee of, any Entity that is a material supplier, contractor lessor, lessee or competitor of Marker or (y) has any claim or cause of action against Marker.

2.23. Exclusivity of Representations; Reliance.

(a) Except as expressly set forth in this Article 2, neither Marker nor any Person on behalf of Marker has made, nor are any of them making, any representation or warranty, written or oral, express or implied, at law or in equity, including with respect to merchantability or fitness for any particular purpose, in respect of Marker or its business in connection with the transactions contemplated hereby, including any representations or warranties about the accuracy or completeness of any information or documents previously provided (including with respect to any financial or other projections therein), and any other such representations and warranties are hereby expressly disclaimed.

(b) Marker acknowledges and agrees that, except for the representations and warranties of TapImmune and Merger Sub set forth in Article 3, neither Marker nor its Representatives is relying on any other representation or warranty of TapImmune, Merger Sub, or any other Person made outside of Article 3 of this Agreement, including regarding the accuracy or completeness of any such other representations or warranties or the omission of any material information, whether express or implied, in each case with respect to the Contemplated Transactions.

**ARTICLE 3
REPRESENTATIONS AND WARRANTIES OF TAPIMMUNE AND MERGER SUB**

TapImmune and Merger Sub represent and warrant to Marker as follows, except as set forth in the written disclosure schedule delivered by TapImmune to Marker (the "*TapImmune Disclosure Schedule*") (it being understood that the representations and warranties in this Article 3 are qualified by: (a) any exceptions and disclosures set forth in the section or subsection of the TapImmune Disclosure Schedule corresponding to the particular section or subsection in this Article 3 in which such representation and warranty appears; (b) any exceptions or disclosures explicitly cross-referenced in such section or subsection of the TapImmune Disclosure Schedule by reference to another section or subsection of the TapImmune Disclosure Schedule; (c) any exceptions or disclosures set forth in any other section or subsection of the TapImmune Disclosure Schedule to the extent it is reasonably apparent from the wording of such exception or disclosure that such exception or disclosure qualifies such representation and warranty); and (d) any exception or disclosure set forth in any TapImmune SEC Documents (other than any information in the "Risk Factors" or "Forward-Looking Statements" sections of such TapImmune SEC Documents or other forward-looking statements in such TapImmune SEC Documents). The inclusion of any information in the TapImmune Disclosure Schedule shall not be deemed to be an admission or acknowledgement, in and of itself, that such information is required by the terms hereof to be disclosed, is material, has resulted in or would result in a TapImmune Material Adverse Effect, or is outside the Ordinary Course of Business.

3.1. Subsidiaries; Due Organization; Organizational Documents.

(a) Section 3.1(a) of the TapImmune Disclosure Schedule identifies each Subsidiary of TapImmune (the "*TapImmune Subsidiaries*"). Neither TapImmune nor any of the TapImmune Subsidiaries owns any capital stock of, or any equity interest of any nature in, any other Entity. TapImmune has not agreed nor is obligated to make, nor is bound by any Contract under which it may become obligated to make, any future investment in or capital contribution to any other Entity. TapImmune has not, at any time, been a general partner of, or has otherwise been liable for any of the debts or other obligations of, any general partnership, limited partnership or other Entity.

(b) Each of TapImmune and the TapImmune Subsidiaries is a corporation duly organized, validly existing and in good standing under the laws of the jurisdiction of its incorporation and has all necessary power and authority: (i) to conduct its business in the manner in which its business is currently being conducted; (ii) to own and use its assets in the manner in which its assets are currently owned and used; and (iii) to perform its obligations under all TapImmune Contracts.

(c) Each of TapImmune and the TapImmune Subsidiaries is qualified to do business as a foreign corporation, and is in good standing, under the laws of all jurisdictions where the nature of its business requires such qualification other than in jurisdictions where the failure to be so qualified would not constitute a TapImmune Material Adverse Effect.

(d) Each director and officer of TapImmune and the TapImmune Subsidiaries as of the date of this Agreement is set forth in Section 3.1(d) of the TapImmune Disclosure Schedule.

(e) Merger Sub was formed solely for the purpose of engaging in the Contemplated Transactions. Except for obligations and liabilities incurred in connection with its incorporation and the Contemplated Transactions, Merger Sub has not, and will not have, incurred, directly or indirectly, any obligations or liabilities or engaged in any business activities of any type or kind whatsoever or entered into any agreements or arrangements with any Person.

(f) TapImmune has delivered or made available to Marker accurate and complete copies of (i) the certificate of incorporation, bylaws and other charter and organizational documents, including all currently effective amendments thereto, for TapImmune and each TapImmune Subsidiary; and (ii) any code of conduct or similar policy adopted by TapImmune or by the TapImmune Board of Directors or any committee thereof. Neither TapImmune nor any TapImmune Subsidiary has taken any action in breach or violation of any of the provisions of its certificate of incorporation, bylaws or other charter or organizational documents nor is in breach or violation of any of the material provisions of their respective certificates of incorporation, bylaws or other charter or organizational documents, except as would not reasonably be expected to have, individually or in the aggregate, a TapImmune Material Adverse Effect.

3.2. Authority; Vote Required.

(a) TapImmune and Merger Sub have all necessary corporate power and authority to enter into and to perform its obligations under this Agreement. The TapImmune Board of Directors has: (i) determined that the Merger is fair to, and in the best interests of, TapImmune and TapImmune Stockholders; (ii) duly authorized and approved by all necessary corporate action, the execution, delivery and performance of this Agreement and the Contemplated Transactions; (iii) recommended the approval of the TapImmune Stockholder Matters by the TapImmune Stockholders and directed that the TapImmune Stockholder Matters be submitted for consideration by TapImmune Stockholders in connection with the solicitation of the Required TapImmune Stockholder Vote; and (iv) approved the TapImmune Stockholder Voting and Lock-Up Agreements and the transactions contemplated thereby. The board of directors of Merger Sub has (A) determined that the Merger is fair to, and in the best interests of, Merger Sub and its sole stockholder; (B) duly authorized and approved by all necessary corporate action, the execution, delivery and performance of this Agreement and the Contemplated Transactions; and (C) recommended that the sole stockholder of Merger Sub adopt this Agreement and thereby approve the Merger and the applicable Contemplated Transactions. This Agreement has been duly executed and delivered by TapImmune and Merger Sub and, assuming the due authorization, execution and delivery by Marker, constitutes the legal, valid and binding obligation of TapImmune and Merger Sub, enforceable against TapImmune and Merger Sub in accordance with its terms, subject to: (1) laws of general application relating to bankruptcy, insolvency and the relief of debtors; and (2) rules of law governing specific performance, injunctive relief and other equitable remedies.

(b) (i) The affirmative vote of the holders of a majority of outstanding shares of TapImmune Common Stock is the only vote of the holders of any class or series of TapImmune Capital Stock necessary to approve the TapImmune Stockholder Matters (the “**Required TapImmune Stockholder Vote**”) and (ii) the affirmative vote of the sole stockholder of Merger Sub is the only vote of the holders of any class or series of Merger Sub Capital Stock necessary to adopt this Agreement and approve the Merger and the applicable Contemplated Transactions (the “**Required Merger Sub Stockholder Vote**”).

3.3. Non-Contravention; Consents.

(a) The execution and delivery of this Agreement by TapImmune and Merger Sub does not, and the performance of this Agreement by TapImmune and Merger Sub will not, (i) conflict with or violate

the certificate of incorporation or bylaws of TapImmune or any of the TapImmune Subsidiaries; (ii) subject to obtaining the Required TapImmune Stockholder Vote and the Required Merger Sub Stockholder Vote and compliance with the requirements set forth in Section 3.3(b) below, conflict with or violate any Legal Requirement applicable to TapImmune or the TapImmune Subsidiaries or by which it or any of their respective properties is bound or affected, except for any such conflicts or violations that would not constitute a TapImmune Material Adverse Effect; or (iii) except as listed on Section 3.3(a) of the TapImmune Disclosure Schedule, require TapImmune or any of the TapImmune Subsidiaries to make any filing with or give any notice to a Person or make any payment, or obtain any Consent from a Person, or result in any breach of or constitute a default (or an event that with notice or lapse of time or both would become a default) under, or impair TapImmune's or Merger Sub's rights or alter the rights or obligations of any third party under, or give to others any rights of termination, amendment, acceleration or cancellation of, or result in the creation of an Encumbrance on any of the properties or assets of TapImmune or any of the TapImmune Subsidiaries pursuant to, any TapImmune Material Contract.

(b) No material Consent, order of, or registration, declaration or filing with any Governmental Body is required by or with respect to TapImmune or any of the TapImmune Subsidiaries in connection with the execution and delivery of this Agreement or the consummation of the Contemplated Transactions, except for (i) the filing of the Certificate of Merger with the Secretary of State of the State of Delaware pursuant to the DGCL, and (ii) such Consents, orders, registrations, declarations and filings as may be required under applicable federal and state securities laws.

3.4. Capitalization.

(a) The authorized capital stock of TapImmune as of the date of this Agreement consists of: (i) 41,666,667 shares of common stock, par value \$0.001 per share (the "**TapImmune Common Stock**"), of which 10,684,516 shares are issued and outstanding as of the date of this Agreement, and (ii) 5,000,000 shares of preferred stock, par value \$0.001 per share, of which 1,250,000 shares are designated Series A Preferred Stock, of which no shares are outstanding as of the date of this Agreement, and of which 1,500,000 shares are designated Series B Preferred Stock, of which no shares are outstanding as of the date of this Agreement. TapImmune does not hold any shares of its capital stock in treasury. All of the issued and outstanding shares of TapImmune Capital Stock have been duly authorized and validly issued, and are fully paid and nonassessable. As of the date of this Agreement, there are outstanding TapImmune Warrants to purchase 6,519,292 shares of TapImmune Common Stock. Section 3.4(a) of the TapImmune Disclosure Schedule lists, as of the date of this Agreement (A) each holder of issued and outstanding TapImmune Warrants, (B) the number of shares of TapImmune Common Stock subject to such TapImmune Warrants, (C) the exercise price of each such TapImmune Warrant, and (D) the termination date of each such TapImmune Warrant.

(b) Except for the TapImmune 2014 Omnibus Stock Option Plan (the "**2014 TapImmune Plan**"), TapImmune does not have any stock option plan or any other plan, program, agreement or arrangement providing for any equity-based compensation for any Person. TapImmune has reserved 1,383,334 shares of TapImmune Common Stock for issuance under the 2014 TapImmune Plan. As of the date of this Agreement, of such reserved shares of TapImmune Common Stock, (A) 556,179 shares have been issued pursuant to the exercise of outstanding options and options to purchase 439,467 shares have been granted and are currently outstanding, and (ii) 559,770 shares of TapImmune Common Stock remain available for future issuance pursuant to the 2014 TapImmune Plan. Section 3.4(b) of the TapImmune Disclosure Schedule sets forth the following information with respect to each TapImmune Option outstanding, as of the date of this Agreement: (1) the name of the optionee, (2) the number of shares of TapImmune Common Stock subject to such TapImmune Option as of the date of this Agreement, (3) the exercise price of such TapImmune Option, (4) the date on which such TapImmune Option was granted, (5) the date on which such TapImmune Option expires, and (6) the vesting schedule applicable to such TapImmune Option, including the extent vested to date and whether by its terms the vesting of such TapImmune Option would be accelerated by the Contemplated Transactions.

(c) Except for in connection with the TapImmune Closing Financing and except for the outstanding TapImmune Warrants set forth on Section 3.4(a) of the TapImmune Disclosure Schedule

and for the TapImmune Options set forth on Section 3.4(b) of the TapImmune Disclosure Schedule, there is no: (i) outstanding subscription, option, call, warrant or right (whether or not currently exercisable) to acquire any shares of the capital stock or other securities of TapImmune or any of the TapImmune Subsidiaries; (ii) outstanding security, instrument or obligation that is or may become convertible into or exchangeable for any shares of the capital stock or other securities of TapImmune or any of the TapImmune Subsidiaries; (iii) stockholder rights plan (or similar plan commonly referred to as a “poison pill”) or Contract under which TapImmune or any of the TapImmune Subsidiaries is or may become obligated to sell or otherwise issue any shares of its capital stock or any other securities; or (iv) condition or circumstance that may give rise to or provide a basis for the assertion of a claim by any Person to the effect that such Person is entitled to acquire or receive any shares of capital stock or other securities of TapImmune or any of the TapImmune Subsidiaries. There are no outstanding or authorized stock appreciation, phantom stock, profit participation, restricted stock units, equity-based awards or other similar rights with respect to TapImmune or any of the TapImmune Subsidiaries.

(d) (i) None of the outstanding shares of TapImmune Capital Stock or Merger Sub Capital Stock are entitled or subject to any preemptive right, right of repurchase or forfeiture, right of participation, right of maintenance or any similar right; (ii) none of the outstanding shares of TapImmune Capital Stock or Merger Sub Capital Stock are subject to any right of first refusal in favor of TapImmune or Merger Sub, as applicable; (iii) there are no outstanding bonds, debentures, notes or other indebtedness of TapImmune or any of the TapImmune Subsidiaries having a right to vote on any matters on which the TapImmune Stockholders or the sole stockholder of Merger Sub, as applicable, have a right to vote; (iv) there is no TapImmune Contract to which TapImmune or any of the TapImmune Subsidiaries is a party relating to the voting or registration of, or restricting any Person from purchasing, selling, pledging or otherwise disposing of (or from granting any option or similar right with respect to), any shares of TapImmune Capital Stock or capital stock of any of the TapImmune Subsidiaries. Neither TapImmune nor any of the TapImmune Subsidiaries are under any obligation, nor is bound by any Contract pursuant to which it may become obligated, to repurchase, redeem or otherwise acquire any outstanding shares of TapImmune Capital Stock, capital stock of any of the TapImmune Subsidiaries or other securities.

(e) The authorized capital of Merger Sub consists of 1,000 shares of common stock, par value \$0.001 per share (“**Merger Sub Capital Stock**”), all of which are, and at the Effective Time will be, issued and outstanding and held of record by TapImmune. The issued and outstanding shares of Merger Sub Capital Stock are duly authorized, validly issued, fully paid and nonassessable. Merger Sub has not at any time granted any stock options, restricted stock, phantom stock, profit participation, restricted stock units, equity-based awards or other similar rights.

(f) All outstanding shares of TapImmune Capital Stock and Merger Sub Capital Stock, as well as all TapImmune Options and all TapImmune Warrants, have been issued and granted, as applicable, in material compliance with all applicable securities laws and other applicable Legal Requirements.

3.5. SEC Filings; Financial Statements.

(a) TapImmune has made available to Marker accurate and complete copies of all registration statements, proxy statements, Certifications (as defined below) and other statements, reports, schedules, forms and other documents filed by TapImmune with the SEC since January 1, 2016 (the “*TapImmune SEC Documents*”) other than such documents that can be obtained on the SEC’s website at www.sec.gov. All material statements, reports, schedules, forms and other documents required to have been filed by TapImmune or its officers with the SEC have been so filed on a timely basis. As of the time it was filed with the SEC (or, if amended or superseded by a filing prior to the date of this Agreement, then on the date of such filing), each of the TapImmune SEC Documents complied in all material respects with the applicable requirements of the Securities Act or the Exchange Act (as the case may be) and, as of the time they were filed, none of the TapImmune SEC Documents contained any untrue statement of a material fact or omitted to state a material fact required to be stated therein or necessary in order to make the statements therein, in the light of the circumstances under which they were made, not misleading. The certifications and statements required by (A) Rule 13a-14 under the

Exchange Act and (B) 18 U.S.C. §1350 (Section 906 of the Sarbanes-Oxley Act) relating to the TapImmune SEC Documents (collectively, the “*Certifications*”) are accurate and complete and comply as to form and content with all applicable Legal Requirements. As used in this [Article 3](#), the term “file” and variations thereof shall be broadly construed to include any manner in which a document or information is furnished, supplied or otherwise made available to the SEC.

(b) The financial statements (including any related notes) contained or incorporated by reference in the TapImmune SEC Documents: (i) complied as to form in all material respects with the published rules and regulations of the SEC applicable thereto; (ii) were prepared in accordance with GAAP (except as may be indicated in the notes to such financial statements or, in the case of unaudited financial statements, as permitted by Form 10-Q of the SEC, and except that the unaudited financial statements may not contain footnotes and are subject to normal and recurring year-end adjustments that are not reasonably expected to be material in amount) applied on a consistent basis unless otherwise noted therein throughout the periods indicated; and (iii) fairly present, in all material respects, the consolidated financial position of TapImmune and the TapImmune Subsidiaries as of the respective dates thereof and the results of operations and cash flows of TapImmune for the periods covered thereby. Other than as expressly disclosed in the TapImmune SEC Documents filed prior to the date hereof, there has been no material change in TapImmune’s accounting methods or principles that would be required to be disclosed in TapImmune’s financial statements in accordance with GAAP. The books of account and other financial records of TapImmune and the TapImmune Subsidiaries are true and complete in all material respects.

(c) TapImmune’s auditor has at all times since the date of enactment of the Sarbanes-Oxley Act been: (i) a registered public accounting firm (as defined in Section 2(a)(12) of the Sarbanes-Oxley Act); (ii) to the Knowledge of TapImmune, “independent” with respect to TapImmune within the meaning of Regulation S-X under the Exchange Act; and (iii) to the Knowledge of TapImmune, in compliance with subsections (g) through (l) of Section 10A of the Exchange Act and the rules and regulations promulgated by the SEC and the Public Company Accounting Oversight Board thereunder.

(d) TapImmune has not received any comment letter from the SEC or the staff thereof or any correspondence from NASDAQ or the staff thereof relating to the delisting or maintenance of listing of the TapImmune Common Stock on The NASDAQ Capital Market. TapImmune has not disclosed any unresolved comments in its SEC Documents.

(e) Since January 1, 2015, there have been no formal internal investigations regarding financial reporting or accounting policies and practices discussed with, reviewed by or initiated at the direction of the chief executive officer or chief financial officer of TapImmune, the TapImmune Board of Directors or any committee thereof, other than ordinary course audits or reviews of accounting policies and practices or internal controls required by the Sarbanes-Oxley Act.

(f) TapImmune is in compliance in all material respects with the applicable provisions of the Sarbanes-Oxley Act and the applicable listing and governance rules and regulations of The NASDAQ Capital Market.

(g) TapImmune maintains a system of internal control over financial reporting (as defined in Rules 13a-15(f) and 15d-15(f) of the Exchange Act) that is sufficient to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with GAAP, including policies and procedures sufficient to provide reasonable assurance (i) that TapImmune maintains records that in reasonable detail accurately and fairly reflect TapImmune’s transactions and dispositions of assets, (ii) that transactions are recorded as necessary to permit preparation of financial statements in accordance with GAAP, (iii) that receipts and expenditures are made only in accordance with authorizations of management and the TapImmune Board of Directors, and (iv) regarding prevention or timely detection of the unauthorized acquisition, use or disposition of TapImmune’s assets that could have a material effect on TapImmune’s financial statements. TapImmune has evaluated the effectiveness of TapImmune’s internal control over financial reporting and, to the extent required by applicable Legal Requirements, presented in any applicable TapImmune SEC Document that is a report on Form 10-K or Form 10-Q (or any amendment thereto) its conclusions about the effectiveness of the internal control over financial reporting as of the end of

the period covered by such report or amendment based on such evaluation. TapImmune has disclosed to TapImmune's auditors and the Audit Committee of the TapImmune Board of Directors (and made available to Marker a summary of the significant aspects of such disclosure) (A) all significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting that are reasonably likely to adversely affect TapImmune's ability to record, process, summarize and report financial information and (B) any fraud, whether or not material, that involves management or other employees who have a significant role in TapImmune's internal control over financial reporting. Except as disclosed in the TapImmune SEC Documents filed prior to the date hereof, TapImmune has not identified any material weaknesses in the design or operation of TapImmune's internal control over financial reporting. Since January 1, 2016, there have been no material changes in TapImmune's internal control over financial reporting.

(h) TapImmune's "disclosure controls and procedures" (as defined in Rules 13a-15(e) and 15d-15(e) of the Exchange Act) are reasonably designed to ensure that all information (both financial and non-financial) required to be disclosed by TapImmune in the reports that it files or submits under the Exchange Act is recorded, processed, summarized and reported within the time periods specified in the rules and forms of the SEC, and that all such information is accumulated and communicated to TapImmune's management as appropriate to allow timely decisions regarding required disclosure and to make the Certifications.

3.6. Absence of Changes. Except as set forth in Section 3.6 of the TapImmune Disclosure Schedule, between the date of the latest balance sheet included in the last periodic report on Form 10-Q or Form 10-K of TapImmune filed with the SEC prior to the date of this Agreement and the date of this Agreement, each of TapImmune and the TapImmune Subsidiaries have conducted its business in the Ordinary Course of Business and there has not been (a) any event that has had a TapImmune Material Adverse Effect or (b) any action, event or occurrence that would have required consent of Marker pursuant to Section 4.2(b) of this Agreement had such action, event or occurrence taken place after the execution and delivery of this Agreement.

3.7. Title to Assets. Except with respect to material TapImmune IP Rights, which are covered in Section 3.9, each of TapImmune and the TapImmune Subsidiaries owns, and has good and valid title to, or, in the case of leased properties and assets, valid leasehold interests in, all tangible properties or assets and equipment used or held for use in its business or operations or purported to be owned by it, in each case, free and clear of any Encumbrances, except for: (i) any lien for current Taxes not yet due and payable or for Taxes that are being contested in good faith and for which adequate reserves have been made on the TapImmune Audited Balance Sheet; and (ii) minor liens that have arisen in the Ordinary Course of Business and that do not (in any case or in the aggregate) materially detract from the value of the assets subject thereto or materially impair the operations of TapImmune or any TapImmune Subsidiary.

3.8. Real Property; Leaseholds. Neither TapImmune nor any TapImmune Subsidiary currently owns or has ever owned any real property or any interest in real property, except for the leaseholds created under the real property leases (including any amendments thereof) identified in Section 3.8 of the TapImmune Disclosure Schedule (the "TapImmune Leases"), which are each in full force and effective, with no existing material default thereunder.

3.9. Intellectual Property.

(a) To TapImmune's Knowledge, TapImmune, directly or through any of its Subsidiaries, owns, has validly licensed, or has the right to use all TapImmune IP Rights, except for any failure to own, license or have the right to use that would not constitute a TapImmune Material Adverse Effect.

(b) Section 3.9(b) of the TapImmune Disclosure Schedule is an accurate, true and complete listing of all TapImmune Registered IP owned by TapImmune or any of its Subsidiaries.

(c) Section 3.9(c) of the TapImmune Disclosure Schedule accurately identifies (i) all material TapImmune IP Rights licensed to TapImmune or any of its Subsidiaries (other than (A) any non-customized software that (1) is so licensed solely in executable or object code form pursuant to a non-exclusive, internal use software license and other Intellectual Property associated with such software and (2) is not incorporated into, or material to the development, manufacturing, or

distribution of, any of TapImmune's or any of its Subsidiaries' products or services (B) any Intellectual Property licensed ancillary to the purchase or use of equipment, reagents or other materials, and (C)(1) agreements between TapImmune or any of its Subsidiaries and their respective employees and consultants and/or (2) non-disclosure or other template agreements entered into in the Ordinary Course of Business); (ii) the corresponding TapImmune Contracts pursuant to which such TapImmune IP Rights are licensed to TapImmune or any of its Subsidiaries; (iii) whether the license or licenses granted to TapImmune or any of its Subsidiaries are exclusive or non-exclusive; and (iv) whether any funding, facilities or personnel of any Governmental Body were used, directly or indirectly, to develop or create, in whole or in part, such TapImmune IP Rights.

(d) Section 3.9(d) of the TapImmune Disclosure Schedule accurately identifies each material TapImmune Contract pursuant to which any Person (other than TapImmune or any of its Subsidiaries) has been granted any license or option to obtain a license under, or otherwise has received or acquired any right (whether or not currently exercisable) or interest in, any TapImmune IP Rights (other than (i) any non-disclosure or other template agreements entered into in the Ordinary Course of Business, and/or (ii) other non-exclusive licenses entered into in the Ordinary Course of Business). TapImmune is not bound by, and no TapImmune IP Rights are subject to, any Contract containing any covenant or other provision that in any way limits or restricts the ability of TapImmune or any of its Subsidiaries to use, exploit, assert or enforce any TapImmune IP Rights anywhere in the world, in each case as would materially limit the business of TapImmune as currently conducted or planned to be conducted.

(e) Except as identified on Section 3.9(e) of the TapImmune Disclosure Schedule, to the Knowledge of TapImmune, TapImmune exclusively owns all right, title, and interest to and in the TapImmune IP Rights (other than (i) TapImmune IP Rights exclusively and non-exclusively licensed to TapImmune, as identified in Section 3.9(c) of the TapImmune Disclosure Schedule, (ii) any non-customized software that (A) is licensed to TapImmune solely in executable or object code form pursuant to a non-exclusive, internal use software license and other Intellectual Property associated with such software and (B) is not incorporated into, or material to the development, manufacturing, or distribution of, any of TapImmune's products or services and (iii) any Intellectual Property licensed ancillary to the purchase or use of equipment, reagents or other materials), in each case, free and clear of any Encumbrances (other than Permitted Encumbrances). Without limiting the generality of the foregoing:

(i) All documents and instruments necessary to register or apply for or renew registration of all TapImmune Registered IP that is solely owned by TapImmune or one of its Subsidiaries has been validly executed, delivered and filed in a timely manner with the appropriate Governmental Body except for any such failure, individually or collectively, that would not constitute a TapImmune Material Adverse Effect.

(ii) Each Person who is or was an employee or contractor of TapImmune or any of its Subsidiaries and who is or was involved in the creation or development of any TapImmune IP Rights has signed a written agreement containing an assignment of such Intellectual Property to TapImmune or such Subsidiary and confidentiality provisions protecting trade secrets and confidential information of TapImmune and its Subsidiaries. To the Knowledge of TapImmune and its Subsidiaries, no current or former stockholder, officer, director, employee or contractor of TapImmune or any of its Subsidiaries has any claim, right (whether or not currently exercisable), or interest to or in any TapImmune IP Rights. To the Knowledge of TapImmune and its Subsidiaries, no employee or contractor of TapImmune or any or any of its Subsidiaries is (a) bound by or otherwise subject to any Contract restricting him or her from performing his or her duties for TapImmune or such Subsidiary or (b) in breach of any Contract with any current or former employer or other Person concerning TapImmune IP Rights or confidentiality provisions protecting trade secrets and confidential information comprising TapImmune IP Rights.

(iii) No funding, facilities or personnel of any Governmental Body were used, directly or indirectly, to develop or create, in whole or in part, any TapImmune IP Rights in which TapImmune or any of its Subsidiaries has an ownership interest.

(iv) TapImmune and each of its Subsidiaries has taken reasonable steps to maintain the confidentiality of and otherwise protect and enforce its rights in all proprietary information that TapImmune or such Subsidiary holds, or purports to hold, as a trade secret.

(v) Neither TapImmune nor any of its Subsidiaries has assigned or otherwise transferred ownership of, or agreed to assign or otherwise transfer ownership of, any TapImmune IP Rights to any other Person.

(vi) To the Knowledge of TapImmune and the TapImmune Subsidiaries, the TapImmune IP Rights constitute all Intellectual Property necessary for TapImmune and its Subsidiaries to conduct its business as currently conducted or planned to be conducted.

(vii) To the Knowledge of TapImmune, the consummation of the transactions contemplated by this Agreement will neither result in the modification, cancellation, termination, suspension of, or acceleration of any payments with respect to any such TapImmune IP Rights Agreement, nor give any third party to any such TapImmune IP Rights Agreement the right to do any of the foregoing. Following the Closing, TapImmune will be permitted to exercise all of the rights of TapImmune under such agreements to the same extent, in all material respects, TapImmune would have been able had the transactions contemplated by this Agreement not occurred and without the payment of any additional amounts or consideration other than ongoing fees, royalties or payments that TapImmune would otherwise be required to pay.

(f) TapImmune has delivered, or made available to Marker, a complete and accurate copy of all material TapImmune IP Rights Agreements. Neither TapImmune nor any of its Subsidiaries is a party to any Contract that, as a result of such execution, delivery and performance of this Agreement, will cause the grant of any license or other right to any TapImmune IP Rights or impair the right of TapImmune or the Surviving Corporation and its Subsidiaries to use, sell or license or enforce any TapImmune IP Rights or portion thereof, except for the occurrence of any such grant or impairment that would not individually or in the aggregate, reasonably be expected to result in a TapImmune Material Adverse Effect. With respect to each of the TapImmune IP Rights Agreements: (i) each such agreement is valid and binding on TapImmune or its Subsidiaries, as applicable, and in full force and effect; (ii) TapImmune has not received any notice of termination or cancellation under such agreement, or received any notice of breach or default under such agreement, which breach has not been cured or waived; and (iii) neither TapImmune nor its Subsidiaries, and to the Knowledge of TapImmune, no other party to any such agreement, is in breach or default thereof in any material respect.

(g) The manufacture, marketing, license, sale or intended use of any product or service currently approved or sold or under preclinical or clinical development by TapImmune or any of its Subsidiaries (i) does not violate or constitute a breach of any license or agreement between TapImmune or its Subsidiaries and any third party, and, (ii) to the Knowledge of TapImmune and its Subsidiaries, does not infringe or misappropriate any Intellectual Property right of any other party. TapImmune has disclosed in correspondence to TapImmune the third-party patents and patent applications found during all freedom to operate searches that were conducted by TapImmune or its Subsidiaries related to any product or technology currently licensed or sold or under development by TapImmune or its Subsidiaries. To the Knowledge of TapImmune and its Subsidiaries, no third party is infringing upon or misappropriating, or violating any license or agreement with TapImmune or its Subsidiaries relating to, any TapImmune IP Rights. There is no current or, to the Knowledge of TapImmune, pending challenge, claim or Legal Proceeding (including opposition, interference or other proceeding in any patent or other government office) contesting the validity, enforceability, ownership or right to use, sell, license or dispose of any TapImmune IP Rights, nor has TapImmune or any of its Subsidiaries received any written notice asserting that the manufacture, marketing, license, sale or intended use of any product or service currently approved or sold or under preclinical or clinical development by TapImmune or any of its Subsidiaries conflicts with or infringes or misappropriates or will conflict with or infringe or misappropriate the rights of any other Person.

(h) Each item of TapImmune IP Rights that is TapImmune Registered IP that is solely owned by TapImmune or one of its Subsidiaries is and at all times has been filed and maintained in compliance with all applicable Legal Requirements and all filings, payments and other actions required to be made

or taken to maintain such item of TapImmune Registered IP in full force and effect have been made by the applicable deadline, except for any failure to perform any of the foregoing, individually or collectively, that would not constitute a TapImmune Material Adverse Effect.

(i) No trademark (whether registered or unregistered) or trade name owned, used, or applied for by TapImmune or any of its Subsidiaries conflicts or interferes with any trademark (whether registered or unregistered) or trade name owned, used, or applied for by any other Person. None of the goodwill associated with or inherent in any trademark (whether registered or unregistered) in which TapImmune or any of its Subsidiaries has or purports to have an ownership interest has been impaired as determined by TapImmune or any of its Subsidiaries in accordance with GAAP.

(j) (i) TapImmune is not bound by any Contract to indemnify, defend, hold harmless, or reimburse any other Person with respect to any Intellectual Property infringement, misappropriation, or similar claim, and (ii) neither TapImmune nor any of its Subsidiaries has ever assumed, or agreed to discharge or otherwise take responsibility for, any existing or potential liability of another Person for infringement, misappropriation, or violation of any Intellectual Property right, which assumption, agreement or responsibility remains in force as of the date of this Agreement.

3.10. Material Contracts.

(a) Section 3.10(a) of the TapImmune Disclosure Schedule lists the following TapImmune Contracts, effective as of the date of this Agreement (each, a “**TapImmune Material Contract**” and collectively, the “**TapImmune Material Contracts**”):

(i) each TapImmune Contract relating to any material bonus, deferred compensation, severance, incentive compensation, pension, profit-sharing or retirement plans, or any other employee benefit plans or arrangements;

(ii) each TapImmune Contract relating to the employment of, or the performance of employment-related services by, any Person, including any employee, consultant or independent contractor, or entity providing employment related, consulting or independent contractor services, not terminable by TapImmune on 90 calendar days’ or less notice without liability, except to the extent general principles of wrongful termination law may limit TapImmune’s, TapImmune’s Subsidiaries’ ability to terminate employees at will;

(iii) each TapImmune Contract relating to any agreement or plan, including any stock option plan, stock appreciation right plan or stock purchase plan, any of the benefits of which will be increased, or the vesting of benefits of which will be accelerated, by the occurrence of any of the Contemplated Transactions (either alone or in conjunction with any other event, such as termination of employment) or the value of any of the benefits of which will be calculated on the basis of any of the Contemplated Transactions;

(iv) each TapImmune Contract relating to any agreement of indemnification or guaranty not entered into in the Ordinary Course of Business;

(v) each TapImmune Contract containing (A) any covenant limiting the freedom of TapImmune, any TapImmune Subsidiary or the Surviving Corporation to engage in any line of business or compete with any Person, (B) any most-favored pricing arrangement, (C) any exclusivity provision, or (D) any non-solicitation provision;

(vi) each TapImmune Contract relating to capital expenditures and requiring payments after the date of this Agreement in excess of \$100,000 pursuant to its express terms and not cancelable without penalty;

(vii) each TapImmune Contract relating to the disposition or acquisition of material assets or any ownership interest in any Entity;

(viii) each TapImmune Contract relating to any mortgages, indentures, loans, notes or credit agreements, security agreements or other agreements or instruments relating to the borrowing of money or extension of credit in excess of \$100,000 or creating any material Encumbrances with respect to any assets of TapImmune or any TapImmune Subsidiary or any loans or debt obligations with officers or directors of TapImmune;

(ix) each TapImmune Contract relating to: (A) any distribution agreement (identifying any that contain exclusivity provisions); (B) any agreement involving provision of services or products with respect to any pre-clinical or clinical development activities of TapImmune; (C) any dealer, distributor, joint marketing, alliance, joint venture, cooperation, development or other agreement currently in force under which TapImmune has continuing obligations to develop or market any product, technology or service, or any agreement pursuant to which TapImmune has continuing obligations to develop any Intellectual Property that will not be owned, in whole or in part, by TapImmune; or (D) any Contract to license any third party to manufacture or produce any product, service or technology of TapImmune or any Contract to sell, distribute or commercialize any products or service of TapImmune, in each case, except TapImmune Contracts entered into in the Ordinary Course of Business;

(x) each TapImmune Contract with any Person, including any financial advisor, broker, finder, investment banker or other Person, providing advisory services to TapImmune in connection with the Contemplated Transactions;

(xi) each TapImmune IP Right Agreement other than those that are immaterial;

(xii) each TapImmune Lease; or

(xiii) any other TapImmune Contract that is not terminable at will (with no penalty or payment) by TapImmune and (i) which involves payment or receipt by TapImmune after the date of this Agreement under any such agreement, Contract or commitment of more than \$100,000 in the aggregate, or obligations after the date of this Agreement in excess of \$100,000 in the aggregate, or (ii) that is material to the business or operations of TapImmune.

(b) TapImmune has delivered or made available to Marker accurate and complete (except for applicable redactions thereto) copies of all TapImmune Material Contracts, including all amendments thereto. There are no TapImmune Material Contracts that are not in written form. Neither TapImmune nor any of the TapImmune Subsidiaries has, nor to TapImmune's Knowledge, as of the date of this Agreement has any other party to a TapImmune Material Contract, breached, violated or defaulted under, or received notice that it has breached, violated or defaulted under, any of the terms or conditions of any TapImmune Material Contract in such manner as would permit any other party to cancel or terminate any such TapImmune Material Contract, or would permit any other party to seek damages that constitutes a TapImmune Material Adverse Effect. As of the date of this Agreement, each TapImmune Material Contract is valid, binding, enforceable and in full force and effect, subject to: (i) laws of general application relating to bankruptcy, insolvency and the relief of debtors; and (ii) rules of law governing specific performance, injunctive relief and other equitable remedies.

3.11. Undisclosed Liabilities. As of the date of this Agreement, neither TapImmune nor any TapImmune Subsidiary has any Liability, except for: (a) Liabilities identified as such in the TapImmune Audited Balance Sheet; (b) normal and recurring current Liabilities that have been incurred by TapImmune since the date of the TapImmune Audited Balance Sheet in the Ordinary Course of Business and that are not in excess of \$100,000 in the aggregate; (c) Liabilities for performance in the Ordinary Course of Business of obligations of TapImmune or any TapImmune Subsidiary under TapImmune Contracts, including the reasonably expected performance of such TapImmune Contracts in accordance with their terms (which would not include, for example, any instances of breach or indemnification); (d) Liabilities described in Section 3.11 of the TapImmune Disclosure Schedule; and (e) Liabilities incurred in connection with the Contemplated Transactions.

3.12. Compliance; Permits; Restrictions.

(a) TapImmune is, and since January 1, 2015, each of TapImmune and its Subsidiaries has been in compliance with all applicable Legal Requirements except for any non-compliance that would not constitute a TapImmune Material Adverse Effect. No investigation, claim, suit, proceeding, audit or other action by any Governmental Body or authority is pending or, to the Knowledge of TapImmune, threatened against TapImmune or any TapImmune Subsidiary. There is no Contract, judgment, injunction, order or decree binding upon TapImmune or any TapImmune Subsidiary which (i) has or

would reasonably be expected to have the effect of prohibiting or materially impairing any business practice of TapImmune or any TapImmune Subsidiary, any acquisition of material property by TapImmune or any TapImmune Subsidiary or the conduct of business by TapImmune or any TapImmune Subsidiary as currently conducted, (ii) would reasonably be expected to have an adverse effect on TapImmune's ability to comply with or perform any covenant or obligation under this Agreement or (iii) would reasonably be expected to have the effect of preventing, delaying, making illegal or otherwise interfering with the Merger or any of the Contemplated Transactions.

(b) TapImmune and the TapImmune Subsidiaries hold all Governmental Authorizations that are material to the operation of its business (collectively, the "**TapImmune Permits**") as currently conducted. Section 3.12(b) of the TapImmune Disclosure Schedule identifies each TapImmune Permit. As of the date of this Agreement, each of TapImmune and the TapImmune Subsidiaries are in material compliance with the terms of the TapImmune Permits. No action, proceeding, revocation proceeding, amendment procedure, writ, injunction or claim is pending or, to the Knowledge of TapImmune, threatened, which seeks to revoke, limit, suspend, or materially modify any TapImmune Permit. The rights and benefits of each material TapImmune Permit will be available to the Surviving Corporation immediately after the Effective Time on terms substantially identical to those enjoyed by TapImmune and the TapImmune Subsidiaries immediately prior to the Effective Time.

(c) There are no proceedings pending or, to the Knowledge of TapImmune, threatened with respect to an alleged violation by TapImmune or any of its Subsidiaries of the FDCA, FDA regulations adopted thereunder, the Controlled Substances Act or any other similar Legal Requirements promulgated by the FDA or other Drug Regulatory Agency.

(d) TapImmune and each of its Subsidiaries hold all required Governmental Authorizations issuable by any Drug Regulatory Agency necessary for the conduct of the business of TapImmune or such Subsidiary as currently conducted, and development, clinical testing, manufacturing, marketing, distribution and importation or exportation, as currently conducted, of any of its products or product candidates (the "**TapImmune Product Candidates**"). TapImmune holds all required Governmental Authorizations issuable by any Governmental Body necessary for the conduct of its business as currently conducted (the "**TapImmune Regulatory Permits**") and no such TapImmune Regulatory Permit has been (i) revoked, withdrawn, suspended, canceled or terminated or (ii) modified in any materially adverse manner. TapImmune has not received any written notice or other written communication from any Governmental Body regarding any revocation, withdrawal, suspension, cancellation, termination or material modification of any TapImmune Regulatory Permit. TapImmune has made available to Marker all information in its possession or control relating the development, clinical testing, manufacturing, importation and exportation of the TapImmune Product Candidates, including complete copies of the following (to the extent there are any): (x) copies of all investigational new drug applications (INDs) submitted to the FDA, and all supplements to and amendments of such INDs; new drug applications; adverse event reports; clinical study reports and material study data; inspection reports, notices of adverse findings, warning letters, filings and letters and other written correspondence to and from any Drug Regulatory Agency; and meeting minutes with any Drug Regulatory Agency; and (y) similar notices, letters, filings, correspondence and meeting minutes with any other Governmental Body. Each of TapImmune and each of its Subsidiaries has complied in all material respects with the ICH E9 Guidance for Industry: Statistical Principles for Clinical Trials in the management of the clinical data that have been presented to TapImmune. To the Knowledge of TapImmune, there are no facts that would be reasonably likely to result in any warning, untitled or notice of violation letter or Form FDA-483 from the FDA.

(e) All clinical, pre-clinical and other studies and tests conducted by or on behalf of, or sponsored by, TapImmune or any of the TapImmune Subsidiaries or in which TapImmune or its Subsidiaries or their respective current products or services have participated were conducted in all material respects in accordance with standard medical and scientific research procedures and in compliance with applicable regulations of the Drug Regulatory Agencies and other applicable Legal Requirements, including 21 C.F.R. Parts 50, 54, 56, 58 and 312. No preclinical or clinical trial conducted by or on behalf of TapImmune has been terminated or suspended prior to completion for safety or non-compliance reasons. Since January 1, 2015, neither TapImmune nor any of the TapImmune Subsidiaries has

received any notices, correspondence or other communications from any Drug Regulatory Agency requiring, or to the Knowledge of TapImmune threatening to initiate, the termination or suspension of any clinical studies conducted by or on behalf of, or sponsored by, TapImmune or in which TapImmune Product Candidates, have participated. To the extent required, all clinical trials conducted by or on behalf of TapImmune have been registered on, and trial results have been reported on, the United States National Institutes of Health Website, www.clinicaltrials.gov, in accordance with 42 U.S.C. §282(j), and are listed in accordance with any applicable additional state and local law requirements.

(f) To the Knowledge of TapImmune, no debarment or exclusionary claims, actions, proceedings or investigations in respect of their business or products are pending or threatened against TapImmune or its officers, employees or agents. TapImmune is not the subject of any pending, or to the Knowledge of TapImmune, threatened investigation in respect of its business or products by the FDA pursuant to its "Fraud, Untrue Statements of Material Facts, Bribery, and Illegal Gratuities" Final Policy set forth in 56 Fed. Reg. 46191 (September 10, 1991) and any amendments thereto. To the Knowledge of TapImmune, TapImmune has not committed any acts, made any statement, or failed to make any statement, in each case in respect of its business or TapImmune Product Candidates that would violate the FDA's "Fraud, Untrue Statements of Material Facts, Bribery, and Illegal Gratuities" Final Policy, and any amendments thereto. Neither TapImmune, nor to the Knowledge of TapImmune, any of its respective officers, employees or agents has been convicted of any crime or engaged in any conduct that would reasonably be expected to result in a debarment or exclusion (i) under 21 U.S.C. Section 335a or (ii) any similar applicable Legal Requirement.

3.13. Tax Matters.

(a) Except as set forth in Section 3.13(a) of the TapImmune Disclosure Schedule, (i) TapImmune and each of its Subsidiaries has timely filed all income Tax Returns and other material Tax Returns that they were required to file under applicable Legal Requirements, (ii) to the Knowledge of TapImmune, all such Tax Returns were correct and complete in all material respects and have been prepared in material compliance with all applicable Legal Requirements, (iii) neither TapImmune nor any of its Subsidiaries is currently the beneficiary of any extension of time within which to file any Tax Return, and (iv) no claim has ever been made by an authority in a jurisdiction where TapImmune or any of its Subsidiaries do not file Tax Returns that such company is subject to taxation by that jurisdiction.

(b) All material Taxes due and owing by TapImmune or any of its Subsidiaries on or before the date hereof (whether or not shown on any Tax Return) have been paid. Any unpaid Taxes of TapImmune and its Subsidiaries have been reserved for on the TapImmune Audited Balance Sheet in accordance with GAAP. Except as set forth in Section 3.13(b) of the TapImmune Disclosure Schedule, since the date of the TapImmune Audited Balance Sheet, TapImmune has not incurred any Liability for Taxes outside the Ordinary Course of Business or otherwise inconsistent with past custom and practice.

(c) TapImmune has withheld and paid all Taxes required to have been withheld and paid in connection with any amounts paid or owing to any employee, independent contractor, creditor, stockholder or other third party.

(d) There are no Encumbrances for Taxes (other than Taxes not yet due and payable or Taxes that are being contested in good faith and for which adequate reserves have been made on TapImmune's Audited Balance Sheet) upon any of the assets of TapImmune or any TapImmune Subsidiary.

(e) Except as set forth in Section 3.13(e) of the TapImmune Disclosure Schedule, no material deficiencies for Taxes with respect to TapImmune or any TapImmune Subsidiary have been claimed, proposed or assessed by any Governmental Body in writing. There are no pending (or, based on written notice, threatened) audits, assessments or other actions for or relating to any liability in respect of Taxes of TapImmune or any TapImmune Subsidiary. No issues relating to Taxes of TapImmune or any TapImmune Subsidiary were raised by the relevant Tax authority in any completed audit or examination that would reasonably be expected to result in a material amount of Taxes in a later

taxable period. TapImmune has delivered or made available to Marker complete and accurate copies of all federal income Tax and all other material Tax Returns of TapImmune and each of the TapImmune Subsidiaries (and the predecessors of each) for all taxable years remaining open under the applicable statute of limitations, and complete and accurate copies of all examination reports and statements of deficiencies assessed against or agreed to by TapImmune with respect to federal income Tax and all other material Taxes. Neither TapImmune nor any TapImmune Subsidiary has waived any statute of limitations in respect of Taxes or agreed to any extension of time with respect to a Tax assessment or deficiency, nor has any request been made in writing for any such extension or waiver.

(f) All material elections with respect to Taxes affecting TapImmune or any of its Subsidiaries as of the date hereof are set forth on Section 3.13(f) of the TapImmune Disclosure Schedule. Neither TapImmune nor any of its Subsidiaries (i) has agreed, or is required, to make any adjustment under Section 481(a) of the Code by reason of a change in accounting method or otherwise; (ii) has elected at any time to be treated as an S corporation within the meaning of Sections 1361 or 1362 of the Code; or (iii) has made any of the foregoing elections or is required to apply any of the foregoing rules under any comparable provision of state, local or foreign law.

(g) Neither TapImmune nor any TapImmune Subsidiary has been a United States real property holding corporation within the meaning of Section 897(c)(2) of the Code during the applicable period specified in Section 897(c)(1)(A)(ii) of the Code.

(h) Neither TapImmune nor any TapImmune Subsidiary is a party to any Tax allocation, Tax sharing or similar agreement (including indemnity arrangements), other than commercial contracts entered into in the Ordinary Course of Business with vendors, customers and landlords, the primary purpose of which does not relate to Taxes.

(i) Neither TapImmune nor any of its Subsidiaries has ever been a member of an affiliated group filing a consolidated, combined or unitary Tax Return (other than a group the common parent of which is TapImmune) for federal, state, local or foreign Tax purposes. Neither TapImmune nor any TapImmune Subsidiary has any Liability for the Taxes of any Person (other than TapImmune) under Treasury Regulations Section 1.1502-6 (or any similar provision of state, local, or foreign law), as a transferee or successor, by Contract or otherwise.

(j) Neither TapImmune nor any TapImmune Subsidiary has distributed stock of another Person, or has had its stock distributed by another Person, in a transaction that was purported or intended to be governed in whole or in part by Section 355 of the Code or Section 361 of the Code.

(k) Neither TapImmune nor any TapImmune Subsidiary is a partner for Tax purposes with respect to any joint venture, partnership, or, to the Knowledge of TapImmune, other arrangement or Contract which is treated as a partnership for Tax purposes.

(l) Neither TapImmune nor any TapImmune Subsidiary will be required to include any item of income in, or exclude any item of deduction from, taxable income for any period (or any portion thereof) ending after the Closing Date as a result of any (i) installment sale or other open transaction disposition made on or prior to the Closing Date, (ii) agreement with any Tax authority (including any closing agreement described in Section 7121 of the Code or any similar provision of state, local or foreign law) made or entered into on or prior to the Closing Date, (iii) prepaid amount, or (iv) election under Section 108(i) of the Code.

(m) Neither TapImmune nor any TapImmune Subsidiary has entered into any transaction identified as a "listed transaction" for purposes of Treasury Regulations Sections 1.6011-4(b)(2) or 301.6111-2(b)(2).

(n) Neither TapImmune nor any TapImmune Subsidiary has taken any action, or has any Knowledge of any fact or circumstance, that would reasonably be expected to prevent the Contemplated Transactions from qualifying as a reorganization within the meaning of Section 368(a) of the Code.

3.14. Employee and Labor Matters; Benefit Plans.

(a) Section 3.14(a) of the TapImmune Disclosure Schedule lists, as of the date of this Agreement, all written and describes all non-written employee benefit plans (as defined in Section 3(3) of ERISA) and all bonus, equity-based, retention, incentive, deferred compensation, retirement or supplemental retirement, profit sharing, severance, golden parachute, disability, life or accident insurance, paid time off, vacation, cafeteria, dependent care, medical care, employee assistance program, education or tuition assistance programs, fringe or employee benefit, and all other compensation, plans, programs, agreements or arrangements, including but not limited to any employment, consulting, independent contractor, severance or executive compensation agreements or arrangements (other than regular salary or wages), written or otherwise, which are currently in effect relating to any present or former employee, independent contractor or director of TapImmune or any TapImmune Affiliate, or which is maintained by, administered or contributed to by, or required to be contributed to by, TapImmune, any of TapImmune's Subsidiaries or any TapImmune Affiliate, or under which TapImmune, any of TapImmune's Subsidiaries or any TapImmune Affiliate has incurred or may incur any liability (each, an "**TapImmune Employee Plan**").

(b) With respect to each TapImmune Employee Plan, TapImmune has made available to Marker a true and complete copy of, to the extent applicable, (i) such TapImmune Employee Plan, (ii) the three most recent annual reports (Form 5500) as filed with the Internal Revenue Service, (iii) each currently effective trust agreement related to such TapImmune Employee Plan, (iv) the most recent summary plan description, prospectus or similar employee summary for each TapImmune Employee Plan, (v) the most recent Internal Revenue Service determination or opinion letter or analogous ruling under foreign law issued with respect to any TapImmune Employee Plan, (vi) all material notices, letters or other correspondence to or from any Governmental Body or agency thereof within the last three years; (vii) all non-discrimination tests for the most recent three plan years; and (viii) all material written agreements and Contracts currently in effect, including (without limitation) administrative service agreements, group annuity contracts, and group insurance contracts.

(c) Each TapImmune Employee Plan that is intended to be qualified under Section 401(a) of the Code has received a favorable determination or may rely on a favorable opinion letter with respect to such qualified status from the Internal Revenue Service. To the Knowledge of TapImmune, nothing has occurred that would reasonably be expected to adversely affect the qualified status of any such TapImmune Employee Plan or the exempt status of any related trust.

(d) Each TapImmune Employee Plan has been operated and maintained in compliance in all material respects, with its terms and, both as to form and operations, with all applicable Legal Requirements, including the Code and ERISA. Neither TapImmune, any of its Subsidiaries, nor any TapImmune Affiliate is subject to any Liability or penalty under Sections 4976 through 4980 of the Code or Title I of ERISA with respect to any of the TapImmune Employee Plans. All contributions required to be made by TapImmune, any of its Subsidiaries or any TapImmune Affiliate to any TapImmune Employee Plan have been made on or before their due dates (and no further contributions will be due or will have accrued thereunder as of the Closing Date, other than contributions accrued in the Ordinary Course of Business consistent with past practice).

(e) No suit, administrative proceeding, action or other litigation has been initiated against, or to the Knowledge of TapImmune, is threatened, against or with respect to any TapImmune Employee Plan, including any audit or inquiry by the IRS, United States Department of Labor or other Governmental Body.

(f) Neither TapImmune nor any TapImmune Affiliate has announced its intention to modify or amend any TapImmune Employee Plan or adopt any arrangement or program which, once established, would come within the definition of a TapImmune Employee Plan.

(g) No TapImmune Employee Plan is subject to Title IV or Section 302 of ERISA or Section 412 of the Code, and neither TapImmune, nor any of its Subsidiaries or any TapImmune Affiliate has ever maintained, contributed to or partially or completely withdrawn from, or incurred any obligation or liability with respect to, any such plan. No TapImmune Employee Plan is a Multiemployer Plan, and

neither TapImmune, nor any of its Subsidiaries or any TapImmune Affiliate has ever contributed to or had an obligation to contribute, or incurred any liability in respect of a contribution, to any Multiemployer Plan. No TapImmune Employee Plan is a Multiple Employer Plan.

(h) No TapImmune Employee Plan provides for medical or death benefits beyond termination of service or retirement, other than (i) pursuant to COBRA or an analogous state law requirement or (ii) death or retirement benefits under a TapImmune Employee Plan qualified under Section 401(a) of the Code. Neither TapImmune nor any TapImmune Affiliate sponsors or maintains any self-funded employee benefit plan. No TapImmune Employee Plan is subject to any Legal Requirement of any foreign jurisdiction outside of the United States.

(i) To the Knowledge of TapImmune, no payment pursuant to any TapImmune Employee Plan or other arrangement to any “service provider” (as such term is defined in Section 409A of the Code and the United States Treasury Regulations and IRS guidance thereunder) from TapImmune or any of its Subsidiaries, including the grant, vesting or exercise of any stock option, would subject any Person to tax pursuant to Section 409A of the Code, whether pursuant to the Contemplated Transactions or otherwise.

(j) With respect to TapImmune Options granted pursuant to the 2014 TapImmune Plan, (i) each TapImmune Option intended to qualify as an “incentive stock option” under Section 422 of the Code so qualifies, (ii) each grant of a TapImmune Option was duly authorized no later than the date on which the grant of such TapImmune Option was by its terms to be effective by all necessary corporate action, including, as applicable, approval by the TapImmune Board of Directors (or a duly constituted and authorized committee thereof) and any required stockholder approval by the necessary number of votes or written consents, and the award agreement governing such grant (if any) was duly executed and delivered by each party thereto, (iii) each TapImmune Option grant was made in accordance with the terms of the plan pursuant to which it was granted and all other applicable Legal Requirements and (iv) the per share exercise price of each TapImmune Option was not less than the fair market value of a share of TapImmune Common Stock on the applicable Grant Date and (v) each such TapImmune Option grant was properly accounted for in accordance with GAAP in the financial statements (including the related notes) of TapImmune and disclosed in TapImmune filings with the Securities and Exchange Commission in accordance with the Exchange Act and all other applicable Legal Requirements. TapImmune has not knowingly granted, and there is no and has been no policy or practice of TapImmune of granting, TapImmune Options prior to, or otherwise coordinating the grant of TapImmune Options with, the release or other public announcement of material information regarding TapImmune or its results of operations or prospects.

(k) No TapImmune Options, stock appreciation rights or other equity-based awards issued or granted by TapImmune are subject to the requirements of Code Section 409A. Each “nonqualified deferred compensation plan” (as such term is defined under Section 409A(d)(1) of the Code and the guidance thereunder) maintained by or under which TapImmune or any of its Subsidiaries makes, is obligated to make or promises to make, payments (each, a “**TapImmune 409A Plan**”) complies in all material respects, in both form and operation, with the requirements of Code Section 409A and the guidance thereunder. No payment to be made under any TapImmune 409A Plan is, or to the Knowledge of TapImmune will be, subject to the penalties of Code Section 409A(a)(1).

(l) TapImmune has paid all wages, bonuses, commissions and other benefits and sums due (and all required taxes, insurance, social security and withholding thereon), including all accrued vacation, accrued sick leave, accrued benefits and accrued payments to its employees and former employees and individuals performing services as independent contractors or consultants, other than accrued amounts representing wages, bonuses, or commission entitlements due for the current pay period or for the reimbursement of legitimate expenses. To the Knowledge of TapImmune, TapImmune is in material compliance with all of its bonus, commission and other compensation plans and has paid any and all amounts required to be paid under such plans, including any and all bonuses and commissions (or pro rata portion thereof) that may have accrued or been earned through the calendar quarter preceding the Effective Time, and is not liable for any payments, taxes or penalties for failure to comply with any of the terms or conditions of such plans or the laws governing such plans.

(m) Each of TapImmune and its Subsidiaries has been in compliance in all material respects with all state and federal labor and employment laws, including those relating to wages, hours, collective bargaining, unemployment compensation, workers compensation, equal employment opportunity, discrimination, harassment, retaliation, immigration control, employee classification, the federal and state WARN Acts, information privacy and security, payment and withholding of Taxes and continuation coverage with respect to group health plans, except where any non-compliance, individually or the aggregate, has not had and would not reasonably be expected to have a TapImmune Material Adverse Effect. TapImmune: (i) has withheld and reported all amounts required by law or by agreement to be withheld and reported with respect to wages, salaries and other payments to employees, (ii) is not liable for any arrears of wages, severance pay or any Taxes or any penalty of any material amount for failure to comply with any of the foregoing, and (iii) is not liable for any payment to any trust or other fund governed by or maintained by or on behalf of any Governmental Body, with respect to unemployment compensation benefits, social security or other benefits or obligations for employees (other than routine payments to be made in the normal course of business and consistent with past practice). There are no actions, suits, claims or administrative matters pending, or to the Knowledge of TapImmune, threatened or reasonably anticipated against TapImmune relating to any employee, employment agreement, independent contractor, independent contractor agreement or TapImmune Employee Plan. There are no pending or, to the Knowledge of TapImmune, threatened or reasonably anticipated claims or actions against TapImmune or any trustee of TapImmune under any worker's compensation policy or long-term disability policy. TapImmune is not a party to a conciliation agreement, consent decree or other agreement or order with any federal, state, or local agency or Governmental Body with respect to employment practices. TapImmune has good labor relations.

(n) Except as noted on Section 3.14(n) of the TapImmune Disclosure Schedule, all individuals employed by TapImmune and its Subsidiaries are employed at-will and TapImmune and its Subsidiaries have no employment or other agreements that contain any severance, change in control, or termination pay liabilities, and all agreements with independent contractors or consultants may be terminated by TapImmune without penalty or liability with 90 days or less notice. No current or former independent contractor of TapImmune or any of its Subsidiaries would reasonably be deemed to be a misclassified employee. Except as set forth on Section 3.14(n) of the TapImmune Disclosure Schedule, no independent contractor is eligible to participate in any TapImmune Employee Plan. Neither TapImmune nor any of its Subsidiaries has material liability with respect to any misclassification of: (A) any Person as an independent contractor rather than as an employee, (B) any employee leased from another employer, or (C) any employee currently or formerly classified as exempt from overtime wages. Neither TapImmune nor any of its Subsidiaries has taken any action which would constitute a "plant closing" or "mass layoff" within the meaning of the WARN Act or similar state or local law, issued any notification of a plant closing or mass layoff required by the WARN Act or similar state or local law, or incurred any liability or obligation under WARN or any similar state or local law that remains unsatisfied. No terminations of employees of TapImmune prior to the Closing would trigger any notice or other obligations under the WARN Act or similar state or local law.

(o) No employee of TapImmune or any of its Subsidiaries is covered by an effective or pending collective bargaining agreement or similar labor agreement. There has not been any activity on behalf of any labor organization or employee group to organize any such employees. There is not, and no employee of TapImmune has threatened, any labor dispute, work stoppage, labor strike or lockout against TapImmune or any of its Subsidiaries. There are no (i) unfair labor practice charges or complaints against TapImmune or any of its Subsidiaries pending before the National Labor Relations Board or any other labor relations tribunal or authority and to the Knowledge of TapImmune no such charges or complaints are threatened, (ii) representation claims or petitions pending before the National Labor Relations Board or any other labor relations tribunal or authority or (iii) grievances or pending arbitration proceedings against TapImmune or any of its Subsidiaries that arose out of or under any collective bargaining agreement.

(p) There is no Contract or arrangement to which TapImmune or any TapImmune Affiliate is a party or by which it is bound to compensate any of its current or former employees, independent contractors or directors for additional income or excise taxes paid pursuant to Sections 409A or 4999 of the Code.

(q) Neither TapImmune nor any TapImmune Affiliate is a party to any Contract that has resulted or would reasonably be expected to result, separately or in the aggregate, in the payment of (i) any "excess parachute payment" within the meaning of Section 280G of the Code or (ii) any amount the deduction for which would be disallowed under Section 162(m) of the Code.

(r) None of the execution and delivery of this Agreement, or the consummation of the Contemplated Transactions or any termination of employment or service or any other event in connection therewith or subsequent thereto will, individually or together or with the occurrence of some other event, (i) result in any payment (including severance, unemployment compensation, golden parachute, bonus or otherwise) becoming due to any employee, independent contractor or director of TapImmune, (ii) materially increase or otherwise enhance any benefits otherwise payable by TapImmune, (iii) result in the acceleration of the time of payment or vesting of any such benefits, except as required under Section 411(d)(3) of the Code, (iv) increase the amount of compensation due to any Person by TapImmune or (v) result in the forgiveness in whole or in part of any outstanding loans made by TapImmune to any Person.

3.15. Environmental Matters. TapImmune and each TapImmune Subsidiary is in material compliance with all applicable Environmental Laws, which compliance includes the possession by TapImmune of all permits and other Governmental Authorizations required under applicable Environmental Laws and compliance with the terms and conditions thereof other than any failure to be in compliance or possess any such permits and authorized that is not a TapImmune Material Adverse Effect. Neither TapImmune nor any of its Subsidiaries has received since January 1, 2014 any written notice or other communication (in writing or otherwise), whether from a Governmental Body, citizens group, employee or otherwise, that alleges that TapImmune or any of the TapImmune Subsidiaries is not in compliance with any Environmental Law, and, to the Knowledge of TapImmune, there are no circumstances that may prevent or interfere with TapImmune's compliance with any Environmental Law in the future. To the Knowledge of TapImmune: (i) no current or prior owner of any property leased or controlled by TapImmune or any of its Subsidiaries has received since January 1, 2014, any written notice or other communication relating to property owned or leased at any time by TapImmune, whether from a Governmental Body, citizens group, employee or otherwise, that alleges that such current or prior owner or TapImmune or any of its Subsidiaries is not in compliance with or has violated any Environmental Law relating to such property and (ii) neither TapImmune nor any of its Subsidiaries has any material liability under any Environmental Law.

3.16. Insurance.

(a) TapImmune made available to Marker accurate and complete copies of all material insurance policies and all material self-insurance programs and arrangements relating to the business, assets, liabilities and operations of TapImmune and each TapImmune Subsidiary, as of the date of this Agreement. Each of such insurance policies is in full force and effect and TapImmune and each TapImmune Subsidiary is in material compliance with the terms thereof. As of the date of this Agreement, other than customary end of policy notifications from insurance carriers, since January 1, 2016, neither TapImmune nor any TapImmune Subsidiary has received any notice or other communication regarding any actual or possible: (a) cancellation or invalidation of any insurance policy; (b) refusal or denial of any coverage, reservation of rights or rejection of any material claim under any insurance policy; or (c) material adjustment in the amount of the premiums payable with respect to any insurance policy. There is no pending workers' compensation or other claim under or based upon any insurance policy of TapImmune or any TapImmune Subsidiary. All information provided to insurance carriers (in applications and otherwise) on behalf of TapImmune and each TapImmune Subsidiary is accurate and complete. TapImmune and each TapImmune Subsidiary have provided timely written notice to the appropriate insurance carrier(s) of each Legal Proceeding pending or threatened in writing against TapImmune or any TapImmune Subsidiary, and no such carrier has issued a denial of coverage or a reservation of rights with respect to any such Legal Proceeding, or informed TapImmune or any TapImmune Subsidiary of its intent to do so.

(b) TapImmune has delivered to Marker accurate and complete copies of the existing policies (primary and excess) of directors' and officers' liability insurance maintained by TapImmune and each TapImmune Subsidiary as of the date of this Agreement (the "*Existing TapImmune D&O Policies*"). Section 3.16(b) of the TapImmune Disclosure Schedule accurately sets forth, as of the date of this Agreement, the most recent annual premiums paid by TapImmune and each TapImmune Subsidiary with respect to the Existing TapImmune D&O Policies. All premiums for the Existing TapImmune D&O Policies have been paid.

3.17. Legal Proceedings; Orders.

(a) There is no pending Legal Proceeding, and, to the Knowledge of TapImmune, no Person has threatened in writing to commence any Legal Proceeding: (i) that involves TapImmune or any of the TapImmune Subsidiary, or to the Knowledge of TapImmune, any director or officer of TapImmune (in his or her capacity as such) or any of the material assets owned or used by TapImmune or any of the TapImmune Subsidiaries; or (ii) that challenges, or that would reasonably be expected to have the effect of preventing, delaying, making illegal or otherwise interfering with, the Contemplated Transactions, in each case, except for any such Legal Proceedings that would not constitute a TapImmune Material Adverse Effect. To the Knowledge of TapImmune, no event has occurred, and no claim, dispute or other condition or circumstance exists, that will, or that would reasonably be expected to, give rise to or serve as a basis for the commencement of any such Legal Proceeding.

(b) There is no order, writ, injunction, judgment or decree to which TapImmune or any TapImmune Subsidiary, or any of the material assets owned or used by TapImmune or any TapImmune Subsidiary, is subject. To the Knowledge of TapImmune, no officer of TapImmune or any TapImmune Subsidiary is subject to any order, writ, injunction, judgment or decree that prohibits such officer from engaging in or continuing any conduct, activity or practice relating to the business of TapImmune or any TapImmune Subsidiary or to any material assets owned or used by TapImmune or any TapImmune Subsidiary.

3.18. Inapplicability of Anti-takeover Statutes. The TapImmune Board of Directors and the board of directors of Merger Sub have taken and will take all actions necessary to ensure that the restrictions applicable to business combinations contained in Section 203 of the DGCL are, and will be, inapplicable to the execution, delivery and performance of this Agreement and the TapImmune Stockholder Voting and Lock-Up Agreements and to the consummation of Contemplated Transactions. No other state takeover statute or similar Legal Requirement applies or purports to apply to the Merger, this Agreement, the TapImmune Stockholder Voting and Lock-Up Agreements or any of the other Contemplated Transactions.

3.19. No Financial Advisor. Except as set forth on Section 3.19 of the TapImmune Disclosure Schedule, no broker, finder or investment banker is entitled to any brokerage fee, finder's fee, opinion fee, success fee, transaction fee or other fee or commission in connection with the Contemplated Transactions based upon arrangements made by or on behalf of TapImmune or any of the TapImmune Subsidiaries.

3.20. Disclosure. The information supplied by TapImmune and each TapImmune Subsidiary for inclusion in the Proxy Statement will not, as of the date of the Proxy Statement or as of the date such information is first mailed to TapImmune Stockholders, (i) contain any untrue statement of any material fact or (ii) omit to state any material fact necessary in order to make such information, in the light of the circumstances under which such information is provided, not false or misleading.

3.21. Bank Accounts; Deposits.

(a) Section 3.21 of the TapImmune Disclosure Schedule provides accurate information with respect to each account maintained by or for the benefit of TapImmune or any of the TapImmune Subsidiaries at any bank or other financial institution, including the name of the bank or financial institution, the account number, the balance as of December 31, 2017 and the names of all individuals authorized to draw on or make withdrawals from such accounts.

(b) All deposits of TapImmune and any TapImmune Subsidiary (including those set forth on the TapImmune Audited Balance Sheet) which are individually more than \$100,000 or more than \$250,000 in the aggregate are fully refundable to TapImmune.

3.22. Transactions with Affiliates. Except as set forth in the TapImmune SEC Documents filed prior to the date of this Agreement, since the date of TapImmune's last proxy statement filed in 2017 with the SEC, no event has occurred that would be required to be reported by TapImmune pursuant to Item 404 of Regulation S-K promulgated by the SEC. Section 3.22 of the TapImmune Disclosure Schedule identifies each Person who is (or may be deemed to be) an Affiliate of TapImmune as of the date of this Agreement.

3.23. Valid Issuance. The TapImmune Common Stock to be issued in the Merger will, when issued in accordance with the provisions of this Agreement be validly issued, fully paid and nonassessable.

3.24. Code of Ethics. TapImmune has adopted a code of ethics, as defined by Item 406(b) of Regulation S-K of the SEC, for senior financial officers, applicable to its principal executive officer, principal financial officer, controller or principal accounting officer, or persons performing similar functions. TapImmune has promptly disclosed any change in or waiver of TapImmune's code of ethics with respect to any such persons, as required by Section 406(b) of the Sarbanes-Oxley Act. To the Knowledge of TapImmune, there have been no violations of provisions of TapImmune's code of ethics by any such persons.

3.25. Opinion of Financial Advisor. The TapImmune Board of Directors has received an opinion of Nomura Securities International, Inc., the financial advisor to TapImmune, dated as of May 14, 2018, to the effect that, subject to the assumptions and limitations set forth therein, the Stock Exchange Ratio and Warrant Exchange Ratio are fair, from a financial point of view, to TapImmune. TapImmune will furnish an accurate and complete copy of such opinion to Marker promptly following execution of this Agreement.

3.26. Shell Company Status. TapImmune is not an issuer identified in Rule 144(i)(1) or of the Securities Act or a shell company as defined in Rule 12b-2 of the Exchange Act.

3.27. Exclusivity of Representations; Reliance.

(a) Except as expressly set forth in this Article 3, neither TapImmune, the TapImmune Subsidiaries, nor any Person on behalf of TapImmune or the TapImmune Subsidiaries has made, nor are any of them making, any representation or warranty, written or oral, express or implied, at law or in equity, including with respect to merchantability or fitness for any particular purpose, in respect of TapImmune or its business in connection with the transactions contemplated hereby, including any representations or warranties about the accuracy or completeness of any information or documents previously provided (including with respect to any financial or other projections therein), and any other such representations and warranties are hereby expressly disclaimed.

(b) TapImmune and Merger Sub acknowledge and agree that, except for the representations and warranties of Marker set forth in Article 2, none of TapImmune, Merger Sub or any of their respective Representatives is relying on any other representation or warranty of Marker or any other Person made outside of Article 2 of this Agreement, including regarding the accuracy or completeness of any such other representations or warranties or the omission of any material information, whether express or implied, in each case with respect to the Contemplated Transactions.

ARTICLE 4 CERTAIN COVENANTS OF THE PARTIES

4.1. Access and Investigation. Subject to the terms of the Confidentiality Agreement which the Parties agree will continue in full force following the date of this Agreement, during the period commencing on the date of this Agreement and continuing until the earlier of the termination of this Agreement in accordance with the terms hereto and the Effective Time (the "*Pre-Closing Period*"), upon reasonable notice each Party shall, and shall use commercially reasonable efforts to cause such Party's Representatives to:

(a) provide the other Party and such other Party's Representatives with reasonable access during normal business hours to such Party's Representatives, personnel and assets and to all existing books, records, Tax Returns, work papers and other documents and information relating to such Party and its Subsidiaries;

(b) provide the other Party and such other Party's Representatives with such copies of the existing books, records, Tax Returns, work papers, product data, and other documents and information relating to such Party and its Subsidiaries, and with such additional financial, operating and other data and information regarding such Party and its Subsidiaries as the other Party may reasonably request; and

(c) permit the other Party's officers and other employees to meet, upon reasonable notice and during normal business hours, with the chief financial officer or other officers and managers of such Party responsible for such Party's financial statements and the internal controls of such Party to discuss such matters as the other Party may deem necessary or reasonably appropriate. Without limiting the generality of any of the foregoing, during the Pre-Closing Period, each Party shall promptly make available to the other Party copies of:

(i) the unaudited monthly consolidated balance sheets of such Party as of the end of each calendar month and the related unaudited monthly consolidated statements of operations, statements of stockholders' equity and statements of cash flows for such calendar month, which shall be delivered within 30 calendar days after the end of such calendar month, or such longer periods as the Parties may agree to in writing;

(ii) all material operating and financial reports prepared by such Party for its senior management, including sales forecasts, marketing plans, development plans, discount reports, write-off reports, hiring reports and capital expenditure reports prepared for its management;

(iii) any written materials or communications sent by or on behalf of a Party to its stockholders;

(iv) any material notice, document or other communication sent by or on behalf of a Party to any party to any TapImmune Material Contract or Marker Material Contract, as applicable, or sent to a Party by any party to any TapImmune Material Contract or Marker Material Contract in connection the Contemplated Transactions, as applicable;

(v) any notice, report or other document filed with or otherwise furnished, submitted or sent to any Governmental Body on behalf of a Party in connection with the Merger or any of the Contemplated Transactions;

(vi) any non-privileged notice, document or other communication sent by or on behalf of, or sent to, a Party relating to any pending or threatened Legal Proceeding involving or affecting such Party; and

(vii) any material notice, report or other document received by a Party from any Governmental Body.

(d) Notwithstanding the foregoing, (i) any Party may restrict the foregoing access to the extent that such Party reasonably believes any Legal Requirement applicable to such Party requires such Party to restrict or prohibit access to any of such Party's properties or information and (ii) neither Party nor its respective Representatives or Subsidiaries shall be required to provide access to or disclose information where such Party reasonably believes access or disclosure would jeopardize the protection of attorney-client privilege.

4.2. Operation of TapImmune's Business.

(a) Except as set forth on Section 4.2(a) of the TapImmune Disclosure Schedule, as expressly required or permitted by this Agreement, or as required by applicable Legal Requirements, during the Pre-Closing Period, TapImmune shall: (i) conduct its business and operations in the Ordinary Course of Business; (ii) continue to pay outstanding accounts payable and other current Liabilities (including payroll) when due and payable, subject to good faith disputes; and (iii) conduct its business and operations in compliance with all applicable Legal Requirements.

(b) Without limiting the generality of the foregoing, during the Pre-Closing Period, except as set forth on Section 4.2(b) of the TapImmune Disclosure Schedule, as expressly required or permitted by this Agreement, or as required by applicable Legal Requirements, TapImmune shall not, without the prior written consent of Marker (which consent shall not be unreasonably withheld or delayed):

(i) (A) declare, accrue, set aside or pay any dividend or make any other distribution in respect of any shares of TapImmune Capital Stock or (B) repurchase, redeem or otherwise reacquire any shares of its capital stock or other securities;

(ii) sell, issue or grant, or authorize the issuance of: (A) any capital stock or other security (except for shares of TapImmune Common Stock issued upon the valid exercise of TapImmune Options or TapImmune Warrants outstanding as of the date of this Agreement, shares of TapImmune Common Stock issued in connection with the TapImmune Closing Financing, and any shares of TapImmune Common Stock issued in connection with any bridge financing between the date hereof and the Closing Date), (B) any option, warrant or right to acquire any capital stock or any other security (except for any repricing of warrants outstanding as of the date hereof), (C) any equity-based award or instrument convertible into or exchangeable for any capital stock or other security other than shares of TapImmune Capital Stock issued in connection with the TapImmune Closing Financing, or (D) any debt securities or any rights to acquire any debt securities;

(iii) except as required to give effect to anything in contemplation of the Closing, amend the certificate of incorporation, bylaws or other charter or organizational documents of TapImmune or Merger Sub, or effect or be a party to any merger, consolidation, share exchange, business combination, recapitalization, reclassification of shares, stock split, reverse stock split or similar transaction except, for the avoidance of doubt, the Contemplated Transactions;

(iv) form any Subsidiary or acquire any equity interest or other interest in any other Entity;

(v) (A) lend money to any Person (except for reasonable advances to employees and consultants for travel and other reasonable business related expenses in the Ordinary Course of Business), (B) incur or guarantee any indebtedness for borrowed money, other than in the Ordinary Course of Business or in connection with any bridge financing between the date hereof and the Closing Date, (C) guarantee any debt securities of others, or (D) make any capital expenditure or commitment individually in excess of \$100,000 or in excess of \$250,000 in the aggregate;

(vi) (A) adopt, establish or enter into any TapImmune Employee Plan, (B) cause or permit any TapImmune Employee Plan to be amended other than as required by Legal Requirement, including in order to make amendments for the purposes of Section 409A of the Code, subject to prior review and approval (with such approval not to be unreasonably withheld, conditioned or delayed) by Marker, (C) hire any additional employees or independent contractors or enter into or amend the term of any employment or consulting agreement with any employee or independent contractor other than as reasonably necessary for the completion of the Contemplated Transactions, (D) enter into any Contract with a labor union or collective bargaining agreement, (E) except as provided in the TapImmune Disclosure Schedule, pay any bonus or make any profit-sharing or similar payment to (other than in the Ordinary Course of Business), or increase the amount of the wages, salary, commissions, fringe benefits or other compensation or remuneration payable to, any of its directors or employees, (F) except as provided in the TapImmune Disclosure Schedule, accelerate the vesting of or entitlement to any payment, award, compensation or benefit with respect to any TapImmune Associate, (G) except as provided in the TapImmune Disclosure Schedule, pay or increase the severance or change of control benefits offered to any TapImmune Associate, or (H) provide or make any Tax-related gross-up payment;

(vii) enter into any material transaction outside the Ordinary Course of Business;

(viii) except as set forth on Section 4.2(b)(iv) of the TapImmune Disclosure Schedule, acquire any material asset nor sell, lease, or otherwise irrevocably dispose of any of its assets or properties, or grant any Encumbrance with respect to such assets or properties, in each case, other than in the Ordinary Course of Business;

(ix) (A) make, change or revoke any material Tax election, (B) file any material amendment to any Tax Return, (C) adopt or change any accounting method in respect of Taxes, (D) change any annual Tax accounting period, (E) enter into any Tax allocation agreement, Tax sharing agreement or Tax indemnity agreement, other than commercial contracts entered into in the Ordinary Course of Business with vendors, customers or landlords, (F) enter into any closing agreement with respect to any Tax, (G) settle or compromise any claim, notice, audit report or

assessment in respect of material Taxes, (H) apply for or enter into any ruling from any Tax authority with respect to Taxes, (I) surrender any right to claim a material Tax refund, or (J) consent to any extension or waiver of the statute of limitations period applicable to any material Tax claim or assessment;

(x) Enter into, amend or terminate any TapImmune Contract that, if effective as of the date hereof, would constitute a TapImmune Material Contract;

(xi) initiate or settle any Legal Proceeding;

(xii) except as otherwise set forth in the TapImmune operating budget delivered to Marker concurrently with the execution of this Agreement, incur any Liabilities or discharge or satisfy any Liabilities, in amounts that exceed the aggregate amount of the TapImmune budget by \$100,000;

(xiii) adopt any stockholder rights plan or similar arrangement;

(xiv) agree, resolve or commit to do any of the foregoing.

Nothing contained in this Agreement is intended to give Marker, directly or indirectly, the right to control or direct TapImmune's operations during the Pre-Closing Period.

4.3. Operation of Marker's Business.

(a) Except as set forth on Section 4.3(a) of the Marker Disclosure Schedule, as expressly required or permitted by this Agreement or as required by applicable Legal Requirements, during the Pre-Closing Period, Marker shall: (i) conduct its business and operations in the Ordinary Course of Business; (ii) continue to pay outstanding accounts payable and other current Liabilities (including payroll) when due and payable, subject to good faith disputes; (iii) continue to make regularly scheduled payments on its existing debt when due and payable; and (iv) conduct its business and operations in compliance with all applicable Legal Requirements.

(b) Without limiting the generality of the foregoing, during the Pre-Closing Period, except as set forth on Section 4.3(b) of the Marker Disclosure Schedule, as expressly permitted by this Agreement, or as required by applicable Legal Requirements, Marker shall not, nor shall it permit any of its Subsidiaries to, without the prior written consent of TapImmune (which consent shall not be unreasonably withheld or delayed):

(i) (A) declare, accrue, set aside or pay any dividend or made any other distribution in respect of any shares of Marker Capital Stock or (B) repurchase, redeem or otherwise reacquire any shares of its capital stock or other securities except pursuant to Marker Contracts existing as of the date of this Agreement;

(ii) sell, issue or grant, or authorize the issuance of: (A) any capital stock or other security, (B) any option, warrant or right to acquire any capital stock or any other security, (C) any equity-based award or instrument convertible into or exchangeable for any capital stock or other security, or (D) any debt securities or any rights to acquire any debt securities;

(iii) except as required to give effect to anything in contemplation of the Closing, amend the certificate of incorporation, bylaws or other charter or organizational documents of Marker, or effect or be a party to any merger, consolidation, share exchange, business combination, recapitalization, reclassification of shares, stock split, reverse stock split or similar transaction except, for the avoidance of doubt, the Contemplated Transactions;

(iv) form any Subsidiary or acquire any equity interest or other interest in any other Entity;

(v) (A) lend money to any Person (except for reasonable advances to employees and consultants for travel and other reasonable business related expenses in the Ordinary Course of Business), (B) incur or guarantee any indebtedness for borrowed money, other than in the Ordinary Course of Business or as contemplated in Section 9.3(a), (C) guarantee any debt securities of others, or (D) make any capital expenditure or commitment in excess of \$20,000;

(vi) (A) adopt, establish or enter into any Marker Employee Plan, (B) cause or permit any Marker Employee Plan to be amended other than as required by Legal Requirement, including in order to make amendments for the purposes of Section 409A of the Code, subject to prior review and approval (with such approval not to be unreasonably withheld, conditioned or delayed) by TapImmune, (C) enter into any Contract with a labor union or collective bargaining agreement, (D) except as provided in the Marker Disclosure Schedule, pay any bonus or make any profit-sharing or similar payment to (other than in the Ordinary Course of Business), or increase the amount of the wages, salary, commissions, fringe benefits or other compensation or remuneration payable to, any of its directors or employees, (E) except as provided in the Marker Disclosure Schedule, accelerate the vesting of or entitlement to any payment, award, compensation or benefit with respect to any Marker Associate, (F) except as provided in the Marker Disclosure Schedule, pay or increase the severance or change of control benefits offered to any Marker Associate, or (G) provide or make any Tax-related gross-up payment;

(vii) except as set forth on this Section 4.3(b)(vii) of the Marker Disclosure Schedule, acquire any material asset nor sell, lease, or otherwise irrevocably dispose of any of its assets or properties, or grant any Encumbrance with respect to such assets or properties, in each case, other than in the Ordinary Course of Business;

(viii) (A) make, change or revoke any material Tax election, (B) file any material amendment to any Tax Return, (C) adopt or change any accounting method in respect of Taxes, (D) change any annual Tax accounting period, (E) enter into any Tax allocation agreement, Tax sharing agreement or Tax indemnity agreement, other than commercial contracts entered into in the Ordinary Course of Business with vendors, customers or landlords, (F) enter into any closing agreement with respect to any Tax, (G) settle or compromise any claim, notice, audit report or assessment in respect of material Taxes, (H) apply for or enter into any ruling from any Tax authority with respect to Taxes, (I) surrender any right to claim a material Tax refund, or (J) consent to any extension or waiver of the statute of limitations period applicable to any material Tax claim or assessment; or

(ix) Except for entering into the Baylor License Agreement and the agreements contemplated therein, enter into, amend or terminate any Marker Contract that, if effective as of the date hereof, would constitute a Marker Material Contract;

(x) initiate or settle any Legal Proceeding;

(xi) adopt any stockholder rights plan or similar arrangement;

(xii) Except as set forth on Section 4.3(b)(xii) of the Marker Disclosure Schedule, renew, extend or modify the current leases or sublease for Marker's principal executive office space; or

(xiii) agree, resolve or commit to do any of the foregoing.

Nothing contained in this Agreement is intended to give TapImmune, directly or indirectly, the right to control or direct Marker's operations during the Pre-Closing Period.

4.4. Notification of Certain Matters.

(a) During the Pre-Closing Period, TapImmune shall:

(i) promptly notify Marker of (and if in writing, furnish copies of): (A) any notice or other communication from any Person alleging that the Consent of such Person is or may be required in connection with any of the Contemplated Transactions; (B) any Legal Proceeding against, relating to, involving or otherwise affecting TapImmune, or to the Knowledge of TapImmune, any director or officer of TapImmune, that is commenced or asserted against, or, to the Knowledge of TapImmune, threatened against, TapImmune or any director or officer of TapImmune; and (C) any notice or other communication from any Person alleging that any payment or other obligation is or will be owed to such Person at any time before or after the date of this Agreement, except for invoices or other communications related to agreements or dealings in the Ordinary Course of Business or payments or obligations identified in this Agreement, including the TapImmune Disclosure Schedule; and

(ii) promptly notify Marker in writing of (and if in writing, furnish copies of): (A) the discovery by TapImmune of any event, condition, fact or circumstance that occurred or existed on or prior to the date of this Agreement and that caused or constitutes an inaccuracy in any representation or warranty made by TapImmune in this Agreement in a manner that causes the condition set forth in Section 8.1 not to be satisfied; (B) any event, condition, fact or circumstance that occurs, arises or exists after the date of this Agreement and that would cause or constitute an inaccuracy in any representation or warranty made by TapImmune in this Agreement in a manner that causes the condition set forth in Section 8.1 not to be satisfied if: (1) such representation or warranty had been made as of the time of the occurrence, existence or discovery of such event, condition, fact or circumstance; or (2) such event, condition, fact or circumstance had occurred, arisen or existed on or prior to the date of this Agreement; (C) any breach of any covenant or obligation of TapImmune in a manner that causes the condition set forth in Section 8.2 not to be satisfied; and (D) any event, condition, fact or circumstance that would reasonably be expected to make the timely satisfaction of any of the conditions set forth in Article 6, Article 7, or Article 8 impossible or materially less likely. No notification given to Marker pursuant to this Section 4.4(a), shall change, limit or otherwise affect any of the representations, warranties, covenants or obligations of TapImmune contained in this Agreement or the TapImmune Disclosure Schedule for purposes of Section 8.1.

(b) During the Pre-Closing Period, Marker shall:

(i) promptly notify TapImmune of: (A) any notice or other communication from any Person alleging that the Consent of such Person is or may be required in connection with any of the Contemplated Transactions; (B) any Legal Proceeding against, relating to, involving or otherwise affecting Marker or any of its Subsidiaries, or to the Knowledge of Marker, any director or officer of Marker, that is commenced or asserted against, or, to the Knowledge of Marker, threatened against, Marker, any of its Subsidiaries, or any director or officer of Marker; and (C) any notice or other communication from any Person alleging that any payment or other obligation is or will be owed to such Person at any time before or after the date of this Agreement, except for invoices or other communications related to agreements or dealings in the Ordinary Course of Business or payments or obligations identified in this Agreement, including the Marker Disclosure Schedule; and

(ii) promptly notify TapImmune in writing, of: (i) the discovery by Marker of any event, condition, fact or circumstance that occurred or existed on or prior to the date of this Agreement and that caused or constitutes an inaccuracy in any representation or warranty made by Marker in this Agreement in a manner that causes the condition set forth in Section 7.1 not to be satisfied; (ii) any event, condition, fact or circumstance that occurs, arises or exists after the date of this Agreement and that would cause or constitute an inaccuracy in any representation or warranty made by Marker in this Agreement in a manner that causes the condition set forth in Section 7.1 not to be satisfied if: (A) such representation or warranty had been made as of the time of the occurrence, existence or discovery of such event, condition, fact or circumstance; or (B) such event, condition, fact or circumstance had occurred, arisen or existed on or prior to the date of this Agreement; (iii) any breach of any covenant or obligation of Marker in a manner that causes the condition set forth in Section 7.2 not to be satisfied; and (iv) any event, condition, fact or circumstance that would reasonably be expected to make the timely satisfaction of any of the conditions set forth in Article 6, Article 7, or Article 8 impossible or materially less likely. No notification given to TapImmune pursuant to this Section 4.4(b), shall change, limit or otherwise affect any of the representations, warranties, covenants or obligations of Marker contained in this Agreement or the Marker Disclosure Schedule for purposes of Section 7.1.

4.5. No Solicitation.

(a) Each Party agrees that neither it nor any of its Subsidiaries shall, nor shall it nor any of its Subsidiaries authorize or permit any of the Representatives retained by it or any of its Subsidiaries to directly or indirectly: (i) solicit, initiate, respond to or take any action knowingly to facilitate or encourage any inquiries or the communication, making, submission or announcement of any

Acquisition Proposal or Acquisition Inquiry or take any action that could reasonably be expected to lead to an Acquisition Proposal or Acquisition Inquiry; (ii) enter into or participate in any discussions or negotiations with any Person with respect to any Acquisition Proposal or Acquisition Inquiry; (iii) furnish any information regarding such Party to any Person in connection with, in response to, relating to or for the purpose of assisting with or facilitating an Acquisition Proposal or Acquisition Inquiry; (iv) approve, endorse or recommend any Acquisition Proposal (subject to Sections 5.2 and 5.3); (v) execute or enter into any letter of intent or similar document or any Contract contemplating or otherwise relating to any Acquisition Transaction other than a confidentiality agreement permitted under Section 4.5(b) (an “*Acquisition Agreement*”); or (vi) grant any waiver or release under any confidentiality, standstill or similar agreement (other than to the other Party) *provided, that*, each Party may grant such waiver or release under any confidentiality, standstill or similar agreement to a third party if the Board of Directors of such Party determines in good faith based on the advice of outside legal counsel, that the failure to take such action would reasonably constitute a breach of the fiduciary duties of the Board of Directors of such Party under applicable Legal Requirements.

(b) Notwithstanding anything contained in Section 4.5(b), prior to receipt of the Required TapImmune Stockholder Vote, in the case of TapImmune, (i) such Party may enter into discussions or negotiations with, any Person that has made (and not withdrawn) a bona fide, unsolicited, Acquisition Proposal, which such Party’s Board of Directors determines in good faith, after consultation with its independent financial advisor, if any, and its outside legal counsel, constitutes, or would reasonably be expected to result in, a Superior Offer, and (ii) thereafter furnish to such Person non-public information regarding such Party (but not any non-public information pertaining to the other Party or the Merger) pursuant to an executed confidentiality agreement containing provisions (including nondisclosure provisions, use restrictions, non-solicitation provisions, no hire provisions and “standstill” provisions) at least as favorable to such Party as those contained in the Confidentiality Agreement, but in each case of the foregoing clauses (i) and (ii), only if: (A) neither such Party nor any Representative of such Party has breached this Section 4.5; (B) the Board of Directors of such Party determines in good faith based on the advice of outside legal counsel, that the failure to take such action would reasonably constitute a breach of the fiduciary duties of the Board of Directors of such Party under applicable Legal Requirements; (C) at least 24 hours prior to furnishing any such non-public information to, or entering into discussions with, such Person, such Party gives the other Party written notice of the identity of such Person and of such Party’s intention to furnish nonpublic information to, or enter into discussions with, such Person; and (D) at least 24 hours prior to furnishing any such non-public information to such Person, such Party furnishes such non-public information to Marker or TapImmune, as applicable (to the extent such non-public information has not been previously furnished by such Party to Marker or TapImmune, as applicable). Without limiting the generality of the foregoing, each Party acknowledges and agrees that, in the event any Representative of such Party (whether or not such Representative is purporting to act on behalf of such Party) takes any action that, if taken by such Party, would constitute a breach of this Section 4.5 by such Party, the taking of such action by such Representative shall be deemed to constitute a breach of this Section 4.5 by such Party for purposes of this Agreement.

(c) If any Party or any Representative of such Party receives an Acquisition Proposal or Acquisition Inquiry at any time during the Pre-Closing Period, then such Party shall promptly (and in no event later than 24 hours after such Party becomes aware of such Acquisition Proposal or Acquisition Inquiry) advise the other Party orally and in writing of such Acquisition Proposal or Acquisition Inquiry (including the identity of the Person making or submitting such Acquisition Proposal or Acquisition Inquiry, and the terms thereof). Such Party shall keep the other Party fully informed, on a current basis, in all material respects with respect to the status and terms of any such Acquisition Proposal or Acquisition Inquiry and any modification or proposed modification thereto. In addition to the foregoing, each Party shall provide the other Party with at least five Business Days’ written notice of a meeting of its board of directors (or any committee thereof) at which its board of directors (or any committee thereof) is reasonably expected to consider an Acquisition Proposal or Acquisition Inquiry it has received.

(d) Each Party shall and shall cause its respective Representatives to, cease immediately and cause to be terminated, and shall not authorize or knowingly permit any of its or their Representatives to

continue, any and all existing activities, discussions or negotiations, if any, with any third party conducted prior to the date hereof with respect to any Acquisition Proposal and shall use its reasonable best efforts to cause any such third party (or its Representatives) in possession of non-public information in respect of such Party or its Subsidiaries that was furnished by or on behalf of such Party or its Subsidiaries to return or destroy (and confirm destruction of) all such information.

ARTICLE 5 ADDITIONAL AGREEMENTS OF THE PARTIES

5.1. Proxy Statement.

(a) As promptly as practicable after the date of this Agreement, TapImmune shall prepare and cause to be filed with the SEC the Proxy Statement. TapImmune shall use commercially reasonable efforts to cause the Proxy Statement to comply with the applicable rules and regulations promulgated by the SEC and to respond promptly to any comments of the SEC or its staff. TapImmune shall use commercially reasonable efforts to cause the Proxy Statement to be mailed to TapImmune's stockholders as promptly as practicable after the Proxy Statement has been filed with the SEC and either (i) the SEC has indicated that it does not intend to review the Proxy Statement or that its review of the Proxy Statement has been completed or (ii) at least ten calendar days shall have passed since the Proxy Statement was filed with the SEC without receiving any correspondence from the SEC commenting upon, or indicating that it intends to review, the Proxy Statement. Each Party shall promptly furnish to the other Party all information concerning such Party, its Subsidiaries and its stockholders that may be required or reasonably requested in connection with any action contemplated by this Section 5.1. If any event relating to Marker occurs, or if Marker becomes aware of any information, that should be disclosed in an amendment or supplement to the Proxy Statement, then Marker shall promptly inform TapImmune thereof and shall cooperate fully with TapImmune in filing such amendment or supplement with the SEC and, if appropriate, in mailing such amendment or supplement to the stockholders of TapImmune.

(b) Prior to the Effective Time, TapImmune shall use commercially reasonable efforts to ensure that the issuance of the TapImmune Common Stock in the Merger will be exempt from registration pursuant to Section 4(2) of the Securities Act and from registration or qualification requirements under applicable state securities laws.

5.2. Marker Stockholder Written Consent.

(a) Marker shall use its reasonable best efforts to obtain, as promptly as practicable, and in any event within 24 hours after the execution hereof, the Marker Stockholder Written Consent for purposes of (i) adopting this Agreement, and approving the Merger, the termination of the Investor Agreements, other certain actions and the actions contemplated by this Agreement (the "**Marker Stockholder Matters**"); (ii) acknowledging that the approval given thereby is irrevocable and that such stockholder is aware of its rights to demand appraisal for its shares pursuant to Section 262 of the DGCL, a copy of which was attached thereto, and that such stockholder has received and read a copy of Section 262 of the DGCL; and (iii) acknowledging that by its approval of the Merger it is not entitled to appraisal rights with respect to its shares in connection with the Merger and thereby waives any rights to receive payment of the fair value of its capital stock under the DGCL.

(b) Reasonably promptly following receipt of the Required Marker Stockholder Vote, Marker shall prepare and mail a notice (the "**Stockholder Notice**") to every stockholder of Marker that did not execute the Marker Stockholder Written Consent. The Stockholder Notice shall (i) be a statement to the effect that the Marker Board of Directors determined that the Merger is advisable in accordance with Section 251(b) of the DGCL and in the best interests of the stockholders of Marker and approved and adopted this Agreement, the Merger and the other Contemplated Transactions, (ii) provide the stockholders of Marker to whom it is sent with notice of the actions taken in the Marker Stockholder Written Consent, including the adoption and approval of this Agreement, the Merger and the other Contemplated Transactions in accordance with Section 228(e) of the DGCL and the certificate of incorporation and bylaws of Marker and (iii) include a description of the appraisal rights of the Marker Stockholders available under the DGCL, along with such other information as is

required thereunder and pursuant to applicable Law. All materials (including any amendments thereto) submitted to the stockholders of Marker in accordance with this [Section 5.2\(b\)](#) shall be subject to TapImmune's advance review and reasonable approval.

(c) Marker agrees that: (i) the Marker Board of Directors shall recommend that Marker Stockholders vote to approve the Marker Stockholder Matters (the "**Marker Board Recommendation**") and shall use commercially reasonable efforts to solicit such approval within the time set forth in [Section 5.2\(a\)](#); and (ii) (A) the Marker Board Recommendation shall not be withdrawn or modified in a manner adverse to TapImmune, and no resolution by the Marker Board of Directors or any committee thereof to withdraw or modify the Marker Board Recommendation in a manner adverse to TapImmune shall be adopted or proposed and (B) the Marker Board of Directors shall not recommend any Acquisition Transaction (collectively a "**Marker Board Adverse Recommendation Change**").

(d) Marker's obligation to solicit the consent of its stockholders to sign the Marker Stockholder Written Consent in accordance with [Section 5.2\(a\)](#) shall not be limited or otherwise affected by the commencement, disclosure, announcement or submission of any Superior Offer or other Acquisition Proposal, or by any withdrawal or modification of the Marker Board Recommendation.

5.3. [TapImmune Stockholders' Meeting](#).

(a) TapImmune shall: (i) take all action necessary under applicable Legal Requirements to call, give notice of and hold a meeting of the holders of TapImmune Common Stock for the purpose of seeking approval of (A) the issuance of shares of TapImmune Common Stock, Marker Merger Warrants and Additional Merger Warrants, if any, to the Marker Stockholders pursuant to the terms of this Agreement, (B) the Reincorporation, (C) the increase in the authorized shares of TapImmune Common Stock in the TapImmune certificate of incorporation, (D) the name change of TapImmune in TapImmune's certificate of incorporation, and (E) an increase in the number of authorized shares reserved for issuance under the 2014 TapImmune Plan (the matters contemplated by the foregoing clauses (A)-(E), collectively, the "**TapImmune Stockholder Matters**", and such meeting, the "**TapImmune Stockholders' Meeting**"). The TapImmune Stockholders' Meeting shall be held as promptly as practicable after the Proxy Statement is filed with the SEC and either (i) the SEC has indicated either that it does not intend to review the Proxy Statement or that its review of the Proxy Statement has been completed, or (ii) at least ten calendar days shall have passed since the Proxy Statement was filed with the SEC without receiving any correspondence from the SEC commenting upon or indicating that it intends to review the Proxy Statement. TapImmune shall take reasonable measures to ensure that all proxies solicited in connection with the TapImmune Stockholders' Meeting are solicited in compliance with all applicable Legal Requirements.

(b) TapImmune agrees that, subject to [Section 5.3\(c\)](#): (i) the TapImmune Board of Directors shall recommend that the holders of TapImmune Common Stock vote to approve the TapImmune Stockholder Matters; (ii) the Proxy Statement shall include a statement to the effect that the TapImmune Board of Directors recommends that TapImmune Stockholders vote to approve the TapImmune Stockholder Matters (the "**TapImmune Board Recommendation**"); (iii) the TapImmune Board of Directors shall use commercially reasonable efforts to solicit such approval within the timeframe set forth in [Section 5.3\(a\)](#) above; and (iv) (A) the TapImmune Board Recommendation shall not be withdrawn or modified in a manner adverse to Marker, and no resolution by the TapImmune Board of Director or any committee thereof to withdraw or modify the TapImmune Board Recommendation in a manner adverse to Marker shall be adopted or proposed and (B) the TapImmune Board of Directors shall not recommend any Acquisition Transaction (collectively a "**TapImmune Board Adverse Recommendation Change**").

(c) Notwithstanding the foregoing, at any time prior to the receipt of the Required TapImmune Stockholder Vote, the TapImmune Board of Directors may make a TapImmune Board Adverse Recommendation Change, if: (i) the TapImmune Board of Directors has received an Acquisition Proposal that the TapImmune Board of Directors has determined in its good faith judgment, after consultation with TapImmune's outside legal counsel, constitutes a Superior Offer, and (ii) the TapImmune Board of Directors determines in its good faith judgment, after consultation with

TapImmune's outside legal counsel, that the failure to make a TapImmune Board Adverse Recommendation Change would reasonably constitute a breach of its fiduciary obligations under applicable Legal Requirements; *provided, however*, that prior to TapImmune taking any action permitted under this Section 5.3(c), (1) TapImmune must promptly notify Marker, in writing, within at least five Business Days (the "*Notice Period*") before making a TapImmune Board Adverse Recommendation Change, of its intention to take such action with respect to a Superior Offer, which notice shall state expressly that TapImmune has received an Acquisition Proposal that the TapImmune Board of Directors intends to declare a Superior Offer and that the TapImmune Board of Directors intends to make a TapImmune Board Adverse Recommendation Change, and (2) TapImmune attaches to such notice the most current version of the proposed agreement (which version shall be updated on a prompt basis) and the identity of the third party making such Superior Offer.

(d) Unless the TapImmune Board of Directors has effected a TapImmune Board Adverse Recommendation Change in accordance with Section 5.3(c), TapImmune's obligation to call, give notice of and hold the TapImmune Stockholders' Meeting in accordance with Section 5.3(a) shall not be limited or otherwise affected by the commencement, disclosure, announcement or submission of any Superior Offer or Acquisition Proposal, or by any withdrawal or modification of the TapImmune Board Recommendation.

(e) Nothing contained in this Agreement shall prohibit TapImmune or its Board of Directors from (i) taking and disclosing to the TapImmune Stockholders a position as contemplated by Rule 14e-2(a) under the Exchange Act or complying with the provisions of Rule 14d-9 under the Exchange Act (other than Rule 14d-9(f) under the Exchange Act), (ii) making any disclosure to the TapImmune Stockholders if the TapImmune Board of Directors determines in good faith, after consultation with its outside legal counsel, that the failure to make such disclosure would reasonably constitute a breach of its fiduciary obligations under applicable Legal Requirements, and (iii) making a "stop, look and listen" communication to the TapImmune Stockholders pursuant to Rule 14d-9(f) under the Exchange Act, *provided, however*, that (A) in the case of each of the foregoing clauses "(i)" and "(ii)," any such disclosure or public statement shall be deemed to be a TapImmune Board Adverse Recommendation Change subject to the terms and conditions of this Agreement unless the TapImmune Board of Directors reaffirms the TapImmune Board Recommendation in such disclosure or public statement or within five Business Days of such disclosure or public statement; (B) in the case of clause "(iii)," any such disclosure or public statement shall be deemed to be a TapImmune Board Adverse Recommendation Change subject to the terms and conditions of this Agreement unless the TapImmune Board of Directors reaffirms the TapImmune Board Recommendation in such disclosure or public statement or within 10 Business Days of such disclosure or public statement; and (C) TapImmune shall not affect a TapImmune Board Adverse Recommendation Change unless specifically permitted pursuant to the terms of Section 5.3(c).

5.4. Regulatory Approvals.

(a) Each Party shall use commercially reasonable efforts to take, or cause to be taken, all actions necessary to comply promptly with all Legal Requirements that may be imposed on such Party with respect to the Contemplated Transactions and, subject to the conditions set forth in Article 6 hereof, to consummate the Contemplated Transactions, as promptly as practicable. In furtherance and not in limitation of the foregoing, each Party hereto agrees to file or otherwise submit, as soon as practicable after the date of this Agreement, but in no event later than 10 Business Days of the date hereof, all applications, notices, reports and other documents reasonably required to be filed by such Party with or otherwise submitted by such Party to any Governmental Body with respect to the Contemplated Transactions, and to submit promptly any additional information requested by any such Governmental Body. Without limiting the generality of the foregoing, the Parties shall prepare and file, if and as required, any notification or other document to be filed in connection with the Merger under any applicable foreign Legal Requirement relating to antitrust or competition matters. Marker and TapImmune shall respond as promptly as is practicable to: (i) any reasonable requests received from the Federal Trade Commission or the Department of Justice for information or documentation; and (ii) any reasonable requests received from any state attorney general, competition authority or other Governmental Body in connection with antitrust or competition matters.

(b) Each of the Parties shall use its commercially reasonable efforts to (i) cooperate in all material respects with each other in connection with timely making all required filings and submissions and timely obtaining all related Consents, permits, authorizations or approvals pursuant to Section 5.4(a); and (ii) keep Marker or TapImmune, as applicable, informed in all material respects and on a reasonably timely basis of any communication received by such Party from, or given by such Party to, the SEC, the Federal Trade Commission, the Department of Justice or any other Governmental Body relating to the Contemplated Transactions. Subject to applicable Legal Requirements relating to the exchange of information, each Party shall, to the extent practicable, give the other party reasonable advance notice of all material communications with any Governmental Body relating to the Contemplated Transactions and each Party shall have the right to attend or participate in material conferences, meetings and telephone or other communications between the other Parties and regulators concerning the Contemplated Transactions.

(c) Notwithstanding Sections 5.4(a) through 5.4(b), or any other provision of this Agreement to the contrary, in no event shall either Party be required to agree to (i) divest, license, hold separate or otherwise dispose of, encumber or allow a third party to utilize, any portion of its or their respective businesses, assets or contracts or (ii) take any other action that may be required or requested by any Governmental Body in connection with obtaining the Consents, authorizations, orders or approvals contemplated by this Section 5.4 that, would have an adverse impact, in any material respect, on any of the Parties.

5.5. Indemnification of Officers and Directors.

(a) From the Effective Time through the sixth anniversary of the date on which the Effective Time occurs, each of TapImmune and the Surviving Corporation shall jointly and severally indemnify and hold harmless each person who is now, or has been at any time prior to the date hereof, or who becomes prior to the Effective Time, a director or officer of TapImmune or Marker (the “**D&O Indemnified Parties**”), against all claims, losses, liabilities, damages, judgments, fines and reasonable fees, costs and expenses, including attorneys’ fees and disbursements (collectively, “**Costs**”), incurred in connection with any claim, action, suit, proceeding or investigation, whether civil, criminal, administrative or investigative, arising out of or pertaining to the fact that the D&O Indemnified Party is or was a director or officer of TapImmune or Marker, whether asserted or claimed prior to, at or after the Effective Time, to the fullest extent permitted under the DGCL for directors or officers of Delaware corporations. Each D&O Indemnified Party will be entitled to advancement of expenses incurred in the defense of any such claim, action, suit, proceeding or investigation from each of TapImmune and the Surviving Corporation, jointly and severally, upon receipt by TapImmune or the Surviving Corporation from the D&O Indemnified Party of a request therefor; *provided, that* any person to whom expenses are advanced provides an undertaking, as applicable, to repay such advances if it is ultimately determined that such person is not entitled to indemnification.

(b) From the Effective Time, the certificate of incorporation and bylaws of each of TapImmune and the Surviving Corporation shall contain, and TapImmune shall cause the certificate of incorporation and bylaws of the Surviving Corporation to so contain, provisions no less favorable with respect to indemnification, advancement of expenses and exculpation of present and former directors and officers of each of TapImmune and Marker than are presently set forth in the certificate of incorporation and bylaws of TapImmune and Marker, as applicable, which provisions (as well as the indemnification agreements between TapImmune and Marker, as applicable, and such D&O Indemnified Parties (as in effect as of the date of this Agreement) in the forms made available to the other Party as of the date of this Agreement) shall not be amended, modified or repealed for a period of six years’ time from the Effective Time in a manner that would adversely affect the rights thereunder of individuals who, at or prior to the Effective Time, were officers or directors of TapImmune or Marker. On or before the Effective Time, TapImmune will enter into written indemnification agreements with the then current officers and directors of TapImmune, and any new directors who join the TapImmune Board of Directors upon the Closing.

(c) TapImmune shall pay all reasonable expenses, including reasonable attorneys’ fees, that may be incurred by the persons referred to in this Section 5.5 in connection with their enforcement of their rights provided in this Section 5.5.

(d) The provisions of this Section 5.5 are intended to be in addition to the rights otherwise available to the D&O Indemnified Parties by law, charter, statute, bylaw or agreement. The obligations of TapImmune under this Section 5.5 shall survive the consummation of the Merger and shall not be terminated or modified in such a manner as to adversely affect any Indemnified Party to whom this Section 5.5 applies without the consent of such affected D&O Indemnified Party (it being expressly agreed that the D&O Indemnified Parties to whom this Section 5.5 applies, as well as their heirs and Representatives, shall be third party beneficiaries of this Section 5.5, each of whom may enforce the provisions of this Section 5.5).

(e) In the event TapImmune or the Surviving Corporation or any of their respective successors or assigns (i) consolidates with or merges into any other Person and shall not be the continuing or surviving corporation or Entity of such consolidation or merger, or (ii) transfers all or substantially all of its properties and assets to any Person, then, and in each such case, proper provision shall be made so that the successors and assigns of TapImmune or the Surviving Corporation, as the case may be, shall succeed to the obligations set forth in this Section 5.5. TapImmune shall cause the Surviving Corporation to perform all of the obligations of the Surviving Corporation under this Section 5.5.

5.6. Additional Agreements. The Parties shall (a) use commercially reasonable efforts to cause to be taken all actions necessary to consummate the Contemplated Transactions and (b) reasonably cooperate with the other Parties and provide the other Parties with such assistance as may be reasonably requested for the purpose of facilitating the performance by each Party of its respective obligations under this Agreement and to enable the Surviving Corporation to continue to meet its obligations under this Agreement following the Closing, provided that no Party shall be required to waive any conditions precedent in Articles 6, 7 or 8. Without limiting the generality of the foregoing, each Party to this Agreement: (i) shall make all filings and other submissions (if any) and give all notices (if any) required to be made and given by such Party in connection with the Contemplated Transactions; (ii) shall use commercially reasonable efforts to obtain each Consent (if any) reasonably required to be obtained (pursuant to any applicable Legal Requirement or Contract, or otherwise) by such Party in connection with the Merger or any of the other Contemplated Transactions or for such Contract to remain in full force and effect (iii) shall use commercially reasonable efforts to lift any injunction prohibiting, or any other legal bar to, the Contemplated Transactions; and (iv) shall use commercially reasonable efforts to satisfy the conditions precedent to the consummation of the Contemplated Transactions.

5.7. Disclosure. Without limiting Marker's or TapImmune's obligations under the Confidentiality Agreement, each Party shall not, and shall not permit any of its Subsidiaries or any Representative of such Party to, issue any press release or make any disclosure (to any customers or employees of such Party, to the public or otherwise) regarding the Contemplated Transactions unless: (a) the other Party has approved such press release or disclosure in writing; (b) such Party has determined in good faith, upon the advice of outside legal counsel, that such disclosure is required by applicable Legal Requirements and, to the extent practicable, before such press release or disclosure is issued or made, such Party advises the other Party of, and consults with the other Party regarding, the text of such press release or disclosure; (c) such press release or disclosure is consistent with previous press releases, public disclosures or public statements made jointly by the Parties (or individually, if approved by the other Party); or (d) such press release or disclosure is to be issued or made pursuant to Section 5.3(e) or with respect to any Acquisition Proposal or TapImmune Board Adverse Recommendation Change.

5.8. Listing. TapImmune shall use its commercially reasonable efforts to: (a) maintain its existing listing on the NASDAQ Capital Market; (b) prepare and submit a notification form for the listing of the shares of TapImmune Common Stock to be issued in the Merger, including the shares issuable in connection with the exercise of the Marker Merger Warrants and Additional Merger Warrants, if any; and (c) to the extent required by NASDAQ Marketplace Rule 5110, to file an initial listing for the combined company on the NASDAQ Capital Market (the "Nasdaq Listing Application") and to cause such Nasdaq Listing Application to be approved for listing. Marker will cooperate with TapImmune as reasonably requested by TapImmune with respect to the Nasdaq Listing Application and promptly furnish to TapImmune all information concerning Marker and Marker Stockholders that may be required or reasonably requested in connection with any action contemplated by this Section 5.8.

5.9. Tax Matters.

(a) TapImmune, Merger Sub and Marker shall use their respective commercially reasonable efforts to cause the Merger to qualify, and agree not to, and not to permit or cause any affiliate or any Subsidiary to, take any actions or cause any action to be taken which would reasonably be expected to prevent the Merger from qualifying, as a “reorganization” under Section 368(a) of the Code.

(b) This Agreement is intended to constitute, and the Parties hereby adopt this Agreement as, a “plan of reorganization” within the meaning of Treasury Regulations Section 1.368-2(g). The Parties shall treat and shall not take any tax reporting position inconsistent with the treatment of the Merger as a reorganization within the meaning of Section 368(a) of the Code for U.S. federal, state and other relevant Tax purposes, unless otherwise required pursuant to a “determination” within the meaning of Section 1313(a) of the Code.

(c) All transfer, documentary, sales, use, stamp, and other such Taxes and similar fees (including any penalties and interest) incurred in connection with this Agreement (collectively, “**Transfer Taxes**”) shall be paid by the Marker Stockholders when due, and the Marker Stockholders will, at their own expense, file all necessary Tax Returns and other documentation with respect to all such Transfer Taxes, and, if required by applicable Law, TapImmune will, and will cause its Affiliates to, join in the execution of any such Tax Returns and other documentation. The Marker Stockholders shall provide TapImmune with (A) evidence reasonably satisfactory to TapImmune that such Transfer Taxes have been paid by the Marker Stockholders and (B) a clearance certificate or similar documents which may be required by any Tax authority to relieve TapImmune of any obligation to withhold any portion of the payments to the Marker Stockholders pursuant to this Agreement.

5.10. Legends. TapImmune shall be entitled to place appropriate legends on the book entries and/or certificates evidencing any shares of TapImmune Common Stock to be received in the Merger by Marker Stockholders who may be considered “affiliates” of TapImmune for purposes of Rules 144 and 145 under the Securities Act reflecting the restrictions set forth in Rules 144 and 145 and to issue appropriate stop transfer instructions to the transfer agent for TapImmune Common Stock.

5.11. Cooperation. Each Party shall cooperate reasonably with the other Party and shall provide the other Party with such assistance as may be reasonably requested for the purpose of facilitating the performance by each Party of their obligations under this Agreement and to enable the combined entity to continue to meet its obligations following the Closing.

5.12. Directors and Officers. The Board of Directors of TapImmune shall be constituted as set forth on Schedule C-1 and the committees of the Board of Directors of TapImmune shall be constituted as set forth on Schedule C-2 (with such directors, in the aggregate, expected to satisfy the sophistication and independence requirements for the required committees of the TapImmune Board of Directors pursuant to NASDAQ’s listing standards).

5.13. Accredited Investor Status. Marker has or will deliver to TapImmune all such information necessary to enable TapImmune to confirm that the stockholders of Marker, other than those set forth on Schedule D hereto, are “accredited investors” as defined in Rule 501(a) of Regulation D promulgated under the Securities Act.

5.14. Section 16 Matters. Prior to the Effective Time, TapImmune shall take all such steps as may be required to cause any acquisitions of TapImmune Common Stock and any options to purchase TapImmune Common Stock resulting from the Contemplated Transactions, by each individual who is reasonably expected to become subject to the reporting requirements of Section 16(a) of the Exchange Act with respect to TapImmune, to be exempt under Rule 16b-3 promulgated under the Exchange Act.

5.15. Takeover Statutes. If any “control share acquisition”, “fair price”, “moratorium” or other anti-takeover Legal Requirement becomes or is deemed to be applicable to TapImmune, Marker, Merger Sub, or the Contemplated Transactions, then each of TapImmune, Marker, Merger Sub, and their respective board of directors shall grant such approvals and take such actions as are necessary so that the Contemplated Transactions may be consummated as promptly as practicable on the terms contemplated hereby and otherwise act to render such anti-takeover Legal Requirement inapplicable to the foregoing.

5.16. Termination of Certain Agreements and Rights. Marker shall use commercially reasonable efforts to terminate, at or prior to the Effective Time, those agreements set forth on Schedule 5.16 (collectively, the “*Investor Agreements*”).

5.17. TapImmune Reverse Stock Split. If deemed necessary by the Parties, TapImmune shall submit to the TapImmune stockholders at the TapImmune Stockholders’ Meeting an amendment to TapImmune’s certificate of incorporation to authorize the TapImmune Board to effect a reverse stock split of all outstanding shares of TapImmune Common Stock at a reverse stock split ratio mutually agreed to by TapImmune and Marker (the “*Reverse Stock Split*”), and shall take such other actions as shall be reasonably necessary to effectuate the Reverse Stock Split.

ARTICLE 6 CONDITIONS PRECEDENT TO OBLIGATIONS OF EACH PARTY

The obligations of each Party to effect the Merger and otherwise consummate the transactions to be consummated at the Closing are subject to the satisfaction or, to the extent permitted by applicable Legal Requirements, the written waiver by each of the Parties, at or prior to the Closing, of each of the following conditions:

6.1. No Restraints. No temporary restraining order, preliminary or permanent injunction or other order preventing the consummation of the Merger has been issued by any court of competent jurisdiction or other Governmental Body of competent jurisdiction and remain in effect, and there shall not be any Legal Requirement which has the effect of making the consummation of the Merger illegal.

6.2. Stockholder Approval. (a) Marker has obtained the Required Marker Stockholder Vote, (b) TapImmune has obtained the Required TapImmune Stockholder Vote, and (c) Marker has received evidence, in form and substance satisfactory to it, that Merger Sub has obtained the Required Merger Sub Stockholder Vote.

6.3. Listing. (a) The existing shares of TapImmune Common Stock have been continually listed on The NASDAQ Capital Market as of and from the date of this Agreement through the Closing Date, (b) the shares of TapImmune Common Stock to be issued in the Merger shall be approved for listing (subject to official notice of issuance) on The NASDAQ Capital Market as of the Effective Time, and (c) to the extent required by NASDAQ Marketplace Rule 5110, the Nasdaq Listing Application has been approved for listing (subject to official notice of issuance).

6.4. No Governmental Proceedings Relating to Contemplated Transactions or Right to Operate Business. There shall not be any Legal Proceeding pending, or overtly threatened in writing by an official of a Governmental Body in which such Governmental Body indicates that it intends to conduct any Legal Proceeding or taking any other action: (a) challenging or seeking to restrain or prohibit the consummation of the Merger; (b) relating to the Merger and seeking to obtain from TapImmune, Merger Sub or Marker any damages or other relief that may be material to TapImmune or Marker; (c) seeking to prohibit or limit in any material and adverse respect a Party’s ability to vote, transfer, receive dividends with respect to or otherwise exercise ownership rights with respect to the stock of TapImmune; (d) that would materially and adversely affect the right or ability of TapImmune or Marker to own the assets or operate the business of TapImmune or Marker; or (e) seeking to compel Marker, TapImmune or any Subsidiary of TapImmune to dispose of or hold separate any material assets as a result of the Merger.

6.5. Baylor License Agreement. The Baylor License Agreement will continue to be in full force and effect as of immediately following the Effective Time.

6.6. TapImmune Closing Financing. TapImmune shall have consummated the TapImmune Closing Financing contemporaneously with the Closing, and such TapImmune Closing Financing shall not adversely affect the stockholders of a Party in a manner disproportionate to the stockholders of the other Party.

ARTICLE 7
ADDITIONAL CONDITIONS PRECEDENT TO OBLIGATIONS OF
TAPIMMUNE AND MERGER SUB

The obligations of TapImmune and Merger Sub to effect the Merger and otherwise consummate the transactions to be consummated at the Closing are subject to the satisfaction or the written waiver by TapImmune, at or prior to the Closing, of each of the following conditions:

7.1. Accuracy of Representations. (a) The representations and warranties of Marker in Section 2.4(a), Section 2.4(b), and Section 2.4(c) (Capitalization), are true and correct in all but de minimis respects as of the date of this Agreement and are true and correct in all but de minimis respects on and as of the Closing Date with the same force and effect as if made on the Closing Date, except for those representations and warranties which address matters only as of a particular date (which representations were so true and correct as of such particular date); and (b) all other representations and warranties of Marker in Article 2 of this Agreement are true and correct as of the date of this Agreement and are true and correct on and as of the Closing Date with the same force and effect as if made on the Closing Date except (i) in each case, or in the aggregate, where the failure to be true and correct would not have a Marker Material Adverse Effect (provided that all “Marker Material Adverse Effect” qualifications and other materiality qualifications limiting the scope of the representations and warranties of Marker in Article 2 of this Agreement will be disregarded), or (ii) for those representations and warranties which address matters only as of a particular date (which representations were so true and correct, subject to the qualifications as set forth in the preceding clause (i), as of such particular date).

7.2. Performance of Covenants. Each of the covenants and obligations in this Agreement that Marker is required to comply with or to perform at or prior to the Closing have been complied with and performed by Marker in all material respects or waived by TapImmune.

7.3. No Marker Material Adverse Effect. Since the date of this Agreement, there has not occurred any Marker Material Adverse Effect that is continuing.

7.4. Termination of Investor Agreements. The Investor Agreements shall have been terminated.

7.5. Agreements and other Documents. TapImmune has received the following documents, each of which shall be in full force and effect as of the Closing Date:

(a) a certificate executed by the Chief Executive Officer of Marker confirming that the conditions set forth in Sections 7.1, 7.2, 7.2, 7.3 and 7.4 have been duly satisfied;

(b) (i) certificates of good standing of Marker in its jurisdiction of organization and the various foreign jurisdictions in which it is qualified to do business, (ii) certified copies of the certificate of incorporation and bylaws of Marker, (iii) a certificate as to the incumbency of the Chief Executive Officer of Marker, and (iv) the adoption of resolutions of the Marker Board of Directors authorizing the execution of this Agreement and the consummation of the Contemplated Transactions to be performed by Marker hereunder;

(c) a form of notice to the Internal Revenue Service in accordance with the requirements of Treasury Regulation Section 1.897-2(h) and in form and substance reasonably acceptable to TapImmune along with written authorization for TapImmune to deliver such notice form to the Internal Revenue Service on behalf of Marker upon the Closing; and

(d) the Allocation Certificate.

7.6. Marker Stockholder Voting and Lock-Up Agreements. The Marker Stockholder Voting and Lock-Up Agreements will continue to be in full force and effect as of immediately following the Effective Time.

ARTICLE 8
ADDITIONAL CONDITIONS PRECEDENT TO OBLIGATIONS OF MARKER

The obligations of Marker to effect the Merger and otherwise consummate the transactions to be consummated at the Closing are subject to the satisfaction or the written waiver by Marker, at or prior to the Closing, of each of the following conditions:

8.1. Accuracy of Representations. (a) The representations and warranties of TapImmune and Merger Sub in Section 3.4(a), Section 3.4(b), Section 3.4(c) and Section 3.4(e) (Capitalization), are true and correct in all but de minimis respects as of the date of this Agreement and are true and correct in all but de minimis respects on and as of the Closing Date with the same force and effect as if made on the Closing Date, except for those representations and warranties which address matters only as of a particular date (which representations were so true and correct as of such particular date); and (b) all other representations and warranties of TapImmune and Merger Sub in Article 3 of this Agreement are true and correct as of the date of this Agreement and are true and correct on and as of the Closing Date with the same force and effect as if made on the Closing Date except (i) in each case, or in the aggregate, where the failure to be true and correct would not have a TapImmune Material Adverse Effect (provided that all “TapImmune Material Adverse Effect” qualifications and other materiality qualifications limiting the scope of the representations and warranties of TapImmune in Article 3 of this Agreement will be disregarded), or (ii) for those representations and warranties which address matters only as of a particular date (which representations were so true and correct, subject to the qualifications as set forth in the preceding clause (i), as of such particular date).

8.2. Performance of Covenants. Each of the covenants and obligations in this Agreement that either TapImmune or Merger Sub is required to comply with or to perform at or prior to the Closing have been complied with or performed in all material respects or waived by Marker.

8.3. No TapImmune Material Adverse Effect. Since the date of this Agreement, there has not occurred any TapImmune Material Adverse Effect that is continuing.

8.4. Board of Directors and Officers. TapImmune has caused the TapImmune Board of Directors and the officers of TapImmune, to be constituted as set forth in Section 5.12 of this Agreement effective as of the Effective Time.

8.5. Sarbanes-Oxley Certifications. Neither the principal executive officer nor the principal financial officer of TapImmune has failed to provide, with respect to any TapImmune SEC Document filed (or required to be filed) with the SEC on or after the date of this Agreement, any necessary certification in the form required under Rule 13a-14 under the Exchange Act and 18 U.S.C. §1350.

8.6. Certificate of Incorporation. TapImmune has effected the Reincorporation and has provided file-stamped copies of the amendments to TapImmune’s certificate of incorporation effecting the Reincorporation and increase in the number of authorized shares of TapImmune Common Stock.

8.7. TapImmune Stockholder Voting and Lock-Up Agreements. The TapImmune Stockholder Voting and Lock-Up Agreements will continue to be in full force and effect as of immediately following the Effective Time.

8.8. Documents. Marker has received the following documents, each of which shall be in full force and effect as of the Closing Date:

(a) a certificate executed by the Chief Executive Officer and Chief Financial Officer (CFO, or if there is no CFO, the principal accounting officer) confirming that the conditions set forth in Sections 8.1, 8.2, 8.3, 8.4, 8.5, 8.6 and 8.7 have been duly satisfied; and

(b) (i) certificates of good standing of each of TapImmune and Merger Sub in its jurisdiction of organization and the various foreign jurisdictions in which each is qualified to do business, (ii) certified copies of the certificate of incorporation and bylaws of TapImmune and Merger Sub, (iii) a certificate as to the incumbency of the Chief Executive Officer and Chief Financial Officer (CFO) of each of TapImmune and Merger Sub (or if there is no CFO, the principal accounting officer), and (iv) the

adoption of resolutions of the TapImmune Board of Directors and the board of directors of Merger Sub authorizing the execution of this Agreement and the consummation of the Contemplated Transactions to be performed by TapImmune and Merger Sub hereunder.

(c) resignations agreements in forms satisfactory to Marker, dated as of the Closing Date and effective as of the Closing executed by all officers and directors of TapImmune who are not to continue as officers or directors of TapImmune pursuant to Section 5.12 hereof.

(d) the TapImmune Outstanding Securities Certificate; and

(e) the Registration Rights Agreement, duly executed by TapImmune.

ARTICLE 9 TERMINATION

9.1. Termination. This Agreement may be terminated prior to the Effective Time (whether before or after adoption of this Agreement by Marker's stockholders or whether before or after approval of the Merger by TapImmune's stockholders, as applicable, unless otherwise specified below):

(a) by mutual written consent duly authorized by the Boards of Directors of TapImmune and Marker;

(b) by either TapImmune or Marker if the Merger shall not have been consummated by September 15, 2018 (the "**Outside Date**"); *provided, however*, that the right to terminate this Agreement under this Section 9.1(b) shall not be available to Marker, on the one hand, or to TapImmune, on the other hand, if such Party's (or, in the case of TapImmune, Merger Sub's) action or failure to act has been a principal cause of the failure of the Merger to occur on or before the Outside Date and such action or failure to act constitutes a breach of this Agreement; *provided, further*, that, in the event that the Proxy Statement is still being reviewed or commented upon by the SEC, then either Party shall be entitled to extend the date for termination of this Agreement pursuant to this Section 9.1(b) for an additional 60 calendar days from the Outside Date;

(c) by either TapImmune or Marker if a court of competent jurisdiction or other Governmental Body has issued a final and nonappealable order, decree or ruling, or has taken any other action, having the effect of permanently restraining, enjoining or otherwise prohibiting the Merger;

(d) by TapImmune if the Required Marker Stockholder Vote shall not have been obtained within 24 hours of the execution of this Agreement; *provided, however*, that once the Required Marker Stockholder Vote has been obtained, TapImmune may not terminate this Agreement pursuant to this Section 9.1(d);

(e) by either TapImmune or Marker if (i) the TapImmune Stockholders' Meeting (including any adjournments and postponements thereof) has been held and completed and the TapImmune Stockholders have taken a final vote on the TapImmune Stockholder Matters and (ii) the TapImmune Stockholder Matters have not been approved at the TapImmune Stockholders' Meeting (or any adjournment or postponement thereof) by the Required TapImmune Stockholder Vote; *provided, however*, that the right to terminate this Agreement under this Section 9.1(e) shall not be available to TapImmune where the failure to obtain the Required TapImmune Stockholder Vote has been caused by the action or failure to act of TapImmune or Merger Sub and such action or failure to act constitutes a material breach by TapImmune or Merger Sub of this Agreement;

(f) by Marker (at any time prior to obtaining the Required TapImmune Stockholder Vote) if any of the following events have occurred: (i) TapImmune failed to include the TapImmune Board Recommendation in the Proxy Statement; (ii) the TapImmune Board of Directors have approved, endorsed or recommended any Acquisition Proposal; (iii) TapImmune has entered into any Acquisition Agreement (other than a confidentiality agreement permitted pursuant to Section 4.5); or (iv) TapImmune or any of its Representatives has willfully and intentionally materially breached the provisions set forth in Section 4.5;

(g) by TapImmune (at any time prior to the approval of the Merger by the Required Marker Stockholder Vote) if Marker or any of its Representatives has willfully and intentionally materially breached the provisions set forth in Section 4.5 of the Agreement;

(h) by Marker, upon a breach of any representation, warranty, covenant or agreement on the part of TapImmune or Merger Sub set forth in this Agreement, or if any representation or warranty of TapImmune or Merger Sub has become inaccurate, in either case such that the conditions set forth in Section 8.1 or Section 8.2 would not be satisfied; *provided, however,* that if such inaccuracy in TapImmune's or Merger Sub's representations and warranties or breach by TapImmune or Merger Sub is curable by TapImmune or Merger Sub, then this Agreement shall not terminate pursuant to this Section 9.1(h) as a result of such particular breach or inaccuracy unless such breach remains uncured 15 calendar days following the date of written notice from Marker to TapImmune of such breach or inaccuracy and its intention to terminate pursuant to this Section 9.1(h); *provided further, however,* that no termination may be made pursuant to this Section 9.1(h) solely as a result of the failure to obtain the Required TapImmune Stockholder Vote (in which case, termination must be made pursuant to Section 9.1(e));

(i) by TapImmune, upon a breach of any representation, warranty, covenant or agreement on the part of Marker set forth in this Agreement, or if any representation or warranty of Marker has become inaccurate, in either case such that the conditions set forth in Section 7.1 or Section 7.2 would not be satisfied; *provided, however,* that if such inaccuracy in Marker's representations and warranties or breach by Marker is curable by Marker, then this Agreement shall not terminate pursuant to this Section 9.1(i) as a result of such particular breach or inaccuracy unless such breach remains uncured 15 calendar days following the date of written notice from TapImmune to Marker of such breach or inaccuracy and its intention to terminate pursuant to this Section 9.1(i); *provided further, however,* that no termination may be made pursuant to this Section 9.1(i) solely as a result of the failure to obtain the Required Marker Stockholder Vote (in which case, termination must be made pursuant to Section 9.1(d));

(j) by TapImmune (prior to obtaining the Required TapImmune Stockholder Vote), if the TapImmune Board of Directors authorized TapImmune to enter into any Permitted Alternative Agreement; *provided, however,* that TapImmune shall not enter into any Permitted Alternative Agreement unless (i) TapImmune has complied with its obligations under Section 4.5; (ii) TapImmune has complied with its obligations under Section 5.3(c); (iii) a copy of the execution version of such Permitted Alternative Agreement has been delivered to Marker; and (iv) within two Business Days of such termination, TapImmune pays to Marker the amount contemplated by Section 9.3; or

(k) by Marker, at any time, if the condition set forth in Section 6.6 (TapImmune Closing Financing) has not been satisfied, and (i) all other conditions in Article 6 and all conditions in Article 7 have been satisfied (other than those conditions that by their nature are to be satisfied by actions taken at the Closing), and remain so satisfied, and (ii) Marker irrevocably confirms by written notice to TapImmune that (A) each of the conditions in Article 8 (other than those conditions that by their nature are to be satisfied by actions taken at the Closing) has been satisfied or that Marker is willing to waive any such conditions that have not been satisfied and (B) it is prepared to consummate the Closing upon satisfaction of the condition set forth in Section 6.6 (*i.e.*, consummation of the TapImmune Closing Financing); *provided,* that Marker shall not terminate this Agreement pursuant to this Section 9.1(k) unless the condition set forth in Section 6.6 has not been satisfied within twenty (20) calendar days after delivery of the written notice from Marker to TapImmune pursuant to clause (ii) of this Section 9.1(k).

The Party desiring to terminate this Agreement pursuant to this Section 9.1 (other than pursuant to Section 9.1(a)) shall give a notice of such termination to the other Party specifying the provisions hereof pursuant to which such termination is made and the basis therefor described in reasonable detail.

9.2. Effect of Termination. In the event of the termination of this Agreement as provided in Section 9.1, this Agreement shall be of no further force or effect; *provided, however*, that (i) this Section 9.2, Section 9.3, and Article 10 shall survive the termination of this Agreement and shall remain in full force and effect, and (ii) the termination of this Agreement shall not relieve any Party for its common law fraud or from any liability for any willful and material breach of any representation, warranty, covenant, obligation or other provision contained in this Agreement.

9.3. Expenses; Termination Fees.

(a) All fees and expenses incurred in connection with this Agreement and the Contemplated Transactions shall be paid by the Party incurring such expenses, whether or not the Merger is consummated; *provided, however*, if John Wilson has loaned funds to Marker to pay reasonable attorneys', accountants' and travel expenses in connection with the Merger, the balance of such amounts that remain unpaid at Closing will be repaid by the Surviving Corporation promptly after Closing;

(b) If (i) this Agreement is terminated by Marker pursuant to Section 9.1(f), then TapImmune shall pay to Marker, within 10 Business Days after termination (or, if applicable, upon the earlier of such entry into a definitive agreement with respect to a Subsequent Transaction or consummation of a Subsequent Transaction), a nonrefundable fee in an amount equal to \$1,500,000 (the "**Marker Termination Fee**"), in addition to any amount payable to Marker pursuant to Section 9.3(c) or Section 9.3(e).

(ii) If this Agreement is terminated by TapImmune pursuant to Section 9.1(j), then TapImmune shall pay to Marker, concurrent with such termination, the Marker Termination Fee, in addition to any amount payable to Marker pursuant to Section 9.3(c) or Section 9.3(e).

(c) (i) If this Agreement is terminated by Marker pursuant to Section 9.1(e), Section 9.1(f) or Section 9.1(h), or (ii) if this Agreement is terminated by TapImmune pursuant to Section 9.1(e), or Section 9.1(j), then TapImmune shall reimburse Marker for all reasonable fees and expenses incurred by Marker in connection with this Agreement and the transactions contemplated hereby, including: (A) all fees and expenses incurred in connection with the preparation, printing and filing, as applicable, of the Proxy Statement (including any preliminary materials related thereto and all amendments and supplements thereto, as well as any financial statements and schedules thereto), excluding legal fees and expenses; and (B) all fees and expenses incurred in connection with the preparation and filing under any filing requirement of any Governmental Body applicable to this Agreement and the transactions contemplated hereby; *provided, however*, the fees and expenses for clauses (A) and (B) above (collectively referred to as the "**Third-Party Expenses**") shall be capped at a maximum of \$500,000 for such Third Party Expenses; *plus* (C) reimbursement of all fees and expenses of Marker's legal counsel in connection with preparation of the Proxy Statement. Such payment shall be made by wire transfer of same-day funds within 10 Business Days following the date on which Marker submits to TapImmune true and correct copies of reasonable documentation supporting such Third-Party Expenses and proxy expenses.

(d) (i) If this Agreement is terminated by TapImmune pursuant to Section 9.1(d), Section 9.1(g), or Section 9.1(i), or (ii) in the event of a failure of TapImmune to consummate the transactions to be consummated at the Closing solely as a result of an Marker Material Adverse Effect as set forth in Section 7.3 (*provided*, that at such time all of the other conditions precedent to Marker's obligation to close set forth in Article 6 and Article 8 of this Agreement have been satisfied by TapImmune, are capable of being satisfied by TapImmune or have been waived by Marker), then Marker shall reimburse TapImmune for: (A) all Third-Party Expenses incurred by TapImmune up to a maximum of \$500,000, *plus* (B) all fees and expenses of TapImmune's legal counsel in connection with preparation of the Proxy Statement ("**TapImmune Proxy Expenses**"). Such payment shall be made by wire transfer of same-day funds within 10 Business Days following the date on which TapImmune submits to Marker true and correct copies of reasonable documentation supporting such Third-Party Expenses and TapImmune Proxy Expenses.

(e) If either Party fails to pay when due any amount payable by such Party under Section 9.3(b), Section 9.3(c), or Section 9.3(d), then (i) such Party shall reimburse the other Party for reasonable costs

and expenses (including reasonable fees and disbursements of counsel) incurred in connection with the collection of such overdue amount and the enforcement by the other Party of its rights under this Section 9.3, and (ii) such Party shall pay to the other Party interest on such overdue amount (for the period commencing as of the date such overdue amount was originally required to be paid and ending on the date such overdue amount is actually paid to the other Party in full) at a rate per annum equal to the “prime rate” (as announced by Bank of America or any successor thereto) in effect on the date such overdue amount was originally required to be paid.

(f) The Parties agree that the payment of the fees and expenses set forth in this Section 9.3, subject to Section 9.2, shall be the sole and exclusive remedy of each Party following a termination of this Agreement under the circumstances described in this Section 9.3, it being understood that in no event shall either TapImmune or Marker be required to pay fees or damages payable pursuant to this Section 9.3 on more than one occasion. Subject to Section 9.2, the payment of the fees and expenses set forth in this Section 9.3, and the provisions of Section 10.10, each of the Parties and their respective Affiliates will not have any liability, will not be entitled to bring or maintain any other claim, action or proceeding against the other, shall be precluded from any other remedy against the other, at law or in equity or otherwise, and shall not seek to obtain any recovery, judgment or damages of any kind against the other (or any partner, member, stockholder, director, officer, employee, Subsidiary, affiliate, agent or other Representative of such Party) in connection with or arising out of the termination of this Agreement, any breach by any Party giving rise to such termination or the failure of the Contemplated Transactions to be consummated. Each of the Parties acknowledges that (i) the agreements contained in this Section 9.3, are an integral part of the Contemplated Transactions, (ii) without these agreements, the Parties would not enter into this Agreement and (iii) any amount payable pursuant to this Section 9.3, is not a penalty, but rather is liquidated damages in a reasonable amount that will compensate the Parties in the circumstances in which such amount is payable.

ARTICLE 10 MISCELLANEOUS PROVISIONS

10.1. Non-Survival of Representations and Warranties. The representations and warranties of Marker, Merger Sub and TapImmune contained in this Agreement or any certificate or instrument delivered pursuant to this Agreement shall terminate at the Effective Time, and only the covenants that by their terms survive the Effective Time and this Section 10.1 shall survive the Effective Time.

10.2. Amendment. This Agreement may be amended with the approval of the respective Boards of Directors of Marker, Merger Sub and TapImmune at any time (whether before or after obtaining the Required TapImmune Stockholder Vote or the Required Marker Stockholder Vote); *provided, however*, that after any such adoption and approval of this Agreement by a Party’s stockholders, no amendment shall be made, which by applicable Legal Requirement requires further approval of the stockholders of such Party, without the further approval of such stockholders. This Agreement may not be amended except by an instrument in writing signed on behalf of each of Marker, Merger Sub and TapImmune.

10.3. Waiver.

(a) No failure on the part of any Party to exercise any power, right, privilege or remedy under this Agreement, and no delay on the part of any Party in exercising any power, right, privilege or remedy under this Agreement, shall operate as a waiver of such power, right, privilege or remedy; and no single or partial exercise of any such power, right, privilege or remedy shall preclude any other or further exercise thereof or of any other power, right, privilege or remedy.

(b) No Party shall be deemed to have waived any claim arising out of this Agreement, or any power, right, privilege or remedy under this Agreement, unless the waiver of such claim, power, right, privilege or remedy is expressly set forth in a written instrument duly executed and delivered on behalf of such Party; and any such waiver shall not be applicable or have any effect except in the specific instance in which it is given.

10.4. Entire Agreement; Counterparts; Exchanges by Facsimile. This Agreement and the other agreements referred to in this Agreement constitute the entire agreement and supersede all prior agreements and understandings, both written and oral, among or between any of the Parties with respect to the subject

matter hereof and thereof; *provided, however*, that the Confidentiality Agreement shall not be superseded and shall remain in full force and effect in accordance with its terms. This Agreement may be executed in several counterparts, each of which shall be deemed an original and all of which shall constitute one and the same instrument. The exchange of a fully executed Agreement (in counterparts or otherwise) by all Parties by facsimile or electronic transmission in PDF format shall be sufficient to bind the Parties to the terms and conditions of this Agreement.

10.5. Applicable Law; Jurisdiction. This Agreement shall be governed by, and construed in accordance with, the laws of the State of Delaware, regardless of the laws that might otherwise govern under applicable principles of conflicts of laws. In any action or suit between any of the Parties arising out of or relating to this Agreement or any of the Contemplated Transactions: (a) each of the Parties irrevocably and unconditionally consents and submits to the exclusive jurisdiction and venue of the state and federal courts located in the State of Texas; (b) if any such action or suit is commenced in a state court, then, subject to applicable Legal Requirements, no Party shall object to the removal of such action or suit to any federal court located in the Southern District of Texas; and (c) each of the Parties irrevocably waives the right to trial by jury.

10.6. Attorneys' Fees. In any action at law or suit in equity to enforce this Agreement or the rights of any of the parties under this Agreement, the prevailing Party in such action or suit shall be entitled to receive a reasonable sum for its attorneys' fees and all other reasonable costs and expenses incurred in such action or suit.

10.7. Assignability; No Third Party Beneficiaries. This Agreement shall be binding upon, and shall be enforceable by and inure solely to the benefit of, the Parties hereto and their respective successors and assigns; *provided, however*, that neither this Agreement nor any of a Party's rights or obligations hereunder may be assigned or delegated by such Party without the prior written consent of each other Party, and any attempted assignment or delegation of this Agreement or any of such rights or obligations by such Party without each other Party's prior written consent shall be void and of no effect. Nothing in this Agreement, express or implied, is intended to or shall confer upon any Person (other than (a) the parties hereto and (b) the D&O Indemnified Parties to the extent of their respective rights pursuant to Section 5.5) any right, benefit or remedy of any nature whatsoever under or by reason of this Agreement.

10.8. Notices. Any notice or other communication required or permitted to be delivered to any Party under this Agreement shall be in writing and shall be deemed properly delivered, given and received when delivered by hand, by registered mail, by courier or express delivery service, electronic mail, or by facsimile to the address, electronic mail address, or facsimile telephone number set forth beneath the name of such Party below (or to such other address, electronic mail address, or facsimile telephone number as such Party has specified in a written notice given to the other parties hereto):

if to TapImmune or Merger Sub:

5 West Forsyth Street, Suite 200
 Jacksonville, Florida 32202
 Telephone No.: (904) 862-6496
 Attention: Peter Hoang
 E-Mail: phoang@tapimmune.com

with a copy to:

Seyfarth Shaw LLP
 700 Milam Street, Suite 1400
 Houston, Texas 77002
 Telephone No.: (713) 238-1887
 Facsimile No.: (713) 225-2340
 Attention: Paul Pryzant
 E-Mail: ppryzant@seyfarth.com

if to Marker:

33 5th Avenue N.W., Suite 800
New Brighton, Minnesota 55112
Telephone No.: (651) 628-9259
Facsimile No.: (651) 628-9507
Attention: John Wilson
E-mail: john.wilson@wilsonwolf.com

with a copy to:

Winthrop & Weinstine, P.A.
225 South Sixth Street, Suite 3500
Minneapolis, MN 55402-4629
Telephone No.: (612) 604-6677
Facsimile No.: (612) 604-6877
Attention: Mark R. Gleeman
E-Mail: mgleeman@winthrop.com

10.9. Severability. Any term or provision of this Agreement that is invalid or unenforceable in any situation in any jurisdiction shall not affect the validity or enforceability of the remaining terms and provisions of this Agreement or the validity or enforceability of the offending term or provision in any other situation or in any other jurisdiction. If a final judgment of a court of competent jurisdiction declares that any term or provision of this Agreement is invalid or unenforceable, the Parties hereto agree that the court making such determination will have the power to limit such term or provision, to delete specific words or phrases or to replace such term or provision with a term or provision that is valid and enforceable and that comes closest to expressing the intention of the invalid or unenforceable term or provision, and this Agreement shall be valid and enforceable as so modified. In the event such court does not exercise the power granted to it in the prior sentence, the Parties hereto agree to replace such invalid or unenforceable term or provision with a valid and enforceable term or provision that will achieve, to the extent possible, the economic, business and other purposes of such invalid or unenforceable term or provision.

10.10. Other Remedies; Specific Performance. Except as otherwise provided herein, any and all remedies herein expressly conferred upon a Party will be deemed cumulative with and not exclusive of any other remedy conferred hereby, or by law or equity upon such Party, and the exercise by a Party of any one remedy will not preclude the exercise of any other remedy. The Parties hereto agree that irreparable damage would occur in the event that any of the provisions of this Agreement were not performed in accordance with their specific terms or were otherwise breached. It is accordingly agreed that the Parties shall be entitled to an injunction or injunctions to prevent breaches of this Agreement and to enforce specifically the terms and provisions hereof in any court of the United States or any state having jurisdiction, this being in addition to any other remedy to which they are entitled at law or in equity, and each of the Parties hereto waives any bond, surety or other security that might be required of any other Party with respect thereto.

10.11. Construction.

(a) For purposes of this Agreement, whenever the context requires: the singular number shall include the plural, and vice versa; the masculine gender shall include the feminine and neuter genders; the feminine gender shall include the masculine and neuter genders; and the neuter gender shall include masculine and feminine genders.

(b) The Parties hereto agree that any rule of construction to the effect that ambiguities are to be resolved against the drafting Party shall not be applied in the construction or interpretation of this Agreement.

(c) As used in this Agreement, the words "include" and "including," and variations thereof, shall not be deemed to be terms of limitation, but rather shall be deemed to be followed by the words "without limitation."

(d) Except as otherwise indicated, all references in this Agreement to "Sections," "Articles," "Exhibits" and "Schedules" are intended to refer to Sections or Articles of this Agreement and Exhibits and Schedules to this Agreement, respectively.

(e) The bold-faced headings contained in this Agreement are for convenience of reference only, shall not be deemed to be a part of this Agreement and shall not be referred to in connection with the construction or interpretation of this Agreement.

[Remainder of page intentionally left blank]

IN WITNESS WHEREOF, the parties have caused this Agreement to be executed as of the date first above written.

TAPIMMUNE INC.

By: /s/ Peter Hoang

Name: Peter Hoang
Title: CEO and President

TIMBERWOLF MERGER SUB, INC.

By: /s/ Peter Hoang

Name: Peter Hoang
Title: CEO and President

MARKER THERAPEUTICS, INC.

By: /s/ John Wilson

Name: John Wilson
Title: Chief Executive Officer

CERTAIN DEFINITIONS

For purposes of the Agreement (including this Exhibit A):

“**2017 Marker Plan**” has the meaning set forth in Section 2.4(b).

“**2014 TapImmune Plan**” has the meaning set forth in Section 3.4(b).

“**Acquisition Agreement**” has the meaning set forth in Section 4.5(a).

“**Acquisition Inquiry**” means, with respect to a Party, an inquiry, indication of interest or request for information (other than an inquiry, indication of interest or request for information made or submitted by Marker, on the one hand, or TapImmune, on the other hand, to the other Party) that would reasonably be expected to lead to an Acquisition Proposal with such Party.

“**Acquisition Proposal**” means, with respect to a Party, any offer or proposal, whether written or oral (other than an offer or proposal made or submitted by or on behalf of Marker or any of its Affiliates, on the one hand, or by or on behalf of TapImmune or any of its Affiliates, on the other hand, to the other Party) made by a third party contemplating or otherwise relating to any Acquisition Transaction with such Party.

“**Acquisition Transaction**” means any transaction or series of transactions involving:

(a) any merger, consolidation, amalgamation, share exchange, business combination, issuance of securities, acquisition of securities, reorganization, recapitalization, tender offer, exchange offer or other similar transaction: (i) in which a Party is a constituent corporation; (ii) in which a Person or “group” (as defined in the Exchange Act and the rules promulgated thereunder) of Persons directly or indirectly acquires beneficial or record ownership of securities representing more than 20% of the outstanding securities of any class of voting securities of a Party or any of its Subsidiaries; or (iii) in which a Party or any of its Subsidiaries issues securities representing more than 20% of the outstanding securities of any class of voting securities of such Party or any of its Subsidiaries; *provided, however*, in the case of TapImmune, the TapImmune Closing Financing shall not be deemed an “Acquisition Transaction.”

(b) any sale, lease, exchange, transfer, license, acquisition or disposition of any business or businesses or assets that constitute or account for 20% or more of the consolidated book value or the fair market value of the assets of a Party and its Subsidiaries, taken as a whole (other than any lease, exchange, transfer, license, disposition, partnership, or collaboration involving less than substantially all of the assets of Marker pursuant to a collaboration agreement, partnership agreement or similar arrangement); or

(c) any tender offer or exchange offer, that if consummated would result in any Person beneficially owning 20% or more of the outstanding equity securities of a Party or any of its Subsidiaries.

“**Additional Merger Warrants**” has the meaning set forth in Section 1.5(d).

“**Affiliates**” has the meaning for such term as used in Rule 145 under the Securities Act.

“**Agreement**” has the meaning set forth in the Preamble as it may be amended from time to time.

“**Allocation Certificate**” has the meaning set forth in Section 1.11(b).

“**Baylor License Agreement**” means the Exclusive License Agreement between Baylor College of Medicine and Marker dated March 16, 2018.

“**Business Day**” means any day other than a day on which banks in the State of New York are authorized or obligated to be closed.

“**Certificate of Merger**” has the meaning set forth in Section 1.3.

“**Certifications**” has the meaning set forth in Section 3.5(a).

“**Closing**” has the meaning set forth in Section 1.3.

“**Closing Date**” has the meaning set forth in [Section 1.3](#).

“**COBRA**” means the Consolidated Omnibus Budget Reconciliation Act of 1985, as amended, as set forth in Section 4980B of the Code and Part 6 of Title I of ERISA.

“**Code**” means the Internal Revenue Code of 1986, as amended.

“**Confidentiality Agreement**” means the Mutual Non-Disclosure Agreement, dated October 1, 2017, between Marker and TapImmune.

“**Consent**” means any approval, consent, ratification, permission, waiver or authorization (including any Governmental Authorization).

“**Contemplated Transactions**” means the Merger, the Reincorporation and the other transactions and actions contemplated by the Agreement.

“**Contract**” shall, with respect to any Person, mean any written agreement, contract, subcontract, lease (whether real or personal property), mortgage, understanding, arrangement, instrument, note, option, warranty, purchase order, license, sublicense, insurance policy, benefit plan or legally binding commitment or undertaking of any nature to which such Person is a party or by which such Person or any of its assets are bound or affected under applicable law.

“**Costs**” has the meaning set forth in [Section 5.5\(a\)](#).

“**D&O Indemnified Parties**” has the meaning set forth in [Section 5.5\(a\)](#).

“**DGCL**” means the General Corporation Law of the State of Delaware.

“**Dissenting Shares**” has the meaning set forth in [Section 1.8\(a\)](#).

“**Drug Regulatory Agency**” has the meaning set forth in [Section 2.12\(c\)](#).

“**Effect**” means any effect, change, event, circumstance, or development.

“**Effective Time**” has the meaning set forth in [Section 1.3](#).

“**Encumbrance**” means any lien, pledge, hypothecation, charge, mortgage, security interest, encumbrance, claim, infringement, interference, option, right of first refusal, preemptive right, community property interest or restriction of any nature (including any restriction on the voting of any security, any restriction on the transfer of any security or other asset, any restriction on the receipt of any income derived from any asset, any restriction on the use of any asset and any restriction on the possession, exercise or transfer of any other attribute of ownership of any asset).

“**Entity**” means any corporation (including any non-profit corporation), partnership (including any general partnership, limited partnership or limited liability partnership), joint venture, estate, trust, company (including any company limited by shares, limited liability company or joint stock company), firm, society or other enterprise, association, organization or entity, and each of its successors.

“**Environmental Law**” means any federal, state, local or foreign Legal Requirement relating to pollution or protection of human health or the environment (including ambient air, surface water, ground water, land surface or subsurface strata), including any law or regulation relating to emissions, discharges, releases or threatened releases of Hazardous Materials, or otherwise relating to the manufacture, processing, distribution, use, treatment, storage, disposal, transport or handling of Hazardous Materials.

“**ERISA**” means the Employee Retirement Income Security Act of 1974, as amended.

“**Exchange Act**” means the Securities Exchange Act of 1934, as amended.

“**Exchange Agent**” has the meaning set forth in [Section 1.7\(a\)](#).

“**Exchange Fund**” has the meaning set forth in [Section 1.7\(a\)](#).

“**Existing TapImmune D&O Policies**” has the meaning set forth in [Section 3.16\(b\)](#).

“**FDA**” has the meaning set forth in [Section 2.12\(c\)](#).

“**FDCA**” has the meaning set forth in [Section 2.12\(c\)](#).

“**Financing Commitment Price**” means the purchase price per share of Timberwolf Common Stock set forth in the definitive purchase agreements agreed to by the third-party investors for the Timberwolf Closing Financing for aggregate gross cash proceeds to Timberwolf of at least \$25 million.

“**GAAP**” has the meaning set forth in [Section 2.5\(a\)](#).

“**Governmental Authorization**” means any: (a) permit, license, certificate, franchise, permission, variance, exceptions, orders, clearance, registration, qualification or authorization issued, granted, given or otherwise made available by or under the authority of any Governmental Body or pursuant to any Legal Requirement; or (b) right under any Contract with any Governmental Body.

“**Governmental Body**” means any: (a) nation, state, commonwealth, province, territory, county, municipality, district or other jurisdiction of any nature; (b) federal, state, local, municipal, foreign or other government; (c) governmental or regulatory body, or quasi-governmental body of any nature (including any governmental division, department, administrative agency or bureau, commission, authority, instrumentality, official, ministry, fund, foundation, center, organization, unit, body or Entity and any court or other tribunal, and for the avoidance of doubt, any Tax authority) or other body exercising similar powers or authority; or (d) self-regulatory organization (including NASDAQ and the Financial Industry Regulatory Authority).

“**Hazardous Materials**” means any pollutant, chemical, substance and any toxic, infectious, carcinogenic, reactive, corrosive, ignitable or flammable chemical, or chemical compound, or hazardous substance, material or waste, whether solid, liquid or gas, that is subject to regulation, control or remediation under any Environmental Law, including crude oil or any fraction thereof, and petroleum products or by-products.

“**Intellectual Property**” means (a) United States, foreign and international patents, patent applications, including provisional applications, statutory invention registrations, invention disclosures and inventions, (b) trademarks, service marks, trade names, domain names, URLs, trade dress, logos and other source identifiers, including registrations and applications for registration thereof, (c) copyrights, including registrations and applications for registration thereof, and (d) software, formulae, customer lists, trade secrets, know-how, confidential information and other proprietary rights and intellectual property, whether patentable or not.

“**Investor Agreements**” shall have the meaning set forth in [Section 5.16](#).

“**IRS**” means the United States Internal Revenue Service.

“**Knowledge**” means, with respect to an individual, that such individual is actually aware of the relevant fact or such individual would reasonably be expected to know such fact in the ordinary course of the performance of the individual’s employee or professional responsibility. Any Person that is an Entity shall have Knowledge if any officer or director of such Person as of the date such Knowledge is imputed has Knowledge of such fact or other matter.

“**Legal Proceeding**” means any action, suit, litigation, arbitration, proceeding (including any civil, criminal, administrative, investigative or appellate proceeding), hearing, inquiry, audit, examination or investigation commenced, brought, conducted or heard by or before, or otherwise involving, any court or other Governmental Body or any arbitrator or arbitration panel.

“**Legal Requirement**” shall mean any federal, state, foreign, material local or municipal or other law, statute, constitution, principle of common law, resolution, ordinance, code, edict, decree, rule, regulation, ruling or requirement issued, enacted, adopted, promulgated, implemented or otherwise put into effect by or under the authority of any Governmental Body (or under the authority of the NASDAQ Stock Market or the Financial Industry Regulatory Authority).

“**Liability**” has the meaning set forth in [Section 2.11](#).

“**Marker**” has the meaning set forth in the Preamble.

“**Marker Affiliate**” means any Person that is (or at any relevant time was) under common control with Marker within the meaning of Sections 414(b), (c), (m) and (o) of the Code, and the regulations issued thereunder.

“**Marker Associate**” means any current or former employee, independent contractor, officer or director of Marker or any Marker Affiliate.

“**Marker Board Adverse Recommendation Change**” has the meaning set forth in [Section 5.2\(b\)](#).

“**Marker Board of Directors**” means the board of directors of Marker.

“**Marker Board Recommendation**” has the meaning set forth in [Section 5.2\(b\)](#).

“**Marker Capital Stock**” means the Marker Common Stock and the Marker Preferred Stock.

“**Marker Common Stock**” has the meaning set forth in [Section 2.4\(a\)](#).

“**Marker Contract**” means any Contract: (a) to which Marker or any of its Subsidiaries is a Party; or (b) by which Marker or any Marker IP Rights or any other asset of Marker or its Subsidiaries is bound or under which Marker has any obligation.

“**Marker Disclosure Schedule**” has the meaning set forth in [Article 2](#).

“**Marker Employee Plan**” has the meaning set forth in [Section 2.14\(a\)](#).

“**Marker Financials**” has the meaning set forth in [Section 2.5\(a\)](#).

“**Marker IP Rights**” means all Intellectual Property owned, licensed or controlled by Marker or any of its Subsidiaries that is necessary or used in the business of Marker and its Subsidiaries as presently conducted or as presently proposed to be conducted.

“**Marker IP Rights Agreement**” means any instrument or agreement governing, related or pertaining to any Marker IP Rights.

“**Marker Leases**” has the meaning set forth in [Section 2.8](#).

“**Marker Material Adverse Effect**” means any Effect that, considered together with all other Effects that have occurred prior to the date of determination of the occurrence of the Marker Material Adverse Effect, is or would reasonably be expected to be materially adverse to, or has or would reasonably be expected to have or result in a material adverse effect on: (a) the business, condition (financial or otherwise), capitalization, assets, operations or financial performance of Marker and its Subsidiaries taken as a whole, including without limitation, (i) Marker’s chief executive officer as of the date hereof is no longer serving in such capacity, (ii) the commencement of a Legal Proceeding regarding a felony criminal act by a Governmental Body against Marker and/or any of its officers or directors, or (iii) any conviction of a felony criminal act against Marker and/or any of its officers or directors; or (b) the ability of Marker to consummate the Contemplated Transactions or to perform any of its covenants or obligations under the Agreement in all material respects; *provided, however*, that Effects from the following shall not be deemed to constitute (nor shall Effects from any of the following be taken into account in determining whether there has occurred) a Marker Material Adverse Effect: (i) any rejection by a Governmental Body of a registration or filing by Marker relating to the Marker IP Rights; (ii) any change in the cash position of Marker which results from operations in the Ordinary Course of Business; (iii) conditions generally affecting the industries in which Marker and its Subsidiaries participate or the United States or global economy or capital markets as a whole, to the extent that such conditions do not have a disproportionate impact on Marker and its Subsidiaries taken as a whole; (iv) any failure by Marker or any of its Subsidiaries to meet internal projections or forecasts on or after the date of this Agreement (it being understood, however, that any Effect causing or contributing to any such failure to meet projections or forecasts may constitute a Marker Material Adverse Effect and may be taken into account in determining whether a Marker Material Adverse Effect has occurred); (v) the execution, delivery, announcement or performance of the obligations under this Agreement or the announcement, pendency or anticipated consummation of the Merger; (vi) any natural disaster or any acts of terrorism, sabotage, military action or war or any escalation or worsening thereof; or (vii) any changes (after the date of this Agreement) in GAAP or applicable Legal Requirements.

“**Marker Material Contract**” has the meaning set forth in [Section 2.10\(a\)](#).

“**Marker Merger Shares**” means the number of shares of TapImmune Common Stock to be issued as consideration in the Merger, which shall be equal to the number of TapImmune Outstanding Shares.

“**Marker Merger Warrants**” means the number of warrants to purchase shares of TapImmune Common Stock to be issued as consideration in the Merger, which shall be equal to the number of TapImmune Outstanding Warrants/Options, with such warrants to be in the form set forth on [Exhibit F](#), and shall be exercisable for a period beginning on the Closing Date and ending on the fifth anniversary of the Closing Date at an exercise price per share of \$2.99.

“**Marker Outstanding Shares**” means the total number of shares of Marker Common Stock outstanding immediately prior to the Effective Time.

“**Marker Permits**” has the meaning set forth in [Section 2.12\(b\)](#).

“**Marker Preferred Stock**” has the meaning set forth in [Section 2.4\(a\)](#).

“**Marker Product Candidates**” means the T cell therapy for treatment of cancer under development by the Baylor College of Medicine, which is the subject of the Baylor License Agreement.

“**Marker Registered IP**” means all Marker IP Rights that are registered, filed or issued under the authority of, with or by any Governmental Body, including all patents, registered copyrights and registered trademarks and all applications for any of the foregoing.

“**Marker Stock Certificate**” has the meaning set forth in [Section 1.6](#).

“**Marker Stockholder**” means each holder of Marker Capital Stock as determined immediately prior to the Effective Time, and “**Marker Stockholders**” means all Marker Stockholders.

“**Marker Stockholder Matters**” has the meaning set forth in [Section 5.2\(a\)](#).

“**Marker Stockholder Voting and Lock-Up Agreements**” has the meaning set forth in the recitals.

“**Marker Stockholder Written Consent**” has the meaning set forth in [Section 2.2\(b\)](#).

“**Marker Termination Fee**” has the meaning set forth in [Section 9.3\(b\)](#).

“**Marker Unaudited Balance Sheet**” shall mean the unaudited consolidated balance sheet of Marker as of December 31, 2017, provided to TapImmune prior to the date of this Agreement.

“**Merger**” has the meaning set forth in the Preamble.

“**Merger Consideration**” has the meaning set forth in [Section 1.5\(a\)\(ii\)](#).

“**Merger Sub**” has the meaning set forth in the Preamble.

“**Merger Sub Capital Stock**” has the meaning set forth in [Section 3.4\(e\)](#).

“**Multiemployer Plan**” means (a) a “multiemployer plan,” as defined in Section 3(37) or 4001(a)(3) of ERISA, or (b) a plan which if maintained or administered in or otherwise subject to the laws of the United States would be described in paragraph (a).

“**Multiple Employer Plan**” means (a) a “multiple employer plan” within the meaning of Section 413(c) of the Code or Section 3(40) of ERISA, or (b) a plan which if maintained or administered in or otherwise subject to the laws of the United States would be described in paragraph (a).

“**NASDAQ**” means The NASDAQ Stock Market.

“**Nasdaq Listing Application**” has the meaning set forth in [Section 5.8](#).

“**Notice Period**” has the meaning set forth in [Section 5.3\(c\)](#).

“**Ordinary Course of Business**” means, in the case of each of Marker and TapImmune and for all periods, such actions taken in the ordinary course of its normal operations and consistent with its past practices, and for periods following the date of this Agreement consistent with its operating plans delivered to the other Party pursuant to [Section 4.1\(c\)\(ii\)](#); *provided, however*, that during the Pre-Closing Period,

(a) the Ordinary Course of Business of each Party shall also include any actions expressly required or permitted by this Agreement, including the Contemplated Transactions, and (b) the Ordinary Course of Business for Marker shall also include (i) actions undertaken in connection with preparing to become a SEC reporting company listed on the NASDAQ Capital Market and (ii) actions required to engage with one or more third parties regarding a potential lease, exchange, transfer, license, disposition, partnership, or collaboration involving less than substantially all of the assets of Marker or pursuant to a collaboration agreement, partnership agreement or similar arrangement.

“**Outside Date**” has the meaning set forth in [Section 9.1\(b\)](#).

“**Party**” or “**Parties**” means Marker, Merger Sub and TapImmune.

“**Permitted Alternative Agreement**” means a binding written Acquisition Agreement providing for the consummation of a transaction that constitutes a Superior Offer.

“**Permitted Encumbrance**” means: (a) any liens for current Taxes not yet due and payable or for Taxes that are being contested in good faith and for which adequate reserves have been made on the Marker Unaudited Balance Sheet or the TapImmune Audited Balance Sheet, as applicable; (b) minor liens that have arisen in the Ordinary Course of Business and that do not (in any case or in the aggregate) materially detract from the value of the assets or properties subject thereto or materially impair the operations of the Marker or TapImmune, as applicable; (c) statutory liens to secure obligations to landlords, lessors or renters under leases or rental agreements; (d) deposits or pledges made in connection with, or to secure payment of, workers’ compensation, unemployment insurance or similar programs mandated by Law; (e) non-exclusive licenses of Intellectual Property granted by Marker or TapImmune, as applicable, in the Ordinary Course of Business and that do not (in any case or in the aggregate) materially detract from the value of the Intellectual Property subject thereto; and (f) statutory liens in favor of carriers, warehousemen, mechanics and materialmen, to secure claims for labor, materials or supplies.

“**Person**” means any individual, Entity or Governmental Body.

“**Pre-Closing Period**” has the meaning set forth in [Section 4.1](#).

“**Proxy Statement**” means the proxy statement to be sent to TapImmune’s stockholders in connection with the TapImmune Stockholders’ Meeting.

“**Registration Rights Agreement**” means that certain Registration Rights Agreement, in the form attached hereto as [Exhibit G](#).

“**Reincorporation**” means the reincorporation of TapImmune from Nevada to Delaware.

“**Representatives**” means directors, officers, other employees, agents, attorneys, accountants, investment bankers, advisors and representatives.

“**Required Marker Stockholder Vote**” has the meaning set forth in [Section 2.2\(b\)](#).

“**Required Merger Sub Stockholder Vote**” has the meaning set forth in [Section 3.2\(b\)](#).

“**Required TapImmune Stockholder Vote**” has the meaning set forth in [Section 3.2\(b\)](#).

“**Reverse Stock Split**” has the meaning set forth in [Section 5.17](#).

“**Sarbanes-Oxley Act**” means the Sarbanes-Oxley Act of 2002, as it may be amended from time to time.

“**SEC**” means the United States Securities and Exchange Commission.

“**Securities Act**” means the Securities Act of 1933, as amended.

“**Stock Exchange Ratio**” means, subject to [Section 1.5\(g\)](#), the following ratio (calculated to eight decimals): the quotient obtained by *dividing* (a) the TapImmune Outstanding Shares *by* (b) the Marker Outstanding Shares.

“**Subsequent Transaction**” means any Acquisition Transaction (with all references to 20% in the definition of Acquisition Proposal being treated as references to 50% for these purposes).

“**Subsidiary**” means an Entity of which another Person directly or indirectly owns or purports to own, beneficially or of record, (a) an amount of voting securities of other interests in such Entity that is sufficient to enable such Person to elect at least a majority of the members of such Entity’s board of directors or other governing body, or (b) at least 50% of the outstanding equity, voting, beneficial or financial interests in such Entity.

“**Superior Offer**” means an unsolicited, bona fide written Acquisition Proposal (with all references to 20% in the definition of Acquisition Transaction being treated as references to 50% for these purposes) made by a third party that (a) was not obtained or made as a direct or indirect result of a breach of (or in violation of) this Agreement; and (b) is on terms and conditions that the TapImmune Board of Directors determines, in its reasonable, good faith judgment, after obtaining and taking into account such matters that its Board of Directors deems relevant including if the consummation of such transaction is contingent on any such financing being obtained, following consultation with its outside legal counsel and financial advisor, if any (i) is more favorable, from a financial point of view, to the TapImmune Stockholders than the terms of the Merger; and (ii) is reasonably capable of being consummated; *provided, however*, that any such offer shall not be deemed to be a “Superior Offer” if any financing required to consummate the transaction contemplated by such offer is not committed and is not reasonably capable of being obtained by such third party.

“**Surviving Corporation**” has the meaning set forth in [Section 1.1](#).

“**TapImmune 409A Plan**” has the meaning set forth in [Section 3.14\(k\)](#).

“**TapImmune**” has the meaning set forth in the Preamble.

“**TapImmune Affiliate**” means any Person that is (or at any relevant time was) under common control with TapImmune within the meaning of Sections 414(b), (c), (m) and (o) of the Code, and the regulations issued thereunder.

“**TapImmune Associate**” means any current or former employee, independent contractor, officer or director of TapImmune, any of its Subsidiaries or any TapImmune Affiliate.

“**TapImmune Audited Balance Sheet**” shall mean the audited consolidated balance sheet of TapImmune and its consolidated Subsidiaries as of December 31, 2017, provided to Marker prior to the date of this Agreement.

“**TapImmune Board Adverse Recommendation Change**” has the meaning set forth in [Section 5.3\(b\)](#).

“**TapImmune Board of Directors**” means the board of directors of TapImmune.

“**TapImmune Board Recommendation**” has the meaning set forth in [Section 5.3\(b\)](#).

“**TapImmune Capital Stock**” means TapImmune Common Stock and TapImmune preferred stock.

“**TapImmune Closing Financing**” means a sale by TapImmune of TapImmune Common Stock to third-party investors, to be consummated contemporaneously with the Closing with aggregate gross cash proceeds to TapImmune of at least \$25 million.

“**TapImmune Common Stock**” has the meaning set forth in [Section 3.4\(a\)](#).

“**TapImmune Contract**” means any Contract: (a) to which TapImmune or any of its Subsidiaries is a Party; or (b) by which TapImmune or any of its Subsidiaries or any TapImmune IP Rights or any other asset of TapImmune or its Subsidiaries is bound or under which TapImmune or any of its Subsidiaries has any obligation.

“**TapImmune Disclosure Schedule**” has the meaning set forth in [Article 3](#).

“**TapImmune Employee Plan**” has the meaning set forth in [Section 3.14\(a\)](#).

“**TapImmune IP Rights**” means all Intellectual Property owned, licensed or controlled by TapImmune that is necessary or used in the business of TapImmune as presently conducted or as presently proposed to be conducted.

“**TapImmune IP Rights Agreement**” means any instrument or agreement governing, related or pertaining to any TapImmune IP Rights.

“**TapImmune Leases**” has the meaning set forth in [Section 3.8](#).

“**TapImmune Material Adverse Effect**” means any Effect that, considered together with all other Effects that have occurred prior to the date of determination of the occurrence of the TapImmune Material Adverse Effect, is or would reasonably be expected to be or to become materially adverse to, or has or would reasonably be expected to have or result in a material adverse effect on: (a) the business, condition (financial or otherwise), capitalization, assets, operations or financial performance of TapImmune and its Subsidiaries taken as a whole, including without limitation, (i) TapImmune’s chief executive officer as of the date hereof is no longer serving in such capacity, (ii) the commencement of a Legal Proceeding regarding a felony criminal act by a Governmental Body against TapImmune and/or any of its officers or directors, or (iii) any conviction of a felony criminal act against TapImmune and/or any of its officers or directors; or (b) the ability of TapImmune to consummate the Contemplated Transactions or to perform any of its covenants or obligations under the Agreement in all material respects; *provided, however*, that Effects from the following shall not be deemed to constitute (nor shall Effects from any of the following be taken into account in determining whether there has occurred) a TapImmune Material Adverse Effect: (i) any rejection by a Governmental Body of a registration or filing by TapImmune relating to the TapImmune IP Rights; (ii) any change in the cash position of TapImmune which results from operations in the Ordinary Course of Business; (iii) conditions generally affecting the industries in which TapImmune and its Subsidiaries participate or the United States or global economy or capital markets as a whole, to the extent that such conditions do not have a disproportionate impact on TapImmune and its Subsidiaries taken as a whole; (iv) any failure of TapImmune or any of its Subsidiaries to meet internal projections or forecast, third-party revenue or earnings predictions or any change in the price or trading volume of TapImmune Common Stock (it being understood, however, that any Effect causing or contributing to any such failure to meet projections or predictions or any change in stock price or trading volume may constitute a TapImmune Material Adverse Effect and may be taken into account in determining whether a TapImmune Material Adverse Effect has occurred); (v) the execution, delivery, announcement or performance of the obligations under this Agreement or the announcement, pendency or anticipated consummation of the Merger; (vi) any natural disaster or any acts of terrorism, sabotage, military action or war or any escalation or worsening thereof; or (vii) any changes (after the date of this Agreement) in GAAP or applicable Legal Requirements.

“**TapImmune Material Contract**” has the meaning set forth in [Section 3.10](#).

“**TapImmune Options**” means options to purchase shares of TapImmune Common Stock issued or granted by TapImmune.

“**TapImmune Outstanding Securities Certificate**” has the meaning set forth in [Section 1.11\(a\)](#).

“**TapImmune Outstanding Shares**” means, subject to [Section 1.5\(g\)](#), the total number of shares of TapImmune Common Stock outstanding immediately prior to the Effective Time (which shall include any shares of TapImmune Common Stock issued pursuant to any bridge financing completed prior to the Effective Time, but excluding any shares of TapImmune Common Stock issued in the TapImmune Closing Financing).

“**TapImmune Outstanding Warrants/Options**” means the total number of TapImmune Warrants and TapImmune Options outstanding immediately prior to the Effective Time.

“**TapImmune Permits**” has the meaning set forth in [Section 3.12\(b\)](#).

“**TapImmune Product Candidates**” shall have the meaning set forth in [Section 3.12\(d\)](#).

“**TapImmune Proxy Expenses**” shall have the meaning set forth in [Section 9.3\(d\)](#).

“**TapImmune Registered IP**” means all TapImmune IP Rights that are registered, filed or issued under the authority of, with or by any Governmental Body, including all patents, registered copyrights and registered trademarks and all applications for any of the foregoing.

“**TapImmune Regulatory Permits**” has the meaning set forth in [Section 3.12\(d\)](#).

“**TapImmune SEC Documents**” shall have the meaning set forth in [Section 3.5\(a\)](#).

“**TapImmune Stockholder**” means each holder of TapImmune Capital Stock as determined immediately prior to the Effective Time, and “**TapImmune Stockholders**” means all TapImmune Stockholders.

“**TapImmune Stockholder Matters**” has the meaning set forth in [Section 5.3\(a\)](#).

“**TapImmune Stockholders’ Meeting**” has the meaning set forth in [Section 5.3\(a\)](#).

“**TapImmune Stockholder Voting and Lock-Up Agreements**” has the meaning set forth in the recitals.

“**TapImmune Subsidiaries**” has the meaning set forth in [Section 3.1\(a\)](#).

“**TapImmune Warrants**” means the outstanding warrants to purchase TapImmune Common Stock set forth in [Section 3.4\(a\)](#) of the TapImmune Disclosure Schedule.

“**Tax**” means any federal, state, local, foreign or other tax, including any income tax, franchise tax, capital gains tax, gross receipts tax, value-added tax, surtax, estimated tax, unemployment tax, national health insurance tax, excise tax, ad valorem tax, transfer tax, stamp tax, sales tax, use tax, property tax, business tax, withholding tax, payroll tax, customs duty, alternative or add-on minimum or other tax of any kind whatsoever, and including any fine, penalty, addition to tax or interest, whether disputed or not.

“**Tax Return**” means any return (including any information return), report, statement, declaration, estimate, schedule, notice, notification, form, election, certificate or other document or information, and any amendment or supplement to any of the foregoing, filed with or submitted to, or required to be filed with or submitted to, any Governmental Body in connection with the determination, assessment, collection or payment of any Tax or in connection with the administration, implementation or enforcement of or compliance with any Legal Requirement relating to any Tax.

“**Third-Party Expenses**” shall have the meaning set forth in [Section 9.3\(c\)](#).

“**Transfer Taxes**” shall have the meaning set forth in [Section 5.9\(c\)](#).

“**Treasury Regulations**” means the United States Treasury regulations promulgated under the Code.

“**WARN**” means the federal and state Worker Adjustment Notification and Retraining Acts.

“**Warrant Exchange Ratio**” means, subject to [Section 1.5\(g\)](#), the following ratio (calculated to eight decimals): the quotient obtained by *dividing* (a) the TapImmune Outstanding Warrants/Options by (b) the Market Outstanding Shares.

EXHIBIT B
FORM OF MARKER STOCKHOLDER VOTING AND LOCK-UP AGREEMENT

VOTING AND LOCK-UP AGREEMENT

This Voting and Lock-Up Agreement (this “**Agreement**”) is made and entered into as of May 15, 2018, between TapImmune Inc., a Nevada corporation (“**TapImmune**”), and the Persons whose names appear on the signature pages hereto (each such Person, a “**Stockholder**” and, collectively, the “**Stockholders**”), who together hold approximately 86% of the issued and outstanding shares of Common Stock of Marker. Capitalized terms used but not otherwise defined herein shall have the respective meanings ascribed to such terms in the Merger Agreement (as defined below).

RECITALS

A. On May 15, 2018, TapImmune, Timberwolf Merger Sub, Inc., a Delaware corporation and wholly owned subsidiary of TapImmune (“**Merger Sub**”), and Marker Therapeutics, Inc., a Delaware corporation (“**Marker**”), entered into an Agreement and Plan of Merger and Reorganization (the “**Merger Agreement**”), pursuant to which Merger Sub will merge with and into Marker with Marker surviving as a wholly owned subsidiary of TapImmune, all upon the terms and subject to the conditions set forth therein.

B. The Stockholders agree to enter into this Agreement with respect to shares of Voting Stock (as defined below) held by the Stockholders.

C. As of the date hereof, the Stockholders are the owners of, and have either sole or shared voting power over, such number of shares of Voting Stock as are indicated opposite each of their names on Schedule A attached hereto.

D. Each of TapImmune and the Stockholders have determined that it is in its best interests to enter into this Agreement.

NOW, THEREFORE, in consideration of the foregoing and the respective representations, warranties, covenants and agreements set forth below and for other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the parties hereto, intending to be legally bound, do hereby agree as follows:

1. **Definitions.** When used in this Agreement, except as set forth in the Preamble hereto, the following terms in all of their tenses, cases and correlative forms shall have the meanings assigned to them in this Section 1 or elsewhere in this Agreement.

“**Affiliate**” of any particular Person means any other Person controlling, controlled by or under common control with such Person. The term “**control**” means possession, directly or indirectly, of the power to direct or cause the direction of the management and policies of such Person, whether through the ownership of voting securities, by contract or otherwise. The terms “**controlled**”, “**controlling**”, and “**under common control with**” have meanings correlative thereto. Notwithstanding the foregoing, no Stockholder shall be deemed an Affiliate of Marker or TapImmune, and vice versa.

“**Beneficially Own**”, “**Beneficial Owner**” or “**Beneficial Ownership**” shall have the meaning (or the correlative meaning, as applicable) set forth in Rule 13d-3 and Rule 13d-5(b)(i) of the rules and regulations promulgated under the Securities Exchange Act.

“**Expiration Time**” shall mean the earlier to occur of (a) the Closing Date and (b) such date and time as the Merger Agreement shall be terminated in accordance with its terms.

“**Hedging Activities**” means any forward sale, hedging or similar transaction involving any Voting Stock, including any transaction by which any economic risks and/or rewards or ownership of, or voting rights with respect to, any such Voting Stock are Transferred or affected.

“**Joinder Agreement**” means a joinder to this Agreement reasonably satisfactory to the Board of Directors of TapImmune evidencing a transferee’s agreement to be bound by and subject to the terms and provisions hereof to the same effect as each Stockholder.

“**Lock-Up Period**” shall mean the period from the Closing Date to the date that is 180 days after the Closing Date.

“**SEC**” shall mean the United States Securities and Exchange Commission.

“**Securities Exchange Act**” shall mean the Securities Exchange Act of 1934, as amended, and the rules and regulations promulgated thereunder.

“**Term**” means the period from the date hereof until the end of the Lock-Up Period.

“**Transfer**” shall mean any offer, direct or indirect sale, assignment, encumbrance, option, pledge, hypothecation, disposition, loan or other transfer, whether directly or indirectly, or entry into any Contract with respect to any offer, sale, assignment, encumbrance, option, right to purchase, pledge, hypothecation, disposition, loan or other transfer, whether directly or indirectly, excluding entry into this Agreement and the Merger Agreement and the consummation of the transactions contemplated hereby and thereby.

“**Voting Stock**” shall mean, (i) prior to the Closing Date, any Marker Common Stock or any securities convertible into, exchangeable for or otherwise exercisable to acquire Marker Common Stock, or any other securities having (or being convertible into, exchangeable for or otherwise exercisable to acquire any securities having) the ordinary power to vote in the election of members of the Board of Directors of Marker, or any right to acquire within sixty days any of the foregoing, whether now owned or hereafter acquired, (ii) after the Closing Date, any TapImmune Common Stock acquired by the Stockholders pursuant to the Merger Agreement, any Marker Merger Warrants acquired by the Stockholders pursuant to the Merger Agreement and the TapImmune Common Stock which may be issued upon exercise of any Marker Merger Warrants.

2. Subject Shares. Each Stockholder agrees that any Voting Stock that such Stockholder Beneficially Owns or owns of record shall be subject to the terms and conditions of this Agreement so long as such Voting Stock is Beneficially Owned or owned of record by such Stockholder.

3. Restrictions Prior to Expiration Time.

3.1. No Transfer of Voting Stock. Until the Expiration Time, subject to Section 6, each Stockholder agrees not to: (x) Transfer any Voting Stock, (y) directly or indirectly engage in any Hedging Activities or (z) deposit any Voting Stock into a voting trust or enter into a voting agreement with respect to Voting Stock or grant any proxy, consent or power of attorney with respect thereto (other than pursuant to this Agreement); provided that any Stockholder may Transfer any such Voting Stock to any other Stockholder or any Affiliate of any such Stockholders if such Affiliate transferee executes a Joinder Agreement (each, a “**Permitted Transferee**”).

3.2. The limitations set forth in Section 3.1 shall not apply to (x) any Transfer as to which the Board of Directors of TapImmune gives its prior written consent, or (y) any Transfer to another Stockholder or any of their respective Affiliates who has executed a Joinder Agreement.

3.3. Non-permitted Transfers. Any Transfer or attempted Transfer of any Voting Stock in violation of this Section 3 shall, to the fullest extent permitted by applicable Law, be null and void *ab initio*.

4. Agreement to Consent and Approve Prior to Expiration Time.

4.1. Until the Expiration Time, no Stockholder shall enter into any tender, voting or other agreement, or grant a proxy or power of attorney, with respect to the Voting Stock that is inconsistent with this Agreement or otherwise take any other action with respect to the Voting Stock that would in any way restrict, limit or interfere with the performance of such Stockholder’s obligations hereunder or the transactions contemplated hereby, including the receipt of the Marker Stockholder Written Consent, attached hereto as Exhibit A, and the consummation of the transactions contemplated by the Merger Agreement.

4.2. Until the Expiration Time, at any meeting of the stockholders of Marker, however called, or at any postponement or adjournment thereof, called to seek the affirmative vote of the holders of the outstanding shares of Voting Stock to adopt the Merger Agreement or in any other circumstances upon which a vote, consent or other approval with respect to the Merger Agreement or the transactions contemplated by the Merger Agreement is sought, each Stockholder shall vote (or cause to be voted)

all shares of Voting Stock currently or hereinafter owned by such Stockholder in favor of (A) adopting the Merger Agreement, and approving the Merger, and the other actions contemplated by the Merger Agreement; (B) acknowledging that the approval given thereby is irrevocable and that the Stockholder is aware of its rights to demand appraisal for its shares pursuant to Section 262 of the DGCL, a copy of which was attached thereto, and that such stockholder has received and read a copy of Section 262 of the DGCL; (C) acknowledging that by its approval of the Merger it is not entitled to appraisal rights with respect to its shares in connection with the Merger and thereby waives any rights to receive payment of the fair value of its capital stock under the DGCL; (D) approving any proposal to adjourn or postpone the meeting to a later date, if there are not sufficient votes for the adoption of the Merger Agreement on the date on which such meeting is held; and (E) any other matters necessary to consummate the Contemplated Transactions that are considered and voted upon by the Marker Stockholders. Without limiting the foregoing, as promptly as practicable, and in no event later than 24 hours after the execution of the Merger Agreement, each Stockholder shall execute and deliver, or cause to be executed and delivered, to each of TapImmune and Marker, the written consent attached hereto as Exhibit A, which written consent shall adopt and approve the Merger Agreement and the Merger, and shall not be amended, rescinded or modified. Each Stockholder shall retain at all times the right to vote such Stockholder's Voting Stock in Stockholder's sole discretion and without any other limitation on those matters other than those set forth in this Section 4.2 and Section 4.3 that are at any time or from time to time presented for consideration to the Marker Stockholders.

4.3. Until the Expiration Time, at any meeting of the stockholders of Marker, however called, or at any postponement or adjournment thereof or in any other circumstances upon which any Stockholder's vote, consent or other approval (including by written consent) is sought, each Stockholder shall vote (or cause to be voted) all shares of Voting Stock (to the extent such Voting Stock are then entitled to vote thereon), currently or hereinafter owned by such Stockholder against and withhold consent with respect to (i) any action or agreement that has or would be reasonably likely to result in any conditions to Marker's obligations under Articles VI and VII of the Merger Agreement not being fulfilled, (ii) any amendments to Marker's certificate of incorporation or bylaws if such amendment would reasonably be expected to prevent or delay the consummation of the Closing or (iii) any other action or agreement that is intended, or could reasonably be expected, to impede, interfere with, delay, or postpone the transactions contemplated by the Merger Agreement or change in any manner the voting rights of any class of stock of Marker. No Stockholder shall commit or agree to take any action inconsistent with the foregoing that would be effective prior to the Expiration Time.

5. Litigation. Each Stockholder agrees not to commence, join in, facilitate, assist or encourage, and agrees to take all actions necessary to opt out of any class in any class action with respect to, any claim, derivative or otherwise, against Marker, TapImmune or any of their respective successors or directors (a) challenging the validity of, or seeking to enjoin the operation of, any provision of this Agreement or (b) alleging a breach of any fiduciary duty of any Person in connection with the evaluation, negotiation or entry into this Agreement or the Merger Agreement; provided, that a Stockholder may defend against, contest or settle any such action, claim, suit or cause of action brought against such Stockholder that relates solely to the Stockholder's capacity as a director, officer or securityholder of Marker.

6. Post-Closing Lock-Up Restrictions.

(a) During the Lock-Up Period, each Stockholder agrees not to Transfer any Voting Stock, or directly or indirectly engage in any Hedging Activities.

(b) The limitations set forth in Section 6(a) shall not apply to (i) any Transfer as to which the Board of Directors of TapImmune gives its prior written consent, (ii) any Transfer in connection with a net or cashless exercise of an option solely to cover tax withholding obligations in connection with any such option exercise, (iii) the establishment of a trading plan pursuant to Rule 10b5-1 under the Exchange Act for the Transfer of TapImmune Common Stock, provided that such plan does not provide for any Transfers of Voting Stock during the Lock-Up Period, (iv) any Transfer to an Affiliate of such Stockholder or, in the case of a Stockholder that is a corporation, limited liability company or partnership, the stockholders, members or general or limited partners of such Stockholder, in each case who has executed a Joinder Agreement, (v) any Transfer to a charitable organization qualified under

Rule 501(c)(3) of the Code, (vi) if the Stockholder is a natural person, to any member of Stockholder's immediate family or to a trust or other estate planning vehicle for the benefit of the Stockholder or any member of the Stockholder's immediate family, in each case who has executed a Joinder Agreement or (vii) any Transfer by will, other testamentary document or intestate succession to the legal representative, heir, beneficiary or a member of the immediate family of the Stockholder; provided that with respect to (ii) above, any required filing under the Exchange Act shall include a footnote disclosure explaining that such exercise and sale was to cover tax withholding obligations of such Stockholder, and with respect to (iii) above, no filing under the Exchange Act or other public announcement shall be required or shall be made voluntarily in connection with the establishment of such a plan, provided that reasonable notice shall be provided to TapImmune prior to any such filing, and provided further that, for the avoidance of doubt, the underlying shares of Voting Stock shall continue to be subject to the restrictions on transfer set forth in this Agreement. For the avoidance of doubt, the restrictions set forth in this Section 6 shall not apply to any TapImmune Common Stock acquired in the open market on or after the closing of the Merger. For purposes of this Agreement, "immediate family" shall mean any relationship by blood, marriage or adoption, not more remote than first cousin.

(c) Non-permitted Transfers. Any Transfer or attempted Transfer in violation of this Section 6 shall, to the fullest extent permitted by applicable Law, be null and void *ab initio*.

7. Legend on Securities; Stop Transfer Order.

(a) TapImmune and Marker may make a notation on its records or give instructions to any transfer agents or registrars for the Voting Stock in order to implement the restrictions on Transfer set forth in this Agreement.

(b) In connection with any Transfer of shares of Voting Stock, the transferor shall provide TapImmune with such certificates, opinions and other documents as TapImmune may reasonably request to assure that such Transfer complies fully with this Agreement.

(c) In furtherance of this Agreement, from and after the Closing Date, the Stockholders shall and hereby do authorize TapImmune to notify TapImmune's transfer agent that there is a stop transfer order with respect to all Voting Stock subject to this Agreement (and that this Agreement places limits on the transfer of the Voting Stock). Subject to the terms of the Registration Rights Agreement between TapImmune and the Stockholders dated as of the Closing Date, the Stockholders further agree to permit TapImmune, from and after the Closing, not to register the transfer of any certificate representing any of the Voting Stock unless such transfer is made in accordance with the terms of this Agreement.

8. Representations and Warranties of the Stockholders. Each Stockholder hereby represents and warrants to TapImmune as follows:

8.1. Organization. If such Stockholder is a corporation, partnership, limited liability company, limited liability partnership, syndicate, trust, association, organization or other entity, such Stockholder is duly organized, validly existing, and in good standing under the laws of the State of its respective jurisdiction.

8.2. Due Authority. Such Stockholder has the full power and authority to make, enter into and carry out the terms of this Agreement. This Agreement has been duly and validly executed and delivered by such Stockholder and constitutes a valid and binding agreement of such Stockholder enforceable against it in accordance with its terms, except to the extent enforceability may be limited by the effect of applicable bankruptcy, reorganization, insolvency, moratorium or other applicable Law affecting the enforcement of creditors' rights generally and the effect of general principles of equity, regardless of whether such enforceability is considered in a proceeding at law or in equity.

8.3. Ownership of the Voting Stock. As of the date hereof, such Stockholder (a) is the record or beneficial owner of the shares of Voting Stock indicated on Schedule A hereto opposite such Stockholder's name, which constitute all of the shares of Voting Stock of Marker owned by the Stockholder as of the date hereof, and (b) has good and marketable title to such Voting Stock, free and

clear of any and all Encumbrances, other than those created by this Agreement. Such Stockholder has and will have until the expiration of the Term either sole or shared voting power (including the right to control such vote as contemplated herein), power of disposition, power to issue instructions with respect to the matters set forth in this Agreement and power to agree to all of the matters applicable to such Stockholder set forth in this Agreement, in each case, over all shares of Voting Stock currently or hereinafter owned by such Stockholder. As of the date hereof, such Stockholder does not own any capital stock or other voting securities of Marker, other than the shares of Voting Stock set forth on Schedule A opposite such Stockholder's name. As of the date hereof, such Stockholder does not own any rights to purchase or acquire any shares of capital stock or other equity securities of Marker, except as set forth on Schedule A opposite such Stockholder's name.

8.4. No Conflict; Consents.

(a) The execution and delivery of this Agreement by such Stockholder does not, and the performance by such Stockholder of the obligations under this Agreement and the compliance by such Stockholder with any provisions hereof do not and will not: (i) conflict with or violate any applicable Law applicable to such Stockholder, (ii) contravene or conflict with, or result in any violation or breach of, any provision of any charter, certificate of incorporation, articles of association, by-laws, operating agreement or similar formation or governing documents and instruments of such Stockholder, or (iii) result in any material breach of or constitute a material default (or an event that with notice or lapse of time or both would become a material default) under, or give to others any rights of termination, amendment, acceleration or cancellation of, or result in the creation of an Encumbrance on any of the shares of Voting Stock owned by such Stockholder pursuant to any Contract to which such Stockholder is a party or by which such Stockholder is bound, except, in the case of clause (i) or (iii), as would not reasonably be expected, either individually or in the aggregate, to materially impair the ability of such Stockholder to perform its obligations hereunder or to consummate the transactions contemplated hereby.

(b) No consent, approval, order or authorization of, or registration, declaration or filing with, any Governmental Body or any other Person is required by or with respect to such Stockholder in connection with the execution and delivery of this Agreement or the consummation by such Stockholder of the transactions contemplated hereby.

8.5. Reliance. The Stockholder has had the opportunity to review the Merger Agreement and this Agreement with counsel of the Stockholder's own choosing. The Stockholder understands and acknowledges that TapImmune and Merger Sub are entering into the Merger Agreement in reliance upon the Stockholder's execution, delivery and performance of this Agreement.

8.6. Absence of Litigation. As of the date hereof, there is no Legal Proceeding pending against, or, to the knowledge of such Stockholder, threatened against such Stockholder that would reasonably be expected to materially impair the ability of such Stockholder to perform such Stockholder's obligations hereunder or to consummate the transactions contemplated hereby.

8.7. Absence of Other Voting Agreement. Except for this Agreement and the Merger Agreement, and the prior Investor Agreements that have been terminated, such Stockholder has not: (i) entered into any voting agreement, voting trust or similar agreement with respect to any Voting Stock or other equity securities of Marker owned by such Stockholder, or (ii) granted any proxy, consent or power of attorney with respect to any Voting Stock owned by such Stockholder (other than as contemplated by this Agreement or with another Stockholder who has executed this Agreement).

9. Representations and Warranties of TapImmune. TapImmune hereby represents and warrants to the Stockholders as follows:

9.1. Organization. TapImmune is duly organized, validly existing, and in good standing under the laws of its state of incorporation.

9.2. Due Authority. TapImmune has the full power and authority to make, enter into and carry out the terms of this Agreement. The execution and delivery of this Agreement by TapImmune and the consummation by TapImmune of the transactions contemplated hereby have been duly and validly

authorized by all necessary action on the part of TapImmune. This Agreement has been duly and validly executed and delivered by TapImmune and constitutes a valid and binding agreement of TapImmune enforceable against it in accordance with its terms, except to the extent enforceability may be limited by the effect of applicable bankruptcy, reorganization, insolvency, moratorium or other applicable Law affecting the enforcement of creditors' rights generally and the effect of general principles of equity, regardless of whether such enforceability is considered in a proceeding at law or in equity.

9.3. No Conflict; Consents.

(a) The execution and delivery of this Agreement by TapImmune does not, and the performance by TapImmune of the obligations under this Agreement and the compliance by TapImmune with any provisions hereof do not and will not: (i) conflict with or violate any applicable Law applicable to TapImmune, (ii) contravene or conflict with, or result in any violation or breach of, any provision of any charter, certificate of incorporation, articles of association, by-laws, operating agreement or similar formation or governing documents and instruments of TapImmune, or (iii) result in any material breach of or constitute a material default (or an event that with notice or lapse of time or both would become a material default) under any Contract to which TapImmune is a party or by which TapImmune is bound, except, in the case of clause (i) or (iii), as would not reasonably be expected, either individually or in the aggregate, to materially impair the ability of TapImmune to perform its obligations hereunder or to consummate the transactions contemplated hereby.

(b) No consent, approval, order or authorization of, or registration, declaration or filing with, any Governmental Body or any other Person is required by or with respect to TapImmune in connection with the execution and delivery of this Agreement or the consummation by TapImmune of the transactions contemplated hereby, except for filings with the SEC of such reports under the Securities Exchange Act as may be required in connection with this Agreement and the consummation of the transactions contemplated hereby.

9.4. Absence of Litigation. As of the date hereof, there is no Legal Proceeding pending against, or, to the knowledge of TapImmune, threatened against TapImmune that would reasonably be expected to materially impair the ability of TapImmune to perform the obligations of TapImmune hereunder or to consummate the transactions contemplated hereby.

10. Capacity as a Stockholder. Each Stockholder signs this Agreement solely in the Stockholder's capacity as a stockholder of Marker, and not in the Stockholder's capacity as a director, officer or employee of Marker.

11. Documentation and Information. The Stockholder shall permit and hereby authorizes TapImmune and Marker to publish and disclose in all documents and schedules filed with the SEC, and any press release or other disclosure document that TapImmune or Marker reasonably determines to be necessary in connection with the Merger and any transactions contemplated by the Merger Agreement, the Stockholder's identity and ownership of the Subject Shares and the nature of the Stockholder's commitments and obligations under this Agreement. Marker is an intended third-party beneficiary of this Section 11.

12. Further Assurances. The Stockholders shall, without further consideration, from time to time, execute and deliver, or cause to be executed and delivered, such additional or further consents, documents and other instruments as TapImmune may reasonably request in order to vest, perfect, confirm or record the rights granted to TapImmune under this Agreement.

13. Joinder; Certain Events.

13.1. During the Term, in the event any Stockholder Transfers any shares of Voting Stock to a Person as permitted by and in accordance with this Agreement, such transferee shall be required, as a condition to such Transfer, to execute and deliver to TapImmune a Joinder Agreement.

13.2. Except as provided in Section 13.1, the Stockholders agree that this Agreement and the obligations hereunder shall attach to the shares of Voting Stock referenced in Section 2 and shall be binding on any Person to which legal or beneficial ownership of such shares of Voting Stock shall pass,

whether by operation of Law or otherwise. In the event of any stock split, stock dividend, merger, amalgamation, reorganization, recapitalization or other change in the capital structure of Marker or, after the Closing Date, TapImmune, affecting the Voting Stock, the number of shares of Voting Stock shall be deemed adjusted appropriately and this Agreement and the obligations hereunder shall attach to any additional shares of Voting Stock so issued to or acquired by the Stockholders.

14. Termination. Except as set forth herein with respect to specific provisions hereof, this Agreement shall not terminate and shall remain in full force and effect until the end of the Term; provided, that this Agreement shall earlier terminate in the event the Closing does not occur (at such date and time as when the Merger Agreement is terminated in accordance with its terms); provided further, that nothing herein shall relieve any party from liability for any intentional breach of this Agreement prior to such termination.

15. No Ownership Interest. Nothing contained in this Agreement shall be deemed to vest in TapImmune any direct or indirect ownership or incidence of ownership of or with respect to the Stockholders' shares of Voting Stock. All rights, ownership and economic benefits of and relating to the Stockholders' shares of Voting Stock shall remain vested in and belong to the Stockholders, and TapImmune shall have no authority to direct the Stockholders in the voting or disposition of any of the shares of Voting Stock except as otherwise provided herein.

16. Miscellaneous.

16.1. Severability. The provisions of this Agreement shall be deemed severable and the invalidity or unenforceability of any provision shall not affect the validity or enforceability of the other provisions hereof. If any provision of this Agreement, or the application thereof to any Person or any circumstance, is invalid or unenforceable, (a) a suitable and equitable provision shall be substituted therefor in order to carry out, so far as may be valid and enforceable, the intent and purpose of such invalid or unenforceable provision; and (b) the remainder of this Agreement and the application of such provision to other Persons or circumstances shall not be affected by such invalidity or unenforceability, nor shall such invalidity or unenforceability affect the validity or enforceability of such provision, or the application thereof, in any other jurisdiction.

16.2. Non-survival of Representations and Warranties. None of the representations and warranties in this Agreement or in any schedule, instrument or other document delivered pursuant to this Agreement shall survive the termination of this Agreement. This Section 16.2 shall not limit any covenant or agreement contained in this Agreement that by its terms is to be performed in whole or in part after the Closing Date or the termination of this Agreement.

16.3. Assignment. Neither this Agreement nor any of the rights, interests or obligations under this Agreement may be assigned or delegated, in whole or in part, by operation of law or otherwise, by any of the parties hereto without the prior written consent of the other parties, and any such assignment without such prior written consent shall be null and void. Subject to the preceding sentence, this Agreement will be binding upon, inure to the benefit of, and be enforceable by, the parties and their respective successors and assigns.

16.4. Amendment and Modification. This Agreement may not be amended, modified or supplemented in any manner, whether by course of conduct or otherwise, except by an instrument in writing specifically designated as an amendment hereto, signed on behalf of each party.

16.5. Enforcement. The parties hereto agree that irreparable damage would occur in the event that any of the provisions of this Agreement were not performed in accordance with their specific terms or were otherwise breached. Accordingly, each of the parties hereto shall be entitled to specific performance of the terms hereof, including an injunction or injunctions to prevent breaches of this Agreement and to enforce specifically the terms and provisions of this Agreement in the Court of Chancery of the State of Delaware (or, if such court lacks subject matter jurisdiction, in the Superior Court of the State of Delaware or the United States District Court for the District of Delaware), this being in addition to any other remedy to which such party is entitled at law or in equity. Each of the parties hereby further waives (a) any defense in any action for specific performance that a remedy at law would be adequate and (b) any requirement under any law to post security as a prerequisite to obtaining equitable relief.

16.6. Notices. All notices and other communications hereunder shall be in writing and shall be deemed duly given (a) on the date of delivery if delivered personally, (b) on the first Business Day following the date of dispatch if delivered utilizing a next-day service by a recognized next-day courier or (c) on the earlier of confirmed receipt or the fifth Business Day following the date of mailing if delivered by registered or certified mail, return receipt requested, postage prepaid. All notices hereunder shall be delivered to the addresses set forth below, or pursuant to such other instructions as may be designated in writing by the party to receive such notice:

(i) if to any Stockholder, to the address set forth on such Stockholder's signature page attached hereto:

with a concurrent copy to (which shall not be considered notice):

Winthrop & Weinstine, P.A.
225 South Sixth Street, Suite 3500
Minneapolis, MN 55402-4629
Telephone No.: (612) 604-6677
Facsimile No.: (612) 604-6877
Attention: Mark R. Gleeman
E-Mail: mgleeman@winthrop.com

(ii) if to TapImmune, to:

5 West Forsyth Street, Suite 200
Jacksonville, Florida 32202
Telephone No.: (904) 862-6496
Attention: Peter Hoang
E-Mail: phoang@tapimmune.com

with a concurrent copy to (which shall not be considered notice):

Seyfarth Shaw LLP
700 Milam Street, Suite 1400
Houston, Texas 77002
Telephone No.: (713) 238-1887
Facsimile No.: (713) 225-2340
Attention: Paul Pryzant
E-Mail: ppryzant@seyfarth.com

16.7. Governing Law; Submission to Jurisdiction. This Agreement shall be governed by, and construed in accordance with, the laws of the State of Delaware, regardless of the laws that might otherwise govern under applicable principles of conflicts of laws. In any action or suit between any of the Parties arising out of or relating to this Agreement or any of the Contemplated Transactions: (a) each of the Parties irrevocably and unconditionally consents and submits to the exclusive jurisdiction and venue of the state and federal courts located in the State of Texas; and (b) if any such action or suit is commenced in a state court, then, subject to applicable Legal Requirements, no Party shall object to the removal of such action or suit to any federal court located in the Southern District of Texas.

16.8. WAIVER OF JURY TRIAL. EACH OF THE PARTIES TO THIS AGREEMENT HEREBY IRREVOCABLY WAIVES ALL RIGHT TO A TRIAL BY JURY IN ANY ACTION, PROCEEDING OR COUNTERCLAIM ARISING OUT OF OR RELATING TO THIS AGREEMENT OR THE TRANSACTIONS CONTEMPLATED HEREBY.

16.9. Entire Agreement; Third-Party Beneficiaries. This Agreement constitutes the entire agreement, and supersedes all prior written agreements, arrangements, communications and understandings and all prior and contemporaneous oral agreements, arrangements, communications and understandings among the parties hereto with respect to the subject matter hereof. Nothing in this Agreement, express or implied, is intended to or shall confer upon any Person other than the parties and their respective successors and permitted assigns any legal or equitable right, benefit or remedy of any nature under or by reason of this Agreement.

16.10. Counterparts; Facsimile Signature. This Agreement may be executed in two or more counterparts, all of which shall be considered one and the same instrument and shall become effective when one or more counterparts have been signed by each of the parties and delivered to the other party. This Agreement may be executed by facsimile signature or other electronic signature and such signature shall constitute an original for all purposes.

16.11. Effect of Headings. Headings of the articles and sections of this Agreement and the table of contents, schedules and exhibits are for convenience of the parties only and shall be given no substantive or interpretative effect whatsoever.

16.12. No Presumption Against Drafting Party. The parties hereto have participated jointly in the negotiation and drafting of this Agreement. Each of the parties hereto acknowledges that each party to this Agreement has been represented by counsel in connection with this Agreement and the transactions contemplated by this Agreement. Accordingly, any rule of law or any legal decision that would require interpretation of any claimed ambiguities in this Agreement against the drafting party has no application and is expressly waived.

16.13. Expenses. Except as otherwise provided herein or in the Merger Agreement, all fees and expenses incurred in connection with or related to this Agreement and the transactions contemplated hereby shall be paid by the party incurring such fees or expenses, whether or not such transactions are consummated. In the event of termination of this Agreement, the obligation of each party to pay its own expenses will be subject to any rights of such party arising from a breach of this Agreement by the other.

16.14. No Recourse. Notwithstanding anything to the contrary contained herein or otherwise, but without limiting any provision in the Merger Agreement, this Agreement may only be enforced against, and any claims or causes of action that may be based upon, arise out of or relate to this Agreement, or the negotiation, execution or performance of this Agreement or the transactions contemplated hereby, may only be made against the entities and Persons that are expressly identified as parties to this Agreement in their capacities as such and no former, current or future stockholders, equity holders, controlling persons, directors, officers, employees, general or limited partners, members, managers, agents or affiliates of any party hereto, or any former, current or future direct or indirect stockholder, equity holder, controlling person, director, officer, employee, general or limited partner, member, manager, agent or affiliate of any of the foregoing (each, a "Non-Recourse Party") shall have any liability for any obligations or liabilities of the parties to this Agreement or for any claim (whether in tort, contract or otherwise) based on, in respect of, or by reason of, the transactions contemplated hereby or in respect of any oral representations made or alleged to be made in connection herewith. Without limiting the rights of any party against the other parties hereto, in no event shall any party or any of its affiliates seek to enforce this Agreement against, make any claims for breach of this Agreement against, or seek to recover monetary damages from, any Non-Recourse Party.

[Remainder of Page Intentionally Left Blank]

In witness whereof, the parties hereto have caused this Agreement to be executed as of the date first set forth above.

TAPIMMUNE INC.

By: _____

Name: Peter Hoang

Title: Chief Executive Officer, President

[Signature page to Voting and Lock-Up Agreement]

STOCKHOLDERS:

By: _____

Name: _____

Title: _____

Notice Address:

[Signature page to Voting and Lock-Up Agreement]

Schedule A

<u>Name of Stockholder</u>	<u>No. Shares of Marker Common Stock</u>
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EXHIBIT A

Marker Stockholder Written Consent

EXHIBIT C

FORM OF TAPIMMUNE STOCKHOLDER VOTING AND LOCK-UP AGREEMENT

VOTING AND LOCK-UP AGREEMENT

This Voting and Lock-Up Agreement (this “**Agreement**”) is made and entered into as of May 15, 2018, between Marker Therapeutics, Inc., a Delaware corporation (the “**Marker**”), and the Persons whose names appear on the signature pages hereto (each such Person, a “**Stockholder**” and, collectively, the “**Stockholders**”). Capitalized terms used but not otherwise defined herein shall have the respective meanings ascribed to such terms in the Merger Agreement (as defined below).

RECITALS

A. On May 15, 2018, Marker, TapImmune Inc., a Nevada corporation (“**TapImmune**”) and Timberwolf Merger Sub, Inc., a Delaware corporation and wholly owned subsidiary of TapImmune (“**Merger Sub**”), entered into an Agreement and Plan of Merger and Reorganization (the “**Merger Agreement**”), pursuant to which Merger Sub will merge with and into Marker with Marker surviving as a wholly owned subsidiary of TapImmune, all upon the terms and subject to the conditions set forth therein.

B. The Stockholders agree to enter into this Agreement with respect to shares of Voting Stock (as defined below) held by the Stockholders.

C. As of the date hereof, the Stockholders are the owners of, and have either sole or shared voting power over, such number of shares of Voting Stock as are indicated opposite each of their names on Schedule A attached hereto.

D. Each of Marker and the Stockholders have determined that it is in its best interests to enter into this Agreement.

NOW, THEREFORE, in consideration of the foregoing and the respective representations, warranties, covenants and agreements set forth below and for other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the parties hereto, intending to be legally bound, do hereby agree as follows:

1. Definitions. When used in this Agreement, except as set forth in the Preamble hereto, the following terms in all of their tenses, cases and correlative forms shall have the meanings assigned to them in this Section 1 or elsewhere in this Agreement.

“**Affiliate**” of any particular Person means any other Person controlling, controlled by or under common control with such Person. The term “**control**” means possession, directly or indirectly, of the power to direct or cause the direction of the management and policies of such Person, whether through the ownership of voting securities, by contract or otherwise. The terms “**controlled**”, “**controlling**”, and “**under common control with**” have meanings correlative thereto. Notwithstanding the foregoing, no Stockholder shall be deemed an Affiliate of Marker or TapImmune, and vice versa.

“**Beneficially Own**”, “**Beneficial Owner**” or “**Beneficial Ownership**” shall have the meaning (or the correlative meaning, as applicable) set forth in Rule 13d-3 and Rule 13d-5(b)(i) of the rules and regulations promulgated under the Securities Exchange Act.

“**Expiration Time**” shall mean the earlier to occur of (a) the Closing Date and (b) such date and time as the Merger Agreement shall be terminated in accordance with its terms.

“**Hedging Activities**” means any forward sale, hedging or similar transaction involving any Voting Stock, including any transaction by which any economic risks and/or rewards or ownership of, or voting rights with respect to, any such Voting Stock are Transferred or affected.

“**Joinder Agreement**” means a joinder to this Agreement reasonably satisfactory to the Board of Directors of Marker evidencing a transferee’s agreement to be bound by and subject to the terms and provisions hereof to the same effect as each Stockholder.

“**Lock-Up Period**” shall mean the period from the Closing Date to the date that is 180 days after the Closing Date.

“**SEC**” shall mean the United States Securities and Exchange Commission.

“*Securities Exchange Act*” shall mean the Securities Exchange Act of 1934, as amended, and the rules and regulations promulgated thereunder.

“*Term*” means the period from the date hereof until the end of the Lock-Up Period.

“*Transfer*” shall mean any offer, direct or indirect sale, assignment, encumbrance, option, pledge, hypothecation, disposition, loan or other transfer, whether directly or indirectly, or entry into any Contract with respect to any offer, sale, assignment, encumbrance, option, right to purchase, pledge, hypothecation, disposition, loan or other transfer, whether directly or indirectly, excluding entry into this Agreement and the Merger Agreement and the consummation of the transactions contemplated hereby and thereby.

“*Voting Stock*” shall mean, (i) prior to the Closing Date, any TapImmune Common Stock, or any securities convertible into, exchangeable for or otherwise exercisable to acquire TapImmune Common Stock, or any other securities having (or being convertible into, exchangeable for or otherwise exercisable to acquire any securities having) the ordinary power to vote in the election of members of the Board of Directors of TapImmune, or any right to acquire within sixty days any of the foregoing, whether now owned or hereafter acquired and (ii) after the Closing Date, any TapImmune Common Stock or other securities Beneficially Owned or of record as of the Closing.

2. Subject Shares. Each Stockholder agrees that any Voting Stock that such Stockholder Beneficially Owns or owns of record shall be subject to the terms and conditions of this Agreement so long as such Voting Stock is Beneficially Owned or owned of record by such Stockholder.

3. Restrictions Prior to Expiration Time.

3.1 No Transfer of Voting Stock. Until the Expiration Time, subject to Section 6, each Stockholder agrees not to: (x) Transfer any Voting Stock, (y) directly or indirectly engage in any Hedging Activities or (z) deposit any Voting Stock into a voting trust or enter into a voting agreement with respect to Voting Stock or grant any proxy, consent or power of attorney with respect thereto (other than pursuant to this Agreement); provided that any Stockholder may Transfer any such Voting Stock to any other Stockholder or any Affiliate of any such Stockholders if such Affiliate transferee executes a Joinder Agreement (each, a “*Permitted Transferee*”).

3.2 The limitations set forth in Section 3.1 shall not apply to (x) any Transfer as to which the Board of Directors of Marker gives its prior written consent or (y) any Transfer to another Stockholder or any of their respective Affiliates who has executed a Joinder Agreement.

3.3 Non-permitted Transfers. Any Transfer or attempted Transfer of any Voting Stock in violation of this Section 3 shall, to the fullest extent permitted by applicable Law, be null and void *ab initio*.

4. Agreement to Consent and Approve Prior to Expiration Time.

4.1 Until the Expiration Time, no Stockholder shall enter into any tender, voting or other agreement, or grant a proxy or power of attorney, with respect to the Voting Stock that is inconsistent with this Agreement or otherwise take any other action with respect to the Voting Stock that would in any way restrict, limit or interfere with the performance of such Stockholder’s obligations hereunder or the transactions contemplated hereby, including the receipt of the approval of the TapImmune Stockholder Matters and the consummation of the transactions contemplated by the Merger Agreement.

4.2 Until the Expiration Time, at any meeting of the stockholders of TapImmune, however called, or at any postponement or adjournment thereof, called to seek the affirmative vote of the holders of the outstanding shares of Voting Stock to adopt the Merger Agreement or in any other circumstances upon which a vote, consent or other approval with respect to the Merger Agreement or the transactions contemplated by the Merger Agreement is sought, each Stockholder shall vote (or cause to be voted) all shares of Voting Stock currently or hereinafter owned by such Stockholder (a) in favor of (A) the issuance of shares of TapImmune Common Stock, Marker Merger Warrants and Additional Merger Warrants, if any, to the Marker Stockholders pursuant to the terms of the Merger Agreement, (B) the

Reincorporation, (C) the increase in the authorized shares of TapImmune Common Stock in the TapImmune certificate of incorporation, (D) the name change of TapImmune in TapImmune's certificate of incorporation, and (E) an increase in the number of authorized shares reserved for issuance under the 2014 TapImmune Plan, and (b) against any Acquisition Proposal.

4.3 Until the Expiration Time, at any meeting of the stockholders of TapImmune, however called, or at any postponement or adjournment thereof or in any other circumstances upon which any Stockholder's vote, consent or other approval (including by written consent) is sought, each Stockholder shall vote (or cause to be voted) all shares of Voting Stock (to the extent such Voting Stock are then entitled to vote thereon), currently or hereinafter owned by such Stockholder against and withhold consent with respect to (i) any action or agreement that has or would be reasonably likely to result in any conditions to TapImmune's obligations under Articles VI and VIII of the Merger Agreement not being fulfilled, (ii) any amendments to TapImmune's certificate of incorporation or bylaws if such amendment would reasonably be expected to prevent or delay the consummation of the Closing or (iii) any other action or agreement that is intended, or could reasonably be expected, to impede, interfere with, delay, or postpone the transactions contemplated by the Merger Agreement or change in any manner the voting rights of any class of stock of TapImmune. No Stockholder shall commit or agree to take any action inconsistent with the foregoing that would be effective prior to the Expiration Time.

5. Litigation. Each Stockholder agrees not to commence, join in, facilitate, assist or encourage, and agrees to take all actions necessary to opt out of any class in any class action with respect to, any claim, derivative or otherwise, against Marker, TapImmune or any of their respective successors or directors (a) challenging the validity of, or seeking to enjoin the operation of, any provision of this Agreement or (b) alleging a breach of any fiduciary duty of any Person in connection with the evaluation, negotiation or entry into this Agreement or the Merger Agreement; provided, that a Stockholder may defend against, contest or settle any such action, claim, suit or cause of action brought against such Stockholder that relates solely to the Stockholder's capacity as a director, officer or securityholder of TapImmune.

6. Post-Closing Lock-Up Restrictions.

(a) During the Lock-Up Period, each Stockholder agrees not to Transfer any Voting Stock, or directly or indirectly engage in any Hedging Activities.

(b) The limitations set forth in Section 6(a) shall not apply to (i) any Transfer as to which the Board of Directors of TapImmune gives its prior written consent, (ii) any Transfer in connection with a net or cashless exercise of an option solely to cover tax withholding obligations in connection with any such option exercise, (iii) any Transfer effected solely to cover tax withholding obligations arising as a result of the vesting or delivery of Voting Stock with respect to restricted stock, (iv) the establishment of a trading plan pursuant to Rule 10b5-1 under the Exchange Act for the Transfer of TapImmune Common Stock, provided that such plan does not provide for any Transfers of Voting Stock during the Lock-Up Period, (v) any Transfer to an Affiliate of such Stockholder or, in the case of a Stockholder that is a corporation, limited liability company or partnership, the stockholders, members or general or limited partners of such Stockholder, in each case who has executed a Joinder Agreement, (vi) any Transfer to a charitable organization qualified under Rule 501(c)(3) of the Code, (vii) if the Stockholder is a natural person, to any member of Stockholder's immediate family or to a trust or other estate planning vehicle for the benefit of the Stockholder or any member of the Stockholder's immediate family, in each case who has executed a Joinder Agreement or (viii) any Transfer by will, other testamentary document or intestate succession to the legal representative, heir, beneficiary or a member of the immediate family of the Stockholder; provided that with respect to (ii) and (iii) above, any required filing under the Exchange Act shall include a footnote disclosure explaining that such exercise and sale was to cover tax withholding obligations of such Stockholder, and with respect to (iv) above, no filing under the Exchange Act or other public announcement shall be required or shall be made voluntarily in connection with the establishment of such a plan, provided that reasonable notice shall be provided to TapImmune prior to any such filing, and provided further that, for the avoidance of doubt, the underlying shares of Voting Stock shall continue to be subject to the restrictions on transfer set forth in this Agreement. For the avoidance of doubt, the restrictions set

forth in this Section 6 shall not apply to any TapImmune Common Stock acquired in the open market on or after the closing of the Merger. For purposes of this Agreement, “immediate family” shall mean any relationship by blood, marriage or adoption, not more remote than first cousin.

(c) Non-permitted Transfers. Any Transfer or attempted Transfer in violation of this Section 6 shall, to the fullest extent permitted by applicable Law, be null and void *ab initio*.

7. Legend on Securities; Stop Transfer Order.

(a) TapImmune and Marker may make a notation on its records or give instructions to any transfer agents or registrars for the Voting Stock in order to implement the restrictions on Transfer set forth in this Agreement.

(b) In connection with any Transfer of shares of Voting Stock, the transferor shall provide TapImmune or Marker with such certificates, opinions and other documents as TapImmune or Marker may reasonably request to assure that such Transfer complies fully with this Agreement.

(c) In furtherance of this Agreement, from and after the Closing Date, the Stockholders shall and hereby do authorize TapImmune to notify TapImmune’s transfer agent that there is a stop transfer order with respect to all Voting Stock subject to this Agreement (and that this Agreement places limits on the transfer of the Voting Stock). The Stockholders further agree to permit TapImmune, from and after the Closing, not to register the transfer of any certificate representing any of the Voting Stock unless such transfer is made in accordance with the terms of this Agreement.

8. Representations and Warranties of the Stockholders. Each Stockholder hereby represents and warrants to Marker as follows:

8.1 Organization. If such Stockholder is a corporation, partnership, limited liability company, limited liability partnership, syndicate, trust, association, organization or other entity, such Stockholder is duly organized, validly existing, and in good standing under the laws of the State of its respective jurisdiction.

8.2 Due Authority. Such Stockholder has the full power and authority to make, enter into and carry out the terms of this Agreement. This Agreement has been duly and validly executed and delivered by such Stockholder and constitutes a valid and binding agreement of such Stockholder enforceable against it in accordance with its terms, except to the extent enforceability may be limited by the effect of applicable bankruptcy, reorganization, insolvency, moratorium or other applicable Law affecting the enforcement of creditors’ rights generally and the effect of general principles of equity, regardless of whether such enforceability is considered in a proceeding at law or in equity.

8.3 Ownership of the Voting Stock. As of the date hereof, such Stockholder (a) is the record or beneficial owner of the shares of Voting Stock indicated on Schedule A hereto opposite such Stockholder’s name, which constitute all of the shares of Voting Stock of TapImmune owned by the Stockholder as of the date hereof, and (b) has good and marketable title to such Voting Stock, free and clear of any and all Encumbrances, other than those created by this Agreement. Such Stockholder has and will have until the expiration of the Term either sole or shared voting power (including the right to control such vote as contemplated herein), power of disposition, power to issue instructions with respect to the matters set forth in this Agreement and power to agree to all of the matters applicable to such Stockholder set forth in this Agreement, in each case, over all shares of Voting Stock currently or hereinafter owned by such Stockholder. As of the date hereof, such Stockholder does not own any capital stock or other voting securities of TapImmune, other than the shares of Voting Stock set forth on Schedule A opposite such Stockholder’s name. As of the date hereof, such Stockholder does not own any rights to purchase or acquire any shares of capital stock or other equity securities of TapImmune, except as set forth on Schedule A opposite such Stockholder’s name.

8.4 No Conflict; Consents.

(a) The execution and delivery of this Agreement by such Stockholder does not, and the performance by such Stockholder of the obligations under this Agreement and the compliance by such Stockholder with any provisions hereof do not and will not: (i) conflict with or violate any applicable

Law applicable to such Stockholder, (ii) contravene or conflict with, or result in any violation or breach of, any provision of any charter, certificate of incorporation, articles of association, by-laws, operating agreement or similar formation or governing documents and instruments of such Stockholder, or (iii) result in any material breach of or constitute a material default (or an event that with notice or lapse of time or both would become a material default) under, or give to others any rights of termination, amendment, acceleration or cancellation of, or result in the creation of an Encumbrance on any of the shares of Voting Stock owned by such Stockholder pursuant to any Contract to which such Stockholder is a party or by which such Stockholder is bound, except, in the case of clause (i) or (iii), as would not reasonably be expected, either individually or in the aggregate, to materially impair the ability of such Stockholder to perform its obligations hereunder or to consummate the transactions contemplated hereby.

(b) No consent, approval, order or authorization of, or registration, declaration or filing with, any Governmental Body or any other Person is required by or with respect to such Stockholder in connection with the execution and delivery of this Agreement or the consummation by such Stockholder of the transactions contemplated hereby.

8.5 Reliance. The Stockholder has had the opportunity to review the Merger Agreement and this Agreement with counsel of the Stockholder's own choosing. The Stockholder understands and acknowledges that Marker is entering into the Merger Agreement in reliance upon the Stockholder's execution, delivery and performance of this Agreement.

8.6 Absence of Litigation. As of the date hereof, there is no Legal Proceeding pending against, or, to the knowledge of such Stockholder, threatened against such Stockholder that would reasonably be expected to materially impair the ability of such Stockholder to perform such Stockholder's obligations hereunder or to consummate the transactions contemplated hereby.

8.7 Absence of Other Voting Agreement. Except for this Agreement and the Merger Agreement, such Stockholder has not: (i) entered into any voting agreement, voting trust or similar agreement with respect to any Voting Stock or other equity securities of TapImmune owned by such Stockholder, or (ii) granted any proxy, consent or power of attorney with respect to any Voting Stock owned by such Stockholder (other than as contemplated by this Agreement or with another Stockholder who has executed this Agreement).

9. Representations and Warranties of Marker. Marker hereby represents and warrants to the Stockholders as follows:

9.1 Organization. Marker is duly organized, validly existing, and in good standing under the laws of its state of incorporation.

9.2 Due Authority. Marker has the full power and authority to make, enter into and carry out the terms of this Agreement. The execution and delivery of this Agreement by Marker and the consummation by Marker of the transactions contemplated hereby have been duly and validly authorized by all necessary action on the part of Marker. This Agreement has been duly and validly executed and delivered by Marker and constitutes a valid and binding agreement of Marker enforceable against it in accordance with its terms, except to the extent enforceability may be limited by the effect of applicable bankruptcy, reorganization, insolvency, moratorium or other applicable Law affecting the enforcement of creditors' rights generally and the effect of general principles of equity, regardless of whether such enforceability is considered in a proceeding at law or in equity.

9.3 No Conflict; Consents.

(a) The execution and delivery of this Agreement by Marker does not, and the performance by Marker of the obligations under this Agreement and the compliance by Marker with any provisions hereof do not and will not: (i) conflict with or violate any applicable Law applicable to Marker, (ii) contravene or conflict with, or result in any violation or breach of, any provision of any charter, certificate of incorporation, articles of association, by-laws, operating agreement or similar formation or governing documents and instruments of Marker, or (iii) result in any material breach of or constitute a material default (or an event that with notice or lapse of time or both would become a

material default) under any Contract to which Marker is a party or by which Marker is bound, except, in the case of clause (i) or (iii), as would not reasonably be expected, either individually or in the aggregate, to materially impair the ability of Marker to perform its obligations hereunder or to consummate the transactions contemplated hereby.

(b) No consent, approval, order or authorization of, or registration, declaration or filing with, any Governmental Body or any other Person is required by or with respect to Marker in connection with the execution and delivery of this Agreement or the consummation by Marker of the transactions contemplated hereby, except for filings with the SEC of such reports under the Securities Exchange Act as may be required in connection with this Agreement and the consummation of the transactions contemplated hereby.

9.4 Absence of Litigation. As of the date hereof, there is no Legal Proceeding pending against, or, to the knowledge of Marker, threatened against Marker that would reasonably be expected to materially impair the ability of Marker to perform the obligations of Marker hereunder or to consummate the transactions contemplated hereby.

10. Fiduciary Duties. The Stockholder makes no agreement or understanding in this Agreement in Stockholder's capacity as a director or officer of TapImmune or any of its subsidiaries (if Stockholder holds such office), and nothing in this Agreement: (a) will limit or affect any actions or omissions taken by Stockholder in stockholder's capacity as such a director or officer, including in exercising rights under the Merger Agreement, and no such actions or omissions shall be deemed a breach of this Agreement, or (b) will be construed to prohibit, limit or restrict Stockholder from exercising Stockholder's fiduciary duties as an officer or director to TapImmune or its stockholders. Each Stockholder is entering into this Agreement solely in his or her capacity as the owner of such Stockholder's shares of Voting Stock.

11. Documentation and Information. The Stockholder shall permit and hereby authorizes TapImmune and Marker to publish and disclose in all documents and schedules filed with the SEC, and any press release or other disclosure document that TapImmune or Marker reasonably determines to be necessary in connection with the Merger and any transactions contemplated by the Merger Agreement, the Stockholder's identity and ownership of the Subject Shares and the nature of the Stockholder's commitments and obligations under this Agreement. TapImmune is an intended third-party beneficiary of this Section 11.

12. Further Assurances. The Stockholders shall, without further consideration, from time to time, execute and deliver, or cause to be executed and delivered, such additional or further consents, documents and other instruments as Marker may reasonably request in order to vest, perfect, confirm or record the rights granted to Marker under this Agreement.

13. Joinder; Certain Events.

13.1 During the Term, in the event any Stockholder Transfers any shares of Voting Stock to a Person as permitted by and in accordance with this Agreement, such transferee shall be required, as a condition to such Transfer, to execute and deliver to Marker a Joinder Agreement.

13.2 Except as provided in Section 13.1, the Stockholders agree that this Agreement and the obligations hereunder shall attach to the shares of Voting Stock referenced in Section 2 and shall be binding on any Person to which legal or beneficial ownership of such shares of Voting Stock shall pass, whether by operation of Law or otherwise. In the event of any stock split, stock dividend, merger, amalgamation, reorganization, recapitalization or other change in the capital structure of TapImmune, affecting the Voting Stock, the number of shares of Voting Stock shall be deemed adjusted appropriately and this Agreement and the obligations hereunder shall attach to any additional shares of Voting Stock so issued to or acquired by the Stockholders.

14. Termination. Except as set forth herein with respect to specific provisions hereof, this Agreement shall not terminate and shall remain in full force and effect until the end of the Term; provided that this Agreement shall earlier terminate in the event the Closing does not occur (at such date and time as when the Merger Agreement is terminated in accordance with its terms); provided further, that nothing herein shall relieve any party from liability for any intentional breach of this Agreement prior to such termination.

15. No Ownership Interest. Nothing contained in this Agreement shall be deemed to vest in Marker any direct or indirect ownership or incidence of ownership of or with respect to the Stockholders' shares of Voting Stock. All rights, ownership and economic benefits of and relating to the Stockholders' shares of Voting Stock shall remain vested in and belong to the Stockholders, and Marker shall have no authority to direct the Stockholders in the voting or disposition of any of the shares of Voting Stock except as otherwise provided herein.

16. Miscellaneous.

16.1 Severability. The provisions of this Agreement shall be deemed severable and the invalidity or unenforceability of any provision shall not affect the validity or enforceability of the other provisions hereof. If any provision of this Agreement, or the application thereof to any Person or any circumstance, is invalid or unenforceable, (a) a suitable and equitable provision shall be substituted therefor in order to carry out, so far as may be valid and enforceable, the intent and purpose of such invalid or unenforceable provision; and (b) the remainder of this Agreement and the application of such provision to other Persons or circumstances shall not be affected by such invalidity or unenforceability, nor shall such invalidity or unenforceability affect the validity or enforceability of such provision, or the application thereof, in any other jurisdiction.

16.2 Non-survival of Representations and Warranties. None of the representations and warranties in this Agreement or in any schedule, instrument or other document delivered pursuant to this Agreement shall survive the termination of this Agreement. This Section 16.2 shall not limit any covenant or agreement contained in this Agreement that by its terms is to be performed in whole or in part after the Closing Date or the termination of this Agreement.

16.3 Assignment. Neither this Agreement nor any of the rights, interests or obligations under this Agreement may be assigned or delegated, in whole or in part, by operation of law or otherwise, by any of the parties hereto without the prior written consent of the other parties, and any such assignment without such prior written consent shall be null and void. Subject to the preceding sentence, this Agreement will be binding upon, inure to the benefit of, and be enforceable by, the parties and their respective successors and assigns.

16.4 Amendment and Modification. This Agreement may not be amended, modified or supplemented in any manner, whether by course of conduct or otherwise, except by an instrument in writing specifically designated as an amendment hereto, signed on behalf of each party.

16.5 Enforcement. The parties hereto agree that irreparable damage would occur in the event that any of the provisions of this Agreement were not performed in accordance with their specific terms or were otherwise breached. Accordingly, each of the parties hereto shall be entitled to specific performance of the terms hereof, including an injunction or injunctions to prevent breaches of this Agreement and to enforce specifically the terms and provisions of this Agreement in the Court of Chancery of the State of Delaware (or, if such court lacks subject matter jurisdiction, in the Superior Court of the State of Delaware or the United States District Court for the District of Delaware), this being in addition to any other remedy to which such party is entitled at law or in equity. Each of the parties hereby further waives (a) any defense in any action for specific performance that a remedy at law would be adequate and (b) any requirement under any law to post security as a prerequisite to obtaining equitable relief.

16.6 Notices. All notices and other communications hereunder shall be in writing and shall be deemed duly given (a) on the date of delivery if delivered personally, (b) on the first Business Day following the date of dispatch if delivered utilizing a next-day service by a recognized next-day courier or (c) on the earlier of confirmed receipt or the fifth Business Day following the date of mailing if

delivered by registered or certified mail, return receipt requested, postage prepaid. All notices hereunder shall be delivered to the addresses set forth below, or pursuant to such other instructions as may be designated in writing by the party to receive such notice:

(i) if to any Stockholder, to the address set forth on such Stockholder's signature page attached hereto:

with a concurrent copy to (which shall not be considered notice):

Seyfarth Shaw LLP
700 Milam Street, Suite 1400
Houston, Texas 77002
Telephone No.: (713) 238-1887
Facsimile No.: (713) 225-2340
Attention: Paul Pryzant
E-Mail: ppryzant@seyfarth.com

(ii) if to Marker, to:

33 5th Avenue N.W., Suite 800
New Brighton, Minnesota 55112
Telephone No.: (651) 628-9259
Facsimile No.: (651) 628-9507
Attention: John Wilson
E-mail: john.wilson@wilsonwolf.com

with a concurrent copy to (which shall not be considered notice):

with a copy to:

Winthrop & Weinstine, P.A.
225 South Sixth Street, Suite 3500
Minneapolis, MN 55402-4629
Telephone No.: (612) 604-6677
Facsimile No.: (612) 604-6877
Attention: Mark R. Gleeman
E-Mail: mgleeman@winthrop.com

16.7 Governing Law; Submission to Jurisdiction. This Agreement shall be governed by, and construed in accordance with, the laws of the State of Delaware, regardless of the laws that might otherwise govern under applicable principles of conflicts of laws. In any action or suit between any of the Parties arising out of or relating to this Agreement or any of the Contemplated Transactions: (a) each of the Parties irrevocably and unconditionally consents and submits to the exclusive jurisdiction and venue of the state and federal courts located in the State of Texas; and (b) if any such action or suit is commenced in a state court, then, subject to applicable Legal Requirements, no Party shall object to the removal of such action or suit to any federal court located in the Southern District of Texas.

16.8 WAIVER OF JURY TRIAL. EACH OF THE PARTIES TO THIS AGREEMENT HEREBY IRREVOCABLY WAIVES ALL RIGHT TO A TRIAL BY JURY IN ANY ACTION, PROCEEDING OR COUNTERCLAIM ARISING OUT OF OR RELATING TO THIS AGREEMENT OR THE TRANSACTIONS CONTEMPLATED HEREBY.

16.9 Entire Agreement; Third-Party Beneficiaries. This Agreement constitutes the entire agreement, and supersedes all prior written agreements, arrangements, communications and understandings and all prior and contemporaneous oral agreements, arrangements, communications and understandings among the parties hereto with respect to the subject matter hereof. Nothing in this Agreement, express or implied, is intended to or shall confer upon any Person other than the parties and their respective successors and permitted assigns any legal or equitable right, benefit or remedy of any nature under or by reason of this Agreement.

16.10 Counterparts; Facsimile Signature. This Agreement may be executed in two or more counterparts, all of which shall be considered one and the same instrument and shall become effective when one or more counterparts have been signed by each of the parties and delivered to the other party. This Agreement may be executed by facsimile signature or other electronic signature and such signature shall constitute an original for all purposes.

16.11 Effect of Headings. Headings of the articles and sections of this Agreement and the table of contents, schedules and exhibits are for convenience of the parties only and shall be given no substantive or interpretative effect whatsoever.

16.12 No Presumption Against Drafting Party. The parties hereto have participated jointly in the negotiation and drafting of this Agreement. Each of the parties hereto acknowledges that each party to this Agreement has been represented by counsel in connection with this Agreement and the transactions contemplated by this Agreement. Accordingly, any rule of law or any legal decision that would require interpretation of any claimed ambiguities in this Agreement against the drafting party has no application and is expressly waived.

16.13 Expenses. Except as otherwise provided herein or in the Merger Agreement, all fees and expenses incurred in connection with or related to this Agreement and the transactions contemplated hereby shall be paid by the party incurring such fees or expenses, whether or not such transactions are consummated. In the event of termination of this Agreement, the obligation of each party to pay its own expenses will be subject to any rights of such party arising from a breach of this Agreement by the other.

16.14 No Recourse. Notwithstanding anything to the contrary contained herein or otherwise, but without limiting any provision in the Merger Agreement, this Agreement may only be enforced against, and any claims or causes of action that may be based upon, arise out of or relate to this Agreement, or the negotiation, execution or performance of this Agreement or the transactions contemplated hereby, may only be made against the entities and Persons that are expressly identified as parties to this Agreement in their capacities as such and no former, current or future stockholders, equity holders, controlling persons, directors, officers, employees, general or limited partners, members, managers, agents or affiliates of any party hereto, or any former, current or future direct or indirect stockholder, equity holder, controlling person, director, officer, employee, general or limited partner, member, manager, agent or affiliate of any of the foregoing (each, a "Non-Recourse Party") shall have any liability for any obligations or liabilities of the parties to this Agreement or for any claim (whether in tort, contract or otherwise) based on, in respect of, or by reason of, the transactions contemplated hereby or in respect of any oral representations made or alleged to be made in connection herewith. Without limiting the rights of any party against the other parties hereto, in no event shall any party or any of its affiliates seek to enforce this Agreement against, make any claims for breach of this Agreement against, or seek to recover monetary damages from, any Non-Recourse Party.

[Remainder of Page Intentionally Left Blank]

In witness whereof, the parties hereto have caused this Agreement to be executed as of the date first set forth above.

MARKER THERAPEUTICS, INC.

By: _____

Name: John R. Wilson

Title: President

[Signature page to Voting and Lock-Up Agreement]

STOCKHOLDERS:

By: _____

Name: _____

Title: _____

Notice Address:

[Signature page to Voting and Lock-Up Agreement]

Schedule A

<u>Name of Stockholder</u>	<u>No. Shares of Common Stock</u>
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EXHIBIT D
SURVIVING CORPORATION CERTIFICATE OF INCORPORATION

AMENDED AND RESTATED CERTIFICATE OF INCORPORATION

OF

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Marker Therapeutics, Inc., a corporation organized and existing under the laws of the State of Delaware (the “**Corporation**”), hereby certifies as follows:

FIRST: The name of the corporation is [].

SECOND: The address of the registered office of the Corporation in the State of Delaware is Corporation Trust Center, 1209 Orange Street, Wilmington, New Castle County, Delaware 19801. The name of the registered agent of the Corporation at such address is The Corporation Trust Company.

THIRD: The nature of the business or purposes to be conducted or promoted by the Corporation is to engage in any lawful act or activity for which corporations may be organized under the Delaware General Corporation Law (the “**DGCL**”).

FOURTH: The total number of shares of stock which the Corporation is authorized to issue is 1,000. All shares shall be Common Stock, \$0.001 par value per share, and are to be of one class.

FIFTH: Unless and except to the extent that the by-laws of the Corporation (the “**By-laws**”) shall so require, the election of directors of the Corporation need not be by written ballot.

SIXTH: To the fullest extent permitted by law, a director of the Corporation shall not be personally liable to the Corporation or to its stockholders for monetary damages for any breach of fiduciary duty as a director. No amendment to, modification of or repeal of this paragraph seven shall apply to or have any effect on the liability or alleged liability of any director of the Corporation for or with respect to any acts or omissions of such director occurring prior to such amendment.

SEVENTH:

1. Right to Indemnification of Directors and Officers. The Corporation shall indemnify and hold harmless, to the fullest extent permitted by applicable law as it presently exists or may hereafter be amended, any person (an “**Indemnified Person**”) who was or is made or is threatened to be made a party or is otherwise involved in any action, suit or proceeding, whether civil, criminal, administrative or investigative (a “**Proceeding**”), by reason of the fact that such person, or a person for whom such person is the legal representative, is or was a director or officer of the Corporation or, while a director or officer of the Corporation, is or was serving at the request of the Corporation as a director, officer, employee or agent of another corporation or of a partnership, joint venture, trust, enterprise or nonprofit entity, including service with respect to employee benefit plans, against all liability and loss suffered and expenses (including attorneys’ fees) reasonably incurred by such Indemnified Person in such Proceeding. Notwithstanding the preceding sentence, except as otherwise provided in Section 3 of this Article Seventh, the Corporation shall be required to indemnify an Indemnified Person in connection with a Proceeding (or part thereof) commenced by such Indemnified Person only if the commencement of such Proceeding (or part thereof) by the Indemnified Person was authorized in the specific case by the board of directors of the Corporation.

2. Prepayment of Expenses of Directors and Officers. The Corporation shall pay the expenses (including attorneys’ fees) incurred by an Indemnified Person in defending any Proceeding in advance of its final disposition, *provided, however*, that, to the extent required by law, such payment of expenses in advance of the final disposition of the Proceeding shall be made only upon receipt of an undertaking by the Indemnified Person to repay all amounts advanced if it should be ultimately determined that the Indemnified Person is not entitled to be indemnified under this Article Tenth or otherwise.

3. Claims by Directors and Officers. If a claim for indemnification or advancement of expenses under this Article Tenth is not paid in full within thirty (30) days after a written claim therefor by the Indemnified Person has been received by the Corporation, the Indemnified Person may file suit to

recover the unpaid amount of such claim and, if successful in whole or in part, shall be entitled to be paid the expense of prosecuting such claim. In any such action the Corporation shall have the burden of proving that the Indemnified Person is not entitled to the requested indemnification or advancement of expenses under applicable law.

4. Indemnification of Employees and Agents. The Corporation may indemnify and advance expenses to any person who was or is made or is threatened to be made or is otherwise involved in any Proceeding by reason of the fact that such person, or a person for whom such person is the legal representative, is or was an employee or agent of the Corporation or, while an employee or agent of the Corporation, is or was serving at the request of the Corporation as a director, officer, employee or agent of another corporation or of a partnership, joint venture, limited liability company, trust, enterprise or nonprofit entity, including service with respect to employee benefit plans, against all liability and loss suffered and expense (including attorneys' fees) reasonably incurred by such person in connection with such Proceeding. The ultimate determination of entitlement to indemnification of persons who are non-director or officer employees or agents shall be made in such manner as is determined by the Board of Directors in its sole discretion. Notwithstanding the foregoing sentence, the Corporation shall not be required to indemnify a person in connection with a Proceeding initiated by such person if the Proceeding was not authorized in advance by the Board of Directors.

5. Advancement of Expenses of Employees and Agents. The Corporation may pay the expenses (including attorneys' fees) incurred by an employee or agent in defending any Proceeding in advance of its final disposition on such terms and conditions as may be determined by the Board of Directors.

6. Non-Exclusivity of Rights. The rights conferred on any person by this Article Tenth shall not be exclusive of any other rights which such person may have or hereafter acquire under any statute, provision of the certificate of incorporation, these by-laws, agreement, vote of stockholders or disinterested directors or otherwise.

7. Other Indemnification. The Corporation's obligation, if any, to indemnify any person who was or is serving at its request as a director, officer or employee of another Corporation, partnership, limited liability company, joint venture, trust, organization or other enterprise shall be reduced by any amount such person may collect as indemnification from such other Corporation, partnership, limited liability company, joint venture, trust, organization or other enterprise.

8. Insurance. The Board of Directors may, to the full extent permitted by applicable law as it presently exists, or may hereafter be amended from time to time, authorize an appropriate officer or officers to purchase and maintain at the Corporation's expense insurance: (a) to indemnify the Corporation for any obligation which it incurs as a result of the indemnification of directors, officers and employees under the provisions of this Article Tenth; and (b) to indemnify or insure directors, officers and employees against liability in instances in which they may not otherwise be indemnified by the Corporation under the provisions of this Article Tenth.

9. Amendment or Repeal. Any repeal or modification of the foregoing provisions of this Article Seventh shall not adversely affect any right or protection hereunder of any person in respect of any act or omission occurring prior to the time of such repeal or modification. The rights provided hereunder shall inure to the benefit of any Indemnified Person and such person's heirs, executors and administrators.

EIGHTH: Unless the Corporation consents in writing to the selection of an alternative forum (an "**Alternative Forum Consent**"), the Court of Chancery in the State of Delaware shall be the sole and exclusive forum for (i) any derivative action or proceeding brought on behalf of the Corporation, (ii) any action asserting a claim of breach of a fiduciary duty owed by any director, officer, stockholder, employee or agent of the Corporation to the Corporation or the Corporation's stockholders, (iii) any action asserting a claim against the Corporation or any director, officer, stockholder, employee or agent of the Corporation arising out of or relating to any provision of the DGCL or the Corporation's certificate of incorporation or the Corporation's By-laws, or (iv) any action asserting a claim against the Corporation or any director, officer, stockholder, employee or agent of the Corporation governed by the internal affairs doctrine of the State of Delaware, except for, as to each of (i) through (iv) above, any claim as to which the Court of

Chancery determines that there is an indispensable party not subject to the jurisdiction of the Court of Chancery (and the indispensable party does not consent to the personal jurisdiction of the Court of Chancery within ten days following such determination), which is vested in the exclusive jurisdiction of a court or forum other than the Court of Chancery, or for which the Court of Chancery does not have subject matter jurisdiction. If any provision or provisions of this Article Eighth shall be held to be invalid, illegal or unenforceable as applied to any person or entity or circumstance for any reason whatsoever, then, to the fullest extent permitted by law, the validity, legality and enforceability of such provisions in any other circumstance and of the remaining provisions of this Article Eighth (including, without limitation, each portion of any sentence of this Article Eighth containing any such provision held to be invalid, illegal or unenforceable that is not itself held to be invalid, illegal or unenforceable) and the application of such provision to other persons or entities and circumstances shall not in any way be affected or impaired thereby. Failure to enforce the foregoing provisions would cause the Corporation irreparable harm and the Corporation shall be entitled to equitable relief, including injunctive relief and specific performance, to enforce the foregoing provisions. Any person or entity purchasing or otherwise acquiring any interest in shares of capital stock of the Corporation shall be deemed to have notice of and consented to the provisions of this Article Eighth. The existence of any prior Alternative Forum Consent shall not act as a waiver of the Corporation's ongoing consent right as set forth above in this Article Eighth with respect to any current or future actions or claims.

NINTH: In furtherance and not in limitation of the powers conferred by statute, the board of directors is expressly authorized to adopt, amend or repeal the By-laws or adopt new By-laws without any action on the part of the stockholders; provided that any By-law adopted or amended by the board of directors, and any powers thereby conferred, may be amended, altered or repealed by the stockholders.

TENTH: The Corporation shall have the right, subject to any express provisions or restrictions contained in the Certificate of Incorporation of the Corporation (the "*Certificate of Incorporation*") or the By-laws, from time to time, to amend, alter or repeal any provision of the Certificate of Incorporation in any manner now or hereafter provided by law, and all rights and powers of any kind conferred upon a director or stockholder of the Corporation by the Certificate of Incorporation or any amendment thereof are conferred subject to such right.

ELEVENTH: This Amended and Restated Certificate of Incorporation has been duly adopted in accordance with the provisions of Section 242 and 245 of the General Corporation Law of Delaware. The Board of Directors duly adopted resolutions setting forth and declaring advisable this Amended and Restated Certificate of Incorporation and directed that the proposed amendments and restatement be considered by the stockholders of the Corporation. This Amended and Restated Certificate of Incorporation was approved by the sole holder of the all of the shares of the Corporation outstanding in accordance with Section 228 of the General Corporation Law of Delaware.

[SIGNATURE PAGE FOLLOWS]

IN WITNESS WHEREOF, the Corporation has caused this Amended and Restated Certificate of Incorporation to be signed by its chief executive officer and president this [] day of [], 2018.

[], INC.

Name:

Title:

EXHIBIT E
MARKER STOCKHOLDER WRITTEN CONSENT

**WRITTEN CONSENT
OF
THE STOCKHOLDERS
OF
MARKER THERAPEUTICS, INC.
(a Delaware corporation)**

May [], 2018

The undersigned stockholders, representing a majority of the issued and outstanding shares of capital stock of Marker Therapeutics, Inc., a Delaware corporation (the “*Company*”), do hereby waive the giving of any notice of action or a meeting of the stockholders and hereby consent to the taking of the following actions and do hereby adopt the following resolutions by written consent in lieu of a meeting (the “*Written Consent*”) pursuant to Section 228(a) of the General Corporation Law of the State of Delaware (the “*DGCL*”):

Approval of Merger

WHEREAS, the Board of Directors of the Company has previously declared advisable, approved and adopted the Agreement and Plan of Merger and Reorganization (the “*Merger Agreement*”), dated as of May 15, 2018, by and among the Company, TapImmune Inc., a Nevada corporation (“*Parent*”), and Timberwolf Merger Sub, Inc., a Delaware corporation and wholly owned subsidiary of Parent (“*Merger Sub*”), an executed copy of which is attached as Exhibit A hereto, providing for the merger of Merger Sub with and into the Company, with the Company continuing as the surviving entity and a wholly-owned subsidiary of Parent (the “*Merger*”);

WHEREAS, the Board of the Directors of the Company has recommended that the stockholders of the Company adopt the Merger Agreement and approve the transactions contemplated thereby, including the Merger;

WHEREAS, pursuant to Section 251 of the DGCL, to adopt and approve the Merger Agreement, the Company must obtain the affirmative vote or written consent of the holders of a majority of the outstanding shares of capital stock entitled to vote thereon; and

WHEREAS, the undersigned stockholders constitute the holders of a majority of the issued and outstanding shares of capital stock of the Company;

NOW, THEREFORE, BE IT RESOLVED, that the Merger Agreement and the transactions contemplated thereby, including the Merger, be and hereby are approved, authorized and adopted on the terms and conditions set forth in the Merger Agreement by the undersigned stockholders of the Company pursuant to the provisions of the DGCL and the Certificate of Incorporation of the Company (the “*Certificate of Incorporation*”), and this resolution shall constitute the affirmative consent of the holders of the undersigned for all purposes of the DGCL, the Certificate of Incorporation or otherwise;

General

RESOLVED, that all acts, transactions, or agreements undertaken prior to the adoption of the foregoing resolutions by any of the directors, officers or authorized representatives of the Company in its name and for its account in connection with the foregoing matters are hereby ratified, confirmed and approved in all respects; and be it further

RESOLVED, that the officers of the Company be, and each of them severally hereby is, empowered, authorized and directed to take such actions as they may deem necessary or convenient to carry out the intent of any and all of the foregoing resolutions, provided that in the case of an amendment to the Merger Agreement following the date hereof, any such amendment shall be subject to the terms set forth in the DGCL, including any requirement to obtain the consent of the stockholders of the Company in connection therewith.

Acknowledgement

Each of the undersigned stockholders hereby acknowledges and agrees that: (i) the adoption and approval of the Merger and the other transactions contemplated by the Merger Agreement is irrevocable and that such stockholder is aware it may have the right to demand appraisal for its shares pursuant to Section 262 of the DGCL, a copy of which is attached hereto, and that such stockholder has received and read a copy of Section 262 of the DGCL, (ii) by its approval of the Merger it is not entitled to appraisal rights with respect to its shares in connection with the Merger and thereby waives any rights to receive payment of the fair value of its capital stock under the DGCL, (iii) the shares of common stock it will acquire pursuant to the terms of the Merger and the shares of common stock issuable upon exercise of the warrants it will acquire pursuant to the terms of the Merger (the “*Shares*”), will be for its own account for investment only, and not with a view to, or for sale in connection with, any distribution of such shares in violation of the Securities Act of 1933 (the “*Securities Act*”), or any rule or regulation under the Securities Act, (iv) it constitutes an “accredited investor,” as that term is defined in Rule 501 under the Securities Act, (v) it has had such opportunity as it has deemed adequate to obtain from representatives of the Company such information as is necessary to permit it to evaluate the merits and risks of its investment in the Company, (vi) it has sufficient experience in business, financial and investment matters to be able to evaluate the risks involved in the acquisition of the Shares pursuant to the terms of the Merger Agreement and to make an informed investment decision with respect thereto, (vii) it can afford a complete loss of the value of the Shares and is able to bear the economic risk of holding such Shares for an indefinite period, (viii) it understand that (a) the Shares have not been registered under the Securities Act and are “restricted securities” within the meaning of Rule 144 under the Securities Act, (b) the Shares cannot be sold, transferred or otherwise disposed of unless they are subsequently registered under the Securities Act or an exemption from registration is then available; and (c) there is now no registration statement on file with the Securities and Exchange Commission with respect to the Shares.

[Remainder of Page Intentionally Left Blank]

IN WITNESS WHEREOF, the undersigned has set his hand hereto effective as of the date first written above.

John R. Wilson

[Signature Page to Stockholder Consent — Marker Therapeutics, Inc.]

Juan F. Vera

[Signature Page to Stockholder Consent — Marker Therapeutics, Inc.]

Ann M. Leen

[Signature Page to Stockholder Consent — Marker Therapeutics, Inc.]

SALT FREE LP

By: _____

Name: Malcolm K. Brenner

Title: General Partner

By: _____

Name: Cliona M. Rooney

Title: General Partner

[Signature Page to Stockholder Consent — Marker Therapeutics, Inc.]

Helen E. Heslop

[Signature Page to Stockholder Consent — Marker Therapeutics, Inc.]

Exhibit A

Merger Agreement

Exhibit A to Stockholder Consent — Marker Therapeutics, Inc.

Exhibit B**SECTION 262 OF THE
GENERAL CORPORATION LAW
OF THE STATE OF DELAWARE****APPRAISAL RIGHTS**

(a) Any stockholder of a corporation of this State who holds shares of stock on the date of the making of a demand pursuant to subsection (d) of this section with respect to such shares, who continuously holds such shares through the effective date of the merger or consolidation, who has otherwise complied with subsection (d) of this section and who has neither voted in favor of the merger or consolidation nor consented thereto in writing pursuant to §228 of this title shall be entitled to an appraisal by the Court of Chancery of the fair value of the stockholder's shares of stock under the circumstances described in subsections (b) and (c) of this section. As used in this section, the word "stockholder" means a holder of record of stock in a corporation; the words "stock" and "share" mean and include what is ordinarily meant by those words; and the words "depository receipt" mean a receipt or other instrument issued by a depository representing an interest in 1 or more shares, or fractions thereof, solely of stock of a corporation, which stock is deposited with the depository.

(b) Appraisal rights shall be available for the shares of any class or series of stock of a constituent corporation in a merger or consolidation to be effected pursuant to §251 (other than a merger effected pursuant to §251(g) of this title and, subject to paragraph (b)(3) of this section, §251(h) of this title), §252, §254, §255, §256, §257, §258, §263 or §264 of this title:

(1) Provided, however, that, except as expressly provided in §363(b) of this title, no appraisal rights under this section shall be available for the shares of any class or series of stock, which stock, or depository receipts in respect thereof, at the record date fixed to determine the stockholders entitled to receive notice of the meeting of stockholders to act upon the agreement of merger or consolidation, were either: (i) listed on a national securities exchange or (ii) held of record by more than 2,000 holders; and further provided that no appraisal rights shall be available for any shares of stock of the constituent corporation surviving a merger if the merger did not require for its approval the vote of the stockholders of the surviving corporation as provided in §251(f) of this title.

(2) Notwithstanding paragraph (b)(1) of this section, appraisal rights under this section shall be available for the shares of any class or series of stock of a constituent corporation if the holders thereof are required by the terms of an agreement of merger or consolidation pursuant to §§251, 252, 254, 255, 256, 257, 258, 263 and 264 of this title to accept for such stock anything except:

a. Shares of stock of the corporation surviving or resulting from such merger or consolidation, or depository receipts in respect thereof;

b. Shares of stock of any other corporation, or depository receipts in respect thereof, which shares of stock (or depository receipts in respect thereof) or depository receipts at the effective date of the merger or consolidation will be either listed on a national securities exchange or held of record by more than 2,000 holders;

c. Cash in lieu of fractional shares or fractional depository receipts described in the foregoing paragraphs (b)(2)a. and b. of this section; or

d. Any combination of the shares of stock, depository receipts and cash in lieu of fractional shares or fractional depository receipts described in the foregoing paragraphs (b)(2)a., b. and c. of this section.

(3) In the event all of the stock of a subsidiary Delaware corporation party to a merger effected under §251(h), §253 or §267 of this title is not owned by the parent immediately prior to the merger, appraisal rights shall be available for the shares of the subsidiary Delaware corporation.

Exhibit B to Stockholder Consent — Marker Therapeutics, Inc.

(4) In the event of an amendment to a corporation's certificate of incorporation contemplated by §363(a) of this title, appraisal rights shall be available as contemplated by §363(b) of this title, and the procedures of this section, including those set forth in subsections (d) and (e) of this section, shall apply as nearly as practicable, with the word "amendment" substituted for the words "merger or consolidation," and the word "corporation" substituted for the words "constituent corporation" and/or "surviving or resulting corporation."

(c) Any corporation may provide in its certificate of incorporation that appraisal rights under this section shall be available for the shares of any class or series of its stock as a result of an amendment to its certificate of incorporation, any merger or consolidation in which the corporation is a constituent corporation or the sale of all or substantially all of the assets of the corporation. If the certificate of incorporation contains such a provision, the provisions of this section, including those set forth in subsections (d), (e), and (g) of this section, shall apply as nearly as is practicable.

(d) Appraisal rights shall be perfected as follows:

(1) If a proposed merger or consolidation for which appraisal rights are provided under this section is to be submitted for approval at a meeting of stockholders, the corporation, not less than 20 days prior to the meeting, shall notify each of its stockholders who was such on the record date for notice of such meeting (or such members who received notice in accordance with §255(c) of this title) with respect to shares for which appraisal rights are available pursuant to subsection (b) or (c) of this section that appraisal rights are available for any or all of the shares of the constituent corporations, and shall include in such notice a copy of this section and, if 1 of the constituent corporations is a nonstock corporation, a copy of §114 of this title. Each stockholder electing to demand the appraisal of such stockholder's shares shall deliver to the corporation, before the taking of the vote on the merger or consolidation, a written demand for appraisal of such stockholder's shares. Such demand will be sufficient if it reasonably informs the corporation of the identity of the stockholder and that the stockholder intends thereby to demand the appraisal of such stockholder's shares. A proxy or vote against the merger or consolidation shall not constitute such a demand. A stockholder electing to take such action must do so by a separate written demand as herein provided. Within 10 days after the effective date of such merger or consolidation, the surviving or resulting corporation shall notify each stockholder of each constituent corporation who has complied with this subsection and has not voted in favor of or consented to the merger or consolidation of the date that the merger or consolidation has become effective; or

(2) If the merger or consolidation was approved pursuant to §228, §251(h), §253, or §267 of this title, then either a constituent corporation before the effective date of the merger or consolidation or the surviving or resulting corporation within 10 days thereafter shall notify each of the holders of any class or series of stock of such constituent corporation who are entitled to appraisal rights of the approval of the merger or consolidation and that appraisal rights are available for any or all shares of such class or series of stock of such constituent corporation, and shall include in such notice a copy of this section and, if 1 of the constituent corporations is a nonstock corporation, a copy of §114 of this title. Such notice may, and, if given on or after the effective date of the merger or consolidation, shall, also notify such stockholders of the effective date of the merger or consolidation. Any stockholder entitled to appraisal rights may, within 20 days after the date of mailing of such notice or, in the case of a merger approved pursuant to §251(h) of this title, within the later of the consummation of the offer contemplated by §251(h) of this title and 20 days after the date of mailing of such notice, demand in writing from the surviving or resulting corporation the appraisal of such holder's shares. Such demand will be sufficient if it reasonably informs the corporation of the identity of the stockholder and that the stockholder intends thereby to demand the appraisal of such holder's shares. If such notice did not notify stockholders of the effective date of the merger or consolidation, either (i) each such constituent corporation shall send a second notice before the effective date of the merger or consolidation notifying each of the holders of any class or series of stock of such constituent corporation that are entitled to appraisal rights of the effective date of the merger or consolidation or (ii) the surviving or resulting corporation shall send such a second notice to all such holders on or within 10 days after such effective date; provided, however, that if such second notice is sent more than 20 days following the sending of the first notice or, in the case of a merger approved pursuant to §251(h) of this title, later

Exhibit B to Stockholder Consent — Marker Therapeutics, Inc.

than the later of the consummation of the offer contemplated by §251(h) of this title and 20 days following the sending of the first notice, such second notice need only be sent to each stockholder who is entitled to appraisal rights and who has demanded appraisal of such holder's shares in accordance with this subsection. An affidavit of the secretary or assistant secretary or of the transfer agent of the corporation that is required to give either notice that such notice has been given shall, in the absence of fraud, be prima facie evidence of the facts stated therein. For purposes of determining the stockholders entitled to receive either notice, each constituent corporation may fix, in advance, a record date that shall be not more than 10 days prior to the date the notice is given, provided, that if the notice is given on or after the effective date of the merger or consolidation, the record date shall be such effective date. If no record date is fixed and the notice is given prior to the effective date, the record date shall be the close of business on the day next preceding the day on which the notice is given.

(e) Within 120 days after the effective date of the merger or consolidation, the surviving or resulting corporation or any stockholder who has complied with subsections (a) and (d) of this section hereof and who is otherwise entitled to appraisal rights, may commence an appraisal proceeding by filing a petition in the Court of Chancery demanding a determination of the value of the stock of all such stockholders. Notwithstanding the foregoing, at any time within 60 days after the effective date of the merger or consolidation, any stockholder who has not commenced an appraisal proceeding or joined that proceeding as a named party shall have the right to withdraw such stockholder's demand for appraisal and to accept the terms offered upon the merger or consolidation. Within 120 days after the effective date of the merger or consolidation, any stockholder who has complied with the requirements of subsections (a) and (d) of this section hereof, upon written request, shall be entitled to receive from the corporation surviving the merger or resulting from the consolidation a statement setting forth the aggregate number of shares not voted in favor of the merger or consolidation and with respect to which demands for appraisal have been received and the aggregate number of holders of such shares. Such written statement shall be mailed to the stockholder within 10 days after such stockholder's written request for such a statement is received by the surviving or resulting corporation or within 10 days after expiration of the period for delivery of demands for appraisal under subsection (d) of this section hereof, whichever is later. Notwithstanding subsection (a) of this section, a person who is the beneficial owner of shares of such stock held either in a voting trust or by a nominee on behalf of such person may, in such person's own name, file a petition or request from the corporation the statement described in this subsection.

(f) Upon the filing of any such petition by a stockholder, service of a copy thereof shall be made upon the surviving or resulting corporation, which shall within 20 days after such service file in the office of the Register in Chancery in which the petition was filed a duly verified list containing the names and addresses of all stockholders who have demanded payment for their shares and with whom agreements as to the value of their shares have not been reached by the surviving or resulting corporation. If the petition shall be filed by the surviving or resulting corporation, the petition shall be accompanied by such a duly verified list. The Register in Chancery, if so ordered by the Court, shall give notice of the time and place fixed for the hearing of such petition by registered or certified mail to the surviving or resulting corporation and to the stockholders shown on the list at the addresses therein stated. Such notice shall also be given by 1 or more publications at least 1 week before the day of the hearing, in a newspaper of general circulation published in the City of Wilmington, Delaware or such publication as the Court deems advisable. The forms of the notices by mail and by publication shall be approved by the Court, and the costs thereof shall be borne by the surviving or resulting corporation.

(g) At the hearing on such petition, the Court shall determine the stockholders who have complied with this section and who have become entitled to appraisal rights. The Court may require the stockholders who have demanded an appraisal for their shares and who hold stock represented by certificates to submit their certificates of stock to the Register in Chancery for notation thereon of the pendency of the appraisal proceedings; and if any stockholder fails to comply with such direction, the Court may dismiss the proceedings as to such stockholder. If immediately before the merger or consolidation the shares of the class or series of stock of the constituent corporation as to which appraisal rights are available were listed on a national securities exchange, the Court shall dismiss the proceedings as to all holders of such shares who are otherwise entitled to appraisal rights unless (1) the total number of shares entitled to appraisal exceeds 1% of the outstanding shares of the class or series eligible for appraisal, (2) the value of the

consideration provided in the merger or consolidation for such total number of shares exceeds \$1 million, or (3) the merger was approved pursuant to §253 or §267 of this title.

(h) After the Court determines the stockholders entitled to an appraisal, the appraisal proceeding shall be conducted in accordance with the rules of the Court of Chancery, including any rules specifically governing appraisal proceedings. Through such proceeding the Court shall determine the fair value of the shares exclusive of any element of value arising from the accomplishment or expectation of the merger or consolidation, together with interest, if any, to be paid upon the amount determined to be the fair value. In determining such fair value, the Court shall take into account all relevant factors. Unless the Court in its discretion determines otherwise for good cause shown, and except as provided in this subsection, interest from the effective date of the merger through the date of payment of the judgment shall be compounded quarterly and shall accrue at 5% over the Federal Reserve discount rate (including any surcharge) as established from time to time during the period between the effective date of the merger and the date of payment of the judgment. At any time before the entry of judgment in the proceedings, the surviving corporation may pay to each stockholder entitled to appraisal an amount in cash, in which case interest shall accrue thereafter as provided herein only upon the sum of (1) the difference, if any, between the amount so paid and the fair value of the shares as determined by the Court, and (2) interest theretofore accrued, unless paid at that time. Upon application by the surviving or resulting corporation or by any stockholder entitled to participate in the appraisal proceeding, the Court may, in its discretion, proceed to trial upon the appraisal prior to the final determination of the stockholders entitled to an appraisal. Any stockholder whose name appears on the list filed by the surviving or resulting corporation pursuant to subsection (f) of this section and who has submitted such stockholder's certificates of stock to the Register in Chancery, if such is required, may participate fully in all proceedings until it is finally determined that such stockholder is not entitled to appraisal rights under this section.

(i) The Court shall direct the payment of the fair value of the shares, together with interest, if any, by the surviving or resulting corporation to the stockholders entitled thereto. Payment shall be so made to each such stockholder, in the case of holders of uncertificated stock forthwith, and the case of holders of shares represented by certificates upon the surrender to the corporation of the certificates representing such stock. The Court's decree may be enforced as other decrees in the Court of Chancery may be enforced, whether such surviving or resulting corporation be a corporation of this State or of any state.

(j) The costs of the proceeding may be determined by the Court and taxed upon the parties as the Court deems equitable in the circumstances. Upon application of a stockholder, the Court may order all or a portion of the expenses incurred by any stockholder in connection with the appraisal proceeding, including, without limitation, reasonable attorney's fees and the fees and expenses of experts, to be charged pro rata against the value of all the shares entitled to an appraisal.

(k) From and after the effective date of the merger or consolidation, no stockholder who has demanded appraisal rights as provided in subsection (d) of this section shall be entitled to vote such stock for any purpose or to receive payment of dividends or other distributions on the stock (except dividends or other distributions payable to stockholders of record at a date which is prior to the effective date of the merger or consolidation); provided, however, that if no petition for an appraisal shall be filed within the time provided in subsection (e) of this section, or if such stockholder shall deliver to the surviving or resulting corporation a written withdrawal of such stockholder's demand for an appraisal and an acceptance of the merger or consolidation, either within 60 days after the effective date of the merger or consolidation as provided in subsection (e) of this section or thereafter with the written approval of the corporation, then the right of such stockholder to an appraisal shall cease. Notwithstanding the foregoing, no appraisal proceeding in the Court of Chancery shall be dismissed as to any stockholder without the approval of the Court, and such approval may be conditioned upon such terms as the Court deems just; provided, however that this provision shall not affect the right of any stockholder who has not commenced an appraisal proceeding or joined that proceeding as a named party to withdraw such stockholder's demand for appraisal and to accept the terms offered upon the merger or consolidation within 60 days after the effective date of the merger or consolidation, as set forth in subsection (e) of this section.

(l) The shares of the surviving or resulting corporation to which the shares of such objecting stockholders would have been converted had they assented to the merger or consolidation shall have the status of authorized and unissued shares of the surviving or resulting corporation.

Exhibit B to Stockholder Consent — Marker Therapeutics, Inc.

EXHIBIT F
FORM OF WARRANT

WARRANT

THIS WARRANT AND THE SECURITIES ISSUABLE UPON THE EXERCISE HEREOF HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED. THEY MAY NOT BE SOLD, OFFERED FOR SALE, PLEDGED, HYPOTHECATED OR OTHERWISE TRANSFERRED EXCEPT PURSUANT TO AN EFFECTIVE REGISTRATION STATEMENT UNDER THE SECURITIES ACT OF 1933, AS AMENDED, OR AN OPINION OF COUNSEL SATISFACTORY TO THE COMPANY THAT REGISTRATION IS NOT REQUIRED UNDER SUCH ACT OR UNLESS SOLD IN ACCORDANCE WITH RULE 144 UNDER SUCH ACT.

WARRANT NO.: _____ NUMBER OF SHARES:
 DATE OF ISSUANCE: _____, 2018 (subject to adjustment hereunder)
 EXPIRATION DATE: _____, 2023

**WARRANT TO PURCHASE SHARES
OF COMMON STOCK OF**

TAPIMMUNE INC.

This Warrant is issued to _____, or its registered assigns (including any successors or assigns, the “**Warrantholder**”), which is hereby acknowledged in connection with that certain Agreement and Plan of Merger and Reorganization, dated as of May 15, 2018, by and among TapImmune Inc., a Nevada corporation (the “**Company**”), Timberwolf Merger Sub, Inc., a Delaware corporation and wholly-owned subsidiary of the Company, and Marker Therapeutics, Inc., a Delaware corporation (as it may be amended from time to time in accordance with its terms, the “**Merger Agreement**”).

1. EXERCISE OF WARRANT.

(a) Number and Exercise Price of Warrant Shares; Expiration Date. Subject to the terms and conditions set forth herein and set forth in the Merger Agreement, the Warrantholder is entitled to purchase from the Company up to _____ shares of the Company’s Common Stock, \$0.001 par value per share (the “**Common Stock**”) (as adjusted from time to time pursuant to the provisions of this Warrant) (the “**Warrant Shares**”), at a purchase price of \$2.99 per share (the “**Exercise Price**”), on or before 5:00 p.m. New York City time on the fifth anniversary of the Date of Issuance (the “**Expiration Date**”) (subject to earlier termination of this Warrant as set forth herein).

(b) Method of Exercise. While this Warrant remains outstanding and exercisable in accordance with Section 1(a) above, the Warrantholder may exercise this Warrant in accordance with Section 5 herein, by either:

- (1) wire transfer to the Company or cashier’s check drawn on a United States bank made payable to the order of the Company, or
- (2) exercising of the right to credit the Exercise Price against the Fair Market Value of the Warrant Shares (as defined below) at the time of exercise (the “**Net Exercise**”) pursuant to Section 1(c).

Notwithstanding anything herein to the contrary, the Warrantholder shall not be required to physically surrender this Warrant to the Company until the Warrantholder has purchased all of the Warrant Shares available hereunder and the Warrant has been exercised in full, in which case, the Warrantholder shall surrender this Warrant to the Company for cancellation within three (3) trading days of the date the final Notice of Exercise is delivered to the Company. Partial exercises of this Warrant resulting in purchases of a portion of the total number of Warrant Shares available hereunder shall have the effect of lowering the outstanding number of Warrant Shares purchasable hereunder in an amount equal to the applicable number of Warrant Shares purchased. The Warrantholder and the Company shall maintain records showing the number of Warrant Shares purchased and the date of such purchases.

(c) **Net Exercise.** If the Company shall receive written notice from the Warrantholder at the time of exercise of this Warrant that the holder elects to Net Exercise the Warrant, the Company shall deliver to such Warrantholder (without payment by the Warrantholder of any exercise price in cash) that number of Warrant Shares computed using the following formula:

$$X = \frac{Y(A - B)}{A}$$

Where

X = The number of Warrant Shares to be issued to the Warrantholder.

Y = The number of Warrant Shares purchasable under this Warrant or, if only a portion of the Warrant is being exercised, the portion of the Warrant being cancelled (at the date of such calculation).

A = The Fair Market Value of one (1) share of Common Stock on the trading date immediately preceding the date on which Warrantholder elects to exercise this Warrant.

B = The Exercise Price (as adjusted hereunder).

The “**Fair Market Value**” of one share of Common Stock shall mean (x) the last reported sale price and, if there are no sales, the last reported bid price, of the Common Stock on the business day prior to the date of exercise on the Trading Market on which the Common Stock is then listed or quoted as reported by Bloomberg Financial Markets (or a comparable reporting service of national reputation selected by the Company and reasonably acceptable to the holder if Bloomberg Financial Markets is not then reporting sales prices of the Common Stock) (collectively, “**Bloomberg**”), (y) if the foregoing does not apply, the last sales price of the Common Stock in the over-the-counter market on the pink sheets or bulletin board for such security as reported by Bloomberg, and, if there are no sales, the last reported bid price of the Common Stock as reported by Bloomberg or, (z) if fair market value cannot be calculated as of such date on either of the foregoing bases, the price determined in good faith by the Company’s Board of Directors.

“**OTC Markets**” shall mean either OTC QX or OTC QB of the OTC Markets Group, Inc.

“**Trading Market**” shall mean any of the following markets or exchanges on which the Common Stock is listed or quoted for trading on the date in question: the NYSE MKT, the NASDAQ Capital Market, the NASDAQ Global Market, the NASDAQ Global Select Market, the New York Stock Exchange or the OTC Markets (or any successors to any of the foregoing).

(d) **Deemed Exercise.** In the event that immediately prior to the close of business on the Expiration Date, the Fair Market Value of one share of Common Stock (as determined in accordance with Section 1(c) above) is greater than the then applicable Exercise Price, this Warrant shall be deemed to be automatically exercised on a net exercise issue basis pursuant to Section 1(c) above, and the Company shall deliver the applicable number of Warrant Shares to the Warrantholder pursuant to the provisions of Section 1(c) above and this Section 1(d).

2. CERTAIN ADJUSTMENTS.

(a) **Adjustment of Number of Warrant Shares and Exercise Price.** The number and kind of Warrant Shares purchasable upon exercise of this Warrant and the Exercise Price shall be subject to adjustment from time to time as follows:

(1) **Subdivisions, Combinations and Other Issuances.** If the Company shall at any time after the Date of Issuance but prior to the Expiration Date subdivide its shares of capital stock of the same class as the Warrant Shares, by split-up or otherwise, or combine such shares of capital stock, or issue additional shares of capital stock as a dividend with respect to any shares of such capital stock, the number of Warrant Shares issuable on the exercise of this Warrant shall forthwith be proportionately increased in the case of a subdivision or stock dividend, or proportionately decreased in the case of a combination. Appropriate adjustments shall also be made to the Exercise Price payable per share, but the aggregate Exercise Price payable for the total number of Warrant Shares purchasable under this Warrant (as adjusted) shall remain the same.

Any adjustment under this Section 2(a)(1), shall become effective at the close of business on the date the subdivision or combination becomes effective, or as of the record date of such dividend, or in the event that no record date is fixed, upon the making of such dividend.

(2) Reclassification, Reorganizations and Consolidation. In case of any reclassification, capital reorganization or change in the capital stock of the Company (other than as a result of a subdivision, combination or stock dividend provided for in Section 2(a)(1) above) that occurs after the Date of Issuance, then, as a condition of such reclassification, reorganization or change, lawful provision shall be made, and duly executed documents evidencing the same from the Company or its successor shall be delivered to the Warrantholder, so that the Warrantholder shall thereafter have the right at any time prior to the expiration of this Warrant to purchase, at a total price equal to that payable upon the exercise of this Warrant, the kind and amount of shares of stock and/or other securities or property (including, if applicable, cash) receivable in connection with such reclassification, reorganization or change by a holder of the same number and type of securities as were purchasable as Warrant Shares by the Warrantholders immediately prior to such reclassification, reorganization or change. In any such case appropriate provisions shall be made with respect to the rights and interest of the Warrantholder so that the provisions hereof shall thereafter be applicable with respect to any shares of stock or other securities or property deliverable upon exercise hereof, and appropriate adjustments shall be made to the Exercise Price payable hereunder, provided the aggregate Exercise Price shall remain the same (and, for the avoidance of doubt, this Warrant shall be exclusively exercisable for such shares of stock and/or other securities or property from and after the consummation of such reclassification or other change in the capital stock of the Company).

(b) Notice to Warrantholder. If, while this Warrant is outstanding, the Company (i) declares a dividend or any other distribution of cash, securities or other property in respect of its Common Stock, including, without limitation, any granting of rights or warrants to subscribe for or purchase any capital stock of the Company or any subsidiary, (ii) authorizes or approves, enters into any agreement contemplating or solicits stockholder approval for any Change of Control or (iii) authorizes the voluntary dissolution, liquidation or winding up of the affairs of the Company, then the Company shall deliver to the Warrantholder a notice of such transaction at least ten (10) business days prior to the applicable record or effective date on which a person would need to hold Common Stock in order to participate in or vote with respect to such transaction; provided, however, that the failure to deliver such notice or any defect therein shall not affect the validity of the corporate action required to be described in such notice.

(c) Calculations. All calculations under this Section 2 shall be made to the nearest cent or the nearest whole share, as the case may be. For purposes of this Section 2, the number of shares of Common Stock deemed to be issued and outstanding as of a given date shall be the sum of the number of shares of Common Stock (excluding treasury shares, if any) issued and outstanding.

(d) Treatment of Warrant upon a Change of Control.

(1) If, at any time while this Warrant is outstanding, the Company consummates a Change of Control, then a holder shall have the right thereafter to receive, upon exercise of this Warrant, the same amount and kind of securities, cash or property as it would have been entitled to receive upon the occurrence of such Change of Control if it had been, immediately prior to such Change of Control, a holder of the number of Warrant Shares then issuable upon exercise in full of this Warrant (the “**Alternate Consideration**”). The Company shall not effect any such Change of Control unless prior to or simultaneously with the consummation thereof, any successor to the Company, surviving entity or the corporation purchasing or otherwise acquiring such assets or other appropriate corporation or entity shall assume the obligation to deliver to the holder, such Alternate Consideration as, in accordance with the foregoing provisions, the holder may be entitled to purchase, and the other obligations under this Warrant.

(2) As used in this Warrant, a “**Change of Control**” shall mean (i) a merger or consolidation of the Company with another corporation (other than a merger effected exclusively for the purpose of changing the domicile of the Company), (ii) the sale, assignment, transfer, conveyance or other

disposal of all or substantially all of the properties or assets or all or a majority of the outstanding voting shares of capital stock of the Company, (iii) a purchase, tender or exchange offer accepted by the holders of a majority of the outstanding voting shares of capital stock of the Company, or (iv) a “person” or “group” (as these terms are used for purposes of Section 13(d) and 14(d) of the Securities Exchange Act of 1934, as amended (the “**Exchange Act**”)) is or shall become the “beneficial owner” (as defined in Rule 13d-3 under the Exchange Act), directly or indirectly at least a majority of the voting power of the capital stock of the Company.

3. **NO FRACTIONAL SHARES.** No fractional Warrant Shares or scrip representing fractional shares will be issued upon exercise of this Warrant. In lieu of any fractional shares which would otherwise be issuable, the Company shall pay cash equal to the product of such fraction multiplied by the Fair Market Value of one Warrant Share.

4. **NO STOCKHOLDER RIGHTS.** Until the exercise of this Warrant or any portion of this Warrant, the Warrantholder shall not have, nor exercise, any rights as a stockholder of the Company (including without limitation the right to notification of stockholder meetings or the right to receive any notice or other communication concerning the business and affairs of the Company) except as provided in Section 8 below.

5. **MECHANICS OF EXERCISE.**

(a) Delivery of Warrant Shares Upon Exercise. This Warrant may be exercised by the holder hereof, in whole or in part, by delivering to the Company (or such other office or agency of the Company as it may designate by notice in writing to the registered Warrantholder at the address of the Warrantholder appearing on the books of the Company) of a duly executed copy of the Notice of Exercise in the form attached hereto as Exhibit A by facsimile or e-mail attachment and paying the Exercise Price (unless the Warrantholder has elected to Net Exercise) then in effect with respect to the number of Warrant Shares as to which the Warrant is being exercised. This Warrant shall be deemed to have been exercised immediately prior to the close of business on the date of the delivery to the Company of the Notice of Exercise as provided above, and the person entitled to receive the Warrant Shares issuable upon such exercise shall be treated for all purposes as the holder of such shares of record as of the close of business on such date. Warrant Shares purchased hereunder shall be transmitted by the Company’s transfer agent to the holder by crediting the account of the holder’s prime broker with The Depository Trust Company through its Deposit or Withdrawal at Custodian system (“**DWAC**”) if the Company is then a participant in such system and either (A) there is an effective registration statement permitting the issuance of the Warrant Shares to or resale of the Warrant Shares by the holder or (B) the shares are eligible for resale by the holder without volume or manner-of-sale limitations pursuant to Rule 144, and otherwise by physical delivery to the address specified by the holder in the Notice of Exercise by the end of the day on the date that is three (3) trading days from the delivery to the Company of the Notice of Exercise and payment of the aggregate Exercise Price (the “**Warrant Share Delivery Date**”), unless exercised by means of a cashless exercise pursuant to Section 1(c). The Warrant Shares shall be deemed to have been issued, and the holder or any other person so designated to be named therein shall be deemed to have become a holder of record of such shares for all purposes, as of the date the Warrant has been exercised, with payment to the Company of the Exercise Price (or by Net Exercise) and all taxes required to be paid by the holder, if any, prior to the issuance of such shares, having been paid.

(b) Rescission Rights. If the Company fails to cause the transfer agent to transmit to the Warrantholder the Warrant Shares pursuant to Section 5(a) by the Warrant Share Delivery Date, then the Warrantholder will have the right to rescind such exercise.

6. **CERTIFICATE OF ADJUSTMENT.** Whenever the Exercise Price or number or type of securities issuable upon exercise of this Warrant is adjusted, as herein provided, the Company shall, at its expense, promptly deliver to the Warrantholder a certificate of an officer of the Company setting forth the nature of such adjustment and showing in detail the facts upon which such adjustment is based.

7. COMPLIANCE WITH SECURITIES LAWS.

(a) The Warrantholder understands that this Warrant and the Warrant Shares are characterized as “restricted securities” under the federal securities laws inasmuch as they are being acquired from the Company in a transaction not involving a public offering and that under such laws and applicable regulations this Warrant and the Warrant Shares may be resold without registration under the Securities Act only in certain limited circumstances. In this connection, the Warrantholder represents that it is familiar with Rule 144 under the Securities Act, as presently in effect, and understands the resale limitations imposed thereby and by the Securities Act.

(b) Prior and as a condition to the sale or transfer of the Warrant Shares issuable upon exercise of this Warrant, the Warrantholder shall furnish to the Company such certificates, representations, agreements and other information, including an opinion of counsel, as the Company or the Company’s transfer agent reasonably may require to confirm that such sale or transfer is being made pursuant to an exemption from, or in a transaction not subject to, the registration requirements of the Securities Act, unless such Warrant Shares are being sold or transferred pursuant to an effective registration statement.

(c) The Warrantholder acknowledges that the Company may place a restrictive legend on the Warrant Shares issuable upon exercise of this Warrant in order to comply with applicable securities laws, in substantially the following form and substance, unless such Warrant Shares are otherwise freely tradable under Rule 144 of the Securities Act:

“THE SECURITIES EVIDENCED BY THIS CERTIFICATE HAVE NOT BEEN REGISTERED UNDER THE U.S. SECURITIES ACT OF 1933, AS AMENDED (THE “SECURITIES ACT”), OR ANY OTHER APPLICABLE SECURITIES LAWS AND HAVE BEEN ISSUED IN RELIANCE UPON AN EXEMPTION FROM THE REGISTRATION REQUIREMENTS OF THE SECURITIES ACT AND SUCH OTHER SECURITIES LAWS. NEITHER THIS SECURITY NOR ANY INTEREST OR PARTICIPATION HEREIN MAY BE REOFFERED, SOLD, ASSIGNED, TRANSFERRED, PLEDGED, ENCUMBERED, HYPOTHECATED OR OTHERWISE DISPOSED OF, EXCEPT PURSUANT TO AN EFFECTIVE REGISTRATION STATEMENT UNDER THE SECURITIES ACT OR PURSUANT TO A TRANSACTION WHICH IS EXEMPT FROM, OR NOT SUBJECT TO, SUCH REGISTRATION, IN EACH CASE IN ACCORDANCE WITH ALL APPLICABLE SECURITIES LAWS, AND IN THE CASE OF A TRANSACTION EXEMPT FROM, OR NOT SUBJECT TO, SUCH REGISTRATION, UNLESS THE COMPANY HAS RECEIVED AN OPINION OF COUNSEL REASONABLY SATISFACTORY TO IT THAT SUCH TRANSACTION DOES NOT REQUIRE REGISTRATION UNDER THE SECURITIES ACT AND SUCH OTHER APPLICABLE LAWS.”

8. REPLACEMENT OF WARRANTS. On receipt of evidence reasonably satisfactory to the Company of the loss, theft, destruction or mutilation of this Warrant and, in the case of any such loss, theft or destruction of this Warrant, on delivery of an indemnity agreement reasonably satisfactory in form and amount to the Company or, in the case of any such mutilation, on surrender and cancellation of such Warrant, the Company at its expense will execute and deliver, in lieu thereof, a new Warrant of like tenor.

9. NO IMPAIRMENT. Except to the extent as may be waived by the holder of this Warrant, the Company will not, by amendment of its charter or through a Change of Control, dissolution, sale of assets or any other voluntary action, avoid or seek to avoid the observance or performance of any of the terms of this Warrant, but will at all times in good faith assist in the carrying out of all such terms and in the taking of all such action as may be necessary or appropriate in order to protect the rights of the Warrantholder against impairment.

10. TRADING DAYS. If the last or appointed day for the taking of any action or the expiration of any right required or granted herein shall be other than a day on which the Common Stock is traded on the Trading Market, then such action may be taken or such right may be exercised on the next succeeding day on which the Common Stock is so traded.

11. TRANSFERS; EXCHANGES.

(a) Subject to compliance with applicable federal and state securities laws and Section 7 hereof, this Warrant may be transferred by the Warrantholder to any Affiliate (as defined below) with respect to any or all of the Warrant Shares purchasable hereunder (a “**Permitted Transfer**”). For a transfer of this Warrant as an entirety by the Warrantholder, upon surrender of this Warrant to the Company, together with the Notice of Assignment in the form attached hereto as Exhibit B duly completed and executed on behalf of the Warrantholder, the Company shall issue a new Warrant of the same denomination to the assignee. For a transfer of this Warrant with respect to a portion of the Warrant Shares purchasable hereunder, upon surrender of this Warrant to the Company, together with the Notice of Assignment in the form attached hereto as Exhibit B duly completed and executed on behalf of the Warrantholder, the Company shall issue a new Warrant to the assignee, in such denomination as shall be requested by the Warrantholder, and shall issue to the Warrantholder a new Warrant covering the number of shares in respect of which this Warrant shall not have been transferred. The term “**Affiliate**” as used herein means, with respect to any person, any other person that, directly or indirectly through one or more intermediaries, controls, is controlled by or is under common control with such person, and any officers, employees or partners of the Warrantholder.

(b) Upon any Permitted Transfer, this Warrant is exchangeable, without expense, at the option of the Warrantholder, upon presentation and surrender hereof to the Company for other warrants of different denominations entitling the holder thereof to purchase in the aggregate the same number of shares of Common Stock purchasable hereunder. This Warrant may be divided or combined with other warrants that carry the same rights upon presentation hereof at the principal office of the Company together with a written notice specifying the denominations in which new warrants are to be issued to the Warrantholder and signed by the Warrantholder hereof. The term “**Warrants**” as used herein includes any warrants into which this Warrant may be divided or exchanged.

12. AUTHORIZED SHARES. The Company covenants that, during the period the Warrant is outstanding, it will reserve from its authorized and unissued Common Stock a sufficient number of shares to provide for the issuance of the Warrant Shares upon the exercise of any purchase rights under this Warrant. The Company further covenants that its issuance of this Warrant shall constitute full authority to its officers who are charged with the duty of issuing the necessary Warrant Shares upon the exercise of the purchase rights under this Warrant. The Company will take all such reasonable action as may be necessary to assure that such Warrant Shares may be issued as provided herein without violation of any applicable law or regulation, or of any requirements of the Trading Market upon which the Common Stock may be quoted or listed. The Company covenants that all Warrant Shares which may be issued upon the exercise of the purchase rights represented by this Warrant will, upon exercise of the purchase rights represented by this Warrant and payment for such Warrant Shares in accordance herewith, be duly authorized, validly issued, fully paid and nonassessable and free from all taxes, liens and charges created by the Company in respect of the issue thereof (other than taxes in respect of any transfer occurring contemporaneously with such issue).

13. MISCELLANEOUS.

(a) This Agreement shall be governed by and construed in accordance with the laws of the United States of America and the State of Delaware, both substantive and remedial, without regard to Delaware conflicts of law principles. Any judicial proceeding brought under this Agreement or any dispute arising out of this Agreement or any matter related hereto shall be brought in the Court of Chancery of the State of Delaware, or in the United States District Court for the District of Delaware.

(b) All notices, requests, consents and other communications hereunder shall be in writing, shall be sent by confirmed facsimile or electronic mail, or mailed by first-class registered or certified airmail, or nationally recognized overnight express courier, postage prepaid, and shall be deemed given when so sent in the case of facsimile or electronic mail transmission, or when so received in the case of mail or courier, and addressed as follows: (a) if to the Company, at TapImmune Inc., 5 West Forsyth Street, Suite 200, Jacksonville, FL 32202 Attn: Mr. Peter L. Hoang, e-mail: phoang@tapimmune.com; with a

copy to (which shall not constitute notice) Seyfarth Shaw LLP, 700 Milam Street, Ste. 1400, Houston, Texas 77002, Attn: Paul Pryzant, Esq., e-mail: ppryzant@seyfarth.com, and (b) if to the Warrantholder, at such address or addresses (including copies to counsel) as may have been furnished by the Warrantholder to the Company in writing.

(c) The invalidity or unenforceability of any provision hereof shall in no way affect the validity or enforceability of any other provisions.

[Signature Page Follows]

IN WITNESS WHEREOF, this Common Stock Purchase Warrant is issued effective as of the date first set forth above.

TAPIMMUNE INC.

By: _____

Name: Peter L. Hoang

Title: Chief Executive Officer, President

[Signature Page to Marker Merger Warrant]

EXHIBIT A

NOTICE OF EXERCISE
(To be signed only upon exercise of Warrant)

To: TapImmune Inc.

The undersigned, the Warrantholder of the attached Warrant, hereby irrevocably elects to exercise the purchase right represented by such Warrant for, and to purchase thereunder, _____ (_____) shares of Common Stock of TapImmune Inc. and (choose one)

_____ herewith makes payment of _____ Dollars (\$_____) thereof

or

_____ elects to Net Exercise the Warrant pursuant to Section 1(b)(2) thereof.

The undersigned requests that the certificates or book entry position evidencing the shares to be acquired pursuant to such exercise be issued in the name of, and delivered to _____, whose address is _____.

By its signature below the undersigned hereby represents and warrants that it is an "accredited investor" as defined in Rule 501(a) of Regulation D promulgated under the Securities Act of 1933, as amended, and agrees to be bound by the terms and conditions of the attached Warrant as of the date hereof, including Section 7 thereof.

DATED:

(Signature must conform in all respects to name of the Warrantholder as specified on the face of the Warrant)

[_____] Address: _____

EXHIBIT B

NOTICE OF ASSIGNMENT FORM

FOR VALUE RECEIVED, [_____] (the “Assignor”) hereby sells, assigns and transfers all of the rights of the undersigned Assignor under the attached Warrant with respect to the number of shares of common stock of TapImmune Inc. (the “Company”) covered thereby set forth below, to the following “Assignee” and, in connection with such transfer, represents and warrants to the Company that the transfer is in compliance with Section 7 of the Warrant and applicable federal and state securities laws:

NAME OF ASSIGNEE

ADDRESS/FAX NUMBER

Number of shares: _____

Dated: _____

Signature: _____

Witness: _____

ASSIGNEE ACKNOWLEDGMENT

The undersigned Assignee acknowledges that it has reviewed the attached Warrant and by its signature below it hereby represents and warrants that it is an “accredited investor” as defined in Rule 501(a) of Regulation D promulgated under the Securities Act of 1933, as amended, and agrees to be bound by the terms and conditions of the Warrant as of the date hereof, including Section 7 thereof.

Signature: _____

By: _____

Its: _____

Address:

EXHIBIT G
FORM OF REGISTRATION RIGHTS AGREEMENT

REGISTRATION RIGHTS AGREEMENT

THIS REGISTRATION RIGHTS AGREEMENT (this “**Agreement**”) is made and entered into effective as of [•], 2018 (the “**Effective Date**”) between TAPIMMUNE INC., a Nevada corporation (the “**Company**”), and the persons who have executed the signature page(s) hereto (each, a “**Holder**” and collectively, the “**Holders**”).

RECITALS:

WHEREAS, on May 15, 2018, the Company, Timberwolf Merger Sub, Inc., a Delaware corporation and wholly-owned subsidiary of the Company (“**Merger Sub**”), and Marker Therapeutics, Inc., a Delaware corporation (“**Marker**”), entered into an Agreement and Plan of Merger and Reorganization (the “**Merger Agreement**”), pursuant to which Merger Sub has been merged with and into Marker, with Marker being the surviving corporation and becoming a wholly-owned subsidiary of the Company (the “**Merger**”); and

WHEREAS, in connection with the Merger and pursuant to the Merger Agreement, the Holders acquired shares (the “**Shares**”) of the Company’s common stock, par value \$0.001 per share (“**Company Common Stock**”), and warrants to purchase share of the Company Common Stock (the “**Warrants**”); and

WHEREAS, in order to induce the Holders to adopt and approve the Merger Agreement and approve the Merger and other transactions contemplated in the Merger Agreement, the Company has agreed to provide the registration rights set forth in this Agreement.

NOW, THEREFORE, in consideration of the mutual promises, representations, warranties, covenants, and conditions set forth herein, the parties mutually agree as follows:

1. **Certain Definitions.** As used in this Agreement, the following terms shall have the following respective meanings:

“**Allowed Delay**” has the meaning set forth in Section 3(d)(2).

“**Approved Market**” means the Over-the-Counter Bulletin Board, the OTC Markets, the Pink Sheets, the Nasdaq Stock Market, the New York Stock Exchange or the NYSE MKT Exchange.

“**Blackout Period**” means, with respect to a registration, a period, in each case commencing on the day immediately after the Company notifies the Holders that they are required to suspend offers and sales of Registrable Securities because a Suspension Event has occurred and ending on the earlier of (1) the date upon which the material non-public information commencing the Blackout Period is disclosed to the public or ceases to be material and (2) such time as the Company notifies the selling Holders that the Company will no longer delay such filing of the Registration Statement, recommence taking steps to make such Registration Statement effective, or allow sales pursuant to such Registration Statement to resume.

“**Business Day**” means any day of the year, other than a Saturday, Sunday, or other day on which the Commission is required or authorized to close.

“**Commission**” means the U. S. Securities and Exchange Commission or any other federal agency at the time administering the Securities Act.

“**Common Stock**” means the common stock, par value \$0.001 per share, of the Company and any and all shares of capital stock or other equity securities of: (i) the Company which are added to or exchanged or substituted for the Common Stock by reason of the declaration of any stock dividend or stock split, the issuance of any distribution or the reclassification, readjustment, recapitalization or other such modification of the capital structure of the Company; and (ii) any other corporation, now or hereafter organized under the laws of any state or other governmental authority, with which the Company is merged, which results from any consolidation or reorganization to which the Company is a party, or to which is sold all or substantially all of the shares or assets of the Company, if immediately after such merger, consolidation, reorganization or sale, the Company or the stockholders of the Company own equity securities having in the aggregate more than 50% of the total voting power of such other corporation.

“**Effective Date**” has the meaning given it in the preamble to this Agreement.

“Exchange Act” means the Securities Exchange Act of 1934, as amended, and the rules and regulations of the Commission promulgated thereunder.

“Family Member” means (a) with respect to any individual, such individual’s spouse, any descendants (whether natural or adopted), any trust all of the beneficial interests of which are owned by any of such individuals or by any of such individuals together with any organization described in Section 501(c)(3) of the Internal Revenue Code of 1986, as amended, the estate of any such individual, and any corporation, association, partnership or limited liability company all of the equity interests of which are owned by those above described individuals, trusts or organizations, and (b) with respect to any trust, the owners of the beneficial interests of such trust.

“Initial Registration Statement” means the initial Registration Statement filed pursuant to this Agreement.

“Majority Holders” means at any time Holders representing a majority of the Registrable Securities.

“Permitted Assignee” means (a) with respect to a partnership, its partners or former partners, (b) with respect to a corporation, its stockholders, (c) with respect to a limited liability company, its members or former members, (d) with respect to an individual party, any Family Member of such party, (e) an entity that is controlled by, controls, or is under common control with a transferor, or (f) a party to this Agreement.

“Piggyback Registration” means, in any registration of Common Stock as set forth in Section 3(b), the ability of holders of Registrable Securities to include Registrable Securities in such registration.

The terms “register,” “registered,” and “registration” refer to a registration effected by preparing and filing a registration statement in compliance with the Securities Act, and the declaration or ordering of the effectiveness of such registration statement.

“Registrable Warrant Shares” means the shares of Common Stock issuable upon the exercise of the Warrants.

“Registrable Securities” means the Shares and the Registrable Warrant Shares, but excluding, subject to Section 3(d), (i) any Registrable Securities that have been publicly sold or may be sold immediately without registration under the Securities Act either pursuant to Rule 144 of the Securities Act or otherwise, without any limitations or restrictions, (ii) any Registrable Securities sold by a person in a transaction pursuant to a registration statement filed under the Securities Act, or (iii) any Registrable Securities that are at the time subject to an effective registration statement under the Securities Act.

“Registration Filing Date” means the date that is 180 days after the date of the closing of the Merger.

“Registration Statement” means the registration statement that the Company is required to file pursuant to this Agreement to register the Registrable Securities.

“Rule 144” means Rule 144 promulgated by the Commission under the Securities Act.

“Rule 145” means Rule 145 promulgated by the Commission under the Securities Act.

“Rule 415” means Rule 415 promulgated by the Commission pursuant to the Securities Act, as such Rule may be amended from time to time, or any similar rule or regulation hereafter adopted by the SEC having substantially the same purpose and effect as such Rule.

“Securities Act” means the Securities Act of 1933, as amended, or any similar federal statute promulgated in replacement thereof, and the rules and regulations of the Commission thereunder, all as the same shall be in effect at the time.

“SEC Effective Date” means the date the Registration Statement is declared effective by the Commission.

“Shelf Registration Statement” means a Shelf Registration Statement as defined in Section 3(a).

“Suspension Event” means the occurrence of any of the following events:

(i) a majority of the board of directors of the Company determines in good faith that (A) the offer or sale of any Registrable Securities would materially impede, delay or interfere with any proposed financing, offer or sale of securities, acquisition, corporate reorganization or other material transaction involving the Company, (B) the sale of Registrable Securities pursuant to such Shelf Registration Statement or other registration statement would require disclosure of non-public material information not otherwise required to be disclosed under applicable law, or (C)(x) the Company has a bona fide business purpose for preserving the confidentiality of a material transaction, (y) disclosure would have a material adverse effect on the Company or the Company’s ability to consummate such a material transaction, or (z) such a material transaction renders the Company unable to comply with Commission requirements, in each case under circumstances that would make it impractical or inadvisable to cause the Shelf Registration Statement or other registration statement (or such filings) to become effective or to promptly amend or supplement the Shelf Registration Statement or other registration statement on a post-effective basis, as applicable;

(ii) a majority of the board of directors of the Company determines in good faith that it is in the Company’s best interest or it is required by law, rule or regulation to supplement the Shelf Registration Statement or other registration statement or file a post-effective amendment to such Shelf Registration Statement or other registration statement in order to ensure that the prospectus included in the Shelf Registration Statement or other registration statement (1) contains the information required by the form on which such Shelf Registration Statement or other registration statement was filed, or (2) discloses any facts or events arising after the effective date of the Shelf Registration Statement or other registration statement (or of the most recent post-effective amendment) that, individually or in the aggregate, represents a fundamental change in the information set forth therein; or

(iii) a majority of the Company’s board of directors determines in good faith that an event has occurred or is continuing as a result of which the Shelf Registration Statement, other registration statement or Prospectus contained therein contains an untrue statement of a material fact or omits any fact necessary to make the statements therein not misleading causing such Shelf Registration Statement, other registration statement or Prospectus contained therein not to be usable for resale of the Registrable Shares during the period required by this Agreement.

“Trading Day” means (a) if the Common Stock is listed or quoted on an Approved Market, then any day during which securities are generally eligible for trading on the Approved Market, or (b) if the Common Stock is not then listed or quoted and traded on an Approved Market, then any business day.

2. Term. This Agreement shall continue in full force and effect until the one (1) year anniversary of the SEC Effective Date, unless terminated sooner hereunder.

3. Registration.

(a) Mandatory Shelf Registration.

(i) Not later than the Registration Filing Date, if the Company has not already filed a Registration Statement in which Holders exercised their Piggyback Registration rights under Section 3(b) below and such Registration Statement has not been declared effective, the Company shall file with the Commission a shelf Registration Statement on Form S-3 or such other form under the Securities Act then available to the Company providing for the resale pursuant to Rule 415 from time to time by the Holders of any and all Registrable Securities beneficially owned by the Holders (the “**Shelf Registration Statement**”). The Company agrees to use its commercially reasonable efforts to cause the Shelf Registration Statement to be declared effective by the SEC within 90 calendar days after the initial date of filing thereof. Except as may be provided herein, the Company shall have no right to withdraw the Shelf Registration Statement.

(ii) The Company shall use its commercially reasonable efforts to cause the Shelf Registration Statement to remain continuously effective until the earliest of (A) the sale pursuant to a registration statement of all of the Registrable Securities covered by the Shelf Registration Statement, (B) the sale, transfer or other disposition pursuant to Rule 144 of all of the Registrable

Securities covered by the Shelf Registration Statement, (C) such time as the Registrable Securities covered by the Shelf Registration Statement that are not held by Affiliates of the Company are, in the opinion of counsel to the Company, eligible for resale pursuant to Rule 144 without any limitations or restrictions, or (D) such time as all of the Registrable Securities covered by the Shelf Registration Statement have been sold to the Company or any of its subsidiaries. The Shelf Registration Statement shall provide for the resale of Registrable Securities from time to time, and pursuant to any method or combination of methods legally available to, and requested by, any Holder.

(iii) If the Majority Holders intend to distribute Registrable Securities under the Shelf Registration Statement by means of an underwritten offering, the Majority Holders will so advise the Company. In such event, the Majority Holders will have the right to select one bookrunner for the offering, provided that such bookrunner is reasonably satisfactory to the Company. The expenses and compensation of any underwriters in any underwritten offering pursuant to the Shelf Registration Statement shall be the sole responsibility of the Holders whose Registrable Securities are included in any such Registration Statement.

(b) Piggyback Registration. In addition to the Company agreement pursuant to Section 3(a) above, if the Company shall determine to register for sale for cash any of its Common Stock, for its own account or for the account of others (other than the Holders), other than (i) a registration relating solely to employee benefit plans or securities issued or issuable to employees, consultants (to the extent the securities owned or to be owned by such consultants could be registered on Form S-8) or any of their Family Members (including a registration on Form S-8) or (ii) a registration relating solely to a Securities Act Rule 145 transaction or a registration on Form S-4 in connection with a merger, acquisition, divestiture, reorganization or similar event, the Company shall promptly give to the Holders written notice thereof (and in no event shall such notice be given less than 20 calendar days prior to the filing of such registration statement), and shall, subject to Section 3(d), include as a Piggyback Registration of all of the Registrable Securities specified in a written request delivered by the Holder thereof within 10 calendar days after receipt of such written notice from the Company together with a completed and duly executed Selling Securityholder Notice and Questionnaire in the form attached hereto as Annex A. However, the Company may, without the consent of the Holders, withdraw such registration statement prior to its becoming effective if the Company or such other stockholders have elected to abandon the proposal to register the securities proposed to be registered thereby.

(c) Underwriting. If a Piggyback Registration is for a registered public offering that is to be made by an underwriting, the Company shall so advise the Holders of the Registrable Securities eligible for inclusion in such Registration Statement pursuant to Section 3(b). In that event, the right of any Holder to Piggyback Registration shall be conditioned upon such Holder's participation in such underwriting and the inclusion of such Holder's Registrable Securities in the underwriting to the extent provided herein. All Holders proposing to sell any of their Registrable Securities through such underwriting shall (together with the Company and any other stockholders of the Company selling their securities through such underwriting) enter into an underwriting agreement in customary form with the underwriter selected for such underwriting by the Company or the selling stockholders, as applicable. Notwithstanding any other provision of this Section, if the underwriter or the Company determines that marketing factors require a limitation on the number of shares of Common Stock or the amount of other securities to be underwritten, the underwriter may exclude some or all Registrable Securities from such registration and underwriting. The Company shall so advise all Holders (except those Holders who failed to timely elect to include their Registrable Securities through such underwriting or have indicated to the Company their decision not to do so), and indicate to each such Holder the number of shares of Registrable Securities that may be included in the registration and underwriting, if any. The number of shares of Registrable Securities to be included in such registration and underwriting shall be allocated among such Holders as follows:

(i) If the Piggyback Registration was initiated by the Company, the number of shares that may be included in the registration and underwriting shall be allocated first to the Company and then, subject to obligations and commitments existing as of the date hereof, to all selling stockholders, including the Holders, who have requested to sell in the registration on a pro rata

basis according to the number of shares requested to be included therein but in no event less than 50% of the Registrable Securities; and

(ii) If the Piggyback Registration was initiated by the exercise of demand registration rights by a stockholder or stockholders of the Company (other than the Holders), then the number of shares that may be included in the registration and underwriting shall be allocated first to such selling stockholders who exercised such demand and then, subject to obligations and commitments existing as of the date hereof, to all other selling stockholders, including the Holders, who have requested to sell in the registration on a pro rata basis according to the number of shares requested to be included therein.

No Registrable Securities excluded from the underwriting by reason of the underwriter's marketing limitation shall be included in such registration. If any Holder disapproves of the terms of any such underwriting, such Holder may elect to withdraw such Holder's Registrable Securities therefrom by delivering a written notice to the Company and the underwriter. The Registrable Securities so withdrawn from such underwriting shall also be withdrawn from such registration; provided, however, that, if by the withdrawal of such Registrable Securities, a greater number of Registrable Securities held by other Holders may be included in such registration (up to the maximum of any limitation imposed by the underwriters), then the Company shall offer to all Holders who have included Registrable Securities in the registration the right to include additional Registrable Securities pursuant to the terms and limitations set forth herein in the same proportion used above in determining the underwriter limitation.

(d) Cutbacks:

(1)(a) if the Commission does not declare the Registration Statement effective, or (b) if the Commission allows the Registration Statement to be declared effective, subject to the withdrawal of certain Registrable Securities from the Registration Statement, and the reason for (a) or (b) is the Commission's determination that (x) the offering of any of the Registrable Securities constitutes a primary offering of securities by the Company, (y) Rule 415 may not be relied upon for the registration of the resale of any or all of the Registrable Securities, and/or (z) a Holder of any Registrable Securities must be named as an underwriter, the Holders understand and agree that in the case of (b) the Company may reduce, on a *pro rata* basis, the total number of Registrable Securities to be registered on behalf of each such Holder. In any such *pro rata* reduction, the number of Registrable Securities to be registered on such Registration Statement will first be reduced by (i) first, the Registrable Securities represented by the Registrable Warrant Shares (applied, in the case that some Registrable Warrant Shares may be registered, to the Holders on a *pro rata* basis based on the total number of unregistered Registrable Warrant Shares held by such Holders on a fully diluted basis), and (ii) second, Registrable Securities represented by Shares (applied, in the case that some Shares may be registered, to the Holders on a *pro rata* basis based on the total number of unregistered Shares held by such Holders) only if the issue of the Commission with the Registration Statement is the inclusion of the Registrable Securities. In addition, any such affected Holder shall be entitled to Piggyback Registration rights after the Registration Statement is declared effective by the Commission until such time as: (AA) all Registrable Securities have been registered pursuant to an effective Registration Statement, (BB) the Registrable Securities may be resold pursuant to Rule 144 of the Securities Act without any limitations or restrictions, or (CC) the Holder agrees to be named as an underwriter in any such registration statement. The Holders acknowledge and agree the provisions of this paragraph may apply to more than one Registration Statement; and

(2) For not more than thirty (30) consecutive days or for a total of not more than ninety (90) days in any twelve (12) month period, the Company may suspend the use of any prospectus included in any Registration Statement contemplated by this Section upon the occurrence of any Suspension Event (an "**Allowed Delay**"); provided, that the Company shall promptly (a) notify each Holder in writing of the commencement of an Allowed Delay, but shall not (without the prior written consent of an Holder) disclose to such Holder any material non-public information giving rise to an Allowed Delay, (b) advise the Holders in writing to cease all sales under the Registration Statement until the end of the Allowed Delay and (c) use commercially reasonable efforts to terminate an Allowed Delay as promptly as practicable.

4. Registration Procedures for Registrable Securities. The Company will keep each Holder included as a selling stockholder in the Registration Statement reasonably advised as to the filing and effectiveness of the Registration Statement. At its expense with respect to the Registration Statement, the Company will:

(a) prepare and file with the Commission with respect to the Registrable Securities, a Registration Statement on Form S-3, or any other form for which the Company then qualifies or which counsel for the Company shall deem appropriate and which form shall be available for the sale of the Registrable Securities in accordance with the intended methods of distribution thereof, and use its commercially reasonable efforts to cause such Registration Statement to become effective and shall remain effective for a period of three years or for such shorter period ending on the earlier to occur of (i) the date as of which all of the Holders as selling stockholders thereunder may sell all of the Registrable Securities registered for resale thereon without any limitations or restrictions under paragraphs (e) or (f) of Rule 144 or (ii) the date when all of the Registrable Securities registered thereunder shall have been sold (the “**Effectiveness Period**”). Thereafter, the Company shall be entitled to withdraw such Registration Statement and the Holders shall have no further right to offer or sell any of the Registrable Securities registered for resale thereon pursuant to the respective Registration Statement (or any prospectus relating thereto);

(b) if the Registration Statement is subject to review by the Commission, respond in a commercially reasonable manner to all comments and diligently pursue resolution of any comments to the satisfaction of the Commission;

(c) prepare and file with the Commission such amendments and supplements to such Registration Statement as may be necessary to keep such Registration Statement effective during the Effectiveness Period and to permit Holders to sell;

(d) furnish, without charge, to each Holder of Registrable Securities covered by such Registration Statement (i) a reasonable number of copies of such Registration Statement (including any exhibits thereto other than exhibits incorporated by reference), each amendment and supplement thereto as such Holder may reasonably request, (ii) such number of copies of the prospectus included in such Registration Statement (including each preliminary prospectus and any other prospectus filed under Rule 424 of the Securities Act) as such Holders may reasonably request, in conformity with the requirements of the Securities Act, and (iii) such other documents as such Holder may require to consummate the disposition of the Registrable Securities owned by such Holder, but only during the Effectiveness Period;

(e) use its commercially reasonable efforts to register or qualify such registration under such other applicable securities laws of such jurisdictions as any Holder of Registrable Securities covered by such Registration Statement reasonably requests and as may be necessary for the marketability of the Registrable Securities (such request to be made by the time the applicable Registration Statement is deemed effective by the Commission) and do any and all other acts and things necessary to enable such Holder to consummate the disposition in such jurisdictions of the Registrable Securities owned by such Holder; provided, that the Company shall not be required to (i) qualify generally to do business in any jurisdiction where it would not otherwise be required to qualify but for this paragraph, (ii) subject itself to taxation in any such jurisdiction, or (iii) consent to general service of process in any such jurisdiction.

(f) notify each Holder of Registrable Securities, the disposition of which requires delivery of a prospectus relating thereto under the Securities Act, of any Suspension Event, and the Company shall promptly thereafter prepare and furnish to such Holder a supplement or amendment to such prospectus (or prepare and file appropriate reports under the Exchange Act) so that, as thereafter delivered to the purchasers of such Registrable Securities, such prospectus shall not contain an untrue statement of a material fact or omit to state any material fact required to be stated therein or necessary to make the statements therein not misleading, unless suspension of the use of such prospectus otherwise is authorized herein or in the event of a Blackout Period, in which case no supplement or amendment need be furnished (or Exchange Act filing made) until the termination of such suspension or Blackout Period;

(g) comply, and continue to comply during the Effectiveness Period, in all material respects with the Securities Act and the Exchange Act and with all applicable rules and regulations of the Commission with respect to the disposition of all securities covered by such Registration Statement;

(h) as promptly as practicable after becoming aware of such event, notify each Holder of Registrable Securities being offered or sold pursuant to the Registration Statement of the issuance by the Commission of any stop order or other suspension of effectiveness of the Registration Statement;

(i) use its commercially reasonable efforts to cause all the Registrable Securities covered by the Registration Statement to be quoted on the OTC Bulletin Board or such other Approved Market on which securities of the same class or series issued by the Company are then listed or traded;

(j) provide a transfer agent and registrar, which may be a single entity, for the shares of Common Stock at all times;

(k) if requested by the Holders, cooperate with the Holders to facilitate the timely preparation and delivery of any necessary prospectus supplements with respect to the resale or certificates representing Registrable Securities to be delivered to a transferee pursuant to the Registration Statement, which certificates shall be free, to the extent permitted by applicable law, of all restrictive legends, and to enable such Registrable Securities to be in such denominations and registered in such names as any such Holders may request; and

(l) take all other reasonable actions necessary to expedite and facilitate the disposition by the Holders of the Registrable Securities pursuant to the Registration Statement.

5. Suspension of Offers and Sales. Each Holder agrees that, upon receipt of any notice from the Company of a Suspension Event or of the commencement of a Blackout Period, such Holder shall discontinue the disposition of Registrable Securities included in the Registration Statement until such Holder's receipt of the copies of the supplemented or amended prospectus contemplated by Section 4(f) hereof or notice of the end of the Blackout Period, and, if so directed by the Company, such Holder shall deliver to the Company (at the Company's expense) all copies (including, without limitation, any and all drafts), other than permanent file copies, then in such Holder's possession, of the prospectus covering such Registrable Securities current at the time of receipt of such notice.

6. Registration Expenses. The Company shall pay all expenses in connection with any registration obligation provided herein, including, without limitation, all registration, filing, stock exchange fees, printing expenses, all fees and expenses of complying with applicable securities laws, and the fees and disbursements of counsel for the Company and of its independent accountants and up to \$15,000 for the legal fees for one legal counsel to Holders; provided, that, in any registration, each party shall pay for its own underwriting discounts and commissions and transfer taxes. Except as provided in this Section and Section 9, the Company shall not be responsible for the expenses of any attorney or other advisor employed by a Holder.

7. Assignment of Rights. No Holder may assign its rights under this Agreement to any party without the prior written consent of the Company; provided, however, that any Holder may assign its rights under this Agreement without such consent to a Permitted Assignee as long as (a) such transfer or assignment is effected in accordance with applicable securities laws; (b) such transferee or assignee agrees in writing to become subject to the terms of this Agreement; and (c) such Holder notifies the Company in writing of such transfer or assignment, stating the name and address of the transferee or assignee and identifying the Registrable Securities with respect to which such rights are being transferred or assigned.

8. Information by Holder. A Holder of Registrable Securities included in any registration agrees to timely cooperate with the Company as reasonably requested by the Company in connection with the preparation and filing of a Shelf Registration Statement or other registration statement hereunder and shall furnish to the Company such information regarding itself, the Registrable Securities held by it, and the intended method of disposition of such securities as shall be required in order to comply with any applicable law or regulation in connection with the registration of such Holder's Registrable Securities or any qualification or compliance with respect to such Holder's Registrable Securities and referred to in this Agreement.

9. Indemnification

(a) In the event of the offer and sale of Registrable Securities under the Securities Act, the Company shall, and hereby does, defend, indemnify and hold harmless, to the fullest extent permitted by law, each Holder, its directors, officers, partners, each other person who participates as an underwriter in the offering or sale of such securities, and each other person, if any, who controls or is under common control with such Holder or any such underwriter within the meaning of Section 15 of the Securities Act, against any losses, claims, damages or liabilities, joint or several, and expenses to which the Holder or any such director, officer, partner or underwriter or controlling person may become subject under the Securities Act, the Exchange Act, or any other federal or state law, insofar as such losses, claims, damages, liabilities or expenses (or actions or proceedings, whether commenced or threatened, in respect thereof) arise out of or are based upon any untrue statement of any material fact contained in any registration statement prepared and filed by the Company under which Registrable Securities were registered under the Securities Act, any preliminary prospectus, final prospectus or summary prospectus contained therein, or any amendment or supplement thereto, or any omission to state therein a material fact required to be stated or necessary to make the statements therein in light of the circumstances in which they were made not misleading, or any violation or alleged violation of the Securities Act, the Exchange Act, any state securities law or any rule or regulation promulgated under the Securities Act, the Exchange Act or any state securities law in connection with this Agreement; and, upon request, the Company shall reimburse the Holder, and each such director, officer, partner, underwriter and controlling person for any legal or any other expenses reasonably incurred by them in connection with investigating, defending or settling any such loss, claim, damage, liability, action or proceeding; provided, that the Company shall not be liable in any such case to the extent that any such loss, claim, damage, liability (or action or proceeding in respect thereof) or expense arises out of or is based upon an untrue statement in or omission from such registration statement, any such preliminary prospectus, final prospectus, summary prospectus, amendment or supplement in reliance upon and in conformity with written information furnished to the Company by the Holder specifically for use in the preparation thereof. Such indemnity shall remain in full force and effect regardless of any investigation made by or on behalf of the Holders, or any such director, officer, partner, underwriter or controlling person and shall survive the transfer of such shares by the Holder.

(b) As a condition to including Registrable Securities in any registration statement filed pursuant to this Agreement, each Holder agrees to be bound by the terms of this Section 9 and to indemnify and hold harmless, to the fullest extent permitted by law, the Company, its directors and officers, and each other person, if any, who controls the Company within the meaning of Section 15 of the Securities Act, against any losses, claims, damages or liabilities, joint or several, to which the Company or any such director or officer or controlling person may become subject under the Securities Act, the Exchange Act, or any other federal or state law, to the extent arising out of or based solely upon: any untrue or alleged untrue statement of a material fact contained in any registration statement, any prospectus, or any form of prospectus, or in any amendment or supplement thereto or in any preliminary prospectus, or arising out of or relating to any omission or alleged omission of a material fact required to be stated therein or necessary to make the statements therein not misleading (i) to the extent, but only to the extent, that such untrue statement or omission is contained in any information so furnished in writing by such Holder to the Company specifically for inclusion in the registration statement or such prospectus or (ii) to the extent that (1) such untrue statements or omissions are based solely upon information regarding such Holder furnished in writing to the Company by such Holder expressly for use therein, or to the extent that such information relates to such Holder or such Holder's proposed method of distribution of Registrable Securities and was reviewed and expressly approved in writing by such Holder expressly for use in the Registration Statement, such prospectus or such form of prospectus or in any amendment or supplement thereto or (2) in the case of an occurrence of an event of the type specified in Section 4(f) hereof, the use by such Holder of an outdated or defective prospectus after the Company has notified such Holder in writing that the prospectus is outdated or defective and prior to the receipt by such Holder of the advice contemplated in Section 4(f). In no event shall the liability of any selling Holder hereunder be greater in amount than the dollar amount of the net proceeds received by such Holder upon the sale of the Registrable Securities giving rise to such indemnification obligation.

(c) Promptly after receipt by an indemnified party of notice of the commencement of any action or proceeding involving a claim referred to in this Section (including any governmental action), such indemnified party shall, if a claim in respect thereof is to be made against an indemnifying party, give written notice to the indemnifying party of the commencement of such action; provided, that the failure of any indemnified party to give notice as provided herein shall not relieve the indemnifying party of its obligations under this Section, except to the extent that the indemnifying party is actually prejudiced by such failure to give notice. In case any such action is brought against an indemnified party, unless in the reasonable judgment of counsel to such indemnified party a conflict of interest between such indemnified and indemnifying parties may exist or the indemnified party may have defenses not available to the indemnifying party in respect of such claim, the indemnifying party shall be entitled to participate in and to assume the defense thereof, with counsel reasonably satisfactory to such indemnified party and, after notice from the indemnifying party to such indemnified party of its election so to assume the defense thereof, the indemnifying party shall not be liable to such indemnified party for any legal or other expenses subsequently incurred by the latter in connection with the defense thereof, unless in such indemnified party's reasonable judgment a conflict of interest between such indemnified and indemnifying parties arises in respect of such claim after the assumption of the defenses thereof or the indemnifying party fails to defend such claim in a diligent manner, other than reasonable costs of investigation. Neither an indemnified nor an indemnifying party shall be liable for any settlement of any action or proceeding effected without its consent. No indemnifying party shall, without the consent of the indemnified party, consent to entry of any judgment or enter into any settlement, which does not include as an unconditional term thereof the giving by the claimant or plaintiff to such indemnified party of a release from all liability in respect of such claim or litigation. Notwithstanding anything to the contrary set forth herein, and without limiting any of the rights set forth above, in any event any party shall have the right to retain, at its own expense, counsel with respect to the defense of a claim.

(d) If the indemnification provided for in Section 9(a) or 9(b) is held by a court of competent jurisdiction to be unavailable to an indemnified party with respect to any loss, liability, claim, damage or expense referred to herein, the indemnifying party, in lieu of indemnifying such indemnified party hereunder, shall (i) contribute to the amount paid or payable by such indemnified party as a result of such loss, liability, claim, damage or expense as is appropriate to reflect the proportionate relative fault of the indemnifying party on the one hand and the indemnified party on the other (determined by reference to, among other things, whether the untrue or alleged untrue statement of a material fact or omission relates to information supplied by the indemnifying party or the indemnified party and the parties' relative intent, knowledge, access to information and opportunity to correct or prevent such untrue statement or omission), or (ii) if the allocation provided by clause (i) above is not permitted by applicable law or provides a lesser sum to the indemnified party than the amount hereinafter calculated, not only the proportionate relative fault of the indemnifying party and the indemnified party, but also the relative benefits received by the indemnifying party on the one hand and the indemnified party on the other, as well as any other relevant equitable considerations. No indemnified party guilty of fraudulent misrepresentation (within the meaning of Section 11(f) of the Securities Act) shall be entitled to contribution from any indemnifying party who was not guilty of such fraudulent misrepresentation.

(e) Other Indemnification. Indemnification similar to that specified in this Section (with appropriate modifications) shall be given by the Company and each Holder of Registrable Securities with respect to any required registration or other qualification of securities under any federal or state law or regulation or governmental authority other than the Securities Act.

10. Rule 144. With a view to making available to the Holders the benefits of Rule 144 and any other rule or regulation of the Commission that may at any time permit the Holders to sell the Registrable Securities to the public without registration, the Company agrees: (i) to make and keep public information available as those terms are understood in Rule 144, (ii) to file with the Commission in a timely manner all reports and other documents required to be filed by an issuer of securities registered under the Securities Act or the Exchange Act pursuant to Rule 144, (iii) as long as any Holder owns any Registrable Securities, to furnish in writing upon such Holder's request a written statement by the Company that it has complied with the reporting requirements of Rule 144 and of the Securities Act and the Exchange Act, and to furnish

to such Holder a copy of the most recent annual or quarterly report of the Company, and such other reports and documents so filed by the Company as may be reasonably requested in availing such Holder of any rule or regulation of the Commission permitting the selling of any such Registrable Securities without registration, and (iv) undertake any additional actions commercially reasonably necessary to maintain the availability of the use of Rule 144.

11. Independent Nature of Each Holder's Obligations and Rights. The obligations of each Holder under this Agreement are several and not joint with the obligations of any other Holder, and each Holder shall not be responsible in any way for the performance of the obligations of any other Holder under this Agreement. Nothing contained herein and no action taken by any Holder pursuant hereto, shall be deemed to constitute such Holders as a partnership, an association, a joint venture, or any other kind of entity, or create a presumption that the Holders are in any way acting in concert or as a group with respect to such obligations or the transactions contemplated by this Agreement. Each Holder shall be entitled to independently protect and enforce its rights, including without limitation the rights arising out of this Agreement, and it shall not be necessary for any other Holder to be joined as an additional party in any proceeding for such purpose.

12. Miscellaneous.

(a) Governing Law. This Agreement shall be governed by and construed in accordance with the laws of the United States of America and the State of Delaware, both substantive and remedial, without regard to Delaware conflicts of law principles. Any judicial proceeding brought against either of the parties to this Agreement or any dispute arising out of this Agreement or any matter related hereto shall be brought in the Court of Chancery of the State of Delaware, or in the United States District Court for the District of Delaware and, by its execution and delivery of this Agreement, each party to this Agreement accepts the jurisdiction of such courts. The foregoing consent to jurisdiction shall not be deemed to confer rights on any person other than the parties to this Agreement.

(b) Remedies. In the event of a breach by the Company or by a Holder of any of their respective obligations under this Agreement, each Holder or the Company, as the case may be, in addition to being entitled to exercise all rights granted by law and under this Agreement, including recovery of damages, shall be entitled to specific performance of its rights under this Agreement. The Company and each Holder agree that monetary damages would not provide adequate compensation for any losses incurred by reason of a breach by it of any of the provisions of this Agreement and hereby further agrees that, in the event of any action for specific performance in respect of such breach, it shall not assert or shall waive the defense that a remedy at law would be adequate.

(c) Successors and Assigns. Except as otherwise provided herein, the provisions hereof shall inure to the benefit of, and be binding upon, the successors, Permitted Assignees, executors and administrators of the parties hereto.

(d) No Inconsistent Agreements. The Company has not entered, as of the date hereof, and shall not enter, on or after the date of this Agreement, into any agreement with respect to its securities that would have the effect of impairing the rights granted to the Holders in this Agreement or otherwise conflicts with the provisions hereof.

(e) Entire Agreement. This Agreement constitutes the full and entire understanding and agreement between the parties with regard to the subjects hereof.

(f) Notices, etc. All notices or other communications which are required or permitted under this Agreement shall be in writing and sufficient if delivered by hand, by facsimile transmission, by registered or certified mail, postage pre-paid, by electronic mail, or by courier or overnight carrier, to the persons at the addresses set forth below (or at such other address as may be provided hereunder), and shall be deemed to have been delivered as of the date so delivered:

If to the Company to:

TapImmune Inc.
5 West Forsyth Street, Suite 200
Jacksonville, Florida 32202
Telephone No.: (904) 862-6496
Attention: Peter Hoang
E-Mail: phoang@tapimmune.com

with copy to:

Seyfarth Shaw LLP
700 Milam Street, Suite 1400
Houston, Texas 77002
Telephone No.: (713) 238-1887
Facsimile No.: (713) 225-2340
Attention: Paul Pryzant
E-Mail: ppryzant@seyfarth.com

If to the Holders:

To each Holder at the address set forth on the signature page hereto or at such other address as any party shall have furnished to the other parties in writing, with a copy to:

Winthrop & Weinstine, P.A.
225 South Sixth Street, Suite 3500
Minneapolis, MN 55402-4629
Telephone No.: (612) 604-6677
Facsimile No.: (612) 604-6877
Attention: Mark R. Gleeman
E-Mail: mgleeman@winthrop.com

(g) Delays or Omissions. No delay or omission to exercise any right, power or remedy accruing to any Holder, upon any breach or default of the Company under this Agreement, shall impair any such right, power or remedy of such Holder nor shall it be construed to be a waiver of any such breach or default, or an acquiescence therein, or of any similar breach or default thereunder occurring; nor shall any waiver of any single breach or default be deemed a waiver of any other breach or default theretofore or thereafter occurring. Any waiver, permit, consent or approval of any kind or character on the part of any Holder of any breach or default under this Agreement, or any waiver on the part of any Holder of any provisions or conditions of this Agreement, must be in writing and shall be effective only to the extent specifically set forth in such writing. All remedies, either under this Agreement, or by law or otherwise afforded to any holder, shall be cumulative and not alternative.

(h) Counterparts. This Agreement may be executed in any number of counterparts, each of which shall be enforceable against the parties actually executing such counterparts, and all of which together shall constitute one instrument. In the event that any signature is delivered by facsimile transmission or electronic transmission via .PDF file, such signature shall create a valid and binding obligation of the party executing (or on whose behalf such signature is executed) with the same force and effect as if such facsimile or electronic signature page were an original thereof.

(i) Severability. In the case any provision of this Agreement shall be invalid, illegal or unenforceable, the validity, legality and enforceability of the remaining provisions shall not in any way be affected or impaired thereby.

(j) Amendments. The provisions of this Agreement may be amended at any time and from time to time, and particular provisions of this Agreement may be waived, with and only with an agreement or consent in writing signed by the Company and the Majority Holders. The Holders acknowledge that by the operation of this Section, the Majority Holders may have the right and power to diminish or eliminate all rights of the Holders under this Agreement.

[SIGNATURE PAGES FOLLOW]

This Registration Rights Agreement is hereby executed as of the date first above written.

COMPANY:

TAPIMMUNE INC.

By: _____

Name: Peter Hoang

Title: Chief Executive Officer, President

MARKER STOCKHOLDERS:

By: _____

Name: _____

Title: _____

Notice Address:

SCHEDULE A

Persons Executing Market Stockholder Voting and Lock-Up Agreements

1. John Wilson
2. Juan Vera
3. Ann Leen
4. Salt Free LP
5. Helen Heslop

SCHEDULE B

Persons Executing TapImmune Stockholder Voting and Lock-Up Agreements

1. Peter Hoang
2. Dr. Glynn Wilson
3. Michael J. Loiancono
4. Sherry Grisewood
5. David Laskow-Pooley
6. Mark Reddish
7. Joshua Silverman
8. Frederick Wasserman

SCHEDULE C-1

Directors of TapImmune

The TapImmune Board will be set at eight (8) directors. Three (3) Board seats will be designated by Marker, three (3) Board seats will be designated by TapImmune (including the CEO), and up to two (2) Board seats will be designated by the investors in the TapImmune Closing Financing, if requested. If the investors in the TapImmune Closing Financing request less than two (2) director seats, the size of the Board will be reduced accordingly (i.e., if the investors request one (1) seat, the Board size will be seven (7), and if they request no seats, the Board size will be six (6)).

SCHEDULE C-2

Committees of the Board of Directors TapImmune

- Compensation Committee
- Nominating and Governance Committee
- Audit Committee

Each of the committees set forth above will be constituted with at least three (3) directors, the members of which will be determined by the Parties based upon NASDAQ and SEC independence rules regarding who can sit on each committee and qualifications for each committee.

**UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D. C. 20549**

FORM 10-K

- ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934
For the Fiscal Year Ended December 31, 2017
- TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934
For the transition period from _____ to _____.



TAPIMMUNE

TAPIMMUNE INC.

(Exact name of registrant as specified in its charter)

Nevada
(State or other jurisdiction of
incorporation)

001-37939
(Commission File Number)

45-4497941
(IRS Employer Identification No.)

5 W. Forsyth Street, Suite 200
Jacksonville, FL
(Address of principal executive offices)

32202
(Zip Code)

904-516-5436

(Registrant's telephone number, including area code)

Securities registered pursuant to Section 12(b) of the Act:

Common Stock, Par Value \$0. 001

(Title of class)

Securities registered pursuant to Section 12(g) of the Act: **None**

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. Yes No

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Act. Yes No

Indicate by check mark whether the registrant (1) filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes No

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). Yes No

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K is not contained herein, and will not be contained, to the best of registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K.

Indicate by checkmark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, or a smaller reporting company.

Large accelerated filer

Accelerated filer

Non-accelerated filer (do not check if a smaller reporting company)

Smaller reporting company

Emerging growth company

Indicate by check mark whether the registrant is an emerging growth company as defined in Rule 405 of the Securities Act of 1933 (§230.405 of this chapter) or Rule 12b-2 of the Securities Exchange Act of 1934 (§240.12b-2 of this chapter).

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act.

Indicate by checkmark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act). Yes No

The aggregate market value of the voting and non-voting common equity held by non-affiliates of the registrant was approximately \$30,500,000 computed by reference to the price per share (\$3.88) at which the registrant's common equity was last sold, as of June 30, 2017 (the last day of the registrant's most recently completed second fiscal quarter).

The registrant had 10,626,140 shares of common stock outstanding as of March 16, 2018.

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FORWARD LOOKING STATEMENTS

This annual report contains forward-looking statements that involve risks and uncertainties. Any statements contained herein that are not statements of historical fact may be deemed to be forward-looking statements. In some cases, you can identify forward-looking statements by terminology such as “may”, “will”, “should”, “expect”, “plan”, “intend”, “anticipate”, “believe”, “estimate”, “predict”, “potential” or “continue”, the negative of such terms or other comparable terminology. In evaluating these statements, you should consider various factors, including the assumptions, risks and uncertainties outlined in this annual report. Any of these items may cause our actual results to differ materially from any forward-looking statement made in this annual report. Forward-looking statements in this annual report include, statements as to:

- the discovery, development, formulation, manufacturing and commercialization of our compounds, our drug candidates;
- conducting clinical trials internally, with collaborators, or with clinical research organizations;
- our collaboration and strategic relationship strategy; anticipated benefits and disadvantages of entering into such agreements;
- our licensing, investment and commercialization strategies;
- the regulatory approval process, including obtaining U.S. Food and Drug Administration and other international health authorities’ approval for our products in the United States and abroad;
- the safety, effectiveness and potential benefits and indications of our drug candidates and other compounds under development;
- the timing and size of our clinical trials; the compounds expected to enter clinical trials; timing of clinical trial results;
- our ability to manage expansion of our drug discovery and development operations;
- future required expertise relating to clinical trials, manufacturing, sales and marketing;
- obtaining and terminating licenses to products, drug candidates or technology, or other intellectual property rights;
- the receipt from or payments pursuant to collaboration or license agreements resulting from milestones or royalties;
- plans to develop and commercialize products on our own;
- plans to use third party manufacturers;
- expected expenses and expenditure levels; expected uses of cash;
- the adequacy of our capital resources to continue operations;
- the need to raise additional capital;
- our expectations regarding competition;
- our investments, including anticipated expenditures, losses and expenses;
- our patent prosecution and maintenance efforts; and

While these forward-looking statements, and any assumptions upon which they are based, are made in good faith and reflect our current judgment regarding future events, our actual results will likely vary, sometimes materially, from any estimates, predictions, projections, assumptions or other future performance suggested herein. Some of the risks and assumptions include:

- our ability to obtain additional capital when needed;
- fluctuations in net cash provided and used by operating, financing and investing activities;
- our limited operating history;

- our history of operating losses;
- our ability to discover, develop, formulate, manufacture and commercialize our drug candidates;
- the risk of unanticipated delays in, or discontinuations of, research and development efforts;
- the risk that previous preclinical testing or clinical trial results are not necessarily indicative of future clinical trial results;
- risks relating to the conduct of our clinical trials;
- changing regulatory requirements and administrative practice;
- the risk of adverse safety findings;
- the risk that results of our clinical trials do not support submission of a marketing approval application for our drug candidates;
- the risk of significant delays or costs in obtaining regulatory approvals;
- risks relating to our reliance on third party manufacturers, collaborators, and clinical research organizations;
- risks relating to the development of new products and their use by us and our current and potential collaborators;
- risks relating to our inability to control the development of out-licensed compounds or drug candidates;
- risks relating to our collaborators' ability to develop and commercialize drug candidates;
- costs associated with prosecuting, maintaining, defending and enforcing patent claims and other intellectual property rights;
- our ability to maintain or obtain adequate product and clinical trial liability and other insurance coverage;
- the risk that our drug candidates may not obtain or maintain regulatory approval;
- the impact of technological advances and competition, including potential generic competition;
- our ability to compete against third parties with greater resources than ours;
- risks relating to changes in pricing and reimbursements in the markets in which we may compete;
- competition to develop and commercialize similar drug products;
- our ability to obtain and maintain patent protection and freedom to operate for our discoveries and to continue to be effective in expanding our patent coverage;
- the impact of changing laws on our patent portfolio;
- developments in and expenses relating to litigation;
- our ability to in-license drug candidates or other technology;
- fluctuations in net cash provided and used by operating, financing and investing activities;
- the competitive environment in which we operate;
- our dependence on key personnel;
- conflicts of interest of our directors and officers;
- our ability to fully implement our business plan;
- our ability to effectively manage our growth; and
- other regulatory, legislative and judicial developments.

Given these risks and uncertainties, you should not place undue reliance on these forward-looking statements. Except as required by federal securities laws, we undertake no obligation to update any forward-looking statements for any reason, even if new information becomes available or other events occur in the future.

*In this report all references to (i) “TapImmune” “we,” “us,” “our” or the “Company” mean TapImmune Inc.; (ii) “SEC” refers to the Securities and Exchange Commission; (iii) “Securities Act” refers to the United States *Securities Act of 1933*, as amended; (iv) “Exchange Act” refers to the United States *Securities Exchange Act of 1934*, as amended; and (v) all dollar amounts refer to United States dollars unless otherwise indicated.*

Calculation of Aggregate Market Value of Non-Affiliate Shares

For purposes of calculating the aggregate market value of shares of our common stock held by non-affiliates as set forth on the cover page of this Annual Report on Form 10-K, we have assumed that all outstanding shares are held by non-affiliates, except for shares held by each of our executive officers, directors and 5% or greater stockholders. In the case of 5% or greater stockholders, we have not deemed such stockholders to be affiliates, other than Eastern Capital Limited, unless there are facts and circumstances which would indicate that such stockholders exercise any control over our company. These assumptions should not be deemed to constitute an admission that all executive officers, directors and 5% or greater stockholders are, in fact, affiliates of our company, or that there are no other persons who may be deemed to be affiliates of our company. Further information concerning shareholdings of our executive officers, directors and principal stockholders can be located in Part III, Item 12 of this Annual Report on Form 10-K.

PART I**ITEM 1. BUSINESS****Company Overview**

We are a clinical-stage immuno-oncology company specializing in the development of innovative peptide and gene-based immunotherapeutics and vaccines for the treatment of cancer and metastatic disease. We are actively advancing our clinical programs by expanding our Folate Receptor Alpha program (TPIV200) for breast and ovarian cancers and our HER2/neu+ peptide antigen program (TPIV100/110) in Phase II clinical trials. In parallel, we are developing a proprietary DNA expression technology named PolyStart™ to improve the ability of the cellular immune system to recognize and destroy diseased cells. We plan to complete the pre-clinical development of our PolyStart™ vaccine and move it into the clinic as an integral component of a prime-boost vaccine methodology.

Our Cancer Vaccines

In contrast to standard therapies for cancer treatment including surgery, radiation therapy and chemotherapy that imprecisely target cancer cells and normal cells, we are developing vaccines that precisely target candidate breast cancer(s), colorectal cancer(s), ovarian cancer(s) and non-small cell lung cancer(s). We are currently developing three core technology platforms:

- 1) an exclusively licensed peptide-based vaccine compositions and methods of use for the treatment of HER2/neu+ breast cancer that overexpresses Human Epidermal Growth Factor Receptor 2 (HER2/neu+) (TPIV100/110),
- (2) an exclusively licensed peptide-based vaccine compositions and methods of use for treating breast and ovarian cancers that overexpress Folate Receptor Alpha (TPIV200), and
- (3) a wholly-owned DNA nucleic acid-based vaccine compositions and methods of use technology (PolyStart™) for treatment of various cancers or infectious disease.

To enhance stockholder value and taking into account development timelines, we plan to focus on advancing our clinical programs including our Folate Receptor Alpha peptide antigen program for breast and ovarian cancer and our HER2/neu+ peptide antigen program into Phase II clinical trials. In parallel, we plan to complete the preclinical development of our PolyStart™ technology as an integral component of our prime-and-boost vaccine methodology. The use of naturally processed T-cell antigens discovered using samples derived from cancer patients plus our PolyStart™ expression technology to improve antigen presentation to T-cells could not only produce an effective cancer vaccine in its own right but also to enhance the efficacy of other immunotherapy approaches such as CAR-T and PD1 inhibitors for example.

Products and Technology in Development

<u>Product/Candidate</u>	<u>Description</u>	<u>Application</u>	<u>Status</u>
TPIV100/110 HER2/neu+ Breast Cancer Vaccine	Peptide Vaccine	Treatment of HER2/neu+ Breast Cancer	Phase I trial completed Phase I(b) trial to start in 2018 Phase I/II to start in 2018 (TPIV110)
TPIV200 Folate Receptor Alpha Vaccine	Peptide Vaccine	Treatment of Folate Alpha/Triple-Negative Breast and Ovarian Cancer	Phase I trial completed Multiple Phase II trials started in 2016 and 2017
PolyStart™	Nucleic acid expression technology	Broad Application to “Prime”- and- “Boost”	Preclinical

CLINICAL

For perspective, we note that clinical trials to support new drug applications are typically conducted in three sequential phases, although the phases may overlap. During Phase I, there is an initial introduction of the therapeutic candidate into healthy human subjects or patients. For an immunotherapeutic vaccine in particular, Phase I studies are generally conducted in cancer patients that have previously received one or another current standard of care and include the measurement of cellular immune responses. Phase II usually involves studies in a more focused patient population in order to carefully assess clinical activity of the drug in specific targeted indications, dosage tolerance (*i.e.*, dose escalation) and optimal dosage, while continuing to identify possible adverse effects and safety risks. If the therapeutic candidate is found to be potentially effective and to have an acceptable safety profile in Phase II evaluations, Phase III trials are undertaken to further demonstrate clinical efficacy and to further test for safety within an expanded patient population at geographically dispersed clinical trial sites.

Human Clinical Trials — HER2/neu+ Breast Cancer — Mayo Foundation

On June 1, 2010, we signed an exclusive licensing option agreement with the Mayo Foundation for Medical Education and Research (“Mayo Foundation”), Rochester, Minnesota for clinical development of a new HER2/neu+ breast cancer vaccine technology. An Investigational New Drug (“IND”) application for Phase I human clinical trial on the HER2/neu+ cancer vaccine in collaboration with the Mayo Foundation was allowed by the Food and Drug Administration (“FDA”) in July 2011 and the Mayo Institutional Review Board approved the trial on May 4, 2012. Patients had histologically confirmed Stage II-III HER2/neu+ breast cancer and had completed systematic therapy at least 90 days prior to treatment and were without evidence of disease. Patient dosing has been completed and final safety analysis on all the patients treated has been completed. The vaccine, comprising four class II peptides, was well tolerated with mild adverse effects. In addition, 19 out of 20 evaluable patients showed robust T-cell immune responses to the antigens in the vaccine composition (Source: The Journal of Immunology: January 1, 2013 190:479-488). These results provided the rationale for advancement into Phase II. An additional secondary endpoint incorporated into this Phase I Trial was a two-year follow on recording time to disease recurrence in the participating breast cancer patients. A second trial is being started in 2018 that uses a novel vaccine strategy in patients with DCIS to eliminate disease and protect from recurrence.

For Phase I(b)/II studies, we plan to add a Class I peptide, licensed from the Mayo Clinic (April 16, 2012), to the four Class II peptides. Management believes that the combination of Class I and Class II HER2/neu+ antigens gives us the leading HER2/neu+ vaccine platform. As the Folate Receptor Alpha vaccine is our lead product, our plans are now initiating formulation studies to progress the HER2/neu+ vaccine towards a Phase II Clinical Trial in 2018.

Human Clinical Trials — Folate Alpha Breast and Ovarian Cancer — Mayo Foundation

Folate Receptor Alpha (“FRa”) is overexpressed in over 80% of breast cancers and in addition, over 90% of ovarian cancers, for which the only treatment options are surgery, radiation therapy and chemotherapy, leaving a very important and urgent clinical need for a new therapeutic. Time to recurrence is relatively short for this type of cancer and survival prognosis is extremely poor after recurrence. In the United States alone, there are approximately 30,000 ovarian cancer patients and 40,000 triple-negative breast cancer patients newly diagnosed every year.

We have completed a 21-patient Phase I clinical trial for the Folate Receptor Alpha Vaccine. Twenty-one patients with breast or ovarian cancer, who had undergone standard surgery and adjuvant treatment, were treated with one cycle of cyclophosphamide (given days 1–7 and 15–22 of 28). Following this, patients were vaccinated intradermally at three sites with a mixture of the five class II FRa peptides on day one of a 28-day cycle for a maximum of six vaccination cycles. The vaccine was well-tolerated and safe and 20 out of 21 evaluable patients showed positive immune responses, providing a strong rationale for progressing to Phase II trials. Further, the data showed that 16 out of 16 patients in the observation stage still showed immune responses (Source: Data published in Journal of Clinical Oncology at ASCO in Chicago May 2015). We have developed a commercial quality lyophilized formulation of the vaccine in a single vial for reconstitution and injection. Good Manufacturing Practice (“GMP”) manufacturing of initial batch for initial Phase II trials has been completed.

On July 27, 2015, we exercised our option agreement with Mayo Foundation with the signing of a worldwide exclusive license agreement to commercialize a proprietary Folate Receptor Alpha vaccine technology for all cancer indications. As part of this agreement, the IND from the Folate Receptor Alpha Phase I Trial was transferred from Mayo Foundation to us for amendment for Phase II Clinical Trials on our lead product.

On September 15, 2015, we announced that our collaborators at the Mayo Foundation had been awarded a grant of \$13.3 million from the U.S. Department of Defense. This grant, commencing September 15, 2015, will cover the costs for a 280-patient Phase II Clinical Trial of Folate Receptor Alpha Vaccine in patients with triple-negative breast cancer. We will work closely with Mayo Foundation on this clinical trial by providing clinical and manufacturing expertise as well as providing GMP vaccine formulations. These vaccine formulations are being developed for multiple Phase II clinical programs in triple-negative breast and ovarian cancer in combination with other immunotherapeutics. This Phase II study of TPIV200 in the treatment of triple-negative breast cancer began enrolling patients in late 2017.

On December 9, 2015, we announced that we received Orphan Drug Designation from the U.S. Food & Drug Administration's Office of Orphan Products Development ("OOPD") for our cancer vaccine TPIV200 in the treatment of ovarian cancer. The TPIV200 ovarian cancer clinical program will now receive benefits including tax credits on clinical research and seven-year market exclusivity upon receiving marketing approval. TPIV200 is a multi-epitope peptide vaccine that targets Folate Receptor Alpha which is overexpressed in multiple cancers including over 90% of ovarian cancer cells.

On February 3, 2016, we announced that the U.S. FDA designated the investigation of multiple-epitope Folate Receptor Alpha Peptide Vaccine (TPIV200) with GM-CSF adjuvant for maintenance therapy in subjects with platinum-sensitive advanced ovarian cancer who achieved stable disease or partial response following completion of standard-of-care chemotherapy, as a Fast Track Development Program. We began enrolling a Phase II study in this indication in 2017.

We have opened multiple clinical sites and have completed enrollment of patients in a Phase II trial of our Folate Receptor Alpha cancer vaccine, TPIV200, in the treatment of triple-negative breast cancer, one of the most difficult-to-treat cancers representing a clear unmet medical need. The open-label, 80-patient clinical trial is designed to evaluate dosing regimens, efficacy, and immune responses in women with triple-negative breast cancer. Key data from the trial is expected to be included in a future New Drug Application submission to the FDA for marketing clearance. This trial is sponsored and conducted by TapImmune.

On April 21, 2016, we announced our participation in an ovarian cancer study sponsored by Memorial Sloan Kettering Cancer Center in New York City in collaboration with AstraZeneca Pharmaceuticals in ovarian cancer patients who are not responsive to platinum, a commonly used chemotherapy for ovarian cancer. This study, a Phase II study of TPIV200 is currently enrolling ovarian cancer patients and is designed to look at the effects of combination therapy with AstraZeneca's checkpoint inhibitor durvalumab. The study will enroll 40 patients and is open-label. Because they are unresponsive to platinum, these patients have no real options left. If the combination therapy proves effective, we believe it would address a critical unmet need. TPIV200 has received Orphan Drug designation for use in the treatment of ovarian cancer. Although we have no business relationship with AstraZeneca, we are paying for one-half of the costs of the clinical study in addition to providing our TPIV200 for the study.

A Company-sponsored Phase II study in platinum-sensitive ovarian cancer patients was initiated in 2017. This study is designed to evaluate TPIV200 with GM-CSF in a randomized, placebo-controlled fashion during the first maintenance period after primary surgery and chemotherapy. Patients at this stage of their treatment have the highest potential for an immunotherapeutic effect and no other approved treatment options. The study will enroll up to 120 patients over the next year and a half, with an interim analysis planned in the first quarter of 2019.

PRECLINICAL

PolyStart™

In parallel with the above completed Phase I clinical trials and upcoming Phase II trials, we plan to complete preclinical development of the PolyStart™ technology as an integral component of our “Prime”-and- “Boost” vaccine methodology. Unlike other vaccine technologies that narrowly address the initiation of an immune response, our “Prime”-and- “Boost” approach broadly stimulates the cellular immune system by enhancing the function of killer T-cells (CD8+) and helper T-cells (CD4+). Our peptide immunotherapeutic approach may be coupled with our developed in-house PolyStart™ nucleic acid-based technology designed to enhance T-cell antigen presentation on the surface of appropriate populations of presenting cells. Our PolyStart™ technology directs the translation and subsequent endogenous processing of antigenic T-cell epitopes contained within a poly-antigen array(s) at four times the level of conventional comparator systems, thereby providing a greater signal/propensity to attract and directly interact with a patient’s T-cells. Accordingly, elevated levels of target specific cell surface presented T-cell antigen(s) are correspondingly expected to more effectively engage, activate and expand antigen specific killer T-cell population(s) that can then seek out and destroy target cells (e.g., cancer cells). Moreover, our versatile PolyStart™ technology is designed to express either Class I CD8+ killer or Class II CD4+ helper T-cell antigenic epitopes. The nucleic acid-based platform may also represent a second stand-alone vaccine technology.

Our PolyStart™ technology was invented in-house and is therefore not subject to any licensing fees or downstream royalty payments. The PolyStart™ technology composition can be administered in the form of a plasmid deoxyribonucleic acid (“DNA”) or incorporated into a viral delivery system via ribonucleic acid (“RNA”) or DNA. The PolyStart™ technology comprises two portions, one supporting high level of expression and the other a T-cell peptide antigen array (“PAA”). The antigens making up the PAA are processed inside a patient’s own cells where they are then presented on the cell surface visible for T-cell recognition, activation and expansion. We have confirmed that the PolyStart™/PAA technology works in preclinical studies in context with a smallpox vaccine candidate. However, it is important to understand that this is a platform technology which can be adapted to essentially any T-cell peptide antigen targeted indication, including HER2/neu+. The PolyStart™ technology combined with our peptide-based technology is an ideal opportunity for developing an effective prime-plus-boost vaccination methodology. On February 7, 2017, we announced that we received a Notice of Allowance from the U.S. Patent and Trademark Office of our patent application titled, “Chimeric nucleic acid molecules with non-AUG initiation sequences and uses thereof,” which represents our first patent on our PolyStart™ program. We anticipate additional patent filings in connection with our research and development in this area.

Our Infectious Disease Program

Management believes that PolyStart™ may have broad use for infectious disease vaccines but any development in this area will rely on collaboration with others having specific expertise and the use of non-dilutive funding”. We are actively seeking business development and out-licensing opportunities with this asset.

Mayo Foundation for Medical Education and Research Relationships

As part of our business strategy, we establish business relationships, including collaborative arrangements with other companies and medical research institutions to assist in the clinical development of certain of our drugs and drug candidates and to provide support for our research programs.

Below is a brief description of our significant business relationships and collaborations and related license agreements with Mayo Foundation that expand our pipeline and provide us with certain rights to existing and potential new products and technologies.

On May 26, 2010, we signed a Technology Option Agreement with the Mayo Foundation in Rochester, Minnesota, for the evaluation of HER2/neu+ peptide epitopes as antigens for a breast cancer vaccine. The agreement grants us an exclusive worldwide option to become the exclusive licensee of the technology after completion of Phase I clinical trials.

Following approval of the IND by the FDA in July 2011, we executed a Sponsored Research Agreement with the Mayo Foundation for the clinical trial.

Mayo Patent & Know-How License

On March 25, 2012, we entered into a Patent & Know-How License Agreement with the Mayo Foundation pursuant to which we acquired certain intellectual property rights from the Mayo Foundation for the development and commercialization of certain products, methods and processes property relating to a proprietary HER2/neu+ technology.

The Mayo Foundation granted us a license (with a right to sublicense) on a worldwide basis to make, sell and use products for prophylactic and therapeutic use. This license is an exclusive license for products that are based on the intellectual property and non-exclusive for products that are based on Mayo Foundation know — how and materials. The intellectual property that is being licensed includes U.S. provisional patent application number 61600480 (titled “Methods and materials for generating CD8+ T-cells having the ability to recognize cancer cells expressing a HER2/neu+ polypeptide”), and provisionals, divisionals, continuations and continuations-in-part.

Under this agreement, and subject to certain exceptions, we are responsible for, among other things, developing the technology under the Patent Rights to bring Licensed Products (as defined in the agreement) to market and costs of filing, prosecution and maintenance of the Patent Rights. Mayo Foundation controls the prosecution and maintenance of the Patent Rights in consultation with us.

The Mayo Foundation granted this license in exchange for an upfront payment of \$250,000 that we paid in three installments. In addition to the upfront payment, we are to pay an annual license maintenance fee, milestone fees, royalty fees (which will be subject to a minimum annual royalty fee once royalty fees are due), and a \$500,000 diligence fee had a Phase I clinical trial for a Licensed Product not been initiated prior to the fifth anniversary of the agreement and a \$2,000,000 diligence fee if we fail to initial a Phase II clinical trial for a Licensed Product prior to the eighth anniversary of the agreement.

We have agreed to indemnify and hold Mayo Foundation harmless from any damages caused as a result of (i) the practice or exercise of any rights and assignments granted by the agreement by or on behalf of us, any affiliate, or any sub-licensee; (ii) research, development, design, manufacture, distribution, use, sale, importation, exportation or other disposition of Licensed Products; (iii) our, any affiliates, or any sub-licensee’s act or omission; and (iv) third party suits for patent infringement involving a Licensed Product

The term of this agreement runs from March 25, 2012 until the date of the last to expire of the Valid Claims (as defined in the agreement), provided that Mayo Foundation may terminate the agreement if, among other matters, (i) 45 days after providing us with notice of a material breach of this agreement, we fail to cure such breach, (ii) we fail to initiate a Phase III clinical trial for a Licensed Product prior to the tenth anniversary of the agreement, and (iii) we cease to conduct business in the normal event of operations or become insolvent or bankrupt. We may voluntarily terminate the agreement at any time upon written notice to Mayo Foundation.

Mayo HER2/neu+ License

On May 4, 2016, we entered into a License and Assignment Agreement with Mayo Foundation (“Mayo Foundation HER2/neu+ License”) pursuant to which we acquired certain intellectual property rights from the Mayo Foundation for the development and commercialization of certain products, methods and processes property relating to any cancer indication in which the HER2/neu+ antigen is overexpressed. The Mayo Foundation HER2/neu+ License resulted from our exercise of an option that was issued pursuant to a Technology Option Agreement that we entered into with the Mayo Foundation on May 25, 2010.

The Mayo Foundation granted us a license (with a right to sublicense) on a worldwide basis to make, sell and use products for therapeutic use against breast, ovarian, lung and any other cancers that overexpress HER2/neu+ antigens. This license is an exclusive license for products that are based on the

intellectual property and non-exclusive for products that are based on Mayo Foundation know-how and materials. The intellectual property that is being licensed includes (i) U.S. patent application numbers 12/740,562 and 14/480,365, divisionals, continuations and continuations in part, and (ii) U.S. provisional application 60/984,646 and PCT/US2008/081799.

Under the Mayo Foundation HER2/neu+ License, and subject to certain exceptions, we are responsible for, among other things, developing the technology under the Patent Rights to bring Licensed Products (both as defined in the Mayo Foundation HER2/neu+ License) to market and costs of filing, prosecution and maintenance of the Patent Rights. Mayo Foundation has sole control over the protection, defense, enforcement, maintenance abandonment and other handling of the Know-How (as defined in the Mayo Foundation HER2/neu+ License) and Materials (as defined in the Mayo Foundation HER2/neu+ License).

The Mayo Foundation granted this license in exchange for an initial payment of \$300,000. The Mayo Foundation assigned to us IND # 14749, and we assumed all responsibility and liability for this investigative new drug application. In addition to the initial payment, we are to pay an annual license maintenance fee, milestone fees and royalty fees (which will be subject to a minimum annual royalty fee once royalty fees are due).

We have agreed to indemnify and hold Mayo Foundation harmless from any damages caused as a result of (i) the practice or exercise of any rights and assignments granted by the agreement by or on behalf of us or any sub-licensee; (ii) research, development, design, manufacture, distribution, use, sale, importation, exportation or other disposition of Licensed Products; (iii) our or any sub-licensee's act or omission, including negligence or willful misconduct; and (iv) third party suits for patent infringement involving a Licensed Product.

The term of this agreement runs from May 4, 2016 until the date of our last obligation to make payments under the agreement, provided that Mayo Foundation may terminate the agreement if, among other matters, (i) 30 days after providing us with notice of a material breach of this agreement, we fail to cure such breach, (ii) 90 days after providing us with written notice, we fail to meet either of the following diligence events (a) initiate a Phase II clinical trial for a Licensed Product prior to the second anniversary of the agreement and, once initiated, keep current on all of our Phase II funding obligations and (b) initiate a Phase IIB or III clinical trial for a Licensed Product prior to the fifth anniversary of the agreement, (iii) we fail to make a sale of a Licensed Product by May 4, 2026, and (iv) we cease to conduct business in the normal event of operations or become insolvent or bankrupt. We may voluntarily terminate the agreement at any time upon written notice to Mayo Foundation.

Mayo Folate Receptor Alpha License

On July 21, 2015, we entered into a License and Assignment Agreement with Mayo Foundation ("Mayo Foundation FRa License") pursuant to which we acquired certain intellectual property rights from the Mayo Foundation for the development and commercialization of certain products, methods and processes property relating to a Folate Receptor Alpha immunotherapeutic vaccine comprised of a set of unique peptide epitopes targeting breast, lung and ovarian cancer. The Mayo Foundation FRa License resulted from our exercise of an option that we acquired from Ayer Special Situations Fund I, LP ("Ayer") that was issued pursuant to a Technology Option Agreement that Ayer entered into with the Mayo Foundation on March 18, 2014.

The Mayo Foundation granted us a license (with a right to sublicense) on a worldwide basis to make, sell and use products for therapeutic use against breast, ovarian, lung and other cancers that express Folate Receptor Alpha. This license is an exclusive license for products that are based on the intellectual property and non-exclusive for products that are based on Mayo Foundation know-how and materials. The intellectual property that is being licensed includes (i) U.S. patent application numbers 12/303,054 and 13/202,263, (ii) U.S. patent number 8,486,412 and 8,858,952 and provisionals, (iii) divisionals including 13/917,410 and (iv) continuations including 14/484,057.

Under the Mayo Foundation FRa License, and subject to certain exceptions, we are responsible for, among other things, developing the technology under the Patent Rights to bring Licensed Products (both as defined in the Mayo Foundation FRa License) to market and costs of filing, prosecution and maintenance

of the Patent Rights. Mayo Foundation has sole control over the protection, defense, enforcement, maintenance abandonment and other handling of the Know-How (as defined in the Mayo Foundation FRa License) and Materials (as defined in the Mayo Foundation FRa License).

The Mayo Foundation granted this license in exchange for an initial upfront payment of \$350,000. The Mayo Foundation assigned to us IND # 14546, and we assumed all responsibility and liability for this investigative new drug application. In addition to the initial upfront payment, we are to pay additional upfront payments, an annual license maintenance fee, milestone fees and royalty fees (which will be subject to a minimum annual royalty fee once royalty fees are due).

We have agreed to indemnify and hold Mayo Foundation harmless from any damages caused as a result of (i) the practice or exercise of any rights and assignments granted by the Mayo Foundation FRa License by or on behalf of us or any sub-licensee; (ii) research, development, design, manufacture, distribution, use, sale, importation, exportation or other disposition of Licensed Products; (iii) our or any sub-licensee's act or omission, including negligence or willful misconduct; and (iv) third party suits for patent infringement involving a Licensed Product.

The term of this agreement runs from July 21, 2015 until the date of our last obligation to make payments under this agreement, provided that the Mayo Foundation may terminate this agreement if, among other matters, (i) 30 days after providing us with notice of a material breach of this agreement, we fail to cure such breach, (ii) 90 days after providing us with written notice, we fail to meet either of the following diligence events (a) initiate a Phase II clinical trial for a Licensed Product prior to the 2nd anniversary of the Mayo Foundation FRa License and, once initiated, keep current on all of our Phase II funding obligations and (b) initiate a Phase IIB or III clinical trial for a Licensed Product prior to the 5th anniversary of the Mayo Foundation FRa License, (iii) we fail to make a sale of a Licensed Product by July 21, 2025 and (iv) we cease to conduct business in the normal event of operations or become insolvent or bankrupt. We may voluntarily terminate the Mayo Foundation FRa License at any time upon written notice to Mayo Foundation.

General

Company History

We were incorporated under the laws of the State of Nevada in 1991. We have one wholly-owned and dormant subsidiary named GeneMax Pharmaceuticals Inc. ("GeneMax Pharmaceuticals"). Our common stock is currently listed for trading on the Nasdaq Capital Market under the symbol "TPIV."

In July 2015, we moved our corporate headquarters to Jacksonville, Florida, to be in closer proximity to our collaborators at Mayo Clinic in Jacksonville, Florida, and our strategic and medical advisors who live in Florida. In July 2017, we moved our corporate headquarters to 5 West Forsyth Street, Jacksonville Florida. We continue to lease a single office at Eastlake Avenue in Seattle, Washington, for the purposes of continuing to develop and patent our PolyStart™ technology.

Over the past three years, we have, in a challenging financing climate, raised sufficient working capital to fund and progress our operations and significantly restructured our balance sheet and capital structure. We believe that we continue to make progress with the resources available to us. With the start of clinical programs and our focus on securing financing from a number of sources, management is confident that our current pathway will secure longer term capital to finance and accelerate our activities. The strength of our science and development approaches is becoming more widely appreciated, particularly as our clinical program generates data and as we embrace additional collaborations with leading institutions and corporations.

While the pathway to successful product development takes time and significant resources, we believe that we have put in place the technical and corporate fundamentals for success. The strength of our product pipeline gives us a unique opportunity to make a major contribution to global health care.

The Immunotherapy Industry for Cancer

Management believes that there is a critical need for more effective cancer therapies. Given the unmet need in the treatment of metastatic cancer combined with our process for harnessing the body's own immune system to treat certain cancers, we believe that we are positioned to be a leading contributor to solving this problem. The immuno-oncology landscape includes the use of monoclonal antibodies, adoptive T-cell therapies, checkpoint inhibitors and in vivo T-cell vaccines. We believe that our use of peptide antigens that can stimulate both T-killer cells (CD8+) and T-helper cells (CD4+) together with the use of our PolyStart™ expression vector as a “boost” strategy can give us a competitive edge in the in vivo T-cell vaccine sector.

In addition, we continue to pursue the development of an approach, which can allow the cellular immune system to make tumor cells more visible to the immune system. Many cancers are not very “immunogenic”, meaning that the cancers are not able to induce an immune response because they no longer express sufficient levels of key proteins on their cell surface, known as Major Histocompatibility Class (“MHC”) I or MHC Class I proteins. In healthy cells, these proteins provide the information to the immune system that defines whether the cell is healthy or, in the case of cancer or viral infection, abnormal. If the MHC Class I proteins signal that the cells are abnormal, then the immune system's T-cells are activated to attack and kill the infected or malignant cell.

In many solid tumors and in metastatic cells, antigen presentation is often impaired thus presenting a weakened signal to which the cellular immune system can respond. Management believes that although a number of cancer therapies have been developed that stimulate the immune system, these approaches have often proven ineffective because the cancers remain invisible to the immune system due to this problem. One of our strategic visions is to broadly stimulate the cellular immune system while additionally improving antigen presentation. We believe that the use of our PolyStart™ expression vector for improved expression of antigens and TAP can improve the immune system's response to a variety of cancers.

In addition to our focus on the cancer vaccines, with adequate funding, we may also pursue the development of prophylactic vaccines against infectious microbes by partnering with other vaccine developers in the infectious disease market.

TapImmune's Target Market and Strategy

We will focus our product development in oncology, both alone and with corporate partners and/or collaborators, including the Mayo Foundation for HER2/neu+ Breast Cancer, Folate Alpha ovarian and breast cancer. The diversity of cancer types and their overall prevalence create a large need for new and improved treatments. Management believes that there is a significant market opportunity for a cancer treatment that utilizes the highly specific defense mechanisms of the immune system to attack cancers. The goal of our management is to ultimately have the FDA approve our cancer vaccines so that we can secure a portion of this market.

Management also believes that our PolyStart™ expression vector approach will provide a flexible and unique platform for the creation of new vaccines that can rapidly respond to emerging viral threats/bioterrorism in addition to enhancing the efficacy of current vaccines in the treatment of infectious disease. If successful, this platform technology would be a significant advance in vaccine development and it will be a key business development strategy to pursue additional partnerships and joint research and/or development ventures with vaccine manufacturers and pharmaceutical companies to bring new and improved vaccines to market.

Our business strategy in cancer is to take products through Phase II clinical trials and then assess whether to partner with pharmaceutical marketing organizations ahead of Phase III trials or to seek commercialization after Phase II.

The global market for cancer immunotherapy is estimated to grow to more than \$80 billion by 2020 according to ResearchandMarkets.com. Management believes that ultimately our combined technology platform(s) have the potential to develop more effective new vaccines, thereby allowing us to participate in this large market through novel new products and in combination with existing vaccines.

Research and Development Efforts

We direct our research and development efforts towards the advancement of immunotherapeutic and prophylactic vaccine products for the treatment of cancer, using our combined proprietary technologies, relevant killer plus helper T-cell peptide antigens, and PolyStart™ nucleic acid-based expression system(s) expressing antigens. We have focused our efforts initially on the development of a therapeutic vaccine for applications in cancer treatment, while concomitantly demonstrating the breadth of our combined technology platform for the development of prophylactic vaccines. Our product development efforts are opportunistically designed to consider combinations with approved and emerging products in both cancer therapeutics and prophylactic vaccines against microbes. This approach allows us to pursue our own internal product development while positioning us to enter into multiple partnerships and licensing agreements. We have made significant progress in the development of a nucleic acid-based (co-linear PolyStart™) technology which directs the enhanced synthesis of a linear peptide antigen array comprising multiple proprietary T-cell epitopes (CD4+ Helper and CD8+ Killer). In addition, the technology also directs the synthesis of the protein TAP1 associated with the transport of MHC Class I epitopes to the surface of cells. The expression or functioning of this protein is often lowered in tumor cells or virally infected cells and its replacement can enhance antigen presentation. Recent work on this novel expression vector platform has demonstrated that T-cells recognize cell surface presented T-cell peptide epitopes confirming that multiple individual peptides are effectively and functional processed from a linear peptide antigen array and that this leads to peptide specific T-cell killing.

Intellectual Property and Patents

Patents and other proprietary rights are vital to our business operations. We protect our technology through various United States and foreign patent filings, and maintain trade secrets that we own. Our policy is to seek appropriate patent protection both in the United States and abroad for our proprietary technologies and products. An enforceable patent with appropriate claim coverage can provide an advantage over competitors who may seek to employ similar approaches to develop therapeutics, and so the future commercial success of products, and therefore our future success, will be in part dependent on our intellectual property strategy. The information provided in this section should be reviewed in the context of Item 1A, “Risk Factors”.

We require each of our employees, consultants and advisors to execute a confidentiality agreement upon the commencement of any employment, consulting or advisory relationship with us. Each agreement provides that all confidential information developed or made known to the individual during the course of the relationship will be kept confidential and not be disclosed to third parties except in specified circumstances. In the case of employees, the agreements provide that all inventions conceived of by an employee shall be our exclusive property.

There can be no assurance that our patents, and any patents that may be issued to us in the future, will afford protection against competitors with similar technology. In addition, no assurances can be given that the patents issued to us will not be infringed upon or designed around by others or that others will not obtain patents that we would need to license or design around. If the courts uphold existing or future patents containing broad claims over technology used by us, the holders of such patents could require us to obtain licenses to use such technology. Patent coverage may also vary from country to country based on the scope of available patent protection. There are also opportunities to obtain an extension of patent coverage for a product in certain countries, which adds further complexity to the determination of patent life.

Intellectual Property

We rely upon a combination of licenses, patents, trade secrets, know-how, and licensing opportunities to develop our business. Our future prospects depend on our ability to protect our intellectual property. We also need to operate without infringing the proprietary rights of third parties.

Patents

Patents and other proprietary rights are vital to our business operations. We protect our technology through various United States and foreign patent filings, and maintain trade secrets that we own. As of December 2017, we held seven U.S. issued patents (two owned, five licensed or option to license), six patent

applications pending (two owned, four licensed or option to license), 12 foreign issued/allowed patents, and ten foreign patent applications pending (eight owned, two licensed or option to license). Our policy is to seek appropriate patent protection both in the United States and abroad for our proprietary technologies and product candidates. An enforceable patent with appropriate claim coverage can provide an advantage over competitors who may seek to employ similar approaches to develop therapeutics, and so the future commercial success of products, and therefore our future success, will be in part dependent on our intellectual property strategy. The information provided in this section should be reviewed in the context of the information disclosed elsewhere in this annual report under “Risk Factors”. We reassess the value of each patent at the time maintenance fees are due, and in cases where maintaining the patent is judged to be of no significant strategic value we decline to pay the maintenance fee.

There can be no assurance that our patents, and any patents that may be issued to us in the future, will afford protection against competitors with similar technology. In addition, no assurances can be given that the patents issued to us will not be infringed upon or designed around by others or that others will not obtain patents that we would need to license or design around. If the courts uphold existing or future patents containing broad claims over technology used by us, the holders of such patents could require us to obtain licenses to use such technology. Patent coverage may also vary from country to country based on the scope of available patent protection. There are also opportunities to obtain an extension of patent coverage for a product in certain countries, which adds further complexity to the determination of patent life.

We currently have a number of issued and pending patents covering composition of matter of PolyStart™ and TAP. In addition, a number of issued and pending patents cover the HER2/neu+ and Folate Receptor Alpha peptides in our Option to License or License Agreements from the Mayo Foundation.

The following table sets forth information as of December 31, 2017 on each issued patent currently held or licensed by us:

Patent No.	Expiration	Title	Ownership	Jurisdiction Where Granted/Filed
Peptide Based Vaccine (Folate Receptor Alpha, Breast and Ovarian Cancer)				
Patent No. 8,486,412	Expires 2027	Immunity to Folate Receptors	Exclusive License	USA
Patent No. 9,243,033	Expires 2027	Immunity to Folate Receptors	Exclusive License	USA
Received Notice of Allowance	Expires 2027	Immunity to Folate Receptors	Exclusive License	USA
Patent No. 2,685,300	Expires 2027	Immunity to Folate Receptors	Exclusive License	Canada
Peptide Based Vaccine (HER2/neu+ Breast Cancer)				
Patent No. 8,858,952	Expires 2031	Methods and Materials for Generating T Cells	Exclusive License	USA
Patent No. 2013221309	Expires 2033	Methods and Materials for Generating CD8+ T Cells Having the Ability to Recognize Cancer Cells Expressing a HER2/neu+ Polypeptide	Exclusive License	Australia
Patent No. ZL2013380019913.1	Expires 2033	Same as above	Exclusive License	China
Patent No. 2,814,836	Expires 2033	Same as above	Exclusive License	Europe
Patent No. 6,170,076	Expires 2033	Same as above	Exclusive License	Japan
Patent No. 9,814,767	Expires 2033	Same as above	Exclusive License	USA
Patent No. ZL200890124030.6	Expires 2028	HLA-DR Binding Peptides and Their Uses	Exclusive License	China
Patent No. 2,704,397	Expires 2033	Same as above	Exclusive License	Canada

Patent No.	Expiration	Title	Ownership	Jurisdiction Where Granted/Filed
Nucleic Acid Based Vaccine (PolyStart™; infectious disease, breast and ovarian Cancer)				
Patent No. 9,364,523	Expires 2035	Chimeric Nucleic Acid Molecules with Non-AUG	Owned	USA
Patent No. 9,655,956	Expires 2035	Translation Initiation Sequences and uses thereof	Owned	USA
HLA DR Peptide Vaccines				
Patent No. 6,006,265	Expires 2028	HLA-DR Binding Peptides And Their Uses	Exclusive License	Japan
Patent No. 2,215,111	Expires 2028	HLA-DR Binding Peptides And Their Uses	Exclusive License	Europe (DE, FR, GB, IE)

On February 7, 2017, we announced that we received a Notice of Allowance from the U.S. Patent and Trademark Office of our patent application titled, “Chimeric nucleic acid molecules with non-AUG initiation sequences and uses thereof.”

We have exclusively licensed the intellectual property for our TPIV100/110 HER2/neu+ breast cancer vaccine and TPIV200 folate receptor alpha vaccine product candidates from Mayo Foundation for Medical Education and Research. See “Mayo Foundation for Medical Education and Research Relationships.”

The effect of the issued patents is that they provide us with patent protection for the claims covered by the patents. While the expiration of a product patent normally results in a loss of market exclusivity for the covered product or product candidate, commercial benefits may continue to be derived from: (i) later-granted patents on processes and intermediates related to the most economical method of manufacture of the active ingredient of such product; (ii) patents relating to the use of such product; (iii) patents relating to novel compositions and formulations; and (iv) in the United States and certain other countries, market exclusivity that may be available under relevant law. The effect of patent expiration on our product candidates also depends upon many other factors such as the nature of the market and the position of the product in it, the growth of the market, the complexities and economics of the process for manufacture of the active ingredient of the product and the requirements of new drug provisions of the Federal Food, Drug and Cosmetic Act or similar laws and regulations in other countries.

Our pending patent applications cover a range of technologies, including specific embodiments and applications for treatment of various medical indications, improved application methods and adjunctive utilization with other therapeutic modalities. The coverage claimed in a patent application can be significantly reduced before the patent is issued. Accordingly, we do not know whether any of the applications we acquire or license will result in the issuance of patents, or, if any patents are issued, whether they will provide significant proprietary protection or will be challenged, circumvented or invalidated. Because unissued U.S. patent applications are maintained in secrecy for a period of eighteen months and U.S. patent applications filed prior to November 29, 2000 are not disclosed until such patents are issued, and since publication of discoveries in the scientific or patent literature often lags behind actual discoveries, we cannot be certain of the priority of inventions covered by pending patent applications. Moreover, we may have to participate in opposition proceedings in a foreign patent office, or for United States patent applications filed before March 16, 2013, in interference proceedings declared by the United States Patent and Trademark Office to determine priority of invention, or in United States *inter partes* review or post-grant review procedures, any of which could result in substantial cost to us, even if the eventual outcome is favorable to us. There can be no assurance that the patents, if issued, would be held valid by a court of competent jurisdiction. An adverse outcome could subject us to significant liabilities to third parties, require disputed rights to be licensed from third parties or require us to cease using such technology.

We have patents and patent applications in other countries, as well as in the European Patent Office that we believe provide equivalent or comparable protection for our product candidates in jurisdictions internationally that we consider to be key markets. Because of the differences in patent laws and laws concerning proprietary rights, the extent of protection provided by U.S. patents or proprietary rights owned by us may differ from that of their foreign counterparts.

We believe that our patents, the protection of discoveries in connection with our development activities, our proprietary products, technologies, processes and know-how and all of our intellectual

property are important to our business. To achieve a competitive position, we rely on trade secrets, non-patented proprietary know-how and continuing technological innovation, where patent protection is not believed to be appropriate or attainable. In addition, as outlined above, we have a number of patent licenses from third parties, some of which important to our business. See “Mayo Foundation for Medical Education and Research Relationships”. There can be no assurance that any of our patents, licenses or other intellectual property rights will afford us any protection from competition.

Trademarks

Our trademarks are of material importance to our business. We currently have pending with the U.S. PTO, an application for registration of the mark of POLYSTART™. We received notice of the registration of the mark TAPIMMUNE from the U.S. PTO. We also have rights to use other names essential to our business. Federally registered trademarks have a perpetual life, as long as they are maintained and renewed on a timely basis and used properly as trademarks, subject to the rights of third parties to seek cancellation of the trademarks if they claim priority or confusion of usage. We regard our trademarks and other proprietary rights as valuable assets and believe they have significant value to us.

Competition

Our drug discovery, development and ultimate commercialization activities face, and will continue to face, intense competition from organizations such as pharmaceutical and biotechnology companies, as well as academic and research institutions and government agencies. We face significant competition from organizations, particularly fully integrated pharmaceutical companies that are pursuing pharmaceuticals that are competitive with our drug candidates. Management believes that a number of companies, which are developing various types of similar in vivo T-cell immunotherapies and therapeutic cancer vaccines to treat cancer, could be our major competitors including: Advaxis Inc., Genzyme Molecular Oncology, Immune Design, Oncothyreon, Celldex, BN Immunotherapeutics, Immunocellular, Galena BioPharma, Antigen Express, Transgene S. A., and Bavarian Nordic. Other immunotherapy approaches including adoptive T-cell therapies, monoclonal antibodies and checkpoint inhibitors also provide competition in the oncology space. In these areas competitors include, Lion Biotechnology, Juno Therapeutics, (formerly) Kite Pharma, Roche Pharmaceuticals, Merck & Co, Bristol Myers Squibb, AstraZeneca plc and Medimmune, LLC. We believe that our in vivo T-cell therapy approaches will be synergistic with these approaches and might even improve them.

Many companies and institutions, either alone or together with their collaborative partners, have substantially greater financial resources, larger drug discovery, development and commercial staffs and significantly greater experience than we do in:

- drug discovery;
- developing products;
- undertaking preclinical testing and clinical trials;
- obtaining FDA and other regulatory approvals of products; and
- manufacturing, marketing, distributing and selling products.

Accordingly, our competitors may succeed in obtaining patent protection, receiving FDA and other regulatory approval or commercializing products that compete with our drug candidates.

In addition, any drug candidate that we successfully develop may compete with existing therapies that have long histories of safe and effective use. Competition may also arise from:

- other drug development technologies and methods of preventing or reducing the incidence of disease;
- new small molecules; or
- other classes of therapeutic agents.

We face, and will continue to face, intense competition from other companies for collaborative arrangements with pharmaceutical and biotechnology companies, for establishing relationships with academic and research institutions and for licenses to drug candidates or proprietary technology. These competitors, either alone or with their collaborative partners, may succeed in developing products that are more effective than ours.

Our ability to compete successfully will depend, in part, on our ability to:

- develop proprietary products;
- develop and maintain products that reach the market first, are technologically superior to and/or are of lower cost than other products in the market;
- attract and retain scientific, product development and sales and marketing personnel;
- obtain patent or other proprietary protection for our products and technologies;
- obtain required regulatory approvals; and
- manufacture, market, distribute and sell any products that we develop.

In a number of countries, including in particular, developing countries, government officials and other groups have suggested that pharmaceutical companies should make drugs available at a low cost. In some cases, governmental authorities have indicated that where pharmaceutical companies do not do so, their patents might not be enforceable to prevent generic competition. Some major pharmaceutical companies have greatly reduced prices for their drugs in certain developing countries. If certain countries do not permit enforcement of any of our patents, sales of our products in those countries, and in other countries by importation from low-price countries, could be reduced by generic competition or by parallel importation of our product. Alternatively, governments in those countries could require that we grant compulsory licenses to allow competitors to manufacture and sell their own versions of our products in those countries, thereby reducing our product sales, or we could respond to governmental concerns by reducing prices for our products. In all of these situations, our results of operations could be adversely affected.

Government Regulation

Our ongoing research and development activities and any manufacturing and marketing of our drug candidates are subject to extensive regulation by numerous governmental authorities in the United States and other countries. Before marketing in the United States, any drug developed by us must undergo rigorous preclinical testing, clinical trials, and an extensive regulatory clearance process implemented by the FDA under the United States Food, Drug and Cosmetic Act and its implementing regulations and, in the case of biologics, the Public Health Service Act. The FDA regulates, among other things, the research, development, testing, manufacture, safety, efficacy, record-keeping, labeling, storage, approval, advertising, promotion, sale and distribution and import and export, of these products.

FDA Review and Approval Process

The regulatory review and approval process is lengthy, expensive and uncertain. The steps generally required before a drug may be marketed in the United States include:

- preclinical laboratory tests, animal studies and formulation studies in compliance with the FDA's Good Laboratory Practice ("GLP") and Good Manufacturing Practice ("GMP") regulations;
- submission to the FDA of an Investigational New Drug application ("IND") for human clinical testing, which must become effective before human clinical trials may commence;
- performance of adequate and well-controlled clinical trials in three phases, as described below, to establish the safety and efficacy of the drug for each indication;
- submission of a New Drug Application ("NDA") or Biologics License Application ("BLA") to the FDA for review;
- random inspections of clinical sites to ensure validity of clinical safety and efficacy data;

- satisfactory completion of an FDA inspection of the manufacturing facility or facilities at which the drug is produced to assess compliance with current good manufacturing practices;
- FDA approval of the NDA or BLA; and
- payment of user and establishment fees, if applicable.

Similar requirements exist within foreign agencies as well. The time required to satisfy FDA requirements or similar requirements of foreign regulatory agencies may vary substantially based on the type, complexity and novelty of the product or the targeted disease.

Preclinical testing includes laboratory evaluation of product pharmacology, drug metabolism, and toxicity which includes animal studies, to assess potential safety and efficacy as well as product chemistry, stability, formulation, development, and testing. The results of the preclinical tests, together with manufacturing information and analytical data, are submitted to the FDA as part of an IND. An IND will automatically become effective 30 days after receipt by the FDA, unless before that time, the FDA raises safety concerns or questions about the conduct of the clinical trial(s) included in the IND. In the latter case, the IND sponsor and the FDA must resolve any outstanding FDA concerns or questions before clinical trials can proceed. We cannot be sure that submission of an IND will result in the FDA allowing clinical trials to commence.

Clinical trials involve the administration of the investigational drug to human subjects under the supervision of qualified investigators and in accordance with good clinical practices regulations covering the protection of human subjects. These regulations require all research subjects to provide informed consent. Clinical trials are conducted under protocols detailing the objectives of the study, the parameters to be used in monitoring safety, and the effectiveness criteria to be evaluated. Each protocol must be submitted to the FDA as part of the IND and each trial must be reviewed and approved by an Institutional Review Board (“IRB”) before it can begin.

Clinical trials typically are conducted in three sequential phases, but the phases may overlap or be combined. Phase I usually involves the initial introduction of the investigational drug into healthy volunteers to evaluate its safety, dosage tolerance, absorption, metabolism, distribution and excretion. Phase II usually involves clinical trials in a limited patient population to evaluate dosage tolerance and optimal dosage, identify possible adverse effects and safety risks, and evaluate and gain preliminary evidence of the efficacy of the drug for specific indications. Phase III clinical trials usually further evaluate clinical efficacy and safety by testing the drug in its final form in an expanded patient population, providing statistical evidence of efficacy and safety, and providing an adequate basis for labeling. We cannot guarantee that Phase I, Phase II or Phase III testing will be completed successfully within any specified period of time, if at all. Furthermore, we, the IRB, or the FDA may suspend clinical trials at any time on various grounds, including a finding that the subjects or patients are being exposed to an unacceptable health risk.

As a separate amendment to an IND, a clinical trial sponsor may submit to the FDA a request for a Special Protocol Assessment (“SPA”). Under the SPA procedure, a sponsor may seek the FDA’s agreement on the design and size of a clinical trial intended to form the primary basis of an effectiveness claim. If the FDA agrees in writing, its agreement may not be changed after the trial begins, except when agreed by FDA or in limited circumstances, such as when a substantial scientific issue essential to determining the safety and effectiveness of a drug candidate is identified after a Phase III clinical trial is commenced and agreement is obtained with the FDA. If the outcome of the trial is successful, the sponsor will ordinarily be able to rely on it as the primary basis for approval with respect to effectiveness. However, additional trials could also be requested by the FDA to support approval, and the FDA may make an approval decision based on a number of factors, including the degree of clinical benefit as well as safety. The FDA is not obligated to approve an NDA or BLA as a result of an SPA agreement, even if the clinical outcome is positive.

Even after initial FDA approval has been obtained, post-approval trials, or Phase IV studies, may be required to provide additional data, and will be required to obtain approval for the sale of a product as a treatment for a clinical indication other than that for which the product was initially tested and approved. Also, the FDA will require post-approval safety reporting to monitor the side effects of the drug. Results of

post-approval programs may limit or expand the indication or indications for which the drug product may be marketed. Further, if there are any requests for modifications to the initial FDA approval for the drug, including changes in indication, manufacturing process, manufacturing facilities, or labeling, a supplemental NDA or BLA may be required to be submitted to the FDA.

The length of time and related costs necessary to complete clinical trials varies significantly and may be difficult to predict. Clinical results are frequently susceptible to varying interpretations that may delay, limit or prevent regulatory approvals. Additional factors that can cause delay or termination of our clinical trials, or cause the costs of these clinical trials to increase, include:

- slow patient enrollment due to the nature of the protocol, the proximity of patients to clinical sites, the eligibility criteria for the study, competition with clinical trials for other drug candidates or other factors;
- inadequately trained or insufficient personnel at the study site to assist in overseeing and monitoring clinical trials;
- delays in approvals from a study site's IRB;
- longer than anticipated treatment time required to demonstrate effectiveness or determine the appropriate product dose;
- lack of sufficient supplies of the drug candidate for use in clinical trials;
- adverse medical events or side effects in treated patients; and
- lack of effectiveness of the drug candidate being tested.

Any drug is likely to produce some toxicities or undesirable side effects in animals and in humans when administered at sufficiently high doses and/or for sufficiently long periods of time. Unacceptable toxicities or side effects may occur at any dose level, and at any time in the course of animal studies designed to identify unacceptable effects of a drug candidate, known as toxicological studies, or in clinical trials of our drug candidates. The appearance of any unacceptable toxicity or side effect could cause us or regulatory authorities to interrupt, limit, delay or abort the development of any of our drug candidates, and could ultimately prevent their marketing approval by the FDA or foreign regulatory authorities for any or all targeted indications.

The FDA's fast track and breakthrough therapy designation programs are intended to facilitate the development and expedite the review of drug candidates intended for the treatment of serious or life-threatening conditions and that demonstrate the potential to address unmet medical needs for these conditions. Under these programs, FDA can, for example, review portions of an NDA or BLA for a drug candidate before the entire application is complete, thus potentially beginning the review process at an earlier time.

We cannot guarantee that the FDA will grant any of our requests for fast track or breakthrough therapy designations, that any such designations would affect the time of review or that the FDA will approve the NDA or BLA submitted for any of our drug candidates, whether or not these designations are granted. Additionally, FDA approval of a fast track/breakthrough product can include restrictions on the product's use or distribution (such as permitting use only for specified medical conditions or limiting distribution to physicians or facilities with special training or experience). Approval of such designated products can be conditioned on additional clinical trials after approval.

Sponsors submit the results of preclinical studies and clinical trials to the FDA as part of an NDA or BLA. NDAs and BLAs must also contain extensive product manufacturing information and proposed labeling. Upon receipt, the FDA initially reviews the NDA or BLA to determine whether it is sufficiently complete to initiate a substantive review. If the FDA identifies deficiencies that would preclude substantive review, the FDA will refuse to accept the NDA or BLA and will inform the sponsor of the deficiencies that must be corrected prior to resubmission. If the FDA accepts the submission for review (then deemed a "filing"), the FDA typically completes the NDA or BLA review within a pre-determined time frame. Under the Prescription Drug User Fee Act, the FDA agrees to review NDAs and BLAs under either a standard review or priority review. FDA procedures provide for priority review of NDAs and BLAs submitted for

drugs that, compared to currently marketed products, if any, offer a significant improvement in the treatment, diagnosis or prevention of a disease. The FDA seeks to review NDAs and BLAs that are granted priority status more quickly than NDAs and BLAs given standard review status. The FDA's stated policy is to act on 90% of priority NDAs and BLAs within eight months of receipt (or six months after filing, which occurs 60 days after NDA or BLA submission). Although the FDA historically has not met these goals, the agency has made significant improvements in the timeliness of the review process. NDA and BLA review often extends beyond anticipated completion dates due to FDA requests for additional data or clarification, the FDA's decision to have an advisory committee review, and difficulties in scheduling an advisory committee meeting. The recommendations of an advisory committee are not binding on the FDA.

To obtain FDA approval to market a product, we must demonstrate that the product is safe and effective for the patient population that will be treated. If regulatory approval of a product is granted, the approval will be limited to those disease states and conditions for which the product is safe and effective, as demonstrated through clinical trials. Marketing or promoting a drug for an unapproved indication is prohibited. Furthermore, approval may entail requirements for post-marketing studies or risk evaluation and mitigation strategies, including the need for patient and/or physician education, patient registries, medication or similar guides, or other restrictions on the distribution of the product. If an NDA or BLA does not satisfy applicable regulatory criteria, the FDA may deny approval of an NDA or BLA or may issue a complete response, and require, among other things, additional clinical data or analyses.

In Canada, the Therapeutic Products Directorate and the Biologics and Genetic Therapies Directorate of HC ensure that clinical trials are properly designed and undertaken and that subjects are not exposed to undue risk. Regulations define specific Investigational New Drug submission (or IND) application requirements, which must be complied with before a new drug can be distributed for trial purposes. The directorates currently review the safety, efficacy and quality data submitted by the sponsor and approve the distribution of the drug to the investigator. The sponsor of the trial is required to maintain accurate records, report adverse drug reactions, and ensure that the investigator adheres to the approved protocol. Trials in humans should be conducted according to generally accepted principles of good clinical practice. Management believes that these standards provide assurance that the data and reported results are credible and accurate, and that the rights, integrity, and privacy of clinical trial subjects are protected.

Sponsors wishing to conduct clinical trials in Phases I through III of development must apply under a 30-day default system. Applications must contain the information described in the regulations, including: a clinical trial attestation; a protocol; statements to be contained in each informed consent form, that set out the risks posed to the health of clinical trial subjects as a result of their participation in the clinical trial; an investigator's brochure; applicable information on excipients (delivery vehicles); and chemistry and manufacturing information.

The sponsor can proceed with the clinical trial if the directorates have not objected to the sale or importation of the drug within 30 days after the date of receipt of the clinical trial application and Research Ethics Board approval for the conduct of the trial at the site has been obtained. Additional information is available on Health Canada's website — www.hc-sc.gc.ca.

Outside the United States and Canada, our ability to market a product is contingent upon receiving a marketing authorization from the appropriate regulatory authorities. The requirements governing the conduct of clinical trials, marketing authorization, pricing and reimbursement vary widely from country to country. At present, foreign marketing authorizations are applied for at a national level, although within the European Union ("EU") registration procedures are available to companies wishing to market a product in more than one EU member state. If the regulatory authority is satisfied that adequate evidence of safety, quality and efficacy has been presented, a marketing authorization may be granted. This foreign regulatory approval process involves all of the risks associated with FDA approval discussed above and may also include additional risks.

The Orphan Drug Act provides incentives to manufacturers to develop and market drugs for rare diseases and conditions affecting fewer than 200,000 persons in the United States at the time of application for orphan drug designation. The first developer to receive FDA marketing approval for an orphan drug is

entitled to a seven-year exclusive marketing period in the United States for the orphan drug indication. However, a drug that the FDA considers to be clinically superior to, or different from, another approved orphan drug, even though for the same indication, may also obtain approval in the United States during the seven-year exclusive marketing period.

Under the FDA Modernization Act of 1997, designation as a Fast Track product for a new drug or biological product means that the FDA will take such actions as are appropriate to expedite the development and review of the application for approval of such product.

Legislation similar to the Orphan Drug Act has been enacted in other countries outside of the United States, including the EU. The orphan legislation in the EU is available for therapies addressing conditions that affect five or fewer out of 10,000 persons, are life-threatening or chronically debilitating conditions and for which no satisfactory treatment is authorized. The market exclusivity period is for ten years, although that period can be reduced to six years if, at the end of the fifth year, available evidence establishes that the product does not justify maintenance of market exclusivity.

Regulation of Manufacturing Process

Even when NDA or BLA approval is obtained, a marketed product, its manufacturer and its manufacturing facilities are subject to continual review and periodic inspections by the FDA. The manufacturing process for pharmaceutical products is highly regulated and regulators may shut down manufacturing facilities that they believe do not comply with regulations. Discovery of previously unknown problems with a product, manufacturer or facility may result in restrictions on the product, manufacturer or facility, including costly recalls or withdrawal of the product from the market. Manufacturing facilities are always subject to inspection by the applicable regulatory authorities.

We and our third-party manufacturers are subject to current Good Manufacturing Practices (“GMP”), which are extensive regulations governing manufacturing processes, including but not limited to stability testing, record keeping and quality standards as defined by the FDA and the European Medicines Agency. Similar regulations are in effect in other countries. Manufacturing facilities are subject to inspection by the applicable regulatory authorities. These facilities, whether our own or our contract manufacturers, must be inspected before we can use them in commercial manufacturing of our related products. We or our contract manufacturers may not be able to comply with applicable GMP and FDA or other regulatory requirements. If we or our contract manufacturers fail to comply, we or our contract manufacturers may be subject to legal or regulatory action, such as suspension of manufacturing, seizure of product, or voluntary recall of product. Furthermore, continued compliance with applicable Good Manufacturing Practices will require continual expenditure of time, money and effort on the part of us or our contract manufacturers in the areas of production and quality control and record keeping and reporting, in order to ensure full compliance.

Post-Approval Regulation

Any products manufactured or distributed by us pursuant to FDA approvals are subject to pervasive and continuing regulation by the FDA, including record-keeping requirements, reporting of adverse experiences with the drug and other reporting, advertising and promotion restrictions. The FDA’s rules for advertising and promotion require, among other things, that our promotion be fairly balanced and adequately substantiated by clinical studies, and that we not promote our products for unapproved uses. We must also submit appropriate new and supplemental applications and obtain FDA approval for certain changes to the approved product, product labeling or manufacturing process. On its own initiative, the FDA may require changes to the labeling of an approved drug if it becomes aware of new safety information that the agency believes should be included in the approved drug’s labeling. The FDA also enforces the requirements of the Prescription Drug Marketing Act (“PDMA”) which, among other things, imposes various requirements in connection with the distribution of product samples to physicians.

In addition to inspections related to manufacturing, we may be subject to periodic unannounced inspections by the FDA and other regulatory bodies related to the other regulatory requirements that apply to marketed drugs manufactured or distributed by us. The FDA also may conduct periodic inspections regarding our review and reporting of adverse events, or related to compliance with the requirements of the

PDMA concerning the handling of drug samples. When the FDA conducts an inspection, the inspectors will identify any deficiencies they believe exist in the form of a notice of inspectional observations. The observations may be more or less significant. If we receive a notice of inspectional observations, we likely will be required to respond in writing, and may be required to undertake corrective and preventive actions in order to address the FDA's concerns.

There are a variety of state laws and regulations that apply in the states or localities where our drug candidates may be marketed. For example, we must comply with state laws that require the registration of manufacturers and wholesale distributors of pharmaceutical products in that state, including, in certain states, manufacturers and distributors who ship products into the state even if such manufacturers or distributors have no place of business within the state. Some states also impose requirements on manufacturers and distributors to establish the pedigree of product in the chain of distribution, including some states that require manufacturers and others to adopt new technology capable of tracking and tracing product as it moves through the distribution chain. Any applicable state or local regulations may hinder our ability to market, or increase the cost of marketing, our products in those states or localities.

The FDA's policies may change and additional government regulations may be enacted which could impose additional burdens or limitations on our ability to market products after approval. Moreover, increased attention to the containment of health care costs in the United States and in foreign markets could result in new government regulations which could have a material adverse effect on our business. We cannot predict the likelihood, nature or extent of adverse governmental regulation which might arise from future legislative or administrative action, either in the United States or abroad.

Marketing Exclusivity

The FDA may grant five years of exclusivity in the United States for the approval of NDAs for new chemical entities, and three years of exclusivity for supplemental NDAs, for among other things, new indications, dosages or dosage forms of an existing drug if new clinical investigations that were conducted or sponsored by the applicant are essential to the approval of the supplemental application. Additionally, six months of marketing exclusivity in the United States is available if, in response to a written request from the FDA, a sponsor submits and the agency accepts requested information relating to the use of the approved drug in the pediatric population. The six-month pediatric exclusivity is added to any existing patent or non-patent exclusivity period for which the drug is eligible. Orphan drug products are also eligible for pediatric exclusivity if the FDA requests and the company completes pediatric clinical trials. Under the Biologics Price Competition and Innovation Act, the FDA may grant 12 years of data exclusivity for innovative biological products.

Health Law Compliance

In addition to FDA laws and regulations, we must also comply with various federal and state laws and regulations pertaining to healthcare "fraud and abuse" laws which govern, among other things, our relationships with healthcare providers, and organizations such as specialty pharmacies, wholesalers and group purchasing organizations relating to the marketing and pricing of prescription drug products. Such laws include, without limitation, state and federal anti-kickback, fraud and abuse, false claims, privacy and security, and physician payment sunshine laws.

The federal Anti-Kickback Statute makes it illegal for any person or entity, including a prescription drug manufacturer (or a party acting on its behalf) to knowingly and willfully, directly or indirectly, solicit, receive, offer, or pay any remuneration that is intended to induce the referral of business, including the purchase, order, lease of any good, facility, item or service for which payment may be made under a federal healthcare program, such as Medicare or Medicaid. The term "remuneration" has been broadly interpreted to include anything of value. Several courts have interpreted the statute's intent requirement to mean that if any one purpose of an arrangement involving remuneration is to induce referrals of federal healthcare covered business, the Anti-Kickback Statute has been violated.

Federal false claims and false statement laws, including the federal civil False Claims Act, prohibit, among other things, any person or entity from knowingly presenting, or causing to be presented, for payment to, or approval by, federal programs, including Medicare and Medicaid, claims for items or

services, including drugs, that are false or fraudulent or not provided as claimed. Entities can be held liable under these laws if they are deemed to “cause” the submission of false or fraudulent claims by, for example, providing inaccurate billing or coding information to customers, promoting a product off-label, or for providing medically unnecessary services or items.

The federal Health Insurance Portability and Accountability Act of 1996, or HIPAA, created additional federal criminal statutes that prohibit among other actions, knowingly and willfully executing, or attempting to execute, a scheme to defraud any healthcare benefit program, including private third-party payors, knowingly and willfully embezzling or stealing from a healthcare benefit program, willfully obstructing a criminal investigation of a healthcare offense, and knowingly and willfully falsifying, concealing or covering up a material fact or making any materially false, fictitious or fraudulent statement in connection with the delivery of or payment for healthcare benefits, items or services.

HIPAA, as amended by the Health Information Technology for Economic and Clinical Health Act, or HITECH, and their implementing regulations, require certain types of individuals and entities to protect the privacy, security, and electronic exchange of certain patient data.

The federal Physician Payments Sunshine Act requires certain manufacturers of drugs, devices, biologics and medical supplies for which payment is available under Medicare, Medicaid or the Children’s Health Insurance Program, with specific exceptions, to report annually to the Centers for Medicare & Medicaid Services, or CMS, information related to payments or other transfers of value made to physicians and teaching hospitals, and applicable manufacturers and applicable group purchasing organizations to report annually to CMS ownership and investment interests held by the physicians and their immediate family members.

Analogous state and foreign laws and regulations, such as state anti-kickback and false claims laws, may apply to sales or marketing arrangements and claims involving healthcare items or services reimbursed by non-governmental third-party payors, including private insurers. Additionally, we may be subject to state laws that require pharmaceutical companies to comply with the pharmaceutical industry’s voluntary compliance guidelines and the relevant compliance guidance promulgated by the federal government. Further, we may be subject to state laws that require drug manufacturers to report information related to payments and other transfers of value to physicians and other healthcare providers or marketing expenditures, as well as state and foreign laws governing the privacy and security of health information in some circumstances, many of which differ from each other in significant ways and often are not preempted by HIPAA, thus complicating compliance efforts. If our operations are found to be in violation of any of these federal, state or foreign laws or regulations, we may be subject to penalties, including without limitation, administrative or civil penalties, imprisonment, damages, fines, disgorgement, exclusion from participation in government healthcare programs, contractual damages, reputational harm, diminished profits and future earnings, or the curtailment or restructuring of our operations.

There are also an increasing number of state laws that require manufacturers to make reports to those states on certain pricing and marketing information. Many of these laws contain ambiguities as to what is required to comply with the laws. Given the lack of clarity in laws and their implementation, our reporting actions could be subject to the penalty provisions of the state authorities.

Healthcare Reform and Reimbursement and Pricing Controls

There has been an increased focus on drug pricing in recent years in the United States. Although there are no direct government price controls over private sector purchases in the United States, there are rebates and other financial requirements for federal and state health care programs. The Medicare Modernization Act, enacted in December 2003, established the Medicare Part D outpatient prescription drug benefit, which is provided primarily through private entities that attempt to negotiate price concessions from pharmaceutical manufacturers. The health care reform legislation enacted in 2010, known as the Affordable Care Act, requires drug manufacturers to pay 50% of the Medicare Part D coverage gap, also known as the “donut hole,” on prescriptions for branded products filled when the beneficiary reaches this coverage. The Deficit Reduction Act of 2005 resulted in changes to the way drug prices are reported to the government and the formula using such information to calculate the required Medicaid rebates. The Affordable Care Act increased the minimum basic Medicaid rebate for branded prescription drugs from 15.1% to 23.1% and

requires pharmaceutical manufacturers to pay states rebates on prescription drugs dispensed to Medicaid managed care enrollees. In addition, the Affordable Care Act increased the additional Medicaid rebate on “line extensions” (such as extended release formulations) of solid oral dosage forms of branded products, revised the definition of average manufacturer price by changing the classes of purchasers included in the calculation, and expanded the entities eligible for discounted pricing under the federal 340B drug pricing program. Current orphan drugs are excluded from the expanded 340B hospitals eligible for discounts.

The Affordable Care Act imposes a significant annual fee on companies that manufacture or import branded prescription drug products. The fee (which is not deductible for federal income tax purposes) is based on the manufacturer’s market share of sales of branded drugs and biologics (excluding orphan drugs) to, or pursuant to coverage under, specified U.S. government programs. The Affordable Care Act also contains a number of provisions, including provisions governing the way that health care is financed by both governmental and private insurers, enrollment in federal health care programs, reimbursement changes, the increased use of comparative effectiveness research in health care decision-making, and enhancements to fraud and abuse requirements and enforcement, that are affecting existing government health care programs and will result in the development of new programs. The Affordable Care Act also contains requirements for manufacturers to publicly report certain payments or other transfers of value made to physicians and teaching hospitals. We are unable to predict the future course of federal or state health care legislation and regulations, including regulations that will be issued to implement provisions of the Affordable Care Act. The Affordable Care Act and further changes in the law or regulatory framework that reduce our revenues or increase our costs could also have a material adverse effect on our business, financial condition and results of operations and cash flows.

Public and private health care payors control costs and influence drug pricing through a variety of mechanisms, including through negotiating discounts with the manufacturers and through the use of tiered formularies and other mechanisms that provide preferential access to certain drugs over others within a therapeutic class. Payors also set other criteria to govern the uses of a drug that will be deemed medically appropriate and therefore reimbursed or otherwise covered. Payors may require physicians to seek approval from them before a product will be reimbursed or covered, commonly referred to as prior authorization. In particular, many public and private health care payors limit reimbursement and coverage to the uses of a drug that are either approved by the FDA or appear in a recognized drug compendium. Drug compendia are publications that summarize the available medical evidence for particular drug products and identify which uses of a drug are supported or not supported by the available evidence, whether or not such uses have been approved by the FDA. For example, in the case of Medicare Part D coverage for oncology drugs, the Medicare Modernization Act, with certain exceptions, provides for Medicare coverage of unapproved uses of an FDA-approved drug if the unapproved use is reasonable and necessary and is supported by one or more citations in CMS-approved compendia, such as the National Comprehensive Cancer Network Drugs and Biologics Compendium. Different pricing and reimbursement schemes exist in other countries. For example, in the European Union, governments influence the price of pharmaceutical products through their pricing and reimbursement rules and control of national health care systems that fund a large part of the cost of such products to consumers. The approach taken varies from member state to member state. Some jurisdictions operate positive or negative list systems under which products may only be marketed once a reimbursement price has been agreed. Other member states allow companies to fix their own prices for medicines, but monitor and control company profits and may limit or restrict reimbursement. The downward pressure on health care costs in general, and prescription drugs in particular, has become very intense. As a result, increasingly high barriers are being erected to the entry of new products, as exemplified by the actions of the National Institute for Clinical Excellence in the United Kingdom, which evaluates the data supporting new medicines and passes reimbursement recommendations to the government. In addition, in some countries, cross-border imports from low-priced markets (parallel imports) exert a commercial pressure on pricing within a country.

Manufacturing

Our manufacturing strategy is to contract with third parties to manufacture the raw materials, our active pharmaceutical ingredients (“API”) and finished solid dose products for clinical and ultimately commercial uses. We currently do not operate manufacturing facilities for clinical or commercial production our drug candidates. In addition, we expect for the foreseeable future to continue to rely on third parties for

the manufacture of commercial supplies of the raw materials, API and finished drug product for any drugs that we successfully develop and are approved for commercial sale. In this manner, we expect to continue to build and maintain our supply chain and quality assurance resources.

Manufacturing of our Products

Our supply chain for manufacturing raw materials, API and drug product ready for distribution and commercialization is a multi-step international process. Establishing and managing the supply chain requires a significant financial commitment and the creation and maintenance of numerous third-party contractual relationships.

We contract with third parties to manufacture our drug candidates for clinical purposes. Third-party manufacturers supply us with raw materials, and other third-party manufacturers convert these raw materials into API or convert the API into final dosage form. For most of our drug candidates, once our raw materials are produced, we rely on one third party to manufacture the API, another to make finished drug product and a third to lyophilize, package and label the finished product. While we currently have focused on single vendors for manufacturing of peptide, formulation development, and lyophilization and vialing, there are a number of vendors we are in contact with and can also use if required.

We may not be able to obtain sufficient quantities of any of our raw materials or drug candidates if our designated manufacturers do not have the capacity or capability to manufacture our products according to our schedule and specifications. If any of these single source suppliers were to become unable or unwilling to supply us with API or finished product that complies with applicable regulatory requirements, we could incur significant delays in our clinical trials which could have a material adverse effect on our business.

We have established a quality assurance program intended to ensure that our third-party manufacturers and service providers produce materials and provide services, when applicable, in accordance with the FDA's current Good Manufacturing Practices and other applicable regulations.

For our future products, we intend to continue to establish third-party suppliers to manufacture sufficient quantities of our drug candidates to undertake clinical trials and to manufacture sufficient quantities of any product that is approved for commercial sale. If we are unable to contract for large scale manufacturing with third parties on acceptable terms for our future products or develop manufacturing capabilities internally, our ability to conduct large scale clinical trials and ultimately meet customer demand for commercial products will be adversely affected.

Third-party Manufacturers

Our third-party manufacturers are independent entities, under contract with us, who are subject to their own unique operational and financial risks which are out of our control. If we or any of our third-party manufacturers fail to perform as required, this could impair our ability to deliver our products on a timely basis or cause delays in our clinical trials and applications for regulatory approval. To the extent that these risks materialize and affect their performance obligations to us, our financial results may be adversely affected.

While we believe there are multiple third parties capable of providing most of the materials and services we need in order to manufacture our product candidates, and that supply of materials that cannot be second-sourced can be managed with inventory planning, there is always a risk that we may underestimate demand, and that our manufacturing capacity through third-party manufacturers may not be sufficient.

Access to Supplies and Materials

Our third-party manufacturers need access to certain supplies and products to manufacture our drug candidates. If delivery of material from their suppliers were interrupted for any reason or if they are unable to purchase sufficient quantities of raw materials used to manufacture our drug candidates, they may be unable to supply our drug candidates in development for clinical trials.

Research and Development

Since our inception, we have made substantial investments in research and technology development. During the years ended December 31, 2017 and 2016, we incurred research and development expenses of approximately \$5.3 million, and \$3.8 million, respectively.

Product Liability and Insurance

Once we are able to commence the sale of our products into the market, we will face the risk of product liability claims. Because we are not yet selling our products, we have not experienced any product liability claims to date. Management maintains products and clinical trial liability insurance policies. There can be no assurance that liability claims will not exceed such insurance coverage limits, which could have a materially adverse effect on our business, financial condition or results of operations or that such insurance will continue to be available on commercially reasonable terms, if at all.

Human Resources***Employees***

We currently have seven full-time employees. The management team is comprised of Peter Hoang (President and Chief Executive Officer), Dr. Glynn Wilson (Strategy Advisor), Michael J. Loiacono (Chief Financial Officer), Dr. Robert Florkiewicz (Senior Director of Molecular Biology & Virology) and a Director of Administration. Additionally, we employ a Director of Manufacturing and an Investor Relations Manager.

Consultants

We have consulting agreements with a number of leading academic scientists, clinicians and regulatory experts. These individuals serve as key consultants or expert witnesses with respect to the imetelstat program or in legal proceedings. They also serve as important contacts for us throughout the broader scientific and clinical communities. They are distinguished individuals with expertise in numerous fields, including cellular biology, molecular biology, oncology, clinical, manufacturing and regulatory. Dr. Richard Kenney serves as our Acting Medical Director in a consulting capacity.

We retain each consultant according to the terms of a consulting agreement. Under such agreements, we pay them a consulting fee and reimburse them for out-of-pocket expenses incurred in performing their services for us. In addition, some consultants hold options to purchase our common stock, subject to the vesting requirements contained in separate award agreements. Our consultants may be employed by other entities and therefore may have commitments to their employer, or may have other consulting or advisory agreements that may limit their availability to us.

Available Information

Our website is located at www.tapimmune.com. We make available free of charge on our website our annual reports on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K and amendments to those reports, as soon as reasonably practicable after we electronically file or furnish such materials to the Securities and Exchange Commission. Our website and the information contained therein or connected thereto are not intended to be incorporated into this Annual Report on Form 10-K.

ITEM 1A. RISK FACTORS

An investment in our common stock involves a high degree of risk. You should carefully consider the risks described below before making an investment decision in our securities. These risk factors are effective as of the date of this Form 10-K and shall be deemed to be modified or superseded to the extent that a statement contained in our future filings modifies or replaces such statement. All of these risks may impair our business operations. The forward-looking statements in this Form 10-K involve risks and uncertainties and actual results may differ materially from the results we discuss in the forward-looking statements. If any of the following risks actually occur, our business, financial condition or results of operations could be materially adversely affected. In that case, the trading price of our stock could decline, and you may lose all or part of your investment.

Risks Related to our Financial Position and Capital Needs

We will need to raise additional capital in the future to continue to operate our business and this capital might not be available on acceptable terms, if at all.

Since we have no sources of revenue to provide incoming cash flows to sustain our future operations, our ability to pursue our planned business activities is dependent upon our successful efforts to raise additional capital. As of December 31, 2017, we had cash of approximately \$5.1 million. We believe that our cash resources can be sufficient to fund our research efforts and operations into the third quarter of 2018. Until we can generate a sufficient amount of product revenue, if ever, we expect to finance future cash needs through public or private equity offerings or debt financings or through a business combination or strategic partnership. Additional capital, if needed, may not be available on satisfactory terms, or at all. Furthermore, if we raise additional funds by issuing equity securities, dilution to our existing stockholders could result. Any equity securities issued also may provide for rights, preferences or privileges senior to those of holders of our common stock. If we raise additional funds by issuing debt securities, these debt securities would have rights, preferences and privileges senior to those of holders of our common stock, and the terms of the debt securities issued could impose significant restrictions on our operations. If we are unable to obtain adequate financing or financing on terms acceptable to us, we may not be able to sustain our future operations and may be required to suspend our research efforts and reduce or cease our operations.

Our auditor has expressed substantial doubt about our ability to continue as a going concern and absent additional financing we may be unable to remain a going concern.

In light of our recurring losses, accumulated deficit and negative cash flow as described in our notes to our audited financial statements, the report of our independent registered public accounting firm on our financial statements for the year ended December 31, 2017 contains an explanatory paragraph raising substantial doubt about our ability to continue as a going concern. Our financial statements do not include any adjustments that may be necessary in the event we are unable to continue as a going concern. We believe our current capital resources are sufficient to support our operations into the third quarter of 2018. Management intends to continue our research efforts and to finance our operations through debt and/or equity financings. Management plans to seek additional debt and/or equity financing through private or public offerings or through a business combination or strategic partnership. There can be no assurance that we will be successful in obtaining additional financing on favorable terms, or at all. These matters raise substantial doubt about our ability to continue as a going concern.

We are a development stage company with a history of operating losses.

We are a clinical-stage immunotherapy company with a history of losses, and we may always operate at a loss. We expect that we will continue to operate at a loss throughout our development stage, and as a result, we may exhaust our financial resources and be unable to complete the development of our products. We anticipate that our ongoing operational costs will increase significantly as we continue conducting our clinical development program. Our deficit will continue to grow during our drug development period. We have no sources of revenue to provide incoming cash flows to sustain our future operations. As outlined above, our ability to pursue our planned business activities depends upon our successful efforts to raise additional financing.

We have sustained losses from operations in each fiscal year since our inception, and we expect losses to continue for the indefinite future due to the substantial investment in research and development. As of December 31, 2017, we had an accumulated deficit of approximately \$157 million since inception. We expect to spend substantial additional sums on the continued administration and research and development of licensed and proprietary products and technologies with no certainty that our approach and associated technologies will become commercially viable or profitable as a result of these expenditures. If we fail to raise a significant amount of capital, we may need to significantly curtail operations or cease operations in the near future. If any of our product candidates fails in clinical trials or does not gain regulatory approval, we may never generate revenue. Even if we generate revenue in the future, we may not be able to become profitable or sustain profitability in subsequent periods.

We have not yet sold any products or received regulatory approval to sell our products.

We have no approved products or products pending approval. As a result, we have not derived any revenue from the sales of products and have not yet demonstrated ability to obtain regulatory approval, formulate and manufacture commercial-scale products, or conduct sales and marketing activities necessary for successful product commercialization. Without revenue, we can only finance our company through debt and equity financings.

The recently passed U.S. federal income tax reform could adversely affect

On December 22, 2017, U.S. federal tax legislation, commonly referred to as the Tax Cuts and Jobs Act (TCJA), was signed into law, significantly reforming the U.S. Internal Revenue Code. The TCJA, among other things, includes changes to U.S. federal tax rates, limitation of the deduction for net operating losses to 80% of current year taxable income and elimination of net operating loss carrybacks. We have evaluated the effect of the TCJA on our net operating losses for the quarter and the year ending December 31, 2017. The estimated impact of the TCJA is based on our management's current knowledge and assumptions and recognized impacts could be materially different from current estimates based on our actual results and our further analysis of the new law. The impact of the TCJA on holders of common shares is uncertain and could be adverse. This Annual Report on Form 10-K does not discuss any such tax legislation or the manner in which it might affect holders of our common stock. Investors should consult with their own tax advisors with respect to such legislation and the potential tax consequences of investing in our common stock.

Risks Related to our Business and Intellectual Property

We may be required to make additional cash payments to warrant holders in the event any registration statement we have filed with the SEC to register the shares issuable upon exercise of the warrants ceases to be effective and we are unable to deliver registered shares.

Since we are required to deliver unlegended registered shares of common stock to certain of the warrant holders acquiring warrants in our 2015, 2016 and 2017 financings upon exercise of such outstanding warrants, we have filed registration statements with the SEC to register such shares. The registration statements permit registered shares of common stock to be issued upon the exercise of such warrants. In some cases, we would be required to make additional cash payments to such warrant holders if we fail to maintain the effectiveness of the relevant registration statement for the issuance of such registered shares upon an exercise by the warrant holder. For each trading day that the shares are not timely delivered we would be required to pay an amount to the holder equal to a percentage of the product of (A) the aggregate number of shares not issued to the holder on a timely basis and to which the holder is entitled and (B) the closing sale price of our common stock on the trading day immediately preceding the last possible date on which we could have issued such shares to the holder. Additionally, we could be required to pay the holder a "buy-in" if the holder is required to purchase shares on the open market to cover any warrant shares sold. As such, the amount of additional cash payments we would be required to make could be substantial, as a percentage of our cash, if we are unable to deliver registered shares upon the warrant exercise. Currently, the registration statements we have filed are not useable until such time as appropriate post-effective amendments to the registration statements can be filed by us and ultimately be declared effective by the Securities and Exchange Commission. While we have filed such amendments to our

registration statements, there can be no assurance that we will be able to have the post-effective amendments to our registration statements declared effective in a timely manner. During such time that we are not able to provide an effective registration statement and to the extent we receive any notices of exercises related to the warrants with such rights, we would be unable to deliver registered shares. In such event we could be required to make cash payments to an exercising warrant holder. We may not be able to make the required cash payments and the failure to do so could materially harm our financial condition and operations.

We may not be able to develop products successfully or develop them on a timely basis.

Our immunotherapy product candidates are at various stages of research and development. Further development and extensive testing will be required to determine their technical feasibility and commercial viability. We will need to complete significant additional clinical trials demonstrating that our product candidates are safe and effective to the satisfaction of the Food and Drug Administration (“FDA”) and other non-U.S. regulatory authorities. The drug approval process is time-consuming, which involves substantial expenditures of resources, and depends upon a number of factors, including the severity of the illness in question, the availability of alternative treatments, and the risks and benefits demonstrated in the clinical trials. Our success depends on our ability to achieve scientific and technological advances and to translate such advances into licensable, FDA-approvable, commercially-competitive products on a timely basis. Failure can occur at any stage of the process. If such programs are not successful, we may be unable to develop revenue-producing products. As we enter a more extensive clinical program for our product candidates, the data generated in these studies may not be as compelling as the earlier results.

Immunotherapies and vaccines that we may develop are not likely to be commercially available for at least five years. Any delay in obtaining FDA and/or other necessary regulatory approvals in the United States and in countries outside the United States for any investigational new drug and failure to receive such approvals would have an adverse effect on the investigational new drug’s potential commercial success and on our business, prospects, financial condition and results of operations. The time required to obtain approval by the FDA and non-U.S. regulatory authorities is unpredictable but typically takes many years following the commencement of clinical trials and depends upon numerous factors, including the substantial discretion of the regulatory authorities. For example, the FDA or non-U.S. regulatory authorities may disagree with the design or implementation of our clinical trials or study endpoints; or we may be unable to demonstrate that a product candidate’s clinical and other benefits outweigh its safety risks. In addition, the FDA or non-U.S. regulatory authorities may disagree with our interpretation of data from preclinical studies or clinical trials or the data collected from clinical trials of our product candidates may not be sufficient to support the submission of a new drug application (“NDA”) or other submission or to obtain regulatory approval in the United States or elsewhere. The FDA or non-U.S. regulatory authorities may fail to approve the manufacturing processes or facilities of third-party manufacturers with which we contract for clinical and commercial supplies; and the approval policies or regulations of the FDA or non-U.S. regulatory authorities may significantly change in a manner rendering our clinical data insufficient for approval. In addition, approval policies, regulations, or the type and amount of clinical data necessary to gain approval may change during the course of a product candidate’s clinical development and may vary among jurisdictions. The proposed development schedules for our immunotherapy product candidates may be affected by a variety of other factors, including technological difficulties, clinical trial failures, regulatory hurdles, competitive products, intellectual property challenges and/or changes in governmental regulation, many of which will not be within our control.

Any delay in the development, approval, introduction or marketing of our products could result either in such products being marketed at a time when their cost and performance characteristics would not be competitive in the marketplace or in the shortening of their commercial lives. In light of the long-term nature of our projects, the unproven technology involved and the other factors described elsewhere in this section, we might not be able to successfully complete the development or marketing of any new products, and as a result, our business, prospects, financial condition and results of operations could be materially and adversely affected. We may be required to reduce our staff, discontinue certain research or development programs of our future products and cease to operate.

Our commercial success depends upon attaining significant market acceptance of our product candidates, if approved, among physicians, patients, healthcare payors and the medical community.

Even if we obtain regulatory approval for our product candidates, they may not gain market acceptance among physicians, healthcare payors, patients or the medical community. Market acceptance of our product candidates, if we receive approval, depends on a number of factors, including the:

- efficacy and safety of our product candidates as demonstrated in clinical trials and post-marketing experience;
- clinical indications for which our product candidates may be approved;
- acceptance by physicians and patients of our product candidates as safe and effective;
- potential and perceived advantages of our product candidates over alternative treatments;
- safety of our product candidates seen in a broader patient group, including its use outside the approved indications should physicians choose to prescribe for such uses;
- prevalence and severity of any side effects;
- product labeling or product insert requirements of the FDA or other regulatory authorities;
- timing of market introduction of our product candidates as well as competitive products;
- cost in relation to alternative treatments;
- availability of coverage and adequate reimbursement and pricing by third-party payors and government authorities;
- relative convenience and ease of administration; and
- effectiveness of any sales and marketing efforts.

Moreover, if our product candidates are approved but fail to achieve market acceptance among physicians, patients, healthcare payors and the medical community, we may not be able to generate significant revenues, which would compromise our ability to become profitable.

We may not be able to establish or maintain the third-party relationships that are necessary to develop or potentially commercialize some or all of our product candidates.

We expect to depend on collaborators, partners, licensees, clinical research organizations and other third parties to support our discovery efforts, to formulate product candidates, to manufacture our product candidates, and to conduct clinical trials for some or all of our product candidates. We cannot guarantee that we will be able to successfully negotiate agreements for or maintain relationships with collaborators, partners, licensees, clinical investigators, vendors and other third parties on favorable terms, if at all. Our ability to successfully negotiate such agreements will depend on, among other things, potential partners' evaluation of the superiority of our technology over competing technologies and the quality of the preclinical and clinical data that we have generated, and the perceived risks specific to developing our product candidates. If we are unable to obtain or maintain these agreements, we may not be able to clinically develop, formulate, manufacture, obtain regulatory approvals for or commercialize our product candidates.

We may face legal claims; litigation is expensive and we may not be able to afford the costs.

We may face legal claims involving stockholders, consumers, competitors, entities from whom we license technology, entities with whom we collaborate, persons claiming that we are infringing on their intellectual property and others. The biotechnology and pharmaceutical industries have been characterized by extensive litigation regarding patents and other intellectual property rights, and companies have employed intellectual property litigation to gain a competitive advantage. We may initiate or become subject to infringement claims or litigation arising out of patents and pending applications of our competitors, or we may become subject to proceedings initiated by our competitors or other third parties or the

United States Patent and Trademark Office (“USPTO”) or applicable foreign bodies to reexamine the patentability of our licensed or owned patents. In addition, litigation may be necessary to enforce our issued patents, to protect our trade secrets and know-how, or to determine the enforceability, scope, and validity of the proprietary rights of other.

The costs of litigation or any proceeding relating to our intellectual property or contractual rights could be substantial even if resolved in our favor. Some of our competitors or financial funding sources have far greater resources than we do and may be better able to afford the costs of complex legal procedures. Also, in a law suit for infringement or contractual breaches, even if frivolous, will require considerable time commitments on the part of management, its attorneys and consultants. Defending these types of proceedings or legal actions involve considerable expense and could negatively affect our financial results.

Our research and development programs are subject to uncertainty.

Factors affecting our research and development programs include, but are not limited to:

- competition from companies that are substantially and financially stronger than we are;
- need for acceptance of our immunotherapies;
- our ability to anticipate and adapt to a competitive market and rapid technological developments;
- amount and timing of operating costs and capital expenditures relating to expansion of our business, operations and infrastructure;
- need to rely on multiple levels of outside funding due to the length of drug development cycles and governmental approved protocols associated with the pharmaceutical industry; and
- dependence upon key personnel including key independent consultants and advisors.

Our research and development expenses may not be consistent from time to time. We may be required to accelerate or delay incurring certain expenses depending on the results of our studies and the availability of adequate funding.

Certain of our technologies are in-licensed from third parties, and the protection of those technologies is not entirely within our control.

We have world-wide exclusive licenses on (i) a novel set of Class II HER2/neu+ peptide antigens, (ii) a novel Class I HER2/neu+ antigen, and (iii) a novel set of Class II Folate Receptor Alpha peptide antigens. As a result of these in-licenses, we could lose the right to develop each of the technologies if:

- the owners of the patent rights underlying the technologies that we license do not properly maintain or enforce the patents and intellectual property underlying those properties,
- the Mayo Clinic seeks to terminate our license in contravention of the license agreements,
- we fail to make all payments due and owing under any of the licenses; or
- we fail to obtain on commercially reasonable terms, if at all, in-licenses from the Mayo Clinic or other for other rights that are necessary to develop the technology that we have already in-licensed.

If any of the above occurs, we could lose the right to use the in-licensed intellectual property, which would adversely affect our ability to commercialize our technologies, products or services. The loss of any current or future licenses from Mayo Clinic or the exclusivity rights provided therein could materially harm our financial condition and operating results.

We rely upon patents and licensed technologies to protect our technology. We may be unable to protect our intellectual property rights, and we may be liable for infringing the intellectual property rights of others.

Our ability to compete effectively depends on our ability to maintain the proprietary nature of our technologies, including PolyStart™, and the proprietary technology of others with whom we have entered into collaboration and licensing agreements.

We own or hold licenses to a number of issued patents and U.S. pending patent applications, as well as foreign patents and foreign counterparts. Our success depends in part on our ability to obtain patent protection both in the United States and abroad for our product candidates, as well as the methods for treating patients in the product indications using these product candidates. Such patent protection is costly to obtain and maintain, and sufficient funds might not be available. Our ability to protect our product candidates from unauthorized or infringing use by third parties depends in substantial part on our ability to obtain and maintain valid and enforceable patents. Due to evolving legal standards relating to the patentability, validity and enforceability of patents covering pharmaceutical inventions and the scope of claims made under these patents, our ability to obtain, maintain and enforce patents is uncertain and involves complex legal and factual questions. Even if our product candidates, as well as methods for treating patients for prescribed indications using these product candidates are covered by valid and enforceable patents and have claims with sufficient scope, disclosure and support in the specification, the patents will provide protection only for a limited amount of time. Accordingly, rights under any issued patents may not provide us with sufficient protection for our product candidates or provide sufficient protection to afford us a commercial advantage against competitive products or processes.

In addition, we cannot guarantee that any patents will be issued from any pending or future patent applications owned by or licensed to us. Even if patents have been issued or will be issued, we cannot guarantee that the claims of these patents are or will be valid or enforceable or will provide us with any significant protection against competitive products or otherwise be commercially valuable to us. The laws of some foreign jurisdictions do not protect intellectual property rights to the same extent as in the United States and many companies have encountered significant difficulties in protecting and defending such rights in foreign jurisdictions. Furthermore, different countries have different procedures for obtaining patents, and patents issued in different countries offer different degrees of protection against use of the patented invention by others. If we encounter such difficulties in protecting or are otherwise precluded from effectively protecting our intellectual property rights in foreign jurisdictions, our business prospects could be substantially harmed.

The patent positions of biotechnology and pharmaceutical companies, including our patent positions, involve complex legal and factual questions, and, therefore, validity and enforceability cannot be predicted with certainty. Patents may be challenged, deemed unenforceable, invalidated, or circumvented. Our patents can be challenged by our competitors who can argue that our patents are invalid, unenforceable, lack sufficient written description or enablement, or that the claims of the issued patents should be limited or narrowly construed. Patents also will not protect our product candidates if competitors devise ways of making or using these product candidates without infringing our patents.

We will be able to protect our proprietary rights from unauthorized use by third parties only to the extent that our technologies, methods of treatment, product candidates, and any future products are covered by valid and enforceable patents or are effectively maintained as trade secrets and we have the funds to enforce our rights, if necessary.

The expiration of our owned or licensed patents before completing the research and development of our product candidates and receiving all required approvals in order to sell and distribute the products on a commercial scale can adversely affect our business and results of operations.

We may be unable to adequately prevent disclosure of trade secrets and other proprietary information.

We also rely on trade secrets to protect our proprietary technologies, especially where we do not believe patent protection is appropriate or obtainable. However, trade secrets are difficult to protect. We rely in part on confidentiality agreements with our employees, consultants, outside scientific collaborators, sponsored researchers, and other advisors to protect our trade secrets and other proprietary information. These agreements may not effectively prevent disclosure of confidential information and may not provide an adequate remedy in the event of unauthorized disclosure of confidential information. In addition, others may independently discover our trade secrets and proprietary information. Costly and time-consuming litigation could be necessary to enforce and determine the scope of our proprietary rights, and failure to obtain or maintain trade secret protection could adversely affect our competitive business position.

If we are unable to obtain licenses needed for the development of our product candidates, or if we breach any of the agreements under which we license rights to patents or other intellectual property from third parties, we could lose license rights that are important to our business.

If we are unable to maintain and/or obtain licenses needed for the development of our product candidates in the future, we may have to develop alternatives to avoid infringing on the patents of others, potentially causing increased costs and delays in drug development and introduction or precluding the development, manufacture, or sale of planned products. Some of our licenses provide for limited periods of exclusivity that require minimum license fees and payments and/or may be extended only with the consent of the licensor. We might not meet these minimum license fees in the future or these third parties might not grant extensions on any or all such licenses. This same restriction may be contained in licenses obtained in the future.

Additionally, the patents underlying the licenses might not be valid and enforceable. To the extent any products developed by us are based on licensed technology, royalty payments on the licenses will reduce our gross profit from such product sales and may render the sales of such products uneconomical. In addition, the loss of any current or future licenses or the exclusivity rights provided therein could materially harm our business financial condition and our operations.

We may not obtain or maintain the benefits associated with orphan drug designation, including market exclusivity.

On December 9, 2015, we announced that we received Orphan Drug Designation from the U.S. Food & Drug Administration's Office of Orphan Products Development ("OOPD") for our cancer vaccine TPIV200 in the treatment of ovarian cancer. The TPIV200 ovarian cancer clinical program will now receive benefits including tax credits on clinical research and seven-year market exclusivity upon receiving marketing approval. Even though we were granted orphan drug designation, we may not receive the benefits associated with orphan drug designation. This may result from a failure to maintain orphan drug status, or result from a competing product reaching the market that has an orphan designation for the same disease indication. Under U.S. regulations for orphan drugs, if such a competing product reaches the market before ours does, the competing product could potentially obtain a scope of market exclusivity that limits or precludes our product from being sold in the United States for seven years. Even if we obtain exclusivity, the FDA could subsequently approve a drug for the same condition if the FDA concludes that the later drug is clinically superior in that it is shown to be safer, more effective or makes a major contribution to patient care. A competitor also may receive approval of different products for the same indication for which our orphan product has exclusivity, or obtain approval for the same product but for a different indication for which the orphan product has exclusivity.

In addition, if and when we request orphan drug designation in Europe, the European exclusivity period is ten years but can be reduced to six years if the drug no longer meets the criteria for orphan drug designation or if the drug is sufficiently profitable so that market exclusivity is no longer justified. Orphan drug exclusivity may be lost if the FDA or European Medicines Evaluation Agency ("EMA") determines that the request for designation was materially defective or if the manufacturer is unable to assure sufficient quantity of the drug to meet the needs of patients with the rare disease or condition.

New regulatory pathways for biosimilar competition could reduce the duration of market exclusivity for our products.

Under the federal Patient Protection and Affordable Care Act ("PPACA"), enacted in 2010, there is an abbreviated path in the United States for regulatory approval of products that are demonstrated to be "biosimilar" or "interchangeable" with an FDA-approved biological product. The PPACA provides a regulatory mechanism that allows for FDA approval of biologic drugs that are similar to (but not generic copies of) innovative drugs on the basis of less extensive data than is required by a full BLA. Under this regulation, an application for approval of a biosimilar may be filed four years after approval of the innovator product. However, qualified innovative biological products will receive 12 years of regulatory exclusivity, meaning that the FDA may not approve a biosimilar version until 12 years after the innovative biological product was first approved by the FDA. However, the term of regulatory exclusivity may not remain at 12 years in the United States and could be shortened.

A number of jurisdictions outside of the United States have also established abbreviated pathways for regulatory approval of biological products that are biosimilar to earlier versions of biological products. For example, the European Union has had an established regulatory pathway for biosimilars since 2005.

The increased likelihood of biosimilar competition has increased the risk of loss of innovators' market exclusivity. Due to this risk, and uncertainties regarding patent protection, if our late-stage product candidates or other clinical candidates are approved for marketing, it is not possible to predict the length of market exclusivity for any particular product with certainty based solely on the expiration of the relevant patent(s) or the current forms of regulatory exclusivity. It is also not possible to predict changes in United States regulatory law that might reduce biological product regulatory exclusivity. The loss of market exclusivity for a product would likely materially and negatively affect revenues from product sales of that product and thus our financial results and condition.

We have limited manufacturing experience and have no manufacturing facility. We are dependent on third-party manufacturers for the manufacture of our product candidates as well as on third parties for our supply chain, and if we experience problems with any such third parties, the manufacturing of our product candidates could be delayed.

We do not own or operate facilities for the manufacture of our product candidates. We currently have no short-term plans to build our own clinical or commercial scale manufacturing capabilities. We currently rely on third-party Contract Manufacturing Organizations ("CMOs"). To meet our projected needs for preclinical and clinical supplies to support our activities through regulatory approval and commercial manufacturing, the CMOs with whom we currently work may need to increase the scale of production. We may need to identify additional CMOs for continued production of supply for our product candidates. Although alternative third-party suppliers with the necessary manufacturing and regulatory expertise and facilities exist, it could be expensive and take a significant amount of time to arrange for alternative suppliers. If we are unable to arrange for alternative third-party manufacturing sources, or to do so on commercially reasonable terms or in a timely manner, we may not be able to complete development of our product candidates, or market or distribute our product candidates.

Reliance on third-party manufacturers entails risks to which we would not be subject if we manufactured our product candidates ourselves, including reliance on the third party for regulatory compliance and quality assurance, the possibility of breach of the manufacturing agreement by the third party because of factors beyond our control, including a failure to synthesize and manufacture our product candidates or any drugs we may eventually commercialize in accordance with our specifications, and the possibility of termination or nonrenewal of agreement by the third party, based on its own business priorities, at a time that is costly or damaging to us. In addition, the FDA and other regulatory authorities would require that our product candidates and any products that we may eventually commercialize be manufactured according to Current Good Manufacturing Practice ("cGMP") and similar foreign standards. Any failure by our third-party manufacturers to comply with cGMP or failure to scale up manufacturing processes, including any failure to deliver sufficient quantities of our product candidates in a timely manner, could lead to a delay in, or failure to obtain, regulatory approval of our product candidates. In addition, such failure could be the basis for the FDA to issue a warning letter, withdraw approvals for such product candidate previously granted to us, or take other regulatory or legal action, including recall or seizure of outside supplies of our product candidates, total or partial suspension of production, suspension of ongoing clinical trials, refusal to approve pending applications or supplemental applications, detention or product, refusal to permit the import or export of products, injunction, or imposing civil and criminal penalties.

Any significant disruption in our supplier relationships could harm our business. Any significant delay in the supply of our product candidates or their respective key materials for an ongoing preclinical study or clinical trial could considerably delay completion of such preclinical study or clinical trial, product testing and potential regulatory approval of our product candidates. If our manufacturers or we are unable to purchase these key materials after regulatory approval has been obtained for one of our product candidates, the commercial launch of such product candidate would be delayed or there would be a shortage in supply, which would impair our ability to generate revenues from the sale of that product candidate.

If we are unable to establish sales and marketing capabilities or enter into agreements with third parties to market and sell our product candidates, we may be unable to generate any revenue.

We do not currently have an organization for the sale, marketing and distribution of products and the cost of establishing and maintaining such an organization may exceed the cost-effectiveness of doing so. In order to market any products approved by the FDA or comparable foreign regulatory authorities, we must build our sales, marketing, managerial and other non-technical capabilities or make arrangements with third parties to perform these services. If we are unable to establish adequate sales, marketing and distribution capabilities, whether independently or with third parties, we may not be able to generate product revenue and may not become profitable. We will be competing with many companies that currently have extensive and well-funded sales and marketing operations. Without an internal commercial organization or the support of a third party to perform sales and marketing functions, we may be unable to compete successfully against these more established companies.

If we are unable to establish or manage strategic collaborations in the future, our revenue and drug development may be limited.

Our strategy includes eventual substantial reliance upon strategic collaborations for marketing and commercialization of our cancer vaccines, and we may rely even more on strategic collaborations for research, development, marketing and commercialization of our other immunotherapies. If we are unsuccessful in securing such strategic collaborations, we may be unable to commercialize our products as we have not yet licensed, marketed or sold any of our immunotherapies or entered into successful collaborations for these services in order to ultimately commercialize our immunotherapies. Establishing strategic collaborations is difficult and time-consuming. Our discussions with potential collaborators may not lead to the establishment of collaborations on favorable terms, if at all. Potential collaborators may reject collaborations based upon their assessment of our financial, clinical, regulatory or intellectual property position. If we successfully establish new collaborations, these relationships may never result in the successful development or commercialization of our immunotherapies or the generation of sales revenue. To the extent that we enter into co-promotion or other collaborative arrangements, our product revenues are likely to be lower than if we directly marketed and sold any products that we may develop.

Management of our relationships with our collaborators will require:

- significant time and effort from our management team;
- coordination of our research and development programs with the research and development priorities of our collaborators; and
- effective allocation of our resources to multiple projects.

If we continue to enter into research and development collaborations at the early phases of drug development, our success will in part depend on the performance of our corporate collaborators. We will not directly control the amount or timing of resources devoted by our corporate collaborators to activities related to our immunotherapies. Our corporate collaborators may not commit sufficient resources to our research and development programs or the commercialization, marketing or distribution of our immunotherapies. If any corporate collaborator fails to commit sufficient resources, our preclinical or clinical development programs related to this collaboration could be delayed or terminated. Also, our collaborators may pursue existing or other development-stage products or alternative technologies in preference to those being developed in collaboration with us. Finally, if we fail to make required milestone or royalty payments to our collaborators or to observe other obligations in our agreements with them, our collaborators may have the right to terminate those agreements.

We need to attract and retain highly skilled personnel; we may be unable to effectively manage growth with our limited resources.

As of December 31, 2017, we had seven full-time employees and a number of management and scientific consultants and advisors. Our ability to attract and retain highly skilled personnel is critical to our operations and expansion. We face competition for these types of personnel from other biotechnology companies and more established organizations, many of which have significantly larger operations and

greater financial, technical, human and other resources than we have. We may not be successful in attracting and retaining qualified personnel on a timely basis, on competitive terms, or at all. If we are not successful in attracting and retaining these personnel, or integrating them into our operations, our business, prospects, financial condition and results of operations will be materially adversely affected. In such circumstances we may be unable to conduct certain research and development programs, unable to adequately manage our clinical trials and other products, and unable to adequately address our management needs.

We depend upon our senior management and key consultants and their loss or unavailability could put us at a competitive disadvantage.

We depend upon the efforts and abilities of our Chief Executive Officer, Peter Hoang, our Acting Chief Medical Officer, Dr. Richard Kenney and our Senior Director of Molecular Biology & Virology, Dr. Robert Florkiewicz, as well as the services of several key consultants. The loss or unavailability of the services of either of these individuals, and our inability to find suitable replacements, for any significant period of time could have a material adverse effect on our business, prospects, financial condition and results of operations.

Our business and operations would suffer in the event of cybersecurity/information systems risk.

Despite the implementation of security measures, our internal computer systems, and those of our manufacturers and other third parties on which we rely, are vulnerable to damage from computer viruses, unauthorized access, natural disasters, fire, terrorism, war and telecommunication and electrical failures. In addition, our systems safeguard important confidential personal data regarding our subjects. If a disruption event were to occur and cause interruptions in our operations, it could result in a material disruption of our drug development programs. For example, the loss of clinical trial data from completed, ongoing or planned clinical trials could result in delays in our regulatory approval efforts and significantly increase our costs to recover or reproduce the data. To the extent that any disruption or security breach results in a loss of or damage to our data or applications, or inappropriate disclosure of confidential or proprietary information, we could incur liability and the further development of our product candidates could be delayed.

Risks Related to our Industry

The biotechnology and immunotherapy industries are characterized by rapid technological developments and a high degree of competition. We may be unable to compete with more substantial enterprises.

The biotechnology and biopharmaceutical industries are characterized by rapid technological developments and a high degree of competition. As a result, our actual or proposed immunotherapies could become obsolete before we recoup any portion of our related research and development and commercialization expenses. Competition in the biopharmaceutical industry is based significantly on scientific and technological factors. These factors include the availability of patent and other protection for technology and products, the ability to commercialize technological developments and the ability to obtain governmental approval for testing, manufacturing and marketing. We compete with specialized biopharmaceutical firms in the United States, Europe and elsewhere, as well as a growing number of large pharmaceutical companies that are applying biotechnology to their operations. Many biopharmaceutical companies have focused their development efforts in the human therapeutics area, including cancer. Many major pharmaceutical companies have developed or acquired internal biotechnology capabilities or made commercial arrangements with other biopharmaceutical companies. These companies, as well as academic institutions and governmental agencies and private research organizations, also compete with us in recruiting and retaining highly qualified scientific personnel and consultants. Our ability to compete successfully with other companies in the pharmaceutical field will also depend to a considerable degree on the continuing availability of capital to us.

We are aware of certain investigational new drugs under development or approved products by competitors that are used for the prevention, diagnosis, or treatment of certain diseases we have targeted for drug development. Various companies are developing biopharmaceutical products that have the potential to directly compete with our immunotherapies even though their approach may be different. The

biotechnology and biopharmaceutical industries are highly competitive, and this competition comes from both biotechnology firms and from major pharmaceutical companies. Many of these companies have substantially greater financial, marketing, and human resources than we do. We also experience competition in the development of our immunotherapies from universities, other research institutions and others in acquiring technology from such universities and institutions.

In addition, certain of our immunotherapies may be subject to competition from investigational new drugs and/or products developed using other technologies, some of which have completed numerous clinical trials.

We are subject to numerous risks inherent in conducting clinical trials.

We outsource some of the management of our clinical trials to third parties. Agreements with clinical investigators and medical institutions for clinical testing and with other third parties for data management services, place substantial responsibilities on these parties that, if unmet, could result in delays in, or termination of, our clinical trials. If any of our clinical trial sites fail to comply with FDA-approved good clinical practices, we may be unable to use the data gathered at those sites. If these clinical investigators, medical institutions or other third parties do not carry out their contractual duties or obligations or fail to meet expected deadlines, or if the quality or accuracy of the clinical data they obtain is compromised due to their failure to adhere to our clinical protocols or for other reasons, our clinical trials may be extended, delayed or terminated, and we may be unable to obtain regulatory approval for, or successfully commercialize, agents. We cannot be certain that we will successfully recruit enough patients to complete our clinical trials nor that we will reach our primary endpoints. Delays in recruitment, lack of clinical benefit or unacceptable side effects would delay our Phase II clinical trials.

We, or our regulators, may suspend or terminate our clinical trials for a variety of reasons. We may voluntarily suspend or terminate our clinical trials at any time if we believe they present an unacceptable risk to the patients enrolled in our clinical trials or do not demonstrate clinical benefit. In addition, regulatory agencies may order the temporary or permanent discontinuation of our clinical trials at any time if they believe that the clinical trials are not being conducted in accordance with applicable regulatory requirements or that they present an unacceptable safety risk to the patients enrolled in our clinical trials.

Our clinical trial operations are subject to regulatory inspections at any time. If regulatory inspectors conclude that we or our clinical trial sites are not in compliance with applicable regulatory requirements for conducting clinical trials, we may receive reports of observations or warning letters detailing deficiencies, and we will be required to implement corrective actions. If regulatory agencies deem our responses to be inadequate, or are dissatisfied with the corrective actions we or our clinical trial sites have implemented, our clinical trials may be temporarily or permanently discontinued, and we may be fined, we or our investigators may be precluded from conducting any ongoing or any future clinical trials, the government may refuse to approve our marketing applications or allow us to manufacture or market our products, and we may be criminally prosecuted.

The lengthy approval process, as well as the unpredictability of future clinical trial results, may result in our failing to obtain regulatory approval for our product candidates, which would materially harm our business, results of operations and prospects.

The successful development of immunotherapies is highly uncertain.

Successful development of biopharmaceuticals is highly uncertain and depends on numerous factors, many of which are beyond our control. Immunotherapies that appear promising in the early phases of development may fail to reach the market for several reasons including:

- preclinical study results that may show the immunotherapy to be less effective than desired (e.g., the study failed to meet its primary objectives) or to have harmful or problematic side effects;
- clinical study results that may show the immunotherapy to be less effective than expected (e.g., the study failed to meet its primary endpoint) or to have unacceptable side effects;
- failure to receive the necessary regulatory approvals or a delay in receiving such approvals. Among other things, such delays may be caused by slow enrollment in clinical studies, length of time to

achieve study endpoints, additional time requirements for data analysis, or Biologics License Application (“BLA”) preparation, discussions with the FDA, an FDA request for additional preclinical or clinical data, or unexpected safety or manufacturing issues;

- manufacturing costs, formulation issues, pricing or reimbursement issues, or other factors that make the immunotherapy uneconomical; and
- the proprietary rights of others and their competing products and technologies that may prevent the immunotherapy from being commercialized.

Success in preclinical and early clinical studies does not ensure that large-scale clinical studies will be successful. Clinical results are frequently susceptible to varying interpretations that may delay, limit or prevent regulatory approvals. The length of time necessary to complete clinical studies and to submit an application for marketing approval for a final decision by a regulatory authority varies significantly from one immunotherapy to the next, and may be difficult to predict.

Even if we are successful in getting market approval, commercial success of any of our product candidates will also depend in large part on the availability of coverage and adequate reimbursement from third-party payors, including government payors such as the Medicare and Medicaid programs and managed care organizations, which may be affected by existing and future health care reform measures designed to reduce the cost of health care. Third-party payors could require us to conduct additional studies, including post-marketing studies related to the cost effectiveness of a product, to qualify for reimbursement, which could be costly and divert our resources. If government and other health care payors were not to provide adequate coverage and reimbursement levels for one any of our products once approved, market acceptance and commercial success would be reduced.

In addition, if one of our products is approved for marketing, we will be subject to significant regulatory obligations regarding the submission of safety and other post-marketing information and reports and registration, and will need to continue to comply (or ensure that our third-party providers) comply with Good Manufacturing Practices (“GMPs”) and Good Clinical Practices (“GCPs”), for any clinical trials that we conduct post-approval. In addition, there is always the risk that we or a regulatory authority might identify previously unknown problems with a product post-approval, such as adverse events of unanticipated severity or frequency. Compliance with these requirements is costly, and any failure to comply or other issues with our product candidates’ post-market approval could have a material adverse effect on our business, financial condition and results of operations.

We must comply with significant government regulations.

The research and development, manufacture and marketing of human therapeutic and diagnostic products are subject to regulation, primarily by the FDA in the United States and by comparable authorities in other countries. These national agencies and other federal, state, local and foreign entities regulate, among other things, research and development activities (including testing in animals and in humans) and the testing, manufacturing, handling, labeling, storage, record keeping, approval, advertising and promotion of the products that we are developing. If we obtain approval for any of our product candidates, our operations will be directly or indirectly through our customers, subject to various federal and state fraud and abuse laws, including, without limitation, the federal Anti-Kickback Statute and the federal False Claims Act, and privacy laws. Noncompliance with applicable laws and requirements can result in various adverse consequences, including delay in approving or refusal to approve product licenses or other applications, suspension or termination of clinical investigations, revocation of approvals previously granted, fines, criminal prosecution, civil and criminal penalties, recall or seizure of products, exclusion from having our products reimbursed by federal health care programs, the curtailment or restructuring of our operations, injunctions against shipping products and total or partial suspension of production and/or refusal to allow a company to enter into governmental supply contracts.

The process of obtaining requisite FDA approval has historically been costly and time-consuming. Current FDA requirements for a new human biological product to be marketed in the United States include: (1) the successful conclusion of preclinical laboratory and animal tests, if appropriate, to gain preliminary information on the product’s safety; (2) filing with the FDA of an IND to conduct human clinical trials for drugs or biologics; (3) the successful completion of adequate and well-controlled human

clinical trials to establish the safety and efficacy of the investigational new drug for its recommended use; and (4) filing by a company and acceptance and approval by the FDA of a Biologic License Application, or BLA, for a biological investigational new drug, to allow commercial distribution of a biologic product. The FDA also requires that any drug or formulation to be tested in humans be manufactured in accordance with its Good Manufacturing Practices, or GMP, regulations. This has been extended to include any drug that will be tested for safety in animals in support of human testing. The GMPs set certain minimum requirements for procedures, record-keeping and the physical characteristics of the laboratories used in the production of these drugs. A delay in one or more of the procedural steps outlined above could be harmful to us in terms of getting our immunotherapies through clinical testing and to market.

Litigation regarding patents, patent applications and other proprietary rights may be expensive and time consuming. If we are involved in such litigation, it could cause delays in bringing product candidates to market and harm our ability to operate.

Our success depends in part on our ability to operate without infringing the proprietary rights of third parties. The pharmaceutical industry is characterized by extensive litigation regarding patents and other intellectual property rights. Other parties may obtain patents in the future and allege that the products or use of our technologies infringe these patent claims or that we are employing their proprietary technology without authorization.

In addition, third parties may challenge or infringe upon our existing or future patents. Proceedings involving our patents or patent applications or those of others could result in adverse decisions regarding:

- the patentability of our inventions relating to our product candidates; and/or
- the enforceability, validity or scope of protection offered by our patents relating to our product candidates.

Even if we are successful in these proceedings, we may incur substantial costs and divert management time and attention in pursuing these proceedings, which could have a material adverse effect on us. If we are unable to avoid infringing the patent rights of others, we may be required to seek a license, defend an infringement action or challenge the validity of the patents in court. Patent litigation is costly and time consuming. We may not have sufficient resources to bring these actions to a successful conclusion. In addition, if we do not obtain a license, develop or obtain non-infringing technology, fail to defend an infringement action successfully or have infringed patents declared invalid, we may:

- incur substantial monetary damages;
- encounter significant delays in bringing our product candidates to market; and/or
- be precluded from participating in the manufacture, use or sale of our product candidates or methods of treatment requiring licenses.

We may incur substantial liabilities from any product liability claims if our insurance coverage for those claims is inadequate.

We face an inherent risk of product liability exposure related to the testing of our immunotherapies in human clinical trials, and will face an even greater risk if the approved products are sold commercially. An individual may bring a liability claim against us if one of the immunotherapies causes, or merely appears to have caused, an injury. If we cannot successfully defend ourselves against the product liability claims, we will incur substantial liabilities. Regardless of merit or eventual outcome, liability claims may result in:

- decreased demand for our immunotherapies;
- damage to our reputation;
- withdrawal of clinical trial participants;
- costs of related litigation;
- substantial monetary awards to patients or other claimants;
- loss of future revenues;

- the inability to commercialize immunotherapies; and
- increased difficulty in raising required additional funds in the private and public capital markets.

We carry products and clinical trial liability insurance. There can be no assurance that future product liability claims will not exceed such insurance coverage limits, which could have a materially adverse effect on our business, financial condition or results of operations, we may not be able to maintain insurance coverage at a reasonable cost and we may not be able to obtain insurance coverage that will be adequate to satisfy any liability that may arise.

Changes in laws and regulations affecting the healthcare industry could adversely affect our business.

As described above, the PPACA and potential regulations thereunder easing the entry of competing follow-on biologics into the marketplace, other new legislation or implementation of existing statutory provisions on importation of lower-cost competing drugs from other jurisdictions, and legislation on comparative effectiveness research are examples of previously enacted and possible future changes in laws that could adversely affect our business.

The current U.S. administration and Congress could carry out significant changes in legislation, regulation, and government policy (including with respect to the possible repeal of all or portions of the PPACA, possible changes in the existing treaty and trade relationships with other countries, and tax reform), as evidenced by statements and recent actions of the current president. While it is not possible to predict whether and when any such changes will occur, changes in the laws, regulations, and policies governing the development and approval of our product candidates and the commercialization, importation, and reimbursement of our product candidates could adversely affect our business.

Risks Related to our Securities

The price of our common stock may be volatile.

The trading price of our common stock may fluctuate substantially. The price of our common stock that will prevail in the market may be higher or lower than the price at which our shares of common stock, depending on many factors, some of which are beyond our control and may not be related to our operating performance. These fluctuations could cause you to lose part or all of your investment in our common stock. Those factors that could cause fluctuations include, but not limited to, the following:

- price and volume of fluctuations in the overall stock market from time to time;
- fluctuations in stock market prices and trading volumes of similar companies;
- actual or anticipated changes in our net loss or fluctuations in our operating results or in the expectations of securities analysts;
- results of our preclinical studies and clinical trials or delays in anticipated timing;
- the issuance of new equity securities pursuant to a future offering, including issuances of preferred stock;
- announcements of new collaboration agreements with strategic partners or developments by our existing collaboration partners;
- announcements of acquisitions, mergers or business combinations;
- announcements of technological innovations, new commercial products, failures of products, or progress toward commercialization by our competitors or peers;
- general economic conditions and trends;
- positive and negative events relating to healthcare and the overall pharmaceutical and biotechnology sectors;
- major catastrophic events;
- sales of large blocks of our stock;

- departures of key personnel;
- changes in the regulatory status of our immunotherapies, including results of our clinical trials;
- events affecting Mayo Clinic, Mayo Foundation for Medical Education and Research or any future collaborators;
- announcements of new products or technologies, commercial relationships or other events by us or our competitors;
- regulatory developments in the United States and other countries;
- failure of our common stock to maintain listing requirements on the Nasdaq Capital Market;
- changes in accounting principles; and
- discussion of us or our stock price by the financial and scientific press and in online investor communities.

In the past, following periods of volatility in the market price of a company's securities, securities class action litigation has often been brought against that company. Due to the potential volatility of our stock price, we may therefore be the target of securities litigation in the future. Securities litigation could result in substantial costs and divert management's attention and resources from our business.

A limited public trading market may cause volatility in the price of our common stock.

The listing of our common stock on the Nasdaq Capital Market does not assure that a meaningful, consistent and liquid trading market currently exists or will exist in the future. In recent years, the stock market has experienced extreme price and volume fluctuations that have particularly affected the market prices of many smaller companies like us. Our common stock is thus subject to this volatility. Sales of substantial amounts of common stock, or the perception that such sales might occur, could adversely affect prevailing market prices of our common stock and our stock price may decline substantially in a short time and our stockholders could suffer losses or be unable to liquidate their holdings. Our stock is thinly traded due to the limited number of shares available for trading thus causing large swings in price. There is no established trading market for our warrants.

The market prices for our common stock may be adversely impacted by future events.

Market prices for our common stock will be influenced by a number of factors, including:

- the issuance of new equity securities pursuant to a future offering, including issuances of preferred stock;
- changes in interest rates;
- competitive developments, including announcements by competitors of new products or services or significant contracts, acquisitions, strategic partnerships, joint ventures or capital commitments;
- variations in quarterly operating results;
- change in financial estimates by securities analysts;
- the depth and liquidity of the market for our common stock and warrants;
- investor perceptions of our company and the pharmaceutical and biotech industries generally; and
- general economic and other national conditions.

If we fail to remain current with our listing requirements, we could be removed from the Nasdaq Capital Market which would limit the ability of broker-dealers to sell our securities and the ability of stockholders to sell their securities in the secondary market.

Companies listed for trading on the Nasdaq Capital Market must be reporting issuers under Section 12 of the Securities Exchange Act, as amended. If we fail to file such reports in a timely manner, or if we fail to meet any other listing requirements, the shares of our common stock would eventually cease to be listed

on the Nasdaq Capital Market, and the market liquidity for our securities could be severely adversely affected by limiting the ability of broker-dealers to sell our securities and the ability of stockholders to sell their securities in the secondary market.

Sales of additional equity securities may adversely affect the market price of our common stock and your rights may be reduced.

We expect to continue to incur drug development and sale, general and administrative costs, and to satisfy our funding requirements, we will need to sell additional equity securities, which may be subject to registration rights and warrants with anti-dilutive protective provisions. The sale or the proposed sale of substantial amounts of our common stock or other equity securities in the public markets may adversely affect the market price of our common stock and our stock price may decline substantially. Our stockholders may experience substantial dilution and a reduction in the price that they are able to obtain upon sale of their shares. Also, new equity securities issued may have greater rights, preferences or privileges than our existing common stock.

Because we have a significant number of additional authorized shares of common stock available for issuance and outstanding warrants to purchase our common stock, our stockholders may experience dilution in the future and it may adversely affect the market price of our securities.

We are currently authorized to issue 41.7 million shares of our common stock. As of December 31, 2017, we had 10.6 million shares of our common stock issued and outstanding, excluding shares issuable upon exercise of our outstanding warrants, options and shares of common stock earned but not yet issued under Omnibus Stock Option Plan. Those outstanding shares represent a minority of our authorized shares, meaning that the ownership position of the current stockholders could be diluted significantly were we to issue a large number of additional shares. For example, as of December 31, 2017, we had outstanding warrants and options to purchase an aggregate of approximately 7.0 million shares of our common stock with exercise prices ranging between \$1.20 and \$204.00 per share that will result in dilution if and when exercised.

The accounting treatment for certain of our warrants is complex and subject to judgments concerning the valuation of embedded derivative rights within the applicable securities. Fluctuations in the valuation of these rights could cause us to take charges to our statement of operations and make our financial results unpredictable.

Certain of our outstanding warrants contain or contained prior to being amended, or may be deemed to contain from time to time, embedded derivative rights in accordance with U.S. Generally Accepted Accounting Principles, or GAAP. There is a risk that questions could arise from investors or regulatory authorities concerning the appropriate accounting treatment of these instruments, which could require us to restate previous financial statements, which in turn could adversely affect our reputation, as well as our results of operations. These derivative rights, or similar rights in securities we may issue in the future, need to be, or may need to be, separately valued as of the end of each accounting period in accordance with GAAP. We record these embedded derivatives as liabilities at issuance, valued using the Black Scholes Option Pricing Model and are subject to revaluation at each reporting date. Any change in fair value between reporting periods is reported on our statement of operations. At December 31, 2017, the fair value of the derivative liability-warrants was \$9,000. Changes in the valuations of these rights, the valuation methodology or the assumptions on which the valuations are based could cause us to take charges to our earnings, which would adversely impact our results of operations. Moreover, the methodologies, assumptions and related interpretations of accounting or regulatory authorities associated with these embedded derivatives are complex and in some cases uncertain, which could cause our accounting for these derivatives, and as a result, our financial results, to fluctuate.

We do not intend to pay cash dividends.

We have not declared or paid any cash dividends on our common stock, and we do not anticipate declaring or paying cash dividends for the foreseeable future. Any future determination as to the payment of cash dividends on our common stock will be at our board of directors' discretion and depends on our financial condition, operating results, capital requirements and other factors that our board of directors considers to be relevant.

Nevada law has anti-takeover provisions that could discourage, delay or prevent a change in control, which may cause our stock price to decline.

Nevada law contains provisions which could make it more difficult for a third party to acquire us, even if closing such a transaction would be beneficial to our stockholders. These provisions may discourage certain types of coercive takeover practices and inadequate takeover bids and encourage persons seeking to acquire control of our company to first negotiate with our board. These provisions may delay or prevent someone from acquiring or merging with us, which may cause the market price of our common stock to decline.

ITEM 1B. UNRESOLVED STAFF COMMENTS

None.

ITEM 2. PROPERTIES

We do not own any real estate or other properties. We lease office space at 5 West Forsyth Street, Suite 200, Jacksonville, Florida 32202, for our principal business office on a five-year agreement due to expire on June 30, 2022. The rent is approximately \$8,600 per month. We also rent a single office at 2815 Eastlake Avenue East in Seattle, Washington. The monthly rent is approximately \$1,100. Additionally, we rent an office at the Florida Atlantic Research and Development Authority at 3651 FAU Blvd, Boca Raton, Florida on a month by month agreement. The monthly rent for the Boca Raton space is \$750 per month. Lastly, we rent a 100 square-foot office in the Innovation Bio Business Center at Mayo Clinic Jacksonville at 4500 San Pablo Road, Jacksonville, Florida 32224. We are currently on a month by month term and the monthly rent is \$275.

ITEM 3. LEGAL PROCEEDINGS

We are not aware of any legal proceedings contemplated by any government authority or any other party involving the Company. As of the date of this annual report, no director, officer or affiliate is (i) a party averse to us in any legal proceeding, or (ii) has an adverse interest to us in any legal proceeding.

ITEM 4. MINE SAFETY DISCLOSURE

Not Applicable

PART II**ITEM 5. MARKET FOR REGISTRANT'S COMMON EQUITY, RELATED STOCKHOLDER MATTERS AND ISSUER PURCHASES OF EQUITY SECURITIES****Market Information**

Our common stock is listed for trading on the Nasdaq Capital Market under the symbol "TPIV". The following table sets forth, for the periods indicated, the high and low sales prices for the common stock since January 1, 2016, as reported on Nasdaq.com.

	<u>High</u>	<u>Low</u>
Fiscal Year 2017		
Fourth Quarter	\$4.41	\$2.60
Third Quarter	\$3.84	\$2.68
Second Quarter	\$4.70	\$3.08
First Quarter	\$5.35	\$3.70
Fiscal Year 2016		
Fourth Quarter	\$6.69	\$3.32
Third Quarter	\$7.15	\$4.80
Second Quarter	\$9.82	\$5.52
First Quarter	\$8.34	\$5.04

As of March 16, 2018, we had 515 stockholders of record whom are holding shares. The price of our common stock on March 16, 2018 was \$3.65 per share.

Dividend Policy

No dividends have been declared or paid on our common stock. We have incurred recurring losses and do not currently intend to pay any cash dividends in the foreseeable future.

Recent Sales of Unregistered Securities

We recorded the issuances of the following securities during the fourth quarter of 2017 to the named individual pursuant to exemptions under the Securities Act of 1933, including Section 4(2):

During the fourth quarter of 2017, 76,667 shares of common stock were issued pursuant to third parties consisting of (i) 50,000 shares to Caro Capital for services pursuant to a vendor agreement; (ii) 16,667 shares to Collision Capital for services pursuant to a vendor agreement; and (iii) 10,000 shares to a shareholder, pursuant to a restricted stock agreement.

ITEM 6. SELECTED FINANCIAL DATA

We are a smaller reporting company as defined by Rule 12b-2 of the Exchange Act and are not required to provide the information required under this item.

ITEM 7. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

The following discussion of our financial condition, changes in financial condition, plan of operations and results of operations should be read in conjunction with (i) our audited consolidated financial statements as at December 31, 2017 and December 31, 2016 and (ii) the section entitled "Business", included in this annual report. The discussion contains forward-looking statements that involve risks, uncertainties and assumptions. Our actual results may differ materially from those anticipated in these forward-looking statements as a result of many factors.

Our Cancer Vaccines

We are a clinical-stage immuno-oncology company specializing in the development of innovative peptide and gene-based immunotherapeutics and vaccines for the treatment of cancer & metastatic disease. We are also developing a proprietary technology to improve the ability of the cellular immune system to recognize and destroy diseased cells. This DNA expression technology named PolyStart™ is in preclinical development.

To enhance shareholder value and taking into account development timelines, we plan to focus on advancing our clinical programs including our Folate Receptor Alpha program for breast and ovarian cancer and our HER2/neu+ peptide antigen program into Phase II clinical trials. In parallel, we plan to complete the preclinical development of our PolyStart™ technology as an integral component of our prime-and-boost vaccine methodology.

The Immunotherapy Industry for Cancer

Immuno-oncology has become the most rapidly growing sector in the pharmaceutical and biotech industry. The approval and success of checkpoint inhibitors Yervoy and Opdivo (Bristol Myers Squibb) and Keytruda (Merck & Co.) together with the development of CAR T-cell therapies (Juno Therapeutics, (formerly) Kite Pharma) has provided much momentum in this sector. In addition, new evidence points to the increasing use of combination immunotherapies for the treatment of cancer. This has provided greater opportunities for the successful development of T-cell vaccines in combination with other approaches.

Products and Technology in Development-Clinical

Folate Receptor Alpha is expressed in over 80% of triple-negative breast cancers and in addition, over 90% of ovarian cancers, for which the only treatment options are surgery, radiation therapy and chemotherapy, leaving a very important and urgent clinical need for a new therapeutic. Time to recurrence is relatively short for these types of cancer and survival prognosis is extremely poor after recurrence. In the United States alone, there are approximately 30,000 ovarian cancer patients and 40,000 triple-negative breast cancer patients newly diagnosed every year.

TPIV200***Phase I Human Clinical Trials — Folate Alpha Breast and Ovarian Cancer — Mayo Clinic***

A 21-patient Phase I clinical trial using TPIV200 was completed in 2015. The vaccine is well tolerated and safe and 20 out of 21 evaluable patients showed positive immune responses, which provided a strong rationale for progressing to Phase II trials. Good Manufacturing Practice ("GMP") for Phase II trials resulted in a commercially viable formulation. On July 27, 2015, we exercised our option agreement with Mayo Clinic with the signing of a worldwide exclusive license agreement to commercialize the proprietary Folate Receptor Alpha Vaccine technology for all cancer indications. As part of this Agreement, the investigational new drug application ("IND") for Folate Receptor Alpha ("TPIV200") was transferred from Mayo Clinic to us for amendment to support our Phase II Clinical trials on our lead product.

On March 15, 2018, we announced the publication of clinical data from a Phase I trial of TPIV200, our multi-epitope T-cell vaccine targeting Folate Receptor Alpha ("FRa") in patients with ovarian and breast cancer. The results show that TPIV200 vaccination was well tolerated by all patients and over 90% developed robust and durable antigen-specific immune responses against FRa without regard for HLA type, which aligns with the intended mechanism of action of the vaccine.

On September 15, 2015, we announced that our collaborators at the Mayo Foundation had been awarded a grant of \$13.3 million from the U.S. Department of Defense. This grant, commencing September 15, 2015, will cover the costs for a 280-patient Phase II Clinical Trial of Folate Receptor Alpha Vaccine in patients with triple-negative breast cancer. We will work closely with Mayo Foundation on this clinical trial by providing clinical and manufacturing expertise as well as providing GMP vaccine formulations. These vaccine formulations are being developed for multiple Phase II clinical programs in triple-negative breast and ovarian cancer in combination with other immunotherapeutics. This Phase II study of TPIV200 in the treatment of triple-negative breast cancer began enrolling patients in late 2017.

On December 9, 2015, we announced that we received Orphan Drug Designation from the U.S. Food & Drug Administration's Office of Orphan Products Development ("OOPD") for our cancer vaccine TPIV200 in the treatment of ovarian cancer. The TPIV200 ovarian cancer clinical program will now receive benefits including tax credits on clinical research and seven-year market exclusivity upon receiving marketing approval. TPIV200 is a multi-epitope peptide vaccine that targets Folate Receptor Alpha which is overexpressed in multiple cancers including over 90% of ovarian cancer cells.

On February 3, 2016, we announced that the U.S. FDA designated the investigation of multiple-epitope Folate Receptor Alpha peptide vaccine (TPIV200) with GM-CSF adjuvant for maintenance therapy in subjects with platinum-sensitive advanced ovarian cancer who achieved stable disease or partial response following completion of standard-of-care chemotherapy, as a Fast Track Development Program. We began enrolling a Phase II study in this indication in 2017.

We have opened multiple clinical sites and have completed enrollment of patients in a Phase II trial of our Folate Receptor Alpha cancer vaccine, TPIV200, in the treatment of triple-negative breast cancer, one of the most difficult-to-treat cancers representing a clear unmet medical need. The open-label, 80-patient clinical trial is designed to evaluate dosing regimens, efficacy, and immune responses in women with triple-negative breast cancer. Key data from the trial is expected to be included in a future New Drug Application submission to the FDA for marketing clearance. This trial is sponsored and conducted by TapImmune.

On April 21, 2016, we announced our participation in an ovarian cancer study sponsored by Memorial Sloan Kettering Cancer Center in New York City in collaboration with AstraZeneca Pharmaceuticals in ovarian cancer patients who are not responsive to platinum, a commonly used chemotherapy for ovarian cancer. This study, a Phase II study of TPIV200 is currently enrolling ovarian cancer patients and is designed to look at the effects of combination therapy with AstraZeneca's checkpoint inhibitor durvalumab. The study will enroll 40 patients and is open-label. Because they are unresponsive to platinum, these patients have no real options left. If the combination therapy proves effective, we believe it would address a critical unmet need. TPIV200 has received Orphan Drug designation for use in the treatment of ovarian cancer. Although we have no business relationship with AstraZeneca, we are paying for one-half of the costs of the clinical study in addition to providing our TPIV200 for the study.

A Company-sponsored Phase II study in platinum-sensitive ovarian cancer patients was initiated in 2017. This study is designed to evaluate TPIV200 with GM-CSF in a randomized, placebo-controlled fashion during the first maintenance period after primary surgery and chemotherapy. Patients at this stage of their treatment have the highest potential for an immunotherapeutic effect and no other approved treatment options. The study will enroll up to 120 patients over the next year and a half, with an interim analysis planned in the first quarter of 2019.

TPIV100/110

Phase I Human Clinical Trials — HER2/neu+ Breast Cancer — Mayo Clinic

A Phase I study using TPIV100 (the four-peptide product) was completed in 2015. Final safety analysis on all the patients treated is complete and the product was shown to be safe. In addition, 19 out of 20 evaluable patients showed robust T-cell immune responses to the antigens in the vaccine composition, providing a solid case for advancement to Phase II in 2017. An additional secondary endpoint incorporated into this Phase I Trial was a two-year follow on recording time to disease recurrence in the participating breast cancer patients. A second trial is being started in 2018 that uses a novel vaccine strategy in patients with DCIS to eliminate disease and protect from recurrence.

For Phase I(b)/II studies, we plan to add a Class I peptide, licensed from the Mayo Clinic (April 16, 2012), to the four Class II peptides, producing TPIV110 (the five-peptide product). Management believes that the combination of Class I and Class II HER2/neu+ antigens, gives us the leading HER2/neu+ vaccine platform. We plan to amend the IND to incorporate the fifth peptide in the Phase I(b)/II study. Discussions with the FDA have resulted in a pre-clinical development project that should allow us to file the amended IND in the first half of 2018.

Products and Technology-Preclinical

PolyStart™

We converted the previously filed U.S. Provisional Patent Application on PolyStart™ into a full Patent Application, and in February 2016 we received a Notice of Allowance from the U.S. Patent and Trademark Office (“USPTO”) for a patent application entitled, “A chimeric nucleic acid molecule with non-AUG initiation sequences.” The term of this patent extends to March 17, 2034. Additional patent filings are in progress. We plan to develop PolyStart™ as both a stand-alone therapy and as a ‘boost strategy’ to be used synergistically with our peptide-based vaccines for breast and ovarian cancer.

Current State of the Company

We are a clinical-stage immunotherapy company specializing in the development of innovative peptide and gene-based immunotherapeutics and vaccines for the treatment of cancer. We now plan to conduct multiple Phase II clinical trials on our vaccines. The largest of these studies in triple-negative breast cancer is totally funded by a \$13.3 million grant from the U.S. Department of Defense to our collaborators at the Mayo Clinic in Jacksonville, Florida. A Company-sponsored trial in triple-negative breast cancer started during the second quarter of 2016 and a Company-sponsored trial in ovarian cancer was started in the fourth quarter of 2017. We believe that our development pipeline is strong and provides us the opportunity to continue to expand on collaborations with leading institutions and corporations.




We believe, the strength of our science and development approaches is becoming more widely appreciated, particularly as our clinical program has now generated positive interim data on both clinical programs in breast and ovarian cancer.

We continue to be focused on our entry into Phase II Triple-Negative Breast Cancer Trials including application for Fast Track & Orphan Drug Status as well as planning for Phase II HER2/neu+ Breast Cancer Trials.

We expect to continue to prosecute our PolyStart™ patent filings and develop new constructs to facilitate collaborative efforts in our current clinical indications and those where others have already indicated interest in combination therapies.

We believe that these fundamental programs and corporate activities have positioned TapImmune to capitalize on the acceptance of immunotherapy as a leading therapeutic strategy in cancer and infectious disease.

TapImmune's Pipeline**Clinical Program**

	Indication	Design	Preclin.	Phase 1	Phase 2	Sponsors/ Collaborators
Folate Receptor-α	Triple-Negative Breast Cancer	Dose & Boost Safety			Follow-up Phase 2 →	
	Ovarian Cancer (platinum-sensitive)	Time to progression			Enrolling Phase 2 →	
	Triple-Negative Breast Cancer	Time to progression			Enrolling Phase 2 →	Mayo Clinic / DoD Fully Funded
	Ovarian Cancer (platinum-resistant)	Combo with durvalumab (anti PD-L1)			Enrolling Phase 2 →	Memorial Sloan Kettering Cancer Center / AstraZeneca / TapImmune
HER2/neu	TPIV100 DCIS Breast Cancer	Preparing Phase 1B		Start in 2018 →		Mayo Clinic / DoD Fully Funded
	TPIV110 Her2/neu Breast Cancer	Preparing Phase 1/2		IND update →		

We have a pipeline of potential immunotherapies under development. Phase I clinical programs on HER2/neu+ for breast and ovarian cancer have been completed and strong immune responses in over 90% of patients treated has provided the rationale and catalyst to advance these programs to Phase II clinical trials.

In addition to the exciting clinical developments, our peptide vaccine technology may be coupled with our developed in-house PolyStart™ nucleic acid-based technology designed to make vaccines significantly more effective by producing four times the required peptides for the immune systems to recognize and act on. Our nucleic acid-based systems can also incorporate “TAP” which stands for Transporter associated with Antigen Presentation.

A key component to success is having a comprehensive patent strategy that continually updates and extends patent coverage for key products. It is highly unlikely that early patents will extend through ultimate product marketing, so extending patent life is an important strategy for ensuring product protection.

We have three active patent families that we are supporting:

1. Filed patents on PolyStart™ expression vector (owned by TapImmune and filed in 2014; this IP covers the use with TAP). We announced the allowance of this patent in February 2016.
2. Filed patents on HER2/neu+ Class II and Class I antigens: exclusive license from Mayo Foundation; and
3. Filed patents on Folate Receptor Alpha antigens: exclusive license from Mayo Foundation

While the pathway to successful product development takes time, we believe we have put in place significant for success. The strength of our product pipeline and access to leading scientists and institutions gives us a unique opportunity to make a major contribution to global health care.

With respect to the broader market, a major driver and positive influence on our activities has been the emergence and general acceptance of the potential of a new generation of immunotherapies that promise to change the standard of care for cancer. The immunotherapy sector has been greatly stimulated by the approval of Provenge[®] for prostate cancer and Yervoy[™] for metastatic melanoma, progression of the areas of checkpoint inhibitors and adoptive T-cell therapy and multiple approaches reaching Phase II and Phase III status.

We believe that through our combination of technologies, we are well positioned to be a leading player in this emerging market. It is important to note that many of the late-stage immunotherapies currently in development do not represent competition to our programs, but instead offer synergistic opportunities to partner our antigen based immunotherapeutics, and PolyStart[™] expression system. Thus, the use of naturally processed T-cell antigens discovered using samples derived from cancer patients plus our PolyStart[™] expression technology to improve antigen presentation to T-cells could not only produce an effective cancer vaccine in its own right but also to enhance the efficacy of other immunotherapy approaches such as CAR-T and PD1 inhibitors for example.

Recent Developments and Company Highlights

Recent Developments

Completed GMP Manufacturing Scale Up and Second Clinical Lot of TPIV200; to Supply Additional Phase II Clinical Trials

We successfully completed a multi-gram production scale-up as well as GMP manufacturing of a second clinical lot of TPIV200. The vaccine supply will be used in the company's ongoing Phase II study in platinum-sensitive ovarian cancer, as well as the planned 280-patient Phase II study sponsored by the Mayo Clinic and funded by the U.S. Department of Defense for treating triple-negative breast cancer. We also made various improvements to the vaccine manufacturing process, resulting in, what we believe to be, a superior formulation of the vaccine that is more amenable to large-scale manufacturing and commercialization.

Clinical Program Pipeline Status Updates

Announcement of Publication of Clinical Trial Results for the TPIV200 Cancer Vaccine in Clinical Cancer Research

On March 15, 2018, we announced the publication of clinical data from a Phase I trial of TPIV200, our multi-epitope T-cell vaccine targeting Folate Receptor Alpha ("FRa") in patients with ovarian and breast cancer. The results show that TPIV200 vaccination was well tolerated by all patients and over 90% developed robust and durable antigen-specific immune responses against FRa without regard for HLA type, which aligns with the intended mechanism of action of the vaccine.

Enrollment Completed: Phase II TPIV200 Trial in Triple-Negative Breast Cancer

We have completed enrollment and are now treating and following the patients in a Phase II trial of our Folate Receptor Alpha cancer vaccine, TPIV200, in the treatment of triple-negative breast cancer, one of the most difficult cancers to treat, representing a clear unmet medical need. The open-label, 80-patient clinical trial is designed to evaluate dosing regimens, adjuvants, efficacy, and immune responses in women with triple-negative breast cancer. Key data from the trial is expected to be included in a future Biologics License Application submission to the FDA for marketing clearance. This trial is sponsored and conducted by TapImmune.

An independent Data Safety Monitoring Board (DSMB) reviews the safety every quarter in this ongoing Phase II study enrolling women with stage I-III triple-negative breast cancer who have completed initial surgery and chemo/radiation therapy. The randomized four-arm study is evaluating two doses of TPIV200 (a high dose and a low dose), each of which will be tested both with and without immune priming

with cyclophosphamide prior to vaccination. Safety reviews are conducted quarterly and have shown no safety issues. The study completed enrollment at the end of 2017, with interim data expected in mid-2018. Details regarding this trial can be found at www.clinicaltrials.gov under identifier numbers NCT02593227 and FRV-002.

Enrolling Patients: Phase II TPIV200 Trial in Platinum-Sensitive Ovarian Cancer

We have opened multiple clinical sites and have enrolled the first 12 patients in a Phase II trial of TPIV200 for a 120-patient study on ovarian cancer patients who are responsive to platinum. We have received the FDA's Fast Track designation to develop TPIV200 as a maintenance therapy in combination with platinum, in platinum-responsive ovarian cancer patients, including women with Stage III and IV ovarian cancer who are in remission following their first round of successful platinum-based chemotherapy. This multi-center, double-blind efficacy study is sponsored and conducted by TapImmune. We expect to complete enrollment mid-2019. An interim analysis is planned based upon 50% patient enrollment, which we anticipate completing in the first half of 2019. Details regarding this trial can be found at www.clinicaltrials.gov under identifier numbers NCT02978222 and FRV-004.

Enrolling Patients: Phase II Mayo Clinic-U.S. DOD Trial of TPIV200 in Triple-Negative Breast Cancer

Patients are being enrolled in this Phase II study of TPIV200 in the treatment of triple-negative breast cancer, conducted by the Mayo Clinic and sponsored by the U.S. DOD. The 280-patient study is led by Dr. Keith Knutson of the Mayo Clinic in Jacksonville, Florida. Dr. Knutson is the inventor of the technology and a member of the Scientific Advisory Board at TapImmune. While we are supplying doses of TPIV200 for the trial and being reimbursed for the costs associated with manufacturing, the remaining costs associated with conducting this study will be funded by a \$13.3 million grant made by the DOD to the Mayo Clinic.

Enrolling Patients: Phase II Trial at Memorial Sloan Kettering of TPIV200 in Platinum-Resistant Ovarian Cancer

A Phase II study of TPIV200 in ovarian cancer patients who are not responsive to platinum, a commonly used chemotherapy for ovarian cancer, sponsored by Memorial Sloan Kettering Cancer Center ("MSKCC"), and in collaboration with AstraZeneca and TapImmune, has begun enrollment for a 40-patient study. The open-label study is designed to evaluate a combination therapy which includes our TPIV200 T-cell vaccine and AstraZeneca's checkpoint inhibitor, durvalumab. Because they are unresponsive to platinum, these patients have no real remaining options. If the combination therapy proves effective, we believe it would address a critical unmet need. TPIV200 has received Orphan Drug designation for use in the treatment of ovarian cancer. We successfully completed enrollment of the first safety cohort. This may enable MSKCC to increase the number of patients that can be enrolled and will subsequently increase the study's enrollment rate. Currently more than 50% of patients have been enrolled. An interim analysis is planned in the first half of 2018. Details regarding this trial can be found at www.clinicaltrials.gov under identifier numbers NCT02764333 and 16-011.

Open IND with FDA for TPIV110 in 2018: Phase II Protocol Now in Preparation

We have enhanced the formulation of our second cancer vaccine product, TPIV110 (the five-peptide product), following very strong safety and immune responses from a Phase I Mayo Clinic study using TPIV100 (the four-peptide product). TPIV110 targets HER2/neu+, which makes it applicable to breast, ovarian, and colorectal cancers. The enhanced TPIV product adds a fifth antigen which should produce an even more robust immune response activating both CD4+ (helper) and CD8+ (killer) T-cells. We have participated in a pre-Investigational New Drug ("pre-IND") meeting with the FDA and will file the amended IND containing the fifth peptide early in 2018. The protocol for a Phase II trial of TPIV110 in the treatment of HER2/neu+ positive breast cancer patients is currently under review by our Clinical Advisory Board and collaborators.

Mayo Clinic to Vaccinate Women With Ductal Carcinoma In Situ (DCIS) Using TapImmune TPIV100 HER2-targeted T-Cell Vaccine

On March 14, 2017, we announced that our partners at the Mayo Clinic received a grant from the U.S. Department of Defense to conduct a Phase IB study of our HER2-targeted vaccine candidate in an early form of breast cancer called DCIS. This is the second TapImmune vaccine to be tested in a fully funded study sponsored by the Mayo Clinic. Our collaborators at Mayo Clinic announced a \$3.8 million grant which we believe would fully fund this trial. If the study is successful, our vaccine may eventually augment or even replace standard surgery and chemotherapy, and potentially could become part of a routine immunization schedule for preventing breast cancer in healthy women. The study is expected to enroll 40–45 women with DCIS and begin to commence such enrollment during early 2018.

Company Highlights

Reverse Stock Split

On September 16, 2016, we effected a one-for-twelve reverse split of our common shares. The common shares began trading on a split-adjusted basis on September 16, 2016. The reverse stock split was effected in connection with our intention to apply to list our common stock on the Nasdaq Capital Market. On November 2, 2016, we received notification that our common stock was approved for listing on The Nasdaq Capital Market and it began trading on Tuesday, November 8, 2016 under the ticker symbol “TPIV.”

June 2017 Private Placement Transaction

On June 26, 2017, we completed private placements of units with certain accredited investors. In the private placement transaction, we sold 1,503,567 shares of common stock for \$3.97 per share and five-year warrants to purchase an equal number of shares of common stock, at an exercise price of \$3.97 per share, for \$0.125 per warrant, with one common share and one warrant being sold together as a unit for a total of \$4.095 per unit. We issued and sold an aggregate of 1,503,567 units for aggregate gross proceeds of \$6.2 million. We incurred \$0.8 million in agency fees and legal costs. In connection with the offering, we reduced the exercise price for the warrants to purchase an aggregate of 653,187 shares of common stock issued to investors in the private placement that closed in August 2016 from \$6.00 per share to \$3.97 per share.

In addition, we issued five-year warrants to the placement agent in the offering providing for the purchase of up to 150,357 shares of our common stock for \$3.97 per share.

June 2017 Exercise and Repricing of Warrants Held by Existing Institutional Investors

On June 23, 2017, certain existing institutional shareholders of the Company who hold various outstanding warrants (i.e. C, D, E and F) to purchase Company common stock, entered into warrant repricing and exercise agreements.

Series E repriced and exercised warrants

Approximately 168,000 of Series E warrants were repriced from \$15.00 per share to \$3.97 per share and exercised immediately for gross proceeds of approximately \$0.7 million. Series E warrants to purchase approximately 187,000 shares of Company common stock being reduced from \$15.00 per share to \$4.50 per share.

Series C, D & F repriced warrants

Additionally, the exercise prices for certain investors of Series C, Series D and Series F warrants were reduced as follows:

Series	Number of Warrant Shares Repriced	Pre-reduced Price	Post-reduced Price
Series C	313,750	\$ 6.00	\$ 4.00
Series D	312,500	\$ 9.00	\$ 4.00
Series F	292,500	\$ 7.20	\$ 4.00

The fair value relating to the modification of exercise prices on the repriced warrants was treated as deemed dividend on the statement of stockholders' equity of \$0.6 million.

June 2017 Agent Warrants

Pursuant to an agency agreement, dated May 12, 2017, by and between Katalyst Securities LLC and us, Katalyst agreed to act as our placement agent in connection with the June 26, 2017 private placement offering.

Pursuant to the agreement, we agreed to pay to Katalyst: (i) an aggregate cash fee for placement agent and financial advisory services equal to 10% of the gross proceeds of the Offering; (ii) a non-accountable expense allowance in the amount of Seventy Thousand Dollars (\$70,000); and (iii) five-year warrants to purchase a number of shares of our common stock equal to 10% of the number of shares sold in the offering. The Katalyst Warrants have the same terms as the private placement warrants issued in the offering. Based on the 1,503,567 shares of common stock sold in the private placement, we issued five-year warrants to Katalyst providing for the purchase of up to 150,357 shares of Company common stock for \$3.97 per share.

Previous Funding

Our previous funding has come from financings that we conducted in January and March of 2015, from the exercises of stock warrants. In our August 2016 private placement, we completed private placements of units with certain accredited investors. The units consisted of (i) one share of our common stock, par value \$0.001 per share and (ii) one five-year warrant to purchase one share of our common stock for \$6.00. We issued and sold an aggregate of 653,187 units at a purchase price per unit of \$4.80 for an aggregate of \$3.1 million. We incurred \$0.8 million in agency fees and legal costs. In addition, we issued five-year warrants to the placement agent in the offering providing for the purchase of up to 65,327 shares of our common stock for \$4.80 per share. In connection with the August 2016 private placement, holders of an aggregate of 583,333 outstanding Series C Warrants and 416,667 Series C-1 Warrants, each providing for the purchase of one share of our common stock for \$6.00 per share, exercised their warrants for an aggregate exercise price of \$6.0 million.

Financial Overview

Critical Accounting Policies

The condensed consolidated financial statements are prepared in conformity with U.S. GAAP, which require the use of estimates, judgments and assumptions that affect the reported amounts of assets and liabilities, the disclosure of contingent liabilities at the date of the financial statements, and the reported amounts of expenses in the periods presented. We believe that the accounting estimates employed are appropriate and resulting balances are reasonable; however, due to inherent uncertainties in making estimates, actual results could differ from the original estimates, requiring adjustments to these balances in future periods. The critical accounting estimates that affect the consolidated financial statements and the judgments and assumptions used are consistent with those described under Part II, Item 7 of our Annual Report on Form 10-K for the year ended December 31, 2017.

Use of Estimates

Preparation of our financial statements in conformity with GAAP requires management to make estimates and assumptions that affect certain reported amounts and disclosures. Accordingly, actual results could differ materially from those estimates. Significant areas requiring management's estimates and assumptions include deferred taxes and related tax balances and disclosures, determining the fair value of stock-based compensation and stock-based transactions, the fair value of the components of the convertible notes payable, foreign exchange gains and losses, and accrued liabilities. Matters impacting our ability to continue as a going concern and contingencies also involve the use of estimates and assumptions.

Fair Value Measurements

The fair value of certain of our financial instruments, including cash and cash equivalents, accrued compensation, and other accrued liabilities, approximate cost because of their short maturities. We measure the fair value of certain of our financial assets and liabilities on a recurring basis. A fair value hierarchy is used to rank the quality and reliability of the information used to determine fair values. Financial assets and liabilities carried at fair value will be classified and disclosed in one of the following three categories:

- Level 1 — Quoted prices (unadjusted) in active markets for identical assets and liabilities.
- Level 2 — Inputs other than Level 1 that are observable, either directly or indirectly, such as unadjusted quoted prices for similar assets and liabilities, unadjusted quoted prices in the markets that are not active, or other inputs that are observable or can be corroborated by observable market data for substantially the full term of the assets or liabilities.
- Level 3 — Unobservable inputs that are supported by little or no market activity and that are significant to the fair value of the assets or liabilities.

Stock-Based Compensation

Stock-based compensation is measured at the grant date based on the fair value of the award. The fair value of the award that is ultimately expected to vest is recognized as expense on a straight-line basis over the requisite service period, which is generally the vesting period. The expense recognized for the portion of the award that is expected to vest has been reduced by an estimated forfeiture rate. The forfeiture rate is determined at the time of grant and revised, if necessary, in subsequent periods if actual forfeitures differ from those estimates.

Expected Term—The expected term of options represents the period that our stock-based awards are expected to be outstanding based on the simplified method, which is the half-life from vesting to the end of its contractual term.

Expected Volatility—We compute stock price volatility over expected terms based on our historical common stock trading prices.

Risk-Free Interest Rate—We base the risk-free interest rate on the implied yield available on U.S. Treasury zero-coupon issues with an equivalent remaining term.

Expected Dividend—We have never declared or paid any cash dividends on our common shares and does not plan to pay cash dividends in the foreseeable future, and, therefore, use an expected dividend yield of zero in our valuation models. We recognize fair value of stock options granted to nonemployees as stock-based compensation expense over the period in which the related services are received.

Derivative Liability

We evaluate our convertible debt, options, warrants or other contracts to determine if those contracts or embedded components of those contracts qualify as derivatives to be separately accounted. This accounting treatment requires that the carrying amount of embedded derivatives be marked-to-market at each balance sheet date and carried at fair value. In the event that the fair value is recorded as a liability, the change in fair value during the period is recorded in the Statement of Operations as either income or expense. Upon conversion, exercise or modification to the terms of a derivative instrument, the instrument is marked to fair value at the conversion date and then the related fair value is reclassified to equity.

In circumstances where the embedded conversion option in a convertible instrument is required to be bifurcated and there are also other embedded derivative instruments in the convertible instrument that are required to be bifurcated, the bifurcated derivative instruments are accounted for as a single, compound derivative instruments.

The classification of financial instruments, including whether such instruments should be recorded as liabilities or as equity, is re-assessed at the end of each reporting period. Equity instruments that are initially classified as equity that become subject to reclassification are reclassified to liability at the fair value of the

instrument on the reclassification date. Derivative instrument liabilities will be classified in the balance sheet as current or non-current based on whether or not net-cash settlement of the derivative instrument is expected within twelve months of the balance sheet date.

Management must determine whether an instrument (or an embedded feature) is indexed to our stock. An entity should use a two-step approach to evaluate whether an equity-linked financial instrument (or embedded feature) is indexed to its own stock, including evaluating the instrument's contingent exercise and settlement provisions. The application of this exercise affects the accounting for (i) certain freestanding warrants that contain exercise price adjustment features and (ii) convertible notes containing full-ratchet and anti-dilution protections (iii) certain free-standing warrants that contain contingently puttable cash settlement.

Results of Operations

Year Ended December 31, 2017 Compared to the Year Ended December 31, 2016

We recorded a net loss of \$11.0 million or (\$1.16) basic and diluted per share during the year ended December 31, 2017 compared to a net loss of \$2.5 million or (\$0.36) basic per share and (\$0.72) diluted per share during the year ended December 31, 2016.

Operating Expenses

Operating expenses incurred during the fiscal year ended December 31, 2017 were \$11.7 million compared to \$8.5 million in the prior year. Significant changes and expenditures are outlined as follows:

- Research and development costs during the fiscal year ended December 31, 2017 were \$5.3 million compared to \$3.8 million during the prior fiscal year. This was due to our increases from prior period for planned expenses relating to our clinical trials.
- General and administrative expenses increased to \$6.4 million during the year ended December 31, 2017 from \$4.7 million during the prior period. The increased expenses period over period were attributable to the following:
 - stock-based compensation relating to stock grants pursuant to Peter Hoang's and Glynn Wilson's employment agreements,
 - stock-based compensation for employees and outside consultants,
 - legal, audit and other professional fees,
 - investor relations expenses, and
 - expenses relating to our shareholder meeting.

Other Income (Expense)

Change in fair value of warrant liabilities

The change in fair value of warrant liabilities for the year ended December 31, 2017 was \$5,500 as compared to \$5.9 million for the year ended December 31, 2016. On August 10, 2016, we amended the Series A and A-1, Series C and C-1, Series D and D-1 and Series E and E-1 warrants agreements issued by us in January and March 2015 to remove the clause that caused the warrants to be classified as warrant liabilities, and the variance period over period is due to that reason.

The fair value of the warrant liabilities decreased by \$5,500 for the year ended December 31, 2017 and is reflected by a corresponding loss in the condensed consolidated statement of operations. This compares to a decrease in the fair value of derivative liabilities for the year ended December 31, 2016 of \$5.9 million. We revalue the derivative liabilities at each balance sheet date to fair value. The fair value is determined using Black-Scholes valuation model using various assumptions. The two most significant changes in the assumptions were the difference in the strike price and the number of warrants with derivative liabilities.

Debt extinguishment gain

In 2003 we entered into a license agreement with a foreign based third-party for certain adenovirus technology. The license agreement was amended several times between inception and 2008 at which time it was amended and restated and had a fixed three-year term expiring in 2011. During such time, we did not pursue the technology and have not undertaken further work in the area covered by the technology license. Neither we nor the third-party took further actions under or pursuant to the license agreement. We carried a historical accrual of approximately \$0.5 million under the amended license agreement related to certain obligations provided for in the license agreement. The license agreement was governed by the laws of a foreign jurisdiction. We sought and obtained legal advice related to such accrued obligations under the expired license agreement. We relied upon a judicial conclusion, as opined upon by outside legal counsel in the applicable foreign jurisdiction, that a court in such foreign jurisdiction would grant relief releasing us from liability under the license agreement, and in accordance with Accounting Standards Codification 405 "Extinguishment of Liabilities", we recorded a debt extinguishment gain of \$0.5 million and reduced the liability amount owed to \$0 during the year ended December 31, 2017.

Grant income

During the years ended December 31, 2017 and 2016, we received \$0.2 million of a grant awarded to Mayo Foundation from the U.S. Department of Defense for the Phase II Clinical Trial of TPIV200. The grant compensated us for our out-of-pocket costs associated with clinical supplies which were manufactured and provided by us for the clinical study.

Shares issued in debt settlement agreements

During the year ended December 31, 2016 we incurred \$0.1 million loss in connection with shares issued to satisfy outstanding debt agreements from previous years.

The weighted average number of shares outstanding were 9.5 million basic and diluted for the year ended December 31, 2017 compared to 6.9 million basic and 7.4 million diluted for the year ended December 31, 2016.

Liquidity and Capital Resources

We have not generated any revenues since inception; we have financed our operations primarily through public and private offerings of our stock and debt including warrants and the exercise thereof.

The following table sets forth our cash and working capital as of December 31, 2017 and 2016:

	December 31, 2017	December 31, 2016
Cash	\$5,129,000	\$7,851,000
Working Capital	\$3,658,000	\$6,185,000

Cash Flows

The following table summarizes our cash flows for the years ended December 31, 2017 and 2016:

	For the Years Ended December 31,	
	2017	2016
Net Cash provided by (used in):		
Operating activities	\$(8,439,000)	\$(6,510,000)
Financing activities	\$ 5,717,000	\$ 7,785,000
Net increase (decrease) in cash	<u>\$(2,722,000)</u>	<u>\$ 1,275,000</u>

Financings**June 2017 Private Placement Transaction**

On June 26, 2017, we completed private placements of units with certain accredited investors. In the private placement transaction, we sold 1,503,567 shares of common stock for \$3.97 per share and five-year warrants to purchase an equal number of shares of common stock, at an exercise price of \$3.97 per share, for \$0.125 per warrant, with one common share and one warrant being sold together as a unit for a total of \$4.095 per unit. We issued and sold an aggregate of 1,503,567 million units for aggregate gross proceeds of \$6.2 million. We incurred \$0.8 million in agency fees and legal costs. In connection with the offering, we reduced the exercise price for the warrants to purchase an aggregate of 653,187 shares of common stock issued to investors in the private placement that closed in August 2016 from \$6.00 per share to \$3.97 per share.

Previous Funding

Our previous funding has come from financings that we conducted in January and March of 2015, from the exercises of stock warrants. In our August 2016 private placement, we completed private placements of units with certain accredited investors. The units consisted of (i) one share of our common stock, par value \$0.001 per share and (ii) one five-year warrant to purchase one share of our common stock for \$6.00. We issued and sold an aggregate of 653,187 units at a purchase price per unit of \$4.80 for an aggregate of \$3.1 million. We incurred \$0.8 million in agency fees and legal costs. In addition, we issued five-year warrants to the placement agent in the offering providing for the purchase of up to 65,327 shares of our common stock for \$4.80 per share. In connection with the August 2016 private placement, holders of an aggregate of 583,333 outstanding Series C Warrants and 416,667 Series C-1 Warrants, each providing for the purchase of one share of our common stock for \$6.00 per share, exercised their warrants for an aggregate exercise price of \$6.0 million.

Future Capital Requirements

As of December 31, 2017, we had working capital of \$3.8 million, compared to working capital of \$6.2 million as of December 31, 2016. We expect our expenses to continue at a similar pace into 2018 primarily to continue funding our in-process Phase II clinical trials. Two of our clinical studies are expected to be funded by a total of \$17.1 million of grants made by the DOD to the Mayo Clinic. Our collaborators at Mayo Clinic announced a \$3.8 million grant which we expect would fully fund a Phase II clinical trial in DCIS that we had planned for our HER2/neu+ vaccine.

Our capital requirements for 2018 and beyond will depend on numerous factors, including the success of our research and development, the resources we devote to develop and support our technologies and our success in pursuing strategic licensing and funded product development collaborations with external partners as well as other strategic initiatives we may determine to pursue. Subject to our ability to raise additional capital, we expect to incur substantial expenditures to further develop our technologies including continued increases in costs related to research, nonclinical testing and clinical studies and trials, as well as costs associated with our capital raising efforts and being a public company.

We believe our existing cash will fund our operations into the third quarter of fiscal 2018. We will require substantial additional capital to conduct research and development, to fund nonclinical testing and Phase II clinical trials of our licensed, patented technologies, and to begin cultivating collaborative relationships for the Phase II and future Phase III clinical testing. Our plans could include seeking both equity and debt financing, alliances or other partnership agreements with entities interested in our technologies, or other business transactions that could generate sufficient resources to ensure continuation of our operations and research and development programs.

We expect to continue to seek additional funding for our operations. Any such required additional capital may not be available on reasonable terms, if at all. If we were unable to obtain additional financing, we may be required to reduce the scope of, delay or eliminate some or all of our planned clinical testing and research and development activities, which could harm our business. The sale of additional equity or debt securities may result in additional dilution to our shareholders. If we raise additional funds through the

issuance of debt securities or preferred stock, these securities could have rights senior to those holders of our common stock and could contain covenants that could restrict our operations. We also will require additional capital beyond our currently forecasted amounts.

Because of the numerous risks and uncertainties associated with research, development and commercialization of our product candidates, we are unable to estimate the exact amounts of our future working capital requirements. Our future funding requirements will depend on many factors, including, but not limited to:

- the number and characteristics of the product candidates we pursue;
- the scope, progress, results and costs of researching and developing our product candidates, and conducting pre-clinical and clinical trials including the research and development expenditures we expect to make in connection with our license agreements with Mayo Foundation;
- strategic transactions we may undertake;
- the timing of, and the costs involved in, obtaining regulatory approvals for our product candidates;
- our ability to maintain current research and development licensing agreements and to establish new strategic partnerships and collaborations, licensing or other arrangements and the financial terms of such agreements;
- our ability to achieve our milestones under our licensing arrangements and the payment obligations we may have under such agreements;
- the costs involved in preparing, filing, prosecuting, maintaining, defending and enforcing patent claims, including litigation costs and the outcome of such litigation; and
- the timing, receipt and amount of sales of, or royalties on, our future products, if any.

We have based our estimates on assumptions that may prove to be wrong. We may need to obtain additional funds sooner or in greater amounts than we currently anticipate.

Various conditions outside of our control may detract from our ability to raise additional capital needed to execute our plan of operations, including overall market conditions in the international and local economies. We recognize that the United States economy has suffered through a period of uncertainty during which the capital markets have been impacted, and that there is no certainty that these levels will stabilize or reverse despite the optics of an improving economy. Any of these factors could have a material impact upon our ability to raise financing and, as a result, upon our short-term or long-term liquidity.

Going Concern

We have no sources of revenue to provide incoming cash flows to sustain our future operations. As outlined above, our ability to pursue our planned business activities is dependent upon our successful efforts to raise additional capital. However the Company cannot guarantee it will be successful in raising funds in the future.

These factors raise substantial doubt regarding our ability to continue as a going concern. Our consolidated financial statements have been prepared on a going concern basis, which implies that we will continue to realize our assets and discharge our liabilities in the normal course of business. Our financial statements do not include any adjustments to the recoverability and classification of recorded asset amounts and classification of liabilities that might be necessary should we be unable to continue as a going concern.

Off-Balance Sheet Arrangements

We have not entered into any off-balance sheet arrangements that have or are reasonably likely to have a current or future effect on our financial condition, changes of financial condition, revenues, expenses, results of operations, liquidity, capital expenditures or capital resources that is material to investors.

Tax Loss and Credit Carryforwards

As of December 31, 2017, we have approximately \$41.7 million of federal and \$21.9 million of state Net Operating Loss (“NOL”s) that may be available to offset future taxable income, if any. The federal net operating loss carryforwards, if not utilized, will expire between 2029 and 2037. The state net operating loss carryforwards, if not utilized, will expire in 2037. Any greater than 50% change in ownership under Section 382 of the Internal Revenue Code, or the Code, places significant annual limitations on the use of such net operating loss carryforwards.

At December 31, 2017 and 2016, we recorded a 100% valuation allowance against our deferred tax assets of approximately \$16.7 million and \$13.8 million, respectively, as our management believes it is uncertain that they will be fully realized. If we determine in the future that we will be able to realize all or a portion of our net operating loss carryforwards, an adjustment to valuation allowance against our deferred tax assets would increase net income in the period in which we make such a determination.

Inflation

Inflation affects the cost of raw materials, goods and services that we use. In recent years, inflation has been modest. However, fluctuations in energy costs and commodity prices can affect the cost of all raw materials and components. The competitive environment somewhat limits our ability to recover higher costs resulting from inflation by raising prices. Although we cannot precisely determine the effects of inflation on our business, it is management’s belief that the effects on revenues and operating results will not be significant. We do not believe that inflation has had a material impact on our results of operations for the periods presented, except with respect to payroll-related costs and other costs arising from or related to government imposed regulations.

ITEM 7A. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

We are a smaller reporting company as defined by Rule 12b-2 of the Exchange Act and are not required to provide the information required under this item.

ITEM 8. FINANCIAL STATEMENTS

The Financial Statements are incorporated herein by reference to pages [B-F-1](#) to [B-F-6](#) at the end of this report and the supplementary data is not applicable.

ITEM 9. CHANGES IN AND DISAGREEMENTS WITH ACCOUNTANTS ON ACCOUNTING AND FINANCIAL DISCLOSURE

We have had no changes in, or disagreements with our principal independent accountants.

ITEM 9A. CONTROLS AND PROCEDURES**Evaluation of Disclosure Controls and Procedures**

We have established disclosure controls and procedures, as such term is defined in Rule 13a-15(e) under the Securities Exchange Act of 1934. Under the supervision and with the participation of our management, we conducted an evaluation of the effectiveness of our disclosure controls and procedures as of December 31, 2017 to ensure that the information required to be disclosed by us in the reports that we file or submit under the Securities Exchange Act of 1934 is recorded, processed, summarized, and reported within the time periods specified in the SEC’s rules and forms. Disclosure controls and procedures include, without limitation, controls and procedures designed to ensure that information required to be disclosed by us in the reports that we file or submit under the Securities Exchange Act of 1934 is accumulated and communicated to our management, including our principal executive officer and principal financial officer as appropriate, to allow timely decisions regarding required disclosure. Our management, with participation of our principal executive officer and principal financial officer, has evaluated the effectiveness of our disclosure controls and procedures as of December 31, 2017. Based on that evaluation, our principal executive officer and principal financial officer concluded that our disclosure controls and procedures were effective as of December 31, 2017.

Management’s Report on Internal Control Over Financial Reporting

Our management is responsible for establishing and maintaining adequate internal controls over financial reporting, as such term is defined in Exchange Act Rule 13a15(f). Under the supervision and with the participation of our management, including our principal executive, financial and accounting officer, we conducted an evaluation of the effectiveness of our internal controls over financial reporting as of December 31, 2017. This evaluation was based on the framework in Internal Control-Integrated Framework (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission (“COSO”). Based on this evaluation, our management concluded that our internal control over financial reporting was effective as of December 31, 2017. The Company’s internal control over financial reporting as of December 31, 2017 has not been audited by the Company’s independent accountants.

Changes in Internal Control Over Financial Reporting

During the year ended December 31, 2017 and as of the date of this filing, we have completed remediation on the five material weaknesses identified in our Annual Report on Form 10-K, filed in March 2017. During the year ended December 31, 2017, we:

- prepared a comprehensive entity-wide risk assessment to identify, evaluate and ultimately report on risks to financial reporting throughout the organization. Following this assessment, we undertook an action plan to strengthen internal controls and procedures;
- prepared comprehensive documentation, including process flows, and risk control matrices for key financial processes and tested key controls for design and operating effectiveness;
- further segregated duties within our finance and accounting functions, to ensure that incompatible duties are segregated;
- implemented and tested a new process in connection with our year-end financial close to more fully document our identification of related parties and related party transactions, to ensure that all material transactions and developments impacting the financial statements are reflected and properly recorded;
- implemented and tested new processes to more fully document and test our accounting operations throughout the organization, including the review, supervision and monitoring taking place;
- expanded the personnel resources allocated to our internal controls over financial reporting, and the activities performed for us, by contracting two external firms; and
- implemented and tested a whistleblower policy, with a hotline number allowing for anonymous communications, to encourage open and effective channels of information in order to help ensure the accuracy and reliability of our financial statements and disclosures and identification of possible fraudulent activities.

During the year ended December 31, 2017 and as of the date of this filing, the Company has completed remediation of the material weaknesses identified in the Company’s annual report on Form 10-K, filed in March 2017. Otherwise, there were no changes in the Company’s internal control over financial reporting identified in connection with the evaluation required by paragraph (d) of the Exchange Act Rules 13a-15 or 15d15 that occurred during the quarter ended December 31, 2017 that materially affected, or were reasonably likely to materially affect, the Company’s internal control over financial reporting.

ITEM 9B. OTHER INFORMATION

The disclosure set forth below is provided in lieu of a separate Form 8-K filing that otherwise would have been required with respect to Item 1.01 Entry into a Material Definitive Agreement of Form 8-K.

Indemnification Agreements with Directors and Officers

On March 23, 2018, we entered into indemnification agreements (the “Indemnification Agreements”) with each of our current directors and officers (collectively the “Indemnitees”). The Indemnification Agreements clarify and supplement indemnification provisions already contained in our Bylaws and

generally provide that we shall indemnify the Indemnitees to the fullest extent permitted by Nevada law, subject to certain exceptions, against expenses, judgments, fines and other amounts actually and reasonably incurred in connection with their service as a director or officer and also provide for rights to advancement of expenses and contribution. The foregoing description of the Indemnification Agreements is qualified in its entirety by the form of Indemnification Agreement incorporated herein by reference as Exhibit 10.27 to this Annual Report on Form 10-K.

Compensatory Arrangements of Certain Officers.

Bonus Awards 2017

On March 23, 2018 the Board of Directors approved a discretionary 2017 cash bonus award for Peter Hoang, our Chief Executive Officer in the amount of \$11,300.

On March 23, 2018 the Compensation Committee approved 2017 bonus awards for each of Dr. Wilson, our executive Chairman and strategic advisor and Mr. Loiacono, our Chief Financial Officer for their performance during 2017 in the amounts of \$25,600 and \$30,000, respectively.

PART III**ITEM 10. DIRECTORS, EXECUTIVE OFFICERS AND CORPORATE GOVERNANCE**

Our directors and executive officers and their respective ages as of the date of this annual report are as follows:

<u>Name</u>	<u>Age</u>	<u>Position with the Company</u>
Dr. Glynn Wilson	71	Chairman of the Board
Peter L. Hoang	46	President, Chief Executive Officer and a Director
Sherry Grisewood	65	Independent Director
David Laskow-Pooley	63	Independent Director
Mark Reddish	63	Independent Director
Joshua Silverman	47	Independent Director
Frederick Wasserman	63	Independent Director
Michael J. Loiacono	52	Chief Financial Officer and Chief Accounting Officer

The following describes the business experience of each of our directors and executive officers, including other directorships held in other public companies:

Directors of the Company**Glynn Wilson, Ph. D., Chairman of the Board**

Dr. Wilson has served as a director since February 2005 and served as a chairman since July 2009. Dr. Wilson currently serves as a strategic advisor to the Company. Dr. Wilson served as Chief Executive Officer between July 2009 and September 2017 and served as our President between November 2015 and September 2017 (except between July 2016 and April 2017 where a former officer served as President), following which Mr. Hoang was appointed to serve as President and Chief Executive Officer. Prior to joining us, Dr. Wilson was President and Chief Scientific Officer of Auriga Pharmaceuticals, a public specialty pharmaceutical company. Dr. Wilson was Research Area Head, Cell and Molecular Biology in Advanced Drug Delivery at Ciba-Geigy Pharmaceuticals from 1984 – 1989 and Worldwide Head of Drug Delivery at SmithKline Beecham from 1989 to 1994. He was the Chief Scientific Officer at Tacora Corporation from 1994 to 1997 and was the Vice-President, R&D, at Access Pharmaceuticals from 1997 to 1998. Dr. Wilson was President and Chief Scientific Officer of Auriga Pharmaceuticals, a public specialty pharmaceutical company from 2004 until 2006. He was a faculty member at Rockefeller University, New York, in the laboratory of the Nobel Laureates, Sanford Moore and William Stein, from 1974 to 1979. He is a recognized leader in the development of drug delivery systems and has been involved in taking lead products & technologies from concept to commercialization. Dr. Wilson has a Ph. D. in Biochemistry and conducted medical research at The Rockefeller University, New York.

Dr. Wilson brings an extensive background of success in corporate management and product development with tenures in both major multinational pharmaceutical companies and start-up pharmaceutical/biotech organizations.

Peter L. Hoang, President and Chief Executive Officer

Mr. Hoang has served as a director since September 2017. Mr. Hoang also serves as our President and Chief Executive Officer, positions which he commenced, September 22, 2017 succeeding Dr. Wilson, who remains as our Chairman. Prior to joining us, Mr. Hoang served as Senior Vice President of Business Development and Strategy at Bellicum Pharmaceuticals from [November 2014 to March 2017, as the Managing Director of Innovations at The University of Texas MD Anderson Cancer Center, where he headed the new venture formation and development effort for the institution from September 2012 to November 2014. Before joining MD Anderson, Mr. Hoang served as a senior investment banker from November 2010 to March 2012, most recently as Managing Director and head of healthcare

mergers & acquisitions advisory for CIT Group. Mr. Hoang has also served in the M&A departments at Oppenheimer, J.P. Morgan, Merrill Lynch, and Deutsche Bank. He earned an M.B.A. with high honors distinction from the Anderson School of Management at UCLA and a B.A. from Yale University.

Mr. Hoang brings over twenty years of investment banking, venture capital, immuno-oncology and public company executive management experience to us.

Sherry Grisewood, Director

Ms. Grisewood has served as a director since March 2013. Between December 2012 and June 2017, Ms. Grisewood was associated with Dawson James Securities Inc., first as Managing Director, Corporate Finance until September 2015 and most recently as Managing Partner, Life Science Research. Prior to joining Dawson James, over a 12-year period as an investment banker Ms. Grisewood led Lifesciences specialty investment banking practices for two New York-based investment banks and acted as an independent strategic advisor and consultant in life sciences. Prior to consulting for investment banks, Ms. Grisewood served as Director of Research for a mid-tier brokerage company and a leading independent investment research company. She currently serves on the Board of Mobitech Regenerative Medicine, a private medical device company, and has served as a Board member of BRTI Life Sciences and Conception Technology, both private medical device companies. Ms. Grisewood is a member of the American Society of Gene and Cell Therapy, the Tissue Engineering and Regenerative Medicine Society International, Women in Bio and the CFA Institute. Ms. Grisewood holds a Bachelor of Science degree in Life Science from Ramapo College of New Jersey.

Ms. Grisewood has over 30 years of securities industry experience in a range of investment banking, advisory and research-related activities and Ms. Grisewood brings a wealth of knowledge about the securities and biomedical industries to us. Ms. Grisewood has participated in over 70 transaction-related projects involving initial public offerings, secondary offerings, PIPE's, private equity, M&A and licensing transactions. These deals and projects represented US, Canadian, Scandinavian, UK, Chinese and Australian clients with advanced therapeutic technologies and delivery systems in the life sciences such as those addressing nucleic acid therapeutics, regenerative medicine, immune-therapy, CNS diseases, or leading-edge device technologies for life science special situations.

David Laskow-Pooley, Director

Mr. Laskow-Pooley has served as a director since March 2015. Mr. Laskow-Pooley is currently CEO of LondonPharma Ltd, a clinical stage company re-purposing approved drugs through novel drug delivery technologies, where he has been employed since April 2012. He is also a Co-founder of Pharmafor Ltd, a small company incubator. Mr. Laskow-Pooley was formerly Managing Director (UK) of Nasdaq-listed drug discovery platform company, OSI, where he was employed from 2002 to 2004. Mr. Laskow-Pooley also was part of the corporate team that developed and launched Tarceva for the treatment of lung cancer with marketing partners Roche and Genentech. Mr. Laskow-Pooley is a pharmacist with more than 40 years of experience in the Pharmaceutical, Diagnostic and Device sectors, and has had a distinguished career in multinational pharmaceutical companies including Glaxo SmithKline and Abbott, in addition to Life Technologies (Biotech Life Sciences) and Amersham, now GE Healthcare (Diagnostic Imaging). Mr. Laskow-Pooley currently serves on the boards of directors of Pharmafor Ltd, a UK private company and Neurovive AB, a Swedish and US public company. Mr. Laskow-Pooley attended the Sunderland School of Pharmacy and received his BS degree in Pharmacy.

Mr. Laskow-Pooley brings extensive experience in the pharmaceutical industry, and with start-up and early stage pharmaceutical/biotech organizations, to us.

Mark Reddish, Director

Mr. Reddish has served as a director since April 2012. Mr. Reddish joined the Company as Vice-President of Product Development between November 2011, and February 2012. Mr. Reddish previously served as Vice President of Product Development and Principal Investigator, Biodefense at ID Biomedical, Bothell, WA, where he was employed from 1998 to 2005. At Biomira Inc. (renamed

Oncothyreon), where he was senior director of Research Immunology from 1991 to 1998, he was responsible for development of their FDA approved tumor marker assays (CA15-3, CA-125, CA19-9, PSA) and lead early research and clinical development of their immunotherapeutic vaccine program. Mr. Reddish has a degree in Biology from Bates College.

Mr. Reddish brings thirty-five years of biomedical experience ranging from clinical and academic research to industrial product development and has already brought significant value and insight to us. Mr. Reddish has over 50 publications in the areas of immunology and microbiology and a number of issued and pending patents in the area of vaccine technologies.

Frederick Wasserman, Director

Mr. Wasserman has served as a director since January 2016. Mr. Wasserman is a business executive with over 35 years of business experience, having served at various companies in roles including Chief Executive Officer, President, Chief Operating Officer and Chief Financial Officer. Mr. Wasserman is currently the President of FGW Partners LLC, Pennington, NJ, where he has been employed since 2007. Mr. Wasserman currently serves on the boards of directors of DHL Holdings Corp, MAM Software Group, Inc., and SMTC Corporation. Mr. Wasserman was employed as a certified public accountant from 1976 to 1989. He earned a Bachelor of Science degree from The Wharton School at The University of Pennsylvania in 1976.

Mr. Wasserman brings to our Board an extensive array of business and industry experience as well as experience as a director of public companies.

Joshua Silverman, Director

Mr. Silverman has served as a director since November 2016. Mr. Silverman is the co-founder and Managing Member of Parkfield Funding LLC, an investment and consulting firm, since August 1, 2016. Mr. Silverman was a former Principal and Managing Partner of Iroquois Capital Management, LLC (“Iroquois”), where he served as Co-Chief Investment Officer of Iroquois from 2003 until August 1, 2016. From 2000 to 2003, Mr. Silverman served as Co-Chief Investment Officer of Vertical Ventures, LLC, a merchant bank. Prior to forming Iroquois, Mr. Silverman was a Director of Joele Frank, a boutique consulting firm specializing in mergers and acquisitions. Previously, Mr. Silverman served as Assistant Press Secretary to the President of the United States. In the past five years, Mr. Silverman has served on the boards of directors of Neurotrope, Inc., MGT Capital Investments Inc., National Holdings Corporation, Alanco Technologies Inc., Protagenic Therapeutics, Inc. and WPCS International Incorporated. Mr. Silverman received his B.A. from Lehigh University in 1992.

Mr. Silverman brings to our Board extensive public company board experience, and financial and investment experience, including with pre-revenue biotechnology companies.

Current Executive Officers and Key Employee

We are led by a team of executives that are chosen by the Board of Directors. Currently, we have three executive officers, set forth below is biographical information for executive officers and certain identified key employees.

Peter L. Hoang, President and Chief Executive Officer.

Mr. Hoang’s biography is included above under Directors of the Company.

Michael J. Loiacono, Chief Financial Officer

Mr. Loiacono has served as our Chief Financial Officer, Secretary and Treasurer since August 25, 2016. Prior to joining us as our Chief Financial Officer, Mr. Loiacono was responsible for the company’s strategic development to include new products and services, new market penetration and maximizing gross and net revenues at FCTI, Inc. Between 2006 and 2013, Mr. Loiacono served as Chief Financial Officer of Global Access Corp, a publicly-traded company until it was acquired by FCTI, Inc. At Global Access, Michael oversaw the overall financial strategy of the company, including capital raises, mergers &

acquisitions, corporate finance, treasury, financial planning and analysis, accounting, investor relations, external auditing and was responsible for Global Access' corporate strategy function. Prior to FCTI/Global Access, Michael held various positions of increasing responsibility in finance management through several private and publicly-traded organizations. Michael attended Rutgers University, Business School where he received his B.S. degree.

Michael J. Loiacono has more than 25 years of financial management experience, which includes public company services as a chief financial officer.

Key Employees

Robert T. Florkiewicz

Dr. Florkiewicz serves as the Company's Senior Director of Molecular Biology & Virology. Dr. Florkiewicz previously served as a consultant to the Company from September 2014 until January 2017. Dr. Florkiewicz has experience in both academic and biotechnology environments. Most recently he conducted research on human embryonic stem cell-based therapies at the University of Washington. He was the Director of Cellular and Molecular Biology and co-founder of Ciblex Corporation, a spin-out from his laboratory at the Scripps Institute, San Diego. He was a patent agent at Seed Intellectual Law Group in Seattle and at ID Biomedical, where he managed the company's intellectual property portfolio prior to and through its acquisition by GlaxoSmithKline. As a Research Scientist at Synergen, Inc., he helped establish the viral vector and animal cell expression group, and also discovered novel molecular mechanisms modulating FGF2 gene expression. He has a Ph.D. in Molecular and Development Biology from the University of Arizona (focusing on the molecular biology of various RNA viruses) and was a postdoctoral fellow at the Salk Institute (focusing on the intracellular trafficking of proteins encoded by vesicular stomatitis virus).

CORPORATE GOVERNANCE AND BOARD MATTERS

Leadership Structure of the Board of Directors

Our property, affairs and business are under the general management of our Board of Directors as provided by the laws of the State of Nevada and our Bylaws. Our bylaws and corporate governance guidelines do not require that our Chairman and Chief Executive Officer positions be separate but such positions are currently separated between Dr. Wilson as our Chairman and Peter Hoang as our Chief Executive Officer and President.

The Board of Directors conducts its business through meetings of the full Board and through committees of the Board. The Board of Directors has appointed standing Audit, Compensation and Nominating and Governance Committees of the Board of Directors comprised of independent directors. The independent members of our board meet during board meetings in separate executive session without any member of management present.

The Board periodically reviews the size of the Board and recommends any changes it determines to be appropriate given our needs. Under our Bylaws, the number of members on the Board may be increased or decreased by resolution of the Board.

Independence of Directors

Our common stock is listed on a national securities exchange, the Nasdaq Capital Market. Accordingly, in determining whether our directors are independent, we are required to comply with the rules of the Nasdaq Capital Market. We also expect to continue to comply with securities and other laws and regulations regarding the independence of directors, including those adopted under Section 301 of the Sarbanes-Oxley Act and Rule 10A-3 under the Securities and Exchange Act of 1934 with respect to the independence of Audit Committee members. The Nasdaq Capital Market listing standards define an "independent director" as a person other than an executive officer or employee of the company or any other individual having a relationship which, in the opinion of the issuer's board of directors, would

interfere with the exercise of independent judgement in carrying out the responsibilities of a director. The Board has affirmatively determined that each of the following directors, constituting a majority of the Board, is independent within the meaning of the Nasdaq Capital Market listing standards:

Sherry Grisewood
David Laskow-Pooley
Mark Reddish
Joshua Silverman
Frederick Wasserman

Such independence definition includes a series of objective tests, including that the director is not an executive officer employee of the company and has not engaged in various types of business dealings with the company. In addition, as further required by the Nasdaq Capital Market listing standards, the Board has made a subjective determination as to each independent director that no relationships exist which, in the opinion of the Board, would interfere with the exercise of independent judgment in carrying out the responsibilities of a director.

Meetings of the Board of Directors

In 2017, our board of directors met five times. Our board of directors adopted various resolutions pursuant to five unanimous written consents in lieu of a meeting during the year ended December 31, 2017. Five board members attended 100% of the aggregate of (i) meetings of our board of directors during the year and (ii) the total number of meetings of all committees on our board of directors on which the incumbent directors served. One director attended 80% of the aggregate of (i) the meetings of our board of directors during the year and (ii) the total number of meetings of all committees of our board of directors on which the incumbent directors served. Two directors attended one meeting each, which was 100% of the total number of meeting on which the director served, due to one director leaving the board during the year and one director joining the board during the year.

Term of Office

Our directors are appointed for a one-year term to hold office until the next annual general meeting of our stockholders or until they resign or are removed from the board in accordance with our bylaws. Our officers are appointed by our Board of Directors and hold office until they resign or are removed from office by the Board of Directors.

Shareholder Communications with the Board of Directors

Our Corporate Governance Guidelines provide that our Chief Executive Officer are responsible for establishing effective communications with our shareholders. Our board of directors has implemented a process for shareholders to send communications to our board of directors and to specific individual directors. Any shareholder desiring to communicate with our board of directors, or with specific individual directors, may do so by writing to our Secretary at 5 W. Forsyth Street, Suite 200, Jacksonville, Florida 32202. Our Secretary will promptly forward all such sealed communications to our board of directors or such individual directors, as applicable.

Committees of the Board of Directors

Our board of directors has three standing committees — the audit committee, the compensation committee, and the nominating and corporate governance committee. Each of our committees operates pursuant to a written charter which, as in effect from time to time, may be found on our website at www.tapimmune.com. Each of the committees is composed of independent directors, consistent with the independence standards defined by the SEC and NASDAQ. Each committee has the right to retain its own legal and other advisors.

The following table reflects the current membership of each Board committee:

Name	Committee Membership		
	Audit Committee	Compensation Committee	Nominating and Corporate Governance Committee
Sherry Grisewood	Chair	✓	
David Laskow-Pooley	✓	Chair	✓
Mark Reddish		✓	✓
Joshua Silverman			
Frederick Wasserman	✓		Chair
Glynn Wilson ⁽¹⁾			

(1) Became non-employee director on September 22, 2017.

Audit Committee

Our Board of Directors has established an Audit Committee which functions pursuant to a written charter last amended by our Board of Directors in July 2016. The Audit Committee members currently consist of Ms. Sherry Grisewood, Mr. David Laskow-Pooley and Mr. Frederick Wasserman with Ms. Grisewood serving as Chair. The Board has affirmatively determined that each such person met the independence requirements for audit committee purposes based on the more stringent independence standards imposed by applicable Nasdaq Capital Market and SEC rules. In addition, the Board of Directors has determined that Ms. Grisewood is an “audit committee financial expert” as that term is defined in Item 407(d)(5) of Regulation S-K promulgated under the Securities and Exchange Act of 1934. In March 2004, the Audit Committee adopted a written charter which was modified in November 2015 and amended in July 2016. We believe that its Audit Committee Charter complies with the requirements related to Sarbanes-Oxley and a current copy of the Audit Committee Charter is available on our website at <http://tapimmune.com/investors/briefcase>. The Audit Committee met five times during 2017.

Compensation Committee

Our Board of Directors has established a Compensation Committee which functions pursuant to a written charter last amended by our Board of Directors in July 2016. The members of the Committee are David Laskow-Pooley, Mark Reddish and Sherry Grisewood. Mr. Laskow-Pooley serves as Chair of the Committee. The Compensation Committee met or acted by written consent once during 2017.

Nominating and Corporate Governance Committee

Our Board of Directors has established a Nominating and Corporate Governance Committee which functions pursuant to a written charter last amended by our Board of Directors in July 2016. The members of the Committee are David Laskow-Pooley, Mark Reddish and Frederick Wasserman. Mr. Wasserman serves as Chair of the Committee. The Nominating and Corporate Governance Committee met or acted by written consent once during 2017.

Role in Risk Oversight

Our board of directors oversees our stockholders’ and other stakeholders’ interest in our long-term health and overall success and financial strength. Risk is inherent with every business, and how well a business manages risk can ultimately determine its success. We face a number of risks, including economic risks, environmental and regulatory risks, and others, such as the impact of competition. Management is responsible for the day-to-day management of risks, while our board of directors, as a whole and through its committees, has the responsibility of satisfying itself that the risk management processes designed and implemented by management are adequate and functioning as designed.

Our board of directors believes that establishing the right “tone at the top” and that full and open communication between management and our board of directors are essential for effective risk management and oversight. Senior management regularly attends board meetings and is available to address any questions or concerns raised by our board on risk management-related and other matters. Our board also holds strategic planning sessions with senior management to discuss strategies, key challenges, and risks and opportunities.

While our entire board of directors is ultimately responsible for risk oversight, our board committees assist our board of directors in fulfilling its oversight responsibilities in certain areas of risk. Our audit committee assists our board in the areas of financial reporting, internal controls and compliance with legal and regulatory requirements and discusses policies with respect to risk assessment and risk management. Risk assessment reports are provided annually by management to our audit committee. Our compensation committee assists our board with respect to the management of risk arising from our compensation policies and programs. Our nominating and corporate governance committee assists our board with respect to the management of risk associated with board organization, membership and structure, succession planning for our directors and executive officers, and corporate governance.

Shareholder Nominations

Our nominating and corporate governance committee will consider candidates recommended by shareholders. To recommend director candidates, shareholders should submit their suggestions in writing to the chairman of the nominating and corporate governance committee, c/o our Secretary, providing the candidate’s name, biographical data and other relevant information, together with consent from the suggested candidate to serve on our board of directors if nominated and elected.

Code of Ethics and Business Conduct

We have adopted a Code of Ethics and Business Conduct that applies to all directors and officers. The code describes the legal, ethical and regulatory standards that must be followed by our directors and officers and sets forth high standards of business conduct applicable to each director and officer. A copy of the code can be viewed on our website at <http://tapimmune.com/investors/briefcase/>

SECTION 16(A) BENEFICIAL OWNERSHIP REPORTING COMPLIANCE

During the year ended December 31, 2017, the executive officers and directors of the Company filed with the Securities and Exchange Commission (the “Commission”) on a timely basis, all required reports relating to transactions involving equity securities of the Company beneficially owned by them. The Company has relied solely on the written representation of its executive officers and directors and copies of the reports they have filed with the Commission in providing this information.

ITEM 11. EXECUTIVE COMPENSATION

Director Compensation

Employee Directors

The Director compensation program provides that employee Directors receive no additional compensation in connection with their board service.

Non-employee directors

On March 9, 2017 the Board of Directors approved changes to the Director Compensation Program for non-employee directors which provided for the following compensation for our non-employee directors:

- An annual retainer of \$80,000, in lieu of any per board or committee meeting fees (including telephonic meetings), or committee chair fees. The annual retainer is payable as follows:
 - (i) half in cash (\$40,000) to be paid in four equal quarterly payments at the end of each calendar quarter, provided such director is still serving as a director, and

- (ii) half (\$40,000) to be paid in restricted common stock under the 2014 Omnibus Stock Ownership Plan (the “Plan”) at the time of the Company’s annual shareholder meeting in which directors are elected, with such shares determined based on the closing price for the Company’s shares on the day preceding the annual meeting and which shall be immediately vested. To the extent any per meeting fees were paid in 2017 to our non-employee directors under the prior non-employee director compensation plan, such fees are to be deducted from the cash portion of the quarterly payments until fully accounted for.

The following components of the Director Compensation Program applicable to non-employee directors remain in place:

- An initial grant upon joining the Board of 12,500 stock options under the Plan;
- Reimbursement of reasonable expenses incurred; and
- Eligibility for Discretionary awards under the Plan.

The following table sets forth information relating to compensation earned or paid to our directors for their services as directors in the fiscal year ended December 31, 2017, and excludes compensation paid to our directors for their services as executive officers:

Director Compensation Table					
Name ⁽¹⁾	Fees Earned or Paid in Cash	Stock Awards ⁽²⁾	Option Awards ⁽²⁾	All Other Compensation	Total
Glynn Wilson ⁽³⁾	—	—	—	—	—
Peter Hoang ⁽³⁾	—	—	—	—	—
Sherry Grisewood	\$ 40,000	\$40,000	—	—	\$80,000
David Laskow-Pooley	\$ 40,000	\$40,000	—	—	\$80,000
Mark Reddish	\$ 40,000	\$40,000	—	—	\$80,000
Joshua Silverman	\$ 40,000	\$40,000	—	—	\$80,000
Frederick Wasserman	\$ 40,000	\$40,000	—	—	\$80,000

- (1) The above table excludes a former director and officer, Dr. John Bonfiglio. Dr. Bonfiglio received no compensation during 2017 as a director.
- (2) As of the end of the year directors Wilson, Hoang, Grisewood, Laskow-Pooley, Reddish, Silverman and Wasserman have aggregate options to acquire 168,167, 0, 12,500, 12,500, 12,875, 12,500, 12,500 and 12,500, respectively and there are no stock awards outstanding for any non-employee director.
- (3) There was no amount paid to Dr. Wilson or Mr. Hoang for their services as directors given their services to us as executive officers. See Summary Compensation Table.

Compensation Discussion and Analysis

Overview of Compensation Program

The Compensation Committee of our Board of Directors is responsible for establishing and evaluating our policies governing the compensation of our executive officers, including our named executive officers. The Compensation Committee reviews and proposes recommendations to the Board of Directors regarding the compensation to be paid to the Chief Executive Officer. In addition, the Compensation Committee reviews and approves the compensation to be paid to all other executive officers. The Compensation Committee ensures that the total compensation paid to our executive officers is fair, reasonable and competitive.

Compensation Objective

Our executive compensation programs are designed to achieve the following objectives:

- Attract and retain talented and experienced executive officers;
- Motivate and reward executive officers whose knowledge, skills, performance and business relationships are critical to our success;
- Align the interests of our executive officers and stockholders by motivating executive officers to ultimately increase stockholder value;
- Compensate our executive officers to manage our business to meet our short term and long-range goals;
- Ensure fairness among the executive officers by recognizing the contributions each executive officer makes to our success; and
- Provide a competitive compensation package which includes some pay for performance factors.

Role of Others in Compensation Decisions

The Compensation Committee makes all of the decisions with respect to the compensation received by our executive officers other than our chief executive officer which the Committee reviews and proposes recommendations to the Board of Directors. The Compensation Committee meets outside the presence of all of our executive officers to consider appropriate compensation recommendations for our chief executive officer. For all other executive officers, the Compensation Committee meets outside the presence of all executive officers except for our chief executive officer. Our chief executive officer periodically reviews each of the other executive officers' performance with the Compensation Committee and makes recommendations to the Compensation Committee with respect to any appropriate changes in base salary, bonus and grants of long-term equity incentive awards for the executive officers, excluding himself. Based in part on these recommendations and other considerations, the Compensation Committee reviews and approves such compensation arrangements of our executive officers other than our chief executive officer. The Compensation Committee also annually analyzes the chief executive officer's performance and determines his salary, annual cash bonus and grants of long-term equity incentive awards and makes recommendations to the Board of Directors. The Compensation Committee reviews and makes recommendations to the Board of Directors regarding all new equity related incentive plans for senior management.

Consideration of Stockholder Advisory Vote on Executive Compensation

The Compensation Committee also expects to consider the results of our stockholder advisory vote on executive compensation. The Board of Directors determined that stockholder advisory votes on executive compensation will be submitted to stockholders of the Company annually until the next required advisory vote on the frequency of conducting advisory votes on executive compensation.

Clawback Policy

In order to further align management's interests with those of stockholders and to support our governance practices, the Board of Directors adopted a recoupment policy applicable to annual bonuses and other short-term and long-term incentive compensation based on financial targets ("Incentive Compensation") received by current and former executive officers of the Company and such other senior executives/employees of the Company who may from time to time be deemed subject to the policy by the Board of Directors ("Covered Executive"). The policy provides that if, as a result of a restatement of our financial statements due to our material noncompliance with any financial reporting requirement under the securities laws, a Covered Executive received more Incentive Compensation than the Covered Executive would have received absent the incorrect financial statements, the Company shall recover said excess Incentive Compensation (defined as the excess of (i) the actual amount of Incentive Compensation paid to the Covered Executive over (ii) the Incentive Compensation that would have been paid based on the restated financial results during the three-year period preceding the date on which the Company is required

to prepare such restatement). The policy also provides that if the Board of Directors makes a determination in its sole discretion that a Covered Executive engaged in Misconduct (as defined below), the Board of Directors may require reimbursement or forfeiture of all or part of the Incentive Compensation received by the Covered Executive. The Board of Directors may use its judgment in determining the amount to be recovered. Misconduct is defined as (i) conviction of a felony, (ii) material breach of any agreement with the Company, (iii) material breach of any Company policy or code, (iv) act of theft, embezzlement or fraud, (v) misrepresentation or misstatement of financial or performance results, and (vi) any other act or event that the Board of Directors has determined that recoupment is appropriate.

2017 Executive Compensation Components

For the fiscal year ended December 31, 2017, the principal components of compensation for our executive officers were:

- Annual base salary;
- Bonus;
- Stock Awards;
- Option Awards; and
- Other benefits.

Annual Base Salary

Base salary is designed to attract and retain experienced executive officers who can drive the achievement of our goals. While the initial base salary for our executive officers was determined by an assessment based upon the responsibilities of the position, the expected contribution of the position to our business, the experience and skill required for the position, and competition in the marketplace for the talent; the factors used in determining increases in base salary include individual performance, changes in role and/or responsibility and changes in the competitive market environment. The Compensation Committee periodically reviews the base salary for each executive officer.

Bonus

The Company awarded discretionary bonuses to the named executive officers during 2017. The Company expects to establish a bonus plan for the executive officers for 2018 and executive officers and employees may also be considered for discretionary bonuses by the Compensation Committee and recommended at the discretion of the Compensation Committee for approval by our Board of Directors.

Long-Term Equity Incentive Compensation

The Company awards long-term equity incentive awards to executive officers, including the named executive officers, as part of a total compensation package. These awards are consistent with our pay for performance principles and align the interests of the executive officers to the interests of our stockholders. The Compensation Committee reviews and approves the amount of each award to be granted to each named executive officer. Long-term equity incentive awards are made pursuant to the 2014 Omnibus Stock Ownership Plan.

Our long-term equity incentives are currently in the form of options to acquire our common stock. Stock option awards provide our executive officers with the right to purchase shares of its common stock at a fixed exercise price for a period of up to ten years under the 2014 Omnibus Stock Ownership Plan. Stock options are granted under the 2014 Omnibus Stock Ownership Plan at a price not less than the prevailing market value at the time of grant and will have realizable value only if our stock price increases. Stock options are earned on the basis of continued service to the Company and generally vest over a number of years or based upon other specific performance based criteria.

Our long-term equity incentives also can be in the form of restricted share awards of our common stock under the 2014 Omnibus Stock Ownership Plan. Restricted stock awards provide our executive officers with the shares of our common stock subject to certain restrictions and/or vesting requirements. Restricted stock shares will be earned on the basis of continued service to the Company and will vest as set forth in the separate award agreements.

The Compensation Committee determines the amount and features of the stock options and/or restricted stock, if any, to be awarded to executive officers. The Compensation Committee evaluates a number of criteria, including the past service of each such executive officer to the Company, the present and potential contributions of such executive officer to our success and such other factors as the Compensation Committee shall deem relevant in connection with accomplishing the purposes of the 2014 Omnibus Stock Ownership Plan, including the executive officer's current stock holdings, years of service, position with the Company and other factors. The Compensation Committee does not expect to apply a formula assigning specific weights to any of these factors when making its determination.

Other Benefits

Retirement Benefits. We do not currently have any retirement plan in place for our executive officers or employees.

Health and Welfare Benefits. All full-time employees, including our named executive officers, may participate in our health and welfare benefit programs, including medical, dental and vision care coverage as may be provided and applicable to all employees.

Perquisites. Because we provide limited perquisites to our executive officers, we do not believe these perquisites and other personal benefits constitute a material component of the executive officers' compensation packages.

Employment Agreements

During 2017, we had employment agreements in effect with Mr. Peter Hoang, Dr. Glynn Wilson and Mr. Michael J. Loiacono. We amended the employment agreement with Dr. Wilson to provide for a change in his role from President and Chief Executive Officer to a strategic advisor. See "Employment Agreements". We entered into employment agreements with these officers to ensure that they would perform their respective roles with the Company for an extended period of time. In addition, we also considered the critical nature of each of their positions and our need to retain them when we committed to these agreements. See "Employment Contracts and Change in Control Arrangements."

2017 Bonus Plan

On July 6, 2017, the Board of Directors approved the 2017 bonus program for Dr. Wilson and Mr. Loiacono as recommended by the Compensation Committee. Under such bonus program, Dr. Wilson and Mr. Loiacono were eligible for bonuses of up to \$102,500 and \$60,000, respectively, equaling up to 50% and 30%, of their respective base salaries (each a "Bonus Target").

The bonuses payable to Dr. Wilson were to be based upon the achievement of the following objectives:

- (i) up to 40% of the Bonus Target for meeting scientific, technical and clinical objectives;
- (ii) up to 20% of the Bonus Target for financial performance and corporate objectives related to our raising capital; and
- (iii) up to 40% of the Bonus Target designated to be discretionary as determined by the Board.

The bonuses payable to Mr. Loiacono were to be based upon the achievement of the following objectives:

- (i) up to 33.3% of the Bonus Target for meeting corporate and operational objectives;
- (ii) up to 33.3% of the Bonus Target for financial performance objectives including related to our raising capital; and

(iii) up to 33.3% of the Bonus Target designated to be discretionary as determined by the Board.

The bonuses were to be paid in a combination of cash and common stock at the discretion of the Compensation Committee.

Because Mr. Hoang joined the Company in September 2017, his employment agreement with us provided that any bonus for 2017 would be at the discretion of the Board.

2017 Compensation Decisions

We believe that the total compensation paid to our named executive officers for the fiscal year ended December 31, 2017 achieved the overall objectives of our executive compensation program. In accordance with our overall objectives, we believe executive compensation for 2017 was competitive with other similarly-sized companies. The Compensation Committee took the following key compensation actions in 2017:

- **Determination of Annual Base Salaries**

The Compensation Committee did not authorize, recommend or approve any changes in the annual base salaries for any of the Company named executive officers during 2017, except Dr. Wilson's annual base salary was reduced in connection with the amendment to his employment agreement.

- **Determination of Equity Awards:**

During the year ended December 31, 2017, we made equity awards to certain of our named executive officers. See Summary Compensation Table.

- **Determination of Bonuses:**

The Compensation Committee awarded discretionary bonuses for 2017 to the named executive officers pursuant to the terms of their employment agreements. The bonuses awarded to our named executive officers were paid in cash and immediately vested shares of our common stock issued under our 2014 Omnibus Stock Ownership Plan. See Summary Compensation Table below:

Summary Compensation Table

The following table sets forth the compensation earned by our executive officers for their services as executive officers during our fiscal years ended December 31, 2017 and December 31, 2016:

Summary Compensation Table							
Name and Principal Position	Year	Salary (\$)	Bonus (\$)	Stock Awards (\$)	Option Awards (\$)	All Other Compensation (\$)	Total (\$)
Peter Hoang ⁽¹⁾ <i>CEO and Principal Executive Officer</i>	2017	90,625	11,300	795,000	—	—	896,925
Glynn Wilson ⁽²⁾ <i>Strategic Advisor, Former CEO and Principal Executive Officer</i>	2017	261,340	25,600	318,000	—	—	604,940
	2016	276,200	110,000	191,000	—	49,200	626,400
Michael J. Loiacono ⁽³⁾ <i>Chief Financial Officer, Chief Accounting Officer and Principal Accounting Officer</i>	2017	200,000	30,000	—	—	—	230,000
	2016	66,900	10,000	—	308,700	21,600	407,200

- (1) Mr. Hoang became our Chief Executive Officer and President on September 22, 2017 and entered into an employment agreement with us. See "Employment Agreements". The salary for Mr. Hoang reflects the portion of the year he served us in the capacity as an officer from the time his employment became effective. The stock award represents the fair market value of an award of 250,000 shares under our 2014 Omnibus Stock Ownership Plan ("Incentive Plan") (based upon the fair value of \$3.18 per share on the date of issuance) issued to Mr. Hoang upon commencement of his employment pursuant to the terms of his employment agreement.

- (2) The amount reflected as salary paid to Dr. Wilson during 2017 was paid pursuant to the terms of our employment agreement with Dr. Wilson, (as amended on September 2017) when Dr. Wilson transitioned to a strategic advisor role and Mr. Hoang became our Chief Executive Officer and President. See “Employment Agreements”. At the time of the amendment, Dr. Wilson was issued 110,000 shares of common stock that vested immediately under our Incentive Plan and the amount in the table reflects the fair value of the award on the date of issuance based on \$3.18 per share.
- (3) The amount reflected as salary in the table for to Mr. Loiacono during 2017 was based upon the terms of his employment agreement with us. See “Employment Agreements.”

The amounts represent fees paid or accrued by us to the executive officers during the past year pursuant to various employment and consulting services agreements, as between us and the executive officers, which are described below. Our executive officers are also reimbursed for any out-of-pocket expenses incurred in connection with corporate duties. We presently have no pension, annuity, life insurance, profit sharing or similar benefit plans.

The following table sets forth information as at December 31, 2017 relating to outstanding equity awards for each named executive officer:

Name	Number of Securities Underlying Unexercised Options (exercisable)	Number of Securities Underlying Unexercised Options (unexercisable)	Number of Securities Underlying Unexercised Unearned Options	Option Exercise Price	Option Expiration Date
Glynn Wilson	166,667	—	—	\$ 7.26	12/11/2025
<i>Strategic Advisor</i>	1,333 ⁽¹⁾	—	—	\$204.00 ⁽²⁾	10/14/2019
	133 ⁽¹⁾	—	—	\$204.00 ⁽²⁾	2/16/2021
Michael J. Loiacono	27,546	26,621	—	\$ 5.70	8/25/2026
<i>Chief Financial Officer, Chief Accounting Officer and Principal Accounting Officer</i>					

- (1) The plan under which these shares were issued was approved by the Board of Directors and the stockholders in 2009 but did not come into effect until February 22, 2010.
- (2) Effective February 16, 2011, the option exercise price was reduced to \$204.00.
- (3) Share amounts reflected in this table have been adjusted to reflect the one for twelve reverse split that occurred on September 15, 2016, unless such share awards occurred after the date of the reverse split.

Employment Agreements

Peter Hoang

The Company and Mr. Hoang entered into an Employment Agreement on September 22, 2017 pursuant to which Mr. Hoang agreed to serve as the Company’s President and Chief Executive Officer and which provides that Mr. Hoang’s base salary will be \$362,500 per year. The term of the agreement is for three years and will be automatically extended for an additional 12 months unless terminated by Mr. Hoang or the Company.

In connection with the execution of Mr. Hoang’s employment agreement he will be granted 250,000 shares of restricted stock, all of which immediately vested under the Company’s Plan. Additionally, on the first anniversary of his employment agreement, Mr. Hoang shall, subject to certain conditions, be eligible to receive a grant of stock options to purchase the number of shares equal to one percent (1%) of the then-outstanding common stock of the Company under the Plan at an exercise price equal to the fair market value of the common stock at the time of such grant, provided that certain requirements are satisfied. The options granted, if made, shall be immediately vested. In addition, on the second and third

anniversaries of the employment agreement, Mr. Hoang shall, subject to certain conditions, be eligible to receive, on each such date, an additional grant of stock options to purchase the number of shares equal to one percent (1%) of the then-outstanding common stock of the Company under the Plan at an exercise price equal to the fair market value of the common stock at the time of such grant, provided that certain requirements are satisfied. These options if made, shall be subject to such further vesting conditions, including performance criteria, as mutually agreed to by Mr. Hoang and the Board.

Dr. Glynn Wilson

Dr. Glynn Wilson has been a longstanding executive of the Company and was appointed as the Company's Executive Chairman on July 1, 2009. The Company and Dr. Wilson entered into a new employment agreement on November 12, 2015, which was subsequently amended on July 18, 2016 and September 22, 2017. As a result of the most recent amendment where Dr. Wilson transitioned the role of President and Chief Executive Officer to Mr. Peter Hoang on September 22, 2017, Dr. Wilson agreed to serve as the Company's Strategic Advisor until December 31, 2018. The amended employment agreement provided that Dr. Wilson's annual base salary is \$205,000. In connection with entering into the September 22, 2017 amendment, Dr. Wilson received equity awards under our Plan consisting of an award of 100,000 shares of unregistered common stock, which immediately vested. In addition, upon the first anniversary of the execution of September 22, 2017 amendment, Dr. Wilson will be eligible to receive, subject to certain conditions, an additional grant of restricted common stock equal to \$300,000.

Michael J. Loiacono

On August 25, 2016, we entered into an Employment Agreement with Michael J. Loiacono, which provides that Mr. Loiacono's base salary will be \$200,000 per year. Pursuant to that agreement, Mr. Loiacono agreed to serve as our Chief Financial Officer and Chief Accounting Officer. The term of the agreement is for two years and will be automatically extended for an additional 12 months prior to the end of the term, or no later than ninety (90) days prior to the end of any such successive 12-month term unless terminated by Mr. Loiacono or the Company.

In connection with the execution of Mr. Loiacono's employment agreement, he was granted equity awards under the Company's Plan consisting of stock options to purchase 54,167 shares of the Company's common stock at an exercise price of \$5.70 per share equal to the fair market value of the common stock on the day immediately preceding the execution of the employment agreement, with 6,250 shares vesting immediately and the remaining shares vesting in 36 equal monthly installments of 1,331 shares on the last day of each of the 36 months following the grant date.

Similar Employment Agreement Terms of Named Executive Officers

Each of the named executive officers is eligible to receive an annual performance bonus of up to 50% of their base salary payable in immediately vested shares of common stock or cash at the Board's discretion. In addition, each of the named executive officers is eligible to participate in the Company's benefit plans, and is entitled to vacation, sick leave and reimbursement of appropriate business expenses.

If a named executive officer's employment is terminated by us for Cause (as defined in their respective employment agreements) or by a named executive officer during the term of the agreement, he will be entitled to receive his (i) then-current annual base salary through the date of termination; (ii) any reimbursable expenses for which he has not yet been reimbursed as of the date of termination; and (iii) any other rights and vested benefits (if any) provided under employee benefit plans and programs of the Company, determined in accordance with the applicable terms and provisions of such plans and programs ("Accrued Compensation").

If a named executive officer's employment is terminated by us without "Cause" or by him for "Good Reason" (as defined in their respective employment agreements), subject to his execution of a release of claims against us, and in addition to the payment of the Accrued Compensation, the Company is obligated to make payments to such named executive officer within 60 days after his termination date equal to 2/3 (in the case of Dr. Wilson), twelve months (in the case of Mr. Hoang) or six months (in the case of Mr. Loiacono) of his annual base salary, as in effect at the termination date, plus any earned but unpaid bonus (the "Additional Severance Payments").

Upon a non-renewal of Mr. Hoang's employment agreement by the Company at the end of the term, Mr. Hoang will be entitled to be paid 12 months of his annual base salary over a twelve-month period.

The employment agreements of the named executive officers also contain change of control provisions providing that if the named executive officers' employment with the Company is terminated by the Company without Cause or by them for Good Reason (in the case of Dr. Wilson, Mr. Hoang and Mr. Loiacono) during the period of ninety (90) days (in the case of Dr. Wilson and Mr. Loiacono) or six months (in the case of Mr. Hoang) following a Change in Control (as that term is defined below) of the Company, in lieu of the Additional Severance Payments described above, the named executive officers will be entitled to receive a severance payment equal to the sum of (i) 2/3 of (in the case of Dr. Wilson), eighteen (18) months of (in the case of Mr. Hoang), eight (8) months of (in the case of Mr. Loiacono) their respective annual base salary, at the higher of the base salary rate in effect on the date of termination or the base salary rate in effect immediately before the effective date of the Change of Control (in the case of Dr. Wilson, Mr. Hoang and Mr. Loiacono), and (ii) their Performance Bonus for the year which includes the effective date of the Change in Control, payable at the target level of performance, which will be paid in a single lump sum after his execution and non-revocation of the Release (in the case of Dr. Wilson, Mr. Hoang and Mr. Loiacono). In addition, they will also receive in the same payment the amount of any performance bonus that, as of the date of termination, has been earned by the named executive officers but has not yet been paid by the Company (in the case of Dr. Wilson, Mr. Hoang and Mr. Loiacono). If the named executive officers hold any stock options or other stock awards granted under the Company's 2014 Omnibus Stock Ownership Plan which are not fully vested at the time their employment with the Company is terminated by the Company without Cause during the period of ninety (90) days (in the case of Dr. Wilson, and Mr. Loiacono) or six months (in the case of Mr. Hoang) following a Change in Control, such equity awards shall become fully vested as of the termination date. For purposes of the employment agreement, the term "Change in Control" means a transaction or series of transactions which constitutes a sale of control of the Company, a change in effective control of the Company, or a sale of all or substantially all of the assets of the Company, or a transaction which qualifies as a "change in ownership" or "change in effective control" of the Company or a "change in ownership of substantially all of the assets" of the Company under the standards set forth in Treasury Regulation section 1.409A-3(i)(5) (in the case of Dr. Wilson, Mr. Hoang and Mr. Loiacono).

The named executive officer employment agreements contain customary covenants regarding confidentiality and works for hire. During their employment term and for a period of 12 months thereafter, Dr. Wilson, Mr. Hoang and Mr. Loiacono covenant not to compete with us and not to solicit any of our customers, vendors or employees.

Dr. Wilson, Mr. Hoang's and Mr. Loiacono's employment agreements also provide that each of the payments and benefits under the agreements are subject to compliance with Section 409A of the Code and it includes time of payment language intended to comply with Section 409A requirements.

The foregoing summary of the employment agreements of our named executive officers is qualified in its entirety by the specific terms of the employment agreements of the named executive officers previously filed with the SEC which are incorporated herein by reference.

ITEM 12. SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT AND RELATED STOCKHOLDER MATTERS

The following table sets forth, as of the date of this annual report, certain information regarding the ownership of our common stock by (i) each person known by us to be the beneficial owner of more than 5% of our outstanding shares of common stock, (ii) each of our directors, (iii) our Chief Executive Officer and (iv) all of our directors and our Chief Executive Officer as a group. Unless otherwise indicated, the address of each person shown is c/o TapImmune Inc., 5 W. Forsyth Street, Suite 200, Jacksonville, Florida 32202. Beneficial ownership, for purposes of this table, includes options and warrants to purchase common stock that are either currently exercisable or will be exercisable within 60 days of the date of this annual report.

Name and Address of Beneficial Owner	Amount and Nature of Beneficial Ownership ⁽¹⁾	Percent of Class
Directors and Officers:		
Dr. Glynn Wilson, Chairman ⁽²⁾	326,350	3.0%
Peter L Hoang, Chief Executive Officer, President and Director ⁽²⁾	179,711	1.7%
Mark Reddish, Director ⁽⁴⁾	44,879	*
Sherry Grisewood, Director ⁽⁵⁾	27,976	*
David Laskow-Pooley, Director ⁽⁶⁾	25,615	*
Frederick Wasserman, Director ⁽⁷⁾	25,615	*
Joshua Silverman, Director ⁽⁸⁾	395,036	3.6%
Michael J. Loiacono, Chief Financial Officer ⁽⁹⁾	38,195	*
All executive officers and directors as a group (8 persons)	1,063,377	9.5%
5% Stockholders:		
Eastern Capital Limited ⁽¹⁰⁾ 10 Market St. #773 Camana Bay, Grand Cayman KY1-1206 Cayman Islands	4,000,002	32.6%
Brio Capital Master Fund Ltd. ⁽¹¹⁾ 100 Merrick Road, Suite 401 W. Rockville Center, NY 11570	798,044	7.3%
Iroquois Capital Management L.L.C. ⁽¹²⁾⁽¹⁴⁾ 205 East 42 nd St., 20 th Floor New York, NY 10017	851,110	5.5%
Richard Abbe ⁽¹³⁾⁽¹⁴⁾ 205 East 42 nd St., 20 th Floor New York, NY 10017	1,130,836	7.3%

* Less than one percent (1%)

- (1) Under Rule 13d-3, a beneficial owner of a security includes any person who, directly or indirectly, through any contract, arrangement, understanding, relationship, or otherwise has or shares: (i) voting power, which includes the power to vote, or to direct the voting of shares; and (ii) investment power, which includes the power to dispose or direct the disposition of shares. Certain shares may be deemed to be beneficially owned by more than one person (if, for example, persons share the power to vote or the power to dispose of the shares). In addition, shares are deemed to be beneficially owned by a person if the person has the right to acquire the shares (for example, upon exercise of an option) within 60 days of the date as of which the information is provided. In computing the percentage ownership of any person, the amount of shares outstanding is deemed to include the amount of shares beneficially owned by such person (and only such person) by reason of these acquisition rights. As a result, the percentage of outstanding shares of any person as shown in this table does not necessarily reflect the person's actual ownership or voting power with respect to the number of shares of common stock actually outstanding as of the date of this annual report. As of March 16, 2018, there were 10,626,140 shares of common stock issued and outstanding.

- (2) This figure includes 158,217 shares directly owned by Dr. Wilson, and 168,133 shares subject to stock options exercisable through July 2018.
- (3) This figure includes 179,711 shares directly owned by Mr. Hoang.
- (4) This figure includes 32,004 shares directly owned by Mr. Reddish and 12,875 shares subject to currently exercisable stock options exercisable through July 2018 awarded pursuant to the director compensation program.
- (5) This figure includes 15,476 shares directly owned by Ms. Grisewood and 12,500 shares subject to stock options exercisable through July 2018 awarded pursuant to the director compensation program.
- (6) This figure includes 13,115 shares directly owned by Mr. Laskow-Pooley and 12,500 shares subject to stock options exercisable through July 2018 awarded pursuant to the director compensation program.
- (7) This figure includes 13,115 shares directly owned by Mr. Wasserman and 12,500 shares subject to stock options exercisable through July 2018 awarded pursuant to the director compensation program.
- (8) This figure includes 13,115 shares directly owned by Mr. Silverman and 10,420 shares subject to stock options exercisable through July 2018 awarded pursuant to the director compensation program. In addition, includes 153,333 shares and currently exercisable warrants to acquire 218,168 shares held indirectly by Mr. Silverman through JNS Holdings Group, LLC
- (9) This figure includes 38,195 shares subject to currently exercisable stock options owned by Mr. Loiacono and excludes 15,972 shares subject to options that have not yet vested.
- (10) All information is based upon the Schedule 13D jointly filed with the Securities and Exchange Commission by Eastern Capital Limited, Portfolio Services LTD. and Kenneth B. Dart, on August 25, 2017. Eastern Capital Limited beneficially owns 2,333,334 shares of common stock and 1,666,668 shares of common stock issuable upon exercise of the Series A-1 Warrants, Series D-1 Warrants, Series E-1 Warrants and Series F-1 Warrants. Eastern Capital Limited has shared voting and dispositive power of the shares it beneficially owns with its parent, Portfolio Services Ltd. and Kenneth B. Dart. All warrants are subject to a limit of exercise to the extent (and only to the extent) that Eastern Capital Limited or any of its affiliates would beneficially own in excess of 49.9% of the common stock after giving effect to such exercise.
- (11) All information is based upon the Schedule 13G filed with the Securities and Exchange Commission by Brio Capital Master Fund Ltd. on January 26, 2018. Brio Capital Management LLC, is the investment manager of Brio Capital Master Fund Ltd. and has the voting and investment discretion over securities held by the Brio Capital Fund Ltd. Shaye Hirsch, in his capacity as Managing Member of Brio Capital Management LLC, makes voting and investment decisions on behalf of Brio Capital Management LLC in its capacity as the investment manager of Brio Capital Master Fund Ltd. Includes shares able to be acquired from all Series C and F Warrants (391,688 shares) but excludes shares able to be acquired from Series D and Series E Warrants (332,705 shares) due to blocker provisions. The Series C Warrants and Series F Warrants are subject to a limit of exercise to the extent (and only to the extent) that Brio Capital Master Fund Ltd. or any of its affiliates would beneficially own in excess of 9.9% of the common stock after giving effect to such exercise. The Series D Warrants and Series E Warrants are subject to a limit of exercise to the extent (and only to the extent) that Brio Capital Master Fund Ltd. or any of its affiliates would beneficially own in excess of 4.9% of the common stock after giving effect to such exercise.
- (12) Information is based upon the Schedule 13G jointly filed with the Securities and Exchange Commission by Iroquois Capital Management L.L.C. ("Iroquois"), Richard Abbe and Kimberly Page on February 14, 2018 and information provided from Iroquois. Includes 382,754 shares of common stock and warrants to purchase 468,356 shares of common stock (260,024 shares pursuant to Series A Warrants (104,167), Series D Warrants (104,168) and Series E Warrants (51,689), and 208,332 shares pursuant to Series C Warrants (109,999) and Series F Warrants (98,333)) held by Iroquois Master Fund Ltd. (the "Fund"). Mr. Abbe shares authority and responsibility for the investments made on behalf of the Fund with Ms. Page, each of whom is a director of the Fund. Iroquois is the investment manager for the Fund and Mr. Abbe is the President of Iroquois.

- (13) Information is based upon the Schedule 13G jointly filed with the Securities and Exchange Commission by Iroquois Capital Management L.L.C. (“Iroquois”), Richard Abbe and Kimberly Page on February 14, 2018 and information provided from Iroquois. Includes the information in footnote 12 above and includes 48,775 shares of common stock and warrants to purchase 59,416 shares of common stock beneficially owned indirectly by Mr. Abbe (by Kensington Investment Group LLC). In addition, each of The Samantha Abbe Irrevocable Trust, The Talia Abbe Irrevocable Trust and The Bennett Abbe Irrevocable Trust held 25,956, 25,954 and 25,954 shares of common stock, respectively, and warrants to purchase 31,225, 31,223 and 31,223 shares of common stock, respectively, consisting of Series A, C, D, E and F warrants. In addition, by virtue of his position as a custodian or trustee of certain Accounts (The Samantha Abbe Irrevocable Trust, The Talia Abbe Irrevocable Trust and The Bennett Abbe Irrevocable Trust), Mr. Abbe may be deemed to be the beneficial owner of the shares of common stock held by, and underlying the warrants (subject to applicable blockers) held by, such Accounts. Mr. Abbe hereby disclaims any beneficial ownership of any such shares of common stock except to the extent of his pecuniary interest therein.
- (14) The Series A Warrants, Series D Warrants and Series E Warrants held by the Fund and those held by Richard Abbe and the Accounts are subject to a limit of exercise to the extent (and only to the extent) that Iroquois or any of its affiliates, or Richard Abbe or any of his affiliates, respectively, would beneficially own in excess of 4.9% of the common stock after giving effect to such exercise. The Series C and Series F Warrants are subject to a limit of exercise to the extent (and only to the extent) that Iroquois or any of its affiliates, or Mr. Abbe or any of his affiliates, respectively, would beneficially own in excess of 9.9% of the common stock after giving effect to such exercise. The percentages reflected in the table give effect to the applicable blockers.

There are no arrangements or understanding among the parties set out above or their respective associates or affiliates concerning election of directors or any other matters which may require stockholder approval.

Changes in Control

Other than the changes in stock ownership by our major stockholders who hold warrants to acquire additional shares of our common stock (as reflected in the footnotes to the table above), we are unaware of any contract, or other arrangement or provision, the operation of which may at a subsequent date result in a change of control of our Company.

Equity Compensation Plan Information

The following table summarizes the equity compensation plans under which our equity securities may be issued as of December 31, 2017:

	(a) Number of Securities to be Issued Upon Exercise of Options	(b) Weighted Average Exercise Price of Outstanding Options	(c) Number of Securities Remaining Available for Future Issuance Under Equity Compensation Plans (Excluding Securities Reflected in Column (a))
Equity compensation plans approved by stockholders:			
2014 Omnibus Stock Option Plan ⁽¹⁾	536,200	\$7.28	837,500
Equity compensation plans not approved by stockholders ⁽²⁾			
	—	—	—
Totals	<u>536,200</u>	<u>\$7.28</u>	<u>837,500</u>

(1) Our 2014 Omnibus Stock Option Plan was approved by our shareholders at the 2017 annual meeting held on August 29, 2017.

(2) We do not have any equity compensation plans not approved by shareholders.

ITEM 13. CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS AND DIRECTOR INDEPENDENCE

SEC rules require us to disclose any transaction or currently proposed transaction in which we are a participant and in which any related person has or will have a direct or indirect material interest involving an amount that exceeds the lesser of \$120,000 or one percent (1%) of the average of the Company's total assets as of the end of last two completed fiscal years. A related person is any executive officer, director, nominee for director, or holder of 5% or more of the Company's common stock, or an immediate family member of any of those persons.

Review and Approval of Related Person Transactions

In order to ensure that material transactions and relationships involving a potential conflict of interest for any of our executive officers or directors are in our best interests, under the Code of Ethics and Business Conduct ("Code of Ethics") adopted by the Board of Directors for all of our employees and directors, all such conflicts of interest are required to be reported to the Audit Committee of the Board of Directors, and the approval of the Audit Committee must be obtained in advance for us to enter into any such transaction or relationship. Pursuant to the Code of Ethics, none of our officers or employees may, on our behalf, authorize or approve any transaction or relationship, or enter into any agreement, in which such officer, director or any member of his or her immediate family, may have a personal interest without such Audit Committee approval. Further, none of our officers or employees may, on our behalf, authorize or approve any transaction or relationship, or enter into any agreement, if they are aware that one of our executive officers or directors, or any member of any such person's family, may have a personal interest in such transaction or relationship, without such Audit Committee approval.

Our Audit Committee reviews all conflict of interest transactions involving our executive officers and directors, pursuant to its charter.

In the course of their review of a related party transaction, the Audit Committee considers:

- the nature of the related person's interest in the transaction;
- the material terms of the transaction, including, without limitation, the amount and type of transaction;
- the importance of the transaction to us;
- the importance of the transaction to the related person;
- whether the transaction would impair the judgment of the director or executive officer to act in our best interests; and
- any other matters the Audit Committee deems appropriate.

Any member of the Audit Committee who has a conflict of interest with respect to a transaction under review may not participate in the deliberations or vote respecting approval of the transaction, provided, however, that such director may be counted in determining the presence of a quorum.

Institutional Investor-Transactions

The Company has several institutional investors, who currently beneficially own in excess of five percent (5%) of our current outstanding stock. The institutional investors have participated in Company Financings in 2016 and 2017 as follows:

2016 Private Placement — Warrant Exercise — Warrant Restructuring.

2016 Private Placement

In August 2016, the Company completed a private placement of units with certain accredited investors. The units consisted of (i) one share of the Company's common stock, par value \$0.001 per share and (ii) one five-year warrant to purchase one share of Company common stock for \$6.00. The Company issued and sold an aggregate of 520,833 Units at a purchase price per Unit of \$4.80 for an aggregate of \$2.5 million.

Warrant Exercises

Simultaneously with the closing of the 2016 private placement, holders of an aggregate of 583,333 outstanding Series C Warrants and 416,666 Series C-1 Warrants, each providing for the purchase of one share of Company common stock for \$6.00 per share, entered into binding commitments to exercise their warrants for an aggregate exercise price of \$6.0 million.

Warrant Restructuring

Simultaneous with the closing of the 2016 private placement, the Company and holders of an aggregate of 3,096,665 outstanding Series A Warrants, Series A-1 Warrants, Series C Warrants, Series C-1 Warrants, Series D Warrants, Series D-1 Warrants, Series E Warrants and Series E-1 Warrants entered into Warrant Amendment Agreements, in which they agreed to amend the terms of the Outstanding Series Warrants to remove provisions from the Outstanding Series Warrants that had previously caused them to be classified as a derivative liability as opposed to equity. In consideration for such amendment and the exercise of the Series C Warrants and Series C-1 Warrants, the Company issued an aggregate of 750,000 additional shares of common stock to such warrant holders and new five-year warrants to purchase 1,000,000 shares of Company common stock at an exercise price of \$7.20 per share (the "Series F Warrants").

2017 Private Placement — Warrant Exercises and Repricings***Private Placement Transaction***

In June 2017, the Company entered into subscription agreements (the "Subscription Agreements") with certain accredited investors relating to a private placement of units (the "2017 Private Placement"). In the private placement transaction, the Company issued 1,503,491 shares of common stock for \$3.97 per share and issued five-year warrants to purchase an equal number of shares of common stock, at an exercise price of \$3.97 per share, for \$0.125 per PIPE Warrant, with one common share and one PIPE Warrant being sold together as a unit for a total of \$4.095 per Unit.

In connection with the 2017 Private Placement, the Company agreed that investors who purchase Units in the 2017 private placement and who also purchased units in the private placement that closed in August 2016 (which units included warrants to purchase common stock at \$6.00 per share) could have the exercise price for their warrants issued in that transaction reduced from \$6.00 per share to \$3.97 per share upon payment to the Company of \$0.125 for each share subject to the investor's 2016 warrant. Investors in the Private Placement paid such amount with respect to their 2016 warrants to purchase an aggregate of 265,573 shares of common stock. The warrants to purchase an aggregate of 387,614 shares of common stock that were issued to all of the other investors in the 2016 private placement transaction (those who did not participate in the 2017 Private Placement) had the exercise price reduced from \$6.00 per share to \$3.97 per share without the payment of any additional consideration.

Exercise and Repricing of Warrants Held by Existing Institutional Investors

In June 2017, certain existing institutional shareholders of the Company who hold various outstanding warrants to purchase Company common stock, entered into Warrant Exercise Agreements, in which the Company agreed to reduce the exercise price for a portion of the investors' existing Series E warrants from \$15.00 per share to \$3.97 per share, provided that the investors exercise such portion of the warrants immediately. Pursuant to the Warrant Exercise Agreements, such warrant holders agreed to exercise Series E warrants to purchase an aggregate of 167,926 shares of Company common stock for aggregate gross proceeds of approximately \$666,666, with the exercise price for 75% of the remainder of the investors' Series E warrants to purchase 186,555 shares of Company common stock being reduced from \$15.00 per share to \$4.50 per share. The remaining 25% of such investors' Series E warrants to purchase an aggregate of 62,185 shares of Company common stock retained their current exercise price. Additionally, the exercise prices for 75% of such investors' Series C, Series D and Series F warrants were reduced to \$4.00 per share from their current exercise prices of: \$6.00 per share for Series C warrants (for 313,750 shares out of a total of 418,333 shares subject to their Series C warrants); \$9.00 per share for Series D warrants

(for 312,500 shares out of a total of 416,666 shares subject to their Series D warrants); and \$7.20 per share for Series F warrants (for 292,500 shares out of a total of 390,000 shares subject to their Series F warrants). The remainder of the investors' Series C, Series D and Series F warrants retained their current exercise prices.

Promissory Note — Officer

The Company had an outstanding promissory note in the amount of \$23,000 owed to Dr. Glynn Wilson, currently strategic advisor and Chairman of the Company. The promissory note bore no interest charges and had no fixed repayment terms. During the year ended December 31, 2016, the note was paid in full.

ITEM 14. PRINCIPAL ACCOUNTING FEES AND SERVICES

Marcum LLP served as our independent registered public accounting firm and audited our financial statements for the fiscal years ended December 31, 2017 and December 31, 2016. Aggregate fees for professional services rendered to us by our auditor are set forth below:

	Year Ended December 31, 2017	Year Ended December 31, 2016
Audit Fees	\$ 114,000	\$ 194,800
Audit Related Fees	—	—
Tax Fees	18,000	68,300
All Other Fees	—	—
	<u>\$ 132,000</u>	<u>\$ 263,100</u>

Audit Fees

Audit fees are the aggregate fees billed for professional services rendered by our independent auditors for the audit of our annual financial statements, the review of the financial statements included in each of our quarterly reports and services provided in connection with statutory and regulatory filings or engagements.

Audit Related Fees

Audit related fees are the aggregate fees billed by our independent auditors for assurance and related services that are reasonably related to the performance of the audit or review of our financial statements and are not described in the preceding category.

Tax Fees

Tax fees are billed by our independent auditors for tax compliance, tax advice and tax planning.

All Other Fees

All other fees include fees billed by our independent auditors for products or services other than as described in the immediately preceding three categories.

Policy on Pre-Approval of Services Performed by Independent Auditors

It is our Audit Committee's policy to pre-approve all audit and permissible non-audit services performed by the independent auditors. The Audit Committee approved all services that our independent accountants provided to us in the past two fiscal years.

PART IV

ITEM 15. EXHIBITS AND FINANCIAL STATEMENT SCHEDULES

(a) The documents filed as part of this report are as follows:

1. The financial statements and accompanying report of independent registered public accounting firm are set forth immediately following the signature page of this report on pages [B-F-1](#) through [B-F-25](#).
2. All financial statement schedules are omitted because they are inapplicable, not required or the information is included elsewhere in the financial statements or the notes thereto.
3. The exhibits required to be filed by this report or able to be incorporated by reference are listed in the “Exhibit Index” following the financial statements.

(b) Other Exhibits

Exhibits required by Item 601 of Regulation S-K are submitted (or incorporated by reference) and listed in a separate section herein immediately following the “Exhibit Index” and are incorporated herein by reference.

(c) Not Applicable.

ITEM 16. FORM 10-K SUMMARY

None.

SIGNATURES

Pursuant to the requirements of Section 13 and 15 (d) of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

Dated: March 23, 2018

TapImmune Inc.

By: /s/ Peter Hoang

Peter Hoang
Chief Executive Officer
(Principal Executive Officer)

By: /s/ Michael J. Loiacono

Michael J. Loiacono
Chief Financial Officer
(Principal Accounting Officer)

POWER OF ATTORNEY

Each of the undersigned officers and directors of TapImmune Inc., hereby constitutes and appoints Peter Hoang and Michael J. Loiacono, their true and lawful attorney-in-fact and agent, for them and in their name, place and stead, in any and all capacities, to sign their name to any and all amendments to this Report on Form 10-K, and other related documents, and to cause the same to be filed with the Securities and Exchange Commission, granting unto said attorneys, full power and authority to do and perform any act and thing necessary and proper to be done in the premises, as fully to all intents and purposes as the undersigned could do if personally present, and the undersigned for himself hereby ratifies and confirms all that said attorney shall lawfully do or cause to be done by virtue hereof.

Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed below by the following persons on March 23, 2018 on behalf of the registrant and in the capacities indicated.

<u>Signature</u>	<u>Title</u>	<u>Date</u>
<u>/s/ Peter Hoang</u> Peter Hoang	President, Chief Executive Officer and Director	March 23, 2018
<u>/s/ Sherry Grisewood</u> Sherry Grisewood	Director	March 23, 2018
<u>/s/ Glynn Wilson</u> Dr. Glynn Wilson	Director	March 23, 2018
<u>/s/ David Laskow-Pooley</u> David Laskow-Pooley	Director	March 23, 2018
<u>/s/ Mark Reddish</u> Mark Reddish	Director	March 23, 2018
<u>/s/ Frederick Wasserman</u> Frederick Wasserman	Director	March 23, 2018
<u>/s/ Joshua Silverman</u> Joshua Silverman	Director	March 23, 2018
<u>/s/ Michael J. Loiacono</u> Michael J. Loiacono	Chief Financial Officer	March 23, 2018

TAPIMMUNE INC.
CONSOLIDATED FINANCIAL STATEMENTS
DECEMBER 31, 2017

<u>Report of Independent Registered Public Accounting Firm</u>	<u>B-1-F-2</u>
<u>Consolidated Balance Sheets</u>	<u>B-1-F-3</u>
<u>Consolidated Statements of Operations</u>	<u>B-1-F-4</u>
<u>Consolidated Statement of Stockholders' Equity (Deficit)</u>	<u>B-1-F-5</u>
<u>Consolidated Statements of Cash Flows</u>	<u>B-1-F-6</u>
<u>Notes to the Consolidated Financial Statements</u>	<u>B-1-F-7</u>

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Shareholders and Board of Directors of
TapImmune, Inc.

Opinion on the Financial Statements

We have audited the accompanying consolidated balance sheets of TapImmune, Inc. (the “Company”) as of December 31, 2017 and 2016, the related consolidated statements of operations, stockholders’ equity (deficit) and cash flows for each of the two years in the period ended December 31, 2017, and the related notes (collectively referred to as the “financial statements”). In our opinion, the financial statements present fairly, in all material respects, the financial position of the Company as of December 31, 2017 and 2016, and the results of its operations and its cash flows for each of the two years in the period ended December 31, 2017, in conformity with accounting principles generally accepted in the United States of America.

Explanatory Paragraph — Going Concern

The accompanying consolidated financial statements have been prepared assuming that the Company will continue as a going concern. As more fully described in Note 2, the Company has a significant working capital deficiency, has incurred significant losses and needs to raise additional funds to meet its obligations and sustain its operations. These conditions raise substantial doubt about the Company’s ability to continue as a going concern. Management’s plans in regard to these matters are also described in Note 2. The consolidated financial statements do not include any adjustments that might result from the outcome of this uncertainty.

Basis for Opinion

These financial statements are the responsibility of the Company’s management. Our responsibility is to express an opinion on the Company’s financial statements based on our audits. We are a public accounting firm registered with the Public Company Accounting Oversight Board (United States) (“PCAOB”) and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audits to obtain reasonable assurance about whether the financial statements are free of material misstatement, whether due to error or fraud. The Company is not required to have, nor were we engaged to perform, an audit of its internal control over financial reporting. As part of our audits we are required to obtain an understanding of internal control over financial reporting but not for the purpose of expressing an opinion on the effectiveness of the Company’s internal control over financial reporting. Accordingly, we express no such opinion.

Our audits included performing procedures to assess the risks of material misstatement of the financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the financial statements. We believe that our audits provide a reasonable basis for our opinion.

Marcum LLP

/s/ Marcum LLP

We have served as the Company’s auditor since 2014.

New York, NY
March 23, 2018

TAPIMMUNE INC.
CONSOLIDATED BALANCE SHEETS

	December 31, 2017	December 31, 2016
ASSETS		
Current assets:		
Cash	\$ 5,129,289	\$ 7,851,243
Prepaid expenses and deposits	51,150	70,149
Total current assets	<u>5,180,439</u>	<u>7,921,392</u>
Total assets	<u>\$ 5,180,439</u>	<u>\$ 7,921,392</u>
LIABILITIES AND STOCKHOLDERS' EQUITY		
Current liabilities:		
Accounts payable and accrued liabilities	\$ 1,508,312	\$ 1,224,940
Research agreement obligations	—	492,365
Warrant liability	9,000	14,500
Promissory note	5,000	5,000
Total current liabilities	<u>1,522,312</u>	<u>1,736,805</u>
Total liabilities	<u>1,522,312</u>	<u>1,736,805</u>
COMMITMENTS AND CONTINGENCIES		
Stockholders' equity:		
Preferred stock – \$0.001 par value, 5 million shares authorized at December 31, 2017 and 2016, respectively		
Series A, \$0.001 par value, 1.25 million shares designated, 0 shares issued and outstanding as of December 31, 2017 and 2016, respectively	—	—
Series B, \$0.001 par value, 1.5 million shares designated, 0 shares issued and outstanding as of December 31, 2017 and 2016, respectively	—	—
Common stock, \$0.001 par value, 41.7 million shares authorized, 10.6 million and 8.4 million shares issued and outstanding as of December 31, 2017 and 2016, respectively	10,616	8,421
Additional paid-in capital	161,067,538	151,991,974
Accumulated deficit	<u>(157,420,027)</u>	<u>(145,815,808)</u>
Total stockholders' equity	<u>3,658,127</u>	<u>6,184,587</u>
Total liabilities and stockholders' equity	<u>\$ 5,180,439</u>	<u>\$ 7,921,392</u>

The accompanying notes are an integral part of these consolidated financial statements.

TAPIMMUNE INC.
CONSOLIDATED STATEMENTS OF OPERATIONS

	For the Years Ended December 31,	
	2017	2016
Operating expenses:		
Research and development	\$ 5,250,985	\$ 3,800,035
General and administrative	6,412,121	4,692,234
Total operating expenses	<u>11,663,106</u>	<u>8,492,269</u>
Loss from operations	(11,663,106)	(8,492,269)
Other income (expense):		
Change in fair value of warrant liabilities	5,500	5,939,500
Debt extinguishment gain	492,365	—
Grant income	183,064	231,200
Loss on debt settlement agreements	—	(135,640)
Other income	—	1,828
Net loss	<u><u>\$(10,982,177)</u></u>	<u><u>\$(2,455,381)</u></u>
Basic net loss per share	<u><u>\$ (1.16)</u></u>	<u><u>\$ (0.36)</u></u>
Diluted net loss per share	<u><u>\$ (1.16)</u></u>	<u><u>\$ (0.72)</u></u>
Weighted average number of common shares outstanding, basic	<u><u>9,453,483</u></u>	<u><u>6,889,898</u></u>
Weighted average number of common shares outstanding, diluted	<u><u>9,453,483</u></u>	<u><u>7,420,995</u></u>

The accompanying notes are an integral part of these consolidated financial statements.

TAPIMMUNE INC.

CONSOLIDATED STATEMENT OF STOCKHOLDERS' EQUITY (DEFICIT)

	Common Stock		Additional Paid- in Capital	Accumulated Deficit	Total Stockholders' Equity
	Shares	Par value			
Balance at January 1, 2016	5,882,976	5,884	112,142,187	(133,508,427)	(21,360,356)
Private placement (net of offering cost)	653,166	653	2,330,473	—	2,331,126
Fair value of shares issued as inducement on August 10, 2016	750,000	750	4,499,250	(4,500,000)	—
Fair value of series F and F-1 warrants issued as inducement in August 2016	—	—	5,352,000	(5,352,000)	—
Reclassification of fair value of derivative liabilities to equity on amendment of warrant agreements	—	—	15,465,000	—	15,465,000
Exercise of warrants (net of offering cost)	1,000,000	1,000	5,482,349	—	5,483,349
Reclassification of fair value of derivative liabilities at exercise date	—	—	5,074,000	—	5,074,000
Exercise of stock options	10,417	10	18,115	—	18,125
Shares issued in debt settlement agreements	10,191	10	70,305	—	70,315
Stock-based compensation	114,435	114	1,558,295	—	1,558,409
Net loss	—	—	—	(2,455,381)	(2,455,381)
Balance, December 31, 2016	8,421,185	8,421	151,991,974	(145,815,808)	6,184,587
Common stock and warrants issued in private placement	1,503,567	1,504	6,188,499	—	6,190,003
Fees and legal costs relating to private placement	—	—	(781,660)	—	(781,660)
Exercise of warrants	167,926	168	666,498	—	666,666
Legal costs relating to exercise of warrants	—	—	(47,043)	—	(47,043)
Fair value of repriced warrants as inducement	—	—	622,042	(622,042)	—
Stock-based compensation	620,685	621	2,737,623	—	2,738,244
Repurchase of common stock to pay for employee withholding taxes	(97,639)	(98)	(310,395)	—	(310,493)
Net loss	—	—	—	(10,982,177)	(10,982,177)
Balance, December 31, 2017	10,615,724	\$10,616	\$ 161,067,538	\$(157,420,027)	\$ 3,658,127

The accompanying notes are an integral part of these consolidated financial statements.

TAPIMMUNE INC.

CONSOLIDATED STATEMENTS OF CASH FLOWS

	For the Years Ended December 31,	
	2017	2016
Cash Flows from Operating Activities:		
Net loss	\$(10,982,177)	\$ (2,455,381)
Reconciliation of net loss to net cash used in operating activities:		
Changes in fair value of warrant liabilities	(5,500)	(5,939,500)
Shares issued in debt settlement agreements	—	70,315
Stock-based compensation	2,738,244	1,558,409
Debt extinguishment gain	(492,365)	—
Changes in operating assets and liabilities:		
Prepaid expenses and deposits	18,999	(1,346)
Accounts payable and accrued expenses	283,372	257,582
Net cash used in operating activities	<u>(8,439,427)</u>	<u>(6,509,921)</u>
Cash Flows from Financing Activities:		
Proceeds from issuance of common stock and warrants in private placement, net of offering costs	5,408,343	2,331,126
Proceeds from exercise of stock warrants, net of offering costs	619,623	5,483,349
Proceeds from exercise of stock options	—	18,125
Repayment of promissory note	—	(25,000)
Repayment of promissory note – related party	—	(23,000)
Repurchase of common stock to pay for employee withholding taxes	(310,493)	—
Net cash provided by financing activities	<u>5,717,473</u>	<u>7,784,600</u>
Net (decrease) increase in cash	(2,721,954)	1,274,679
Cash at beginning of period	7,851,243	6,576,564
Cash at end of period	<u>\$ 5,129,289</u>	<u>\$ 7,851,243</u>
Supplemental schedule of non-cash financing activities:		
Fair value of repriced warrants as inducement	\$ 622,042	\$ —
Reclassification of accrued liability upon issuance of common shares relating to Dr. Glynn Wilson's compensation	\$ —	\$ 191,000
Fair value of issuance of series F and F-1 warrants as inducement in August 2016	\$ —	\$ 5,352,000
Fair value of shares issued as inducement on August 10, 2016	\$ —	\$ 4,500,000
Reclassification of fair value of derivative liabilities to equity on amendment of warrant agreements	\$ —	\$ 15,465,000
Reclassification of Derivative Warrant Liabilities to Equity at Exercise Date	\$ —	\$ 5,074,000

The accompanying notes are an integral part of these consolidated financial statements.

TAPIMMUNE INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
DECEMBER 31, 2017**NOTE 1: NATURE OF OPERATIONS**

TapImmune Inc. (the "Company"), a Nevada corporation incorporated in 1991, is a biotechnology company focusing on immunotherapy specializing in the development of innovative peptide and gene-based immunotherapeutics and vaccines for the treatment of oncology and infectious disease. Unlike other vaccine technologies that narrowly address the initiation of an immune response, TapImmune's approach broadly stimulates the cellular immune system by enhancing the function of killer T-cells (CD8+) and T-helper (CD4+) cells and by restoring antigen presentation in tumor cells allowing their recognition and killing by the immune system.

A Phase I study at the Mayo Clinic, Rochester, MN, evaluating the safety and immune responses of a set of proprietary HER2/neu+ antigens has been successfully completed and the results led to the decision to proceed with Phase II clinical studies in 2017.

A separate Phase I study has also been conducted at Mayo Foundation ("Mayo") in ovarian and breast cancer (Folate Receptor Alpha). Folate Receptor Alpha is expressed in nearly 50% of breast cancers and in addition, over 95% of ovarian cancers, for which the only treatment options are surgery and chemotherapy, leaving a very important and urgent clinical need for a new therapeutic. Time to recurrence is relatively short for this type of cancer and survival prognosis is extremely poor after recurrence. In the USA alone, there are approximately 30,000 ovarian cancer patients newly diagnosed every year. These Folate Receptor Antigens are applicable to ovarian and triple-negative breast cancer. Both of these diseases have few treatment options if any beyond surgery and chemotherapy and therefore the Company is hopeful that it might be an ideal candidate for orphan drug status in these indications. This study has been successfully completed and the results led to the decision to proceed with multiple Phase II studies in 2017.

In addition, enhancing the visibility of cancer or infected cells to a patient's immune system is a critical aspect of an effective vaccine. In this regard, TapImmune's PolyStart™ nucleic acid-based technology provides a four-fold increase in target cell specific naturally processed antigenic epitopes on a cells surface. This increased cell surface presentation corresponding increases activated Helper and/or long-lived Killer T-cell populations that then effectively seek out and work to destroy a patient's cancer cells.

NOTE 2: SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES***Basis of Presentation***

These financial statements are presented in United States dollars and have been prepared in accordance with accounting principles generally accepted in the United States of America ("GAAP").

Principles of Consolidation

These financial statements include the accounts of the Company and its wholly-owned and dormant subsidiary GeneMax Pharmaceuticals Inc. All significant intercompany balances and transactions are eliminated upon consolidation.

Use of Estimates

Preparation of the Company's financial statements in conformity with GAAP requires management to make estimates and assumptions that affect certain reported amounts and disclosures. Accordingly, actual results could differ materially from those estimates. Significant areas requiring management's estimates and assumptions include valuation allowance on deferred tax assets, determining the fair value of stock-based compensation and stock-based transactions, the fair value of the components of the warrant liabilities and accrued liabilities.

Liquidity, financial condition and managements plans

These consolidated financial statements have been prepared on the basis of a going concern which contemplates the realization of assets and the satisfaction of liabilities in the normal course of business. As at December 31, 2017, the Company had cash balances of approximately \$5.1 million. Historically, the Company has incurred significant losses in the development of its business. The ability of the Company to continue as a going concern is dependent on raising additional capital to fund current clinical trials, ongoing research and development, maintenance and protection of patents and ultimately on generating future profitable operations. Planned expenditures relating to current and future clinical trials of the Company's immunotherapy vaccine will require significant additional funding. The Company is dependent on future financings to fund ongoing research and development as well as working capital requirements. The Company's future capital requirements will depend on many factors including the rate and extent of scientific progress in its research and development programs, the timing, cost and scope involved in clinical trials, obtaining regulatory approvals, pursuing further patent protections and the timing and costs of commercialization activities.

Management is addressing going concern through seeking new sources of capital and is continuing initiatives to raise capital through private placements, related party loans and other institutional sources to meet future working capital requirements. We have no sources of revenue to provide incoming cash flows to sustain our future operations. Our ability to pursue our planned business activities is dependent upon our successful efforts to raise additional capital. These factors raise substantial doubt regarding our ability to continue as a going concern.

Historically, the Company has raised capital through issuances of various financial instruments and during 2016, the Company completed significant restructuring of outstanding debt and equity instruments into equity. Additional capital is required to expand programs including pre-clinical work and to progress clinical trials for the lead vaccine candidates. Strategic partnerships will be needed to continue the product development portfolio and fund development costs. These measures, if successful, may contribute to reduce the risk of going concern uncertainties for the Company beyond the next twelve months.

There is no certainty that the Company will be able to arrange sufficient funding to continue development of products to marketability.

Fair Value Measurements

The Company follows Accounting Standards Codification ("ASC") 820, "Fair Value Measurements and Disclosures," ("ASC 820") for the Company's financial assets and liabilities that are re-measured and reported at fair value at each reporting period, and are re-measured and reported at fair value at least annually using a fair value hierarchy that is broken down into three levels. Level inputs are defined as follows:

- Level 1 — Quoted prices (unadjusted) in active markets for identical assets and liabilities.
- Level 2 — Inputs other than Level 1 that are observable, either directly or indirectly, such as unadjusted quoted prices for similar assets and liabilities, unadjusted quoted prices in the markets that are not active, or other inputs that are observable or can be corroborated by observable market data for substantially the full term of the assets or liabilities.
- Level 3 — Unobservable inputs that are supported by little or no market activity and that are significant to the fair value of the assets or liabilities. Financial Instruments and Concentration of Credit Risk.

Patents and Patent Application Costs

Although the Company believes that its patents and underlying technology have continuing value, the amount of future benefits to be derived from the patents is uncertain. Patent costs are, therefore, expensed as incurred.

Stock-Based Compensation

The Company incurs stock-based compensation expense related to restricted stock units and stock options. The fair value of restricted stock is determined by the closing market price of the Company's common stock on the date of grant. The Company estimates the fair value of stock options granted using the Black-Scholes option pricing model. The Black-Scholes option pricing model was developed for use in estimating the fair value of traded options, which have no vesting restrictions and are fully transferable. In addition, option valuation models require the input of highly subjective assumptions, including the expected stock price volatility and expected option life. The Company amortizes the fair value of the awards expected to vest on a straight-line basis over the requisite service period of the awards. Expected volatility is based on historical volatility. The expected life of options granted is based on historical expected life. The risk-free interest rate is based on the U.S. Treasury yield in effect at the time of grant. The forfeiture rate is based on historical data, and the Company records stock-based compensation expense only for those awards that are expected to vest. The dividend yield is based on the fact that no dividends have been paid historically and none are currently expected to be paid in the foreseeable future:

Expected Term—The expected term of options represents the period that the Company's stock-based awards are expected to be outstanding based on the simplified method, which is the half-life from vesting to the end of its contractual term.

Expected Volatility—The Company computes stock price volatility over expected terms based on its historical common stock trading prices.

Risk-Free Interest Rate—The Company bases the risk-free interest rate on the implied yield available on U.S. Treasury zero-coupon issues with an equivalent remaining term.

Expected Dividend—The Company has never declared or paid any cash dividends on its common shares and does not plan to pay cash dividends in the foreseeable future, and, therefore, uses an expected dividend yield of zero in its valuation models. The Company recognizes fair value of stock options granted to nonemployees as stock-based compensation expense over the period in which the related services are received.

Research and Development Costs

The Company has acquired research and development rights to certain technologies. The rights and licenses acquired are considered rights to unproven technology which may not have alternate future uses and therefore, are expensed as incurred as research and development costs.

Clinical trial expenses include direct costs associated with contract research organizations ("CROs"), as well as patient-related costs at sites at which our trials are being conducted. Direct costs associated with our CROs are generally payable on a time and materials basis, or when certain enrollment and monitoring milestones are achieved.

The Company incurred costs of approximately \$5.3 million and \$3.8 million on research and development for the year ended December 31, 2017 and 2016, respectively.

Income Taxes

The Company follows the asset and liability method of accounting for income taxes. Under this method, deferred tax assets and liabilities are recognized for the future tax consequences attributable to differences between the financial statement carrying amounts of assets and liabilities and their respective tax balances. Potential deferred tax assets and liabilities are measured using enacted tax rates expected to apply to the taxable income in the years in which those differences are expected to be recovered or settled. The effect on potential deferred tax assets and liabilities of a change in tax rates is recognized in the statement of operations in the period that includes the date of allowances against deferred tax assets.

Tax benefits are recognized only for tax positions that are more likely than not to be sustained upon examination by tax authorities. The amount recognized is measured as the largest amount of benefit that is greater than 50 percent likely to be realized upon settlement. A liability for "unrecognized tax benefits" is recorded for any tax benefits claimed in the Company's tax returns that do not meet these recognition and

measurement standards. As of December 31, 2017 and 2016, no liability for unrecognized tax benefits was required to be reported. The guidance also discusses the classification of related interest and penalties on income taxes. The Company's policy is to record interest and penalties on uncertain tax positions as a component of income tax expense. No interest or penalties were recorded during the years ended December 31, 2017 and 2016.

Derivative Liability

The Company evaluates its convertible debt, options, warrants or other contracts to determine if those contracts or embedded components of those contracts qualify as derivatives to be separately accounted for. This accounting treatment requires that the carrying amount of embedded derivatives be marked-to-market at each balance sheet date and carried at fair value. In the event that the fair value is recorded as a liability, the change in fair value during the period is recorded in the Statement of Operations as either income or expense. Upon conversion, exercise or modification to the terms of a derivative instrument, the instrument is marked to fair value at the conversion date and then the related fair value is reclassified to equity.

In circumstances where the embedded conversion option in a convertible instrument is required to be bifurcated and there are also other embedded derivative instruments in the convertible instrument that are required to be bifurcated, the bifurcated derivative instruments are accounted for as a single, compound derivative instrument.

The classification of financial instruments, including whether such instruments should be recorded as liabilities or as equity, is re-assessed at the end of each reporting period. Equity instruments that are initially classified as equity that become subject to reclassification are reclassified to liability at the fair value of the instrument on the reclassification date. Derivative instrument liabilities will be classified in the balance sheet as current or non-current based on whether or not net-cash settlement of the derivative instrument is expected within 12 months of the balance sheet date.

Management must determine whether an instrument (or an embedded feature) is indexed to the Company's own stock. An entity should use a two-step approach to evaluate whether an equity-linked financial instrument (or embedded feature) is indexed to its own stock, including evaluating the instrument's contingent exercise and settlement provisions. This exercise affects the accounting for (i) certain freestanding warrants that contain exercise price adjustment features and (ii) convertible notes containing full-ratchet and anti-dilution protections (iii) certain free-standing warrants that contain contingently puttable cash settlement.

Grant Income

The Company recognizes grant income in accordance with the terms stipulated under the grant awarded to the Company's collaborators at the Mayo Foundation from the U.S. Department of Defense. In various situations, the Company receives certain payments from the U.S. Department of Defense for reimbursement of clinical supplies. These payments are non-refundable, and are not dependent on the Company's ongoing future performance. The Company has adopted a policy of recognizing these payments as grant income when received.

Loss per Common Share

Basic loss per share include only the weighted average common shares outstanding, without consideration of potentially dilutive securities. Diluted loss per share include the weighted average common shares outstanding and any potentially dilutive common stock equivalent shares in the calculation.

Cash and Credit Risk

The Company maintains cash in accounts which are in excess of the Federal Deposit Insurance Corporation ("FDIC") insured limits of \$250,000. As of December 31, 2017 and 2016, approximately \$4.9 million and \$7.6 million, respectively, in cash was uninsured based upon the FDIC insurance coverage limits.

New Accounting Pronouncements

From time to time, new accounting pronouncements are issued by the Financial Accounting Standards Board (“FASB”) or other standard setting bodies that we adopt as of the specified effective date. Unless otherwise discussed, we do not believe that the impact of recently issued standards that are not yet effective will have a material impact on our financial position or results of operations upon adoption.

Recent Accounting Pronouncements Adopted in the Year

Going Concern

In August 2014, the FASB issued ASU No. 2014-15, “Presentation of Financial Statements — Going Concern”, which defines management’s responsibility to assess an entity’s ability to continue as a going concern, and requires related footnote disclosures if there is substantial doubt about its ability to continue as a going concern. ASU No. 2014-15 is effective for the Company for the fiscal year ending on December 31, 2016, with early adoption permitted. The Company adopted ASU 2014-15 as of December 31, 2017 in its consolidated financial statements and related disclosures, which did not have a material impact on its results of operations, cash flows or financial position.

Deferred Taxes

In November 2015, FASB issued ASU No. 2015-17, “Balance Sheet Classification of Deferred Taxes”. ASU No. 2015-17 requires that deferred tax liabilities and assets be classified as noncurrent in a classified statement of financial position. ASU No. 2015-17 is effective for financial statements issued for fiscal years beginning after December 15, 2016, and interim periods within those fiscal years. The Company adopted ASU No. 2015-17 on January 1, 2017 and its adoption did not have a material impact on the Company’s financial position and results of operations.

Compensation — Stock Compensation

In March 2016, the FASB issued ASU No. 2016-09, Compensation — Stock Compensation (Topic 718), Improvements to Employee Share-Based Payment Accounting. Under ASU No. 2016-09, companies will no longer record excess tax benefits and certain tax deficiencies in additional paid-in capital (“APIC”). Instead, they will record all excess tax benefits and tax deficiencies as income tax expense or benefit in the income statement and the APIC pools will be eliminated. In addition, ASU No. 2016-09 eliminates the requirement that excess tax benefits be realized before companies can recognize them. ASU No. 2016-09 also requires companies to present excess tax benefits as an operating activity on the statement of cash flows rather than as a financing activity. Furthermore, ASU No. 2016-09 will increase the amount an employer can withhold to cover income taxes on awards and still qualify for the exception to liability classification for shares used to satisfy the employer’s statutory income tax withholding obligation. An employer with a statutory income tax withholding obligation will now be allowed to withhold shares with a fair value up to the amount of taxes owed using the maximum statutory tax rate in the employee’s applicable jurisdiction(s). ASU No. 2016-09 requires a company to classify the cash paid to a tax authority when shares are withheld to satisfy its statutory income tax withholding obligation as a financing activity on the statement of cash flows. Under current U.S. GAAP, it was not specified how these cash flows should be classified. In addition, companies will now have to elect whether to account for forfeitures on share-based payments by (1) recognizing forfeitures of awards as they occur or (2) estimating the number of awards expected to be forfeited and adjusting the estimate when it is likely to change, as is currently required. The amendments of this ASU are effective for reporting periods beginning after January 1, 2017, with early adoption permitted but all of the guidance must be adopted in the same period. The Company adopted this on January 1, 2017. The Company has evaluated the impact of ASU No. 2016-09 and has determined that the adoption of the impact of forfeitures, net of income taxes, will not have a material impact on the Company’s future financial statements.

Statement of Cash Flows

In August 2016, the FASB issued Accounting Standards Update (“ASU”) No. 2016-15, Statement of Cash Flows (Topic 230). This amendment provides guidance on the presentation and classification of specific cash flow items to improve consistency within the statement of cash flows. ASU 2016-15 is effective

for fiscal years, and interim periods within those fiscal years beginning after December 15, 2017, with early adoption permitted. The Company adopted this as of December 31, 2017. The Company has evaluated the impact of ASU No. 2016-15 and has determined that the adoption did not have a material impact on the Company's financial position and results of operations.

Recent Accounting Pronouncements Not Yet Adopted

Accounting for Certain Financial Instruments with Down Round Features

On July 13, 2017, the FASB has issued a two-part Accounting Standards Update ("ASU"), No. 2017-11, (i) Accounting for Certain Financial Instruments with Down Round Features and (ii) Replacement of the Indefinite Deferral for Mandatorily Redeemable Financial Instruments of Certain Nonpublic Entities and Certain Mandatorily Redeemable Noncontrolling Interests With a Scope Exception.

The ASU is effective for public business entities for fiscal years, and interim periods within those fiscal years, beginning after December 15, 2018 and the interim periods within that annual period. Early adoption is permitted. The Company will be evaluating the impact of adopting this standard on the consolidated financial statements and disclosures.

Compensation — Stock Compensation

In May 2017, the FASB issued ASU No. 2017-09, Compensation — Stock Compensation (Topic 718): Scope of Modification Accounting, which clarifies when to account for a change to the terms or conditions of a share-based payment award as a modification. Under the new guidance, modification accounting is required only if the fair value, the vesting conditions, or the classification of the award (as equity or liability) changes as a result of the change in terms or conditions. It is effective prospectively for the annual period beginning after December 15, 2017 and interim periods within that annual period. Early adoption is permitted. The Company is currently evaluating the impact of adopting this standard on the consolidated financial statements and disclosures, but does not expect it to have a significant impact.

Revenue from Contracts with Customers

In May 2014, the FASB issued ASU No. 2014-09, "Revenue from Contracts with Customers (Topic 606)" (ASU 2014-09) as modified by ASU No. 2015-14, "Revenue from Contracts with Customers (Topic 606): Deferral of the Effective Date," ASU 2016-08, "Revenue from Contracts with Customers (Topic 606): Principal versus Agent Considerations (Reporting Revenue Gross versus Net)," ASU No. 2016-10, "Revenue from Contracts with Customers (Topic 606): Identifying Performance Obligations and Licensing," and ASU No. 2016-12, "Revenue from Contracts with Customers (Topic 606): Narrow-Scope Improvements and Practical Expedients." The revenue recognition principle in ASU 2014-09 is that an entity should recognize revenue to depict the transfer of goods or services to customers in an amount that reflects the consideration to which the entity expects to be entitled in exchange for those goods or services. In addition, new and enhanced disclosures will be required. Companies may adopt the new standard either using the full retrospective approach, a modified retrospective approach with practical expedients, or a cumulative effect upon adoption approach. The Company will adopt the new standard effective January 1, 2018, using the modified retrospective approach. The only impact of the adoption of ASU 2014-09 will be to reclassify the Company's grant income as revenue.

NOTE 3: NET LOSS PER SHARE APPLICABLE TO COMMON SHAREHOLDER

Net Loss per Share Applicable to Common Stockholders

Basic loss per common share is computed by dividing net loss by the weighted average number of common shares outstanding during the reporting period. Diluted loss per common share is computed similar to basic loss per common share except that it reflects the potential dilution that could occur if dilutive securities or other obligations to issue common stock were exercised or converted into common stock.

The following table sets forth the computation of loss per share for the years ended December 31, 2017 and 2016, respectively:

	For the Years Ended December 31,	
	2017	2016
Numerator:		
Net loss	\$(10,982,177)	\$(2,455,381)
Less: non-cash income from change in fair value of common stock warrants	—	(2,856,000)
Net loss – diluted	<u>(10,982,177)</u>	<u>(5,311,381)</u>
Denominator:		
Weighted average common shares outstanding – basic	9,453,483	6,889,898
Dilutive effect of warrants, net	—	531,097
Weighted average common shares outstanding – diluted	<u>9,453,483</u>	<u>7,420,995</u>
Net loss per share data:		
Basic	<u>\$ (1.16)</u>	<u>\$ (0.36)</u>
Diluted	<u>\$ (1.16)</u>	<u>\$ (0.72)</u>

The following securities, rounded to the thousand, were not included in the diluted net loss per share calculation because their effect was anti-dilutive for the periods presented:

	Year Ended December 31,	
	2017	2016
Common stock options	489,000	432,000
Common Stock Purchase Warrants	6,521,000	5,060,000
Potentially dilutive securities	<u>7,010,000</u>	<u>5,492,000</u>

NOTE 4: ACCOUNTS PAYABLE AND ACCRUED LIABILITIES

Accounts payable and accrued liabilities consist of the following as of December 31, 2017 and 2016, respectively:

	December 31, 2017	December 31, 2016
Accounts payable	\$ 1,015,000	\$ 680,000
Compensation and benefits	162,000	218,000
Professional fees	32,000	53,000
Consulting agreements	—	95,000
Technology license fees	105,000	105,000
Investor relations fees	110,000	—
Other	84,000	74,000
Total accounts payable and accrued liabilities	<u>\$ 1,508,000</u>	<u>\$ 1,225,000</u>

NOTE 5: RESEARCH AGREEMENT OBLIGATIONS

In 2003, the Company entered into a license agreement with a foreign based third-party for certain adenovirus technology. The license agreement was amended several times between inception and 2008 at which time it was amended and restated and had a fixed three-year term expiring in 2011. During such time, the Company did not pursue the technology and has not undertaken further work in the area covered by the technology license. Neither the Company nor the third-party took further actions under or pursuant to the license agreement. The Company carried a historical accrual of approximately \$0.5 million under the amended license agreement related to certain obligations provided for in the license agreement. The license agreement was governed by the laws of a foreign jurisdiction. The Company sought and obtained legal advice related to such accrued obligations under the expired license agreement. The Company relied upon a judicial conclusion, as opined upon by outside legal counsel in the applicable foreign jurisdiction, that a court in such foreign jurisdiction would grant relief releasing the Company from liability under the license agreement, and in accordance with Accounting Standards Codification 405 "Extinguishment of Liabilities", the Company recorded a debt extinguishment gain of \$0.5 million and reduced the liability amount owed to \$0 during the year ended December 31, 2017.

NOTE 6: WARRANT LIABILITY

A weighted average summary of quantitative information with respect to valuation methodology and significant unobservable inputs used for the Company's common stock purchase warrants that are categorized within Level 3 of the fair value hierarchy for the years ended 2017 and 2016, respectively:

	Weighted Average Inputs for the Period	
	For the Years Ended	
	December 31, 2017	December 31, 2016
Stock price	\$3.92	\$4.37
Exercise price	\$1.20	\$1.20
Contractual term (years)	0.78	1.15
Volatility (annual)	63%	100%
Risk-free rate	1%	1%
Dividend yield (per share)	0%	0%

The foregoing assumptions are recalculated every reporting period and are subject to change based primarily on management's assessment of the probability of the events described occurring. Accordingly, changes to these assessments could materially affect the valuations.

The following table presents changes in Level 3 warrant liabilities, reflected in accrued expenses measured at fair value for the year ended December 31, 2017 and 2016, respectively:

	Warrant Liability
Balance – January 1, 2016	\$ 26,493,000
Reclassification of derivative liabilities to equity at exercise date	(5,074,000)
Reclassification of fair value of derivative liabilities to equity on amendment of warrant agreements	(15,465,000)
Change in fair value of warrant liability	(5,939,500)
Balance – December 31, 2016	14,500
Change in fair value of warrant liability	(5,500)
Balance – December 31, 2017	\$ 9,000

NOTE 7: FAIR VALUE MEASUREMENTS

Financial assets and liabilities measured at fair value on a recurring basis are summarized below and disclosed on the balance sheet under Derivative liability — warrants:

	Fair value measured at December 31, 2017			Fair value at December 31, 2017
	Quoted prices in active markets (Level 1)	Significant other observable inputs (Level 2)	Significant unobservable inputs (Level 3)	
Warrant liability	\$—	\$—	\$ 9,000	\$ 9,000

	Fair value measured at December 31, 2016			Fair value at December 31, 2016
	Quoted prices in active markets (Level 1)	Significant other observable inputs (Level 2)	Significant unobservable inputs (Level 3)	
Warrant liability	\$—	\$—	\$ 14,500	\$ 14,500

There were no transfers between Level 1, 2 or 3 during the year ended December 31, 2017 and 2016, respectively.

The valuation of warrants is subjective and is affected by changes in inputs to the valuation model including the price per share of common stock, the historical volatility of the stock price, risk-free rates based on U.S. Treasury security yields, the expected term of the warrants and dividend yield. Changes in these assumptions can materially affect the fair value estimate. The Company could ultimately incur amounts to settle the warrant at a cash settlement value that is significantly different than the carrying value of the liability on the financial statements. The Company will continue to classify the fair value of the warrants as a liability until the warrants are exercised, expire, or are amended in a way that would no longer require these warrants to be classified as a liability. Changes in the fair value of the common stock warrants liability are recognized as a component of other income (expense) in the Statements of Operations.

The net cash settlement value at the time of any future transactions, where the Company consolidates or merges with another entity, will depend upon the value of the following inputs at that time: the consideration value per share of the Company's common stock, the volatility of the Company's common stock, the remaining term of the warrant from announcement date, the risk-free interest rate based on U.S. Treasury security yields, and the Company's dividend yield. The warrant requires use of a volatility assumption equal to the greater of 100% and the 100-day volatility function determined as of the trading day immediately following announcement of a Fundamental Transaction.

Warrant Amendment Transaction

On August 10, 2016, the Company and holders of an aggregate of 3,096,665 outstanding Series A Warrants, Series A-1 Warrants, Series C Warrants, Series C-1 Warrants, Series D Warrants, Series D-1 Warrants, Series E Warrants and Series E-1 Warrants entered into warrant amendment agreements (the "Amended Warrants") in which they agreed to amend the terms of the outstanding series warrants to remove provisions that had previously precluded equity classification treatment on the Company's balance sheets.

The fair value of the Amended Warrants was re-measured immediately prior to the date of amendment with changes in fair value recorded as a gain of \$5.1 million in the statement of operations and \$15.5 million was reclassified to equity.

NOTE 8: STOCKHOLDERS' EQUITY***Preferred Stock***

The Company has authorized up to 5,000,000 shares of preferred stock, \$0.0001 par value per share, for issuance. The preferred stock will have such rights, privileges and restrictions, including voting rights, dividend conversion rights, redemption privileges and liquidation preferences, as shall be determined by the Company's board of directors upon its issuance. To date, the Company has not issued any preferred shares.

Series A Preferred Stock— The Company has designated up to 1,250,000 shares of Series A Preferred Stock, \$0.0001 par value per share, for issuance. To date, the Company has not issued any Series A preferred shares.

Series B Preferred Stock— The Company has designated up to 1,500,000 shares of Series B Preferred Stock, \$0.0001 par value per share, for issuance. To date, the Company has not issued any Series B preferred shares.

Common Stock

The Company has authorized up to 41,666,667 shares of common stock, \$0.0001 par value per share, for issuance. Significant 2017 and 2016 common stock transactions were as follows:

2017 Common Stock Transactions

June 2017 Private Placement Transaction

On June 26, 2017, the Company completed private placement of units with certain accredited investors. In the private placement transaction, the Company sold 1,503,567 shares of common stock for \$3.97 per share and five-year warrants to purchase an equal number of shares of common stock, at an exercise price of \$3.97 per share, for \$0.125 per warrant, with one common share and one warrant being sold together as a unit for a total of \$4.095 per unit. The Company issued and sold an aggregate of 1,503,567 units for aggregate gross proceeds of \$6.2 million. The Company incurred \$0.8 million in agency fees and legal costs. In connection with the offering, the Company reduced the exercise price for the warrants to purchase an aggregate of 653,187 shares of common stock issued to investors in the private placement that closed in August 2016 from \$6.00 per share to \$3.97 per share.

In addition, the Company issued five-year warrants to the placement agent in the offering providing for the purchase of up to 150,357 shares of Company common stock for \$3.97 per share.

June 2017 Exercise and Repricing of Warrants Held by Existing Institutional Investors

On June 23, 2017, certain existing institutional shareholders of the Company who hold various outstanding warrants (i.e. C, D, E and F) to purchase Company common stock, entered into warrant repricing and exercise agreements.

Series E repriced and exercised warrants

Approximately 168,000 of Series E warrants were repriced from \$15.00 per share to \$3.97 per share and exercised immediately for gross proceeds of approximately \$0.7 million. Series E warrants to purchase approximately 187,000 shares of Company common stock being reduced from \$15.00 per share to \$4.50 per share.

Series C, D & F repriced warrants

Additionally, the exercise prices for certain investors of Series C, Series D and Series F warrants were reduced as follows:

<u>Series</u>	<u>Number of Warrant Shares Repriced</u>	<u>Pre-reduced Price</u>	<u>Post-reduced Price</u>
Series C	313,750	\$ 6.00	\$ 4.00
Series D	312,500	\$ 9.00	\$ 4.00
Series F	292,500	\$ 7.20	\$ 4.00

The fair value relating to the modification of exercise prices on the repriced warrants was treated as deemed dividend on the statement of stockholders' equity of \$0.6 million.

A weighted average summary of quantitative information with respect to valuation methodology and significant unobservable inputs used for the Company's common stock purchase warrants that are included in the modification is as follows:

	Before Modification	After Modification
Exercise price	\$8.32	\$4.04
Contractual term (years)	3.34	3.34
Volatility (annual)	200%	200%
Risk-free rate	2%	2%
Dividend yield (per share)	0%	0%

2017 Management Compensation

On March 9, 2017, the Company issued 12,761 shares of stock to Dr. Glynn Wilson. The fair value of the common stock of \$55,000 was recognized as stock-based compensation in general and administrative expenses. The issuance was based on the closing price of our common stock of \$4.31 per share.

On March 9, 2017, the Company issued 5,220 shares of stock to our former Chief Operating Officer. The fair value of the common stock of \$22,500 was recognized as stock-based compensation in general and administrative expenses. The issuance was based on the closing price of our common stock of \$4.31 per share.

On September 22, 2017, the Company granted Mr. Hoang 250,000 shares of unregistered, fully vested restricted common stock. The Company recorded \$0.8 million of stock-based compensation based on the fair value of the common stock at September 22, 2017. 70,289 shares of common stock, with a fair value of \$0.2 million, were withheld (at the closing price of the Company's common stock on the NASDAQ Capital Market on September 22, 2017) to satisfy certain payroll liabilities, as applicable to the award.

On September 22, 2017, the Company granted Dr. Wilson 100,000 shares of unregistered, fully vested restricted common stock. The Company recorded \$0.3 million of stock-based compensation based on the fair value of the common stock at September 22, 2017. 27,350 shares of common stock, with a fair value of \$0.1 million, were withheld (at the closing price of the Company's common stock on the NASDAQ Capital Market on September 22, 2017) to satisfy certain payroll liabilities, as applicable to the award.

Consulting Arrangements

During fiscal 2017, the Company issued 0.2 million shares of common stock as part of consulting agreements. The fair value of the common stock of \$0.6 million was recognized as stock-based compensation in general and administrative expenses.

2016 Common Stock Transactions

Private placements

On August 10, 2016 and August 25, 2016, the Company completed private placements of units with certain accredited investors. The units consisted of (i) one share of the Company's common stock, par value \$0.001 per share and (ii) one five-year warrant to purchase one share of Company common stock for \$6.00. The Company issued and sold an aggregate of 653,187 units at a purchase price per unit of \$4.80 for an aggregate of approximately \$3.1 million. The Company incurred approximately \$0.8 million in agency fees and legal costs.

Warrant Amendment Transaction

On August 10, 2016, the Company and holders of outstanding Series A Warrants, Series A-1 Warrants, Series C Warrants, Series C-1 Warrants, Series D Warrants, Series D-1 Warrants, Series E Warrants and Series E-1 Warrants entered into warrant amendment agreements in which they agreed to amend the terms of the outstanding series warrants to remove provisions that had previously precluded equity classification treatment on the Company's balance sheets.

In consideration for such amendment and the exercise of the Series C Warrants and Series C-1 Warrants, the Company issued an aggregate of 750,000 additional shares of common stock to such warrant holders and new five-year warrants to purchase 1,000,000 shares of Company common stock at an exercise price of \$7.20 per share.

Warrant Exercises

On August 11, 2016, holders of an aggregate of 583,333 outstanding Series C Warrants and 416,667 Series C-1 Warrants, each providing for the purchase of one share of our common stock for \$6.00 per share, exercised their warrants for an aggregate exercise price of \$6,000,000.

Exercise of Stock Options

In December 2016, Dr. John Bonfiglio exercised 10,417 shares of common stock pursuant to stock options at an exercise price equal to \$1.74 per share.

Debt Settlement

In May 2016, the Company issued 10,191 common shares as part of debt conversion agreements from 2014. The fair value of the common stock of approximately \$70,000 was recognized as loss on debt settlement agreements in other income (expense).

2016 Management Compensation

In July 2016, the Company entered into an employment agreement with Dr. John Bonfiglio relating to his appointment as the Company's President and Chief Operating Officer. As part of the agreement, Dr. John Bonfiglio was awarded 20,833 common shares, which will vest upon the earlier of (i) the listing of the Company's common stock on a national securities exchange in the United States or (ii) the first anniversary of the employment agreement, so long as Dr. John Bonfiglio is employed with the Company. The fair value of the common stock of approximately \$103,000 was recognized as stock-based compensation in general and administrative expense.

Consulting arrangements

During the year ended December 31, 2016, the Company issued 75,000 common shares as part of consulting agreements. The fair value of the common stock of approximately \$480,000 was recognized as stock-based compensation in general and administrative expense.

NOTE 9: WARRANTS

Share Purchase Warrants

A summary of the Company's share purchase warrants as of December 31, 2017 and 2016, respectively, and changes during the period is presented below:

	Number of Warrants	Weighted Average Exercise Price	Weighted Average Remaining Contractual Life (in years)	Total Intrinsic Value
Balance – January 1, 2016	4,343,000	8.67	4.24	\$ 5,547,000
Issued	1,718,000	6.65	—	—
Exercised	(1,000,000)	6.00	—	—
Expired	(2,000)	287.20	—	—
Balance – December 31, 2016	5,059,000	\$ 8.49	3.68	\$ 1,713,000
Issued	1,654,000	3.97	—	—
Exercised	(168,000)	15.00	—	—
Expired	(25,000)	30.50	—	—
Balance – December 31, 2017	6,520,000	\$ 6.11	3.16	\$ 1,739,000

The following table reflects the status of the outstanding warrants at December 31, 2017:

Series	Total Outstanding Warrants	Exercise Price	Expiration
A	214,433	\$ 1.20	1/13/2020
C	313,749	\$ 4.00	1/13/2020
C	110,683	\$ 6.00	1/13/2020
D	312,501	\$ 4.00	Between 07/16/2020 and 08/13/2020 and 08/19/2020 and 09/09/2020
D	297,499	\$ 9.00	Between 07/16/2020 and 08/13/2020 and 08/19/2020 and 09/09/2020
E	186,557	\$ 4.50	Between 10/01/2020 and 11/12/2020 and 11/30/2020 and 12/09/2020
E	261,616	\$ 15.00	Between 10/01/2020 and 11/12/2020 and 11/30/2020 and 12/09/2020
F	292,499	\$ 4.00	8/11/2021
F	290,834	\$ 7.20	8/11/2021
A-1	418,750	\$ 1.20	3/9/2020
C-1	2,083	\$ 6.00	1/13/2020
D-1	416,667	\$ 9.00	Between 08/19/2020 and 09/09/2020
E-1	418,750	\$ 15.00	6/16/2020
F-1	416,667	\$ 7.20	8/11/2021
PIPE Warrants	653,187	\$ 3.97	8/11/2021
PIPE Warrants	1,503,567	\$ 3.97	6/22/2022
Broker Warrants	65,326	\$ 4.80	8/11/2021
Broker Warrants	150,357	\$ 3.97	6/22/2022
Other	194,796	\$1.20 – \$120.00	Between 4/04/2018 and 9/01/2019

2017 Warrant Transactions

June 2017 Private Placement Transaction

On June 26, 2017, the Company completed private placement of units with certain accredited investors. In the private placement transaction, the Company sold 1,503,567 shares of common stock for \$3.97 per share and five-year warrants to purchase an equal number of shares of common stock, at an exercise price of \$3.97 per share, for \$0.125 per warrant, with one common share and one warrant being sold together as a unit for a total of \$4.095 per unit. The Company issued and sold an aggregate of 1,503,567 units for aggregate gross proceeds of \$6.2 million. The Company incurred \$0.8 million in agency fees and legal costs. In connection with the offering, the Company reduced the exercise price for the warrants to purchase an aggregate of 653,187 shares of common stock issued to investors in the private placement that closed in August 2016 from \$6.00 per share to \$3.97 per share.

June 2017 Exercise and Repricing of Warrants Held by Existing Institutional Investors

On June 23, 2017, certain existing institutional shareholders of the Company who hold various outstanding warrants (i.e. C, D, E and F) to purchase Company common stock, entered into warrant repricing and exercise agreements.

Series E repriced and exercised warrants

Approximately 168,000 of Series E warrants were repriced from \$15.00 per share to \$3.97 per share and exercised immediately for gross proceeds of approximately \$0.7 million. Series E warrants to purchase approximately 187,000 shares of Company common stock being reduced from \$15.00 per share to \$4.50 per share.

Series C, D & F repriced warrants

Additionally, the exercise prices for certain investors of Series C, Series D and Series F warrants were reduced as follows:

Series	Number of Warrant Shares Repriced	Pre-reduced Price	Post-reduced Price
Series C	313,750	\$ 6.00	\$ 4.00
Series D	312,500	\$ 9.00	\$ 4.00
Series F	292,500	\$ 7.20	\$ 4.00

The fair value relating to the modification of exercise prices on the repriced warrants was treated as deemed dividend on the statement of stockholders' equity of \$0.6 million.

June 2017 Agent Warrants

Pursuant to an agency agreement, dated May 12, 2017, by and between Katalyst Securities LLC and us, Katalyst agreed to act as our placement agent in connection with the June 26, 2017 private placement offering.

Pursuant to the agreement, we agreed to pay to Katalyst: (i) an aggregate cash fee for placement agent and financial advisory services equal to 10% of the gross proceeds of the Offering; (ii) a non-accountable expense allowance in the amount of Seventy Thousand Dollars (\$70,000); and (iii) five-year warrants to purchase a number of shares of our common stock equal to 10% of the number of shares sold in the offering. The Katalyst Warrants have the same terms as the private placement warrants issued in the offering. Based on the 1,503,567 shares of common stock sold in the private placement, we issued five-year warrants to Katalyst providing for the purchase of up to 150,357 shares of Company common stock for \$3.97 per share.

2016 Warrant TransactionsAugust 2016 Warrant Exercises

On August 11, 2016, holders of an aggregate of 583,333 outstanding Series C Warrants and 416,667 Series C-1 Warrants, each providing for the purchase of one share of our common stock for \$6.00 per share, exercised their warrants for an aggregate exercise price of \$6,000,000.

August 2016 Warrant Amendments

As discussed in Note 8, Stockholders' Equity, simultaneous with the exercise of the warrants, the Company and holders of outstanding Series A Warrants, Series A-1 Warrants, Series C Warrants, Series C-1 Warrants, Series D Warrants, Series D-1 Warrants, Series E Warrants and Series E-1 Warrants entered into warrant amendment agreements, in which they agreed to amend the terms of the existing warrant agreements to remove provisions that had previously caused them to be classified as a derivative liability as opposed to equity on our balance sheet. In consideration for such amendment and the exercise of the Series C Warrants and Series C-1 Warrants, we issued an aggregate of 750,000 additional shares of common stock to such warrant holders and new five-year warrants to purchase 1,000,000 shares of our common stock at an exercise price of \$7.20 per share (the "Series F and F-1 Warrants"). The value of the shares and fair value of the warrants was treated as dividend on the statement of stockholders' equity of \$4.5 million.

August 2016 Private Placement Transaction

On August 10, 2016 and August 25, 2016, the Company completed private placements of units with certain accredited investors. The units consisted of (i) one share of the Company's common stock, par value \$0.001 per share and (ii) one five-year warrant to purchase one share of Company common stock for \$6.00. The Company issued and sold an aggregate of 653,187 units at a purchase price per unit of \$4.80 for an aggregate of approximately \$3.1 million. The Company incurred approximately \$0.8 million in agency fees and legal costs.

In addition, the Company issued five-year warrants to the placement agent in the offering providing for the purchase of up to 65,317 shares of Company common stock for \$4.80 per share.

NOTE 10: STOCK OPTION PLANS

Options to Purchase Shares of Common Stock

2014 Stock Omnibus Plan

On March 19, 2014, the Board adopted the 2014 Omnibus Stock Option Plan (“2014 Plan”), which replaced the 2009 Stock Incentive Plan. The 2014 Plan allowed for grants of stock options, restricted shares, stock bonuses and other equity based awards to employees and non-employee directors of the Company. Awards under the 2014 Plan may be at prices and for terms as determined by the Board of Directors, and may have vesting requirements as determined by the Board, provided that the exercise price for any stock option must be at least equal to the fair market value (as defined in the 2014 Plan) of a share of the stock on the grant date. Once granted, the exercise price of an option may not be reduced without the approval of the Company’s stockholders, other than under certain limited circumstances such as a stock split, or take any other action with respect to a stock option that would be treated as a repricing under the rules and regulations of the New York Stock Exchange.

The 2014 Plan was amended in February 2015 to provide for grants to consultants, and again in November 2015 to (i) increase the number of shares reserved for issuance under the Plan to 0.6 million shares; (ii) provide the Board and Committee administering the Plan with full discretion on the vesting period for Service-Vesting Awards under the Plan, including the grant of Awards with less than the Minimum Vesting Requirement (as such terms are defined in the Plan), and (iii) provide the Board and Committee administering the Plan with the ability to grant stock bonuses to executive officers.

On August 29, 2017, the 2014 Plan was amended to increase the shares reserved under the Plan to 1.4 million shares. As of December 31, 2017, approximately 533,000 options are available to be issued from the 2014 Plan.

Stock Options

A summary of the Company’s stock option activity is as follows for stock options:

	Number of Shares	Weighted Average Exercise Price	Total Intrinsic Value	Weighted Average Remaining Contractual Life (in years)
Outstanding as of January 1, 2016	298,679	\$ 9.22	\$ 177,000	9.7
Granted	147,500	5.84	—	9.3
Exercised	(10,417)	1.74	—	—
Forfeited/expired	(1,667)	228.00	—	—
Outstanding as of December 31, 2016	434,095	7.41	39,000	8.9
Granted	90,000	3.18	—	9.7
Forfeited/expired	(34,840)	6.75	—	—
Outstanding as of December 31, 2017	489,255	\$ 6.68	\$ 107,000	8.3
Options vested and exercisable	385,760	\$ 7.44	\$ 41,000	8.0

The Black-Scholes option pricing model is used to estimate the fair value of stock options granted under the Company's share-based compensation plans. The weighted average assumptions used in calculating the fair values of stock options that were granted during the years ended December 31, 2017, 2016, respectively, were as follows:

	For the Years Ended December 31,	
	2017	2016
Exercise price	\$ 3.25	\$ 5.84
Expected term (years)	10.0	9.7
Expected stock price volatility	217%	238%
Risk-free rate of interest	2%	2%
Expected dividend rate	0%	0%

The Company recorded \$2.6 million and \$1.6 million of stock-based compensation expense to general and administrative expenses for the years ended December 31, 2017 and 2016, respectively. The Company recorded \$0.1 million of stock-based compensation expense to research and development for the year ended December 31, 2017.

Unrecognized stock-based compensation cost:	\$262,000
Expected weighted average period compensation costs to be recognized (years):	0.7

NOTE 11: GRANT INCOME

During the years ended December 31, 2017 and 2016, the Company received \$0.2 million of a grant awarded to Mayo Foundation from the U.S. Department of Defense for the Phase II Clinical Trial of TPIV200. The grant compensated the Company for clinical supplies manufactured and provided by the Company for the clinical study.

NOTE 12: CONTINGENCIES AND COMMITMENTS

Employment Agreements

On August 25, 2016, the Company appointed Michael J. Loiacono as the Company's Chief Financial Officer, Chief Accounting Officer, Secretary and Treasurer. In connection with Mr. Loiacono's appointment, he entered into an employment agreement with the Company. The employment agreement provides that Mr. Loiacono's base salary will be \$200,000 per year and he is eligible for an annual performance bonus of up to 50% of his base salary. The term of the employment agreement is for two years and will be automatically extended for an additional 12 months unless terminated by Mr. Loiacono or the Company.

On September 22, 2017, the Company appointed Peter Hoang as the Company's President and Chief Executive Officer. In connection with Mr. Hoang's appointment, he entered into an employment agreement with the Company. The employment agreement provides that Mr. Hoang's base salary will be \$362,500 per year and he is eligible for an annual performance bonus of up to 50% of his base salary. In addition, on the first anniversary of the employment agreement, Mr. Hoang will be eligible to receive a grant of stock options to purchase the number of shares of common stock equal to one percent of the then-outstanding common stock of the Company. The term of the employment agreement is for three years and will be automatically extended for an additional 12 months unless terminated by Mr. Hoang or the Company.

On September 22, 2017, the Company entered into an amended employment agreement with Dr. Glynn Wilson, the Company's Strategic Advisor. The amended employment agreement provides that Dr. Wilson's base salary will be \$205,000 per year and he is eligible for an annual performance bonus of up to 50% of his base salary. In addition, upon the first anniversary of the execution of amendment employment agreement, Dr. Wilson will be eligible to receive an additional grant of restricted common stock equal to \$300,000. The term of the employment agreement is through December 31, 2018.

Operating Lease Obligations

The Company was a party to several operating leases as of December 31, 2017, primarily for office space at certain locations.

Future minimum lease payments under the Company's operating leases as of December 31, 2017, for each of the next five years and thereafter are as following (rounded to nearest thousand):

2018	\$ 116,000
2019	108,000
2020	111,000
2021	114,000
2022	68,000
Thereafter	—
Total	<u>\$517,000</u>

Total rental expense under the Company's operating leases was \$121,200 and \$82,500 for the years ended December 31, 2017 and 2016, respectively.

NOTE 13: LEGAL PROCEEDINGS

From time to time, the Company may be party to ordinary, routine litigation incidental to their business. The Company knows of no material, active or pending legal proceedings against the Company, nor is the Company involved as a plaintiff in any material proceeding or pending litigation. There are no proceedings in which any of the Company's directors, officers or affiliates, or any registered or beneficial shareholder, is an adverse party or has a material interest adverse to the Company's interest. The Company was not involved in any litigation during the years ended December 31, 2017 and 2016.

NOTE 14: INCOME TAXES

The Company has no income tax expense due to operating losses incurred for the years ended December 31, 2017 and 2016. Approximately \$62,000 in non-qualified stock options were cancelled during 2017 due to terminations that resulted in a reversal of the deferred tax asset of approximately \$16,000. The cancellations did not result in a book income for December 31, 2017.

The effects of temporary differences that give rise to significant portions of the deferred tax assets as of December 31, 2017 and 2016 are as follows:

	For the years ended December 31,	
	2017	2016
Deferred tax assets:		
Net operating loss carryforward	\$ 13,653,000	\$ 10,934,000
Stock-based compensation	2,231,000	2,066,000
License agreements	493,000	490,000
Research and development	117,000	117,000
Technology licensing fee	185,000	185,000
Valuation allowance	<u>(16,679,000)</u>	<u>(13,792,000)</u>
Deferred tax assets, net of valuation allowance	<u>\$ —</u>	<u>\$ —</u>

On December 22, 2017, the U.S. government enacted comprehensive tax legislation commonly referred to as the Tax Cuts and Jobs Act (the "Tax Act"), which makes broad and complex changes to the U.S. tax code. Certain of these changes may be applicable to the Company, including but not limited to, reducing the U.S. federal corporate tax rate from 35 percent to 21 percent, creating a new limitation on deductible interest expense, eliminating the corporate alternative minimum tax ("AMT"), modifying the rules related to

uses and limitations of net operating loss carryforwards generated in tax years ending after December 31, 2017, and changing the rules pertaining to the taxation of profits earned abroad. Changes in tax rates and tax laws are accounted for in the period of enactment. The Tax Act reduces the corporate tax rate to 21 percent, effective January 1, 2018.

The Company assesses the likelihood that deferred tax assets will be realized. To the extent that realization is not likely, a valuation allowance is established. Based upon the history of losses, management believes that it is more likely than not that future benefits of deferred tax assets will not be realized and has established a full valuation allowance for the years ended December 31, 2017 and 2016. Consequently, the deferred tax asset valuation allowance increased by \$2.9 million as of December 31, 2017. The Company has research and development tax credit carryforwards of \$117,000 to offset future federal income taxes. The research and development tax credit carryforwards begin to expire in 2029.

The Company has approximately \$41.7 million of federal and \$21.9 million of state Net Operating Loss ("NOL"s) that may be available to offset future taxable income, if any. The federal net operating loss carryforwards, if not utilized, will expire between 2029 and 2037. The state net operating loss carryforwards, if not utilized, will expire in 2037.

In accordance with Section 382 of the Internal Revenue code, the usage of the Company's net operating loss carryforwards may be limited in the event of a change in ownership. A full Section 382 analysis has not been prepared and NOLs could be subject to limitation under Section 382.

For the years ended December 31, 2017 and 2016, the expected tax expense (benefit) based on the U.S. federal statutory rate is reconciled with the actual tax provision (benefit) as follows:

	For the years ended December 31,	
	2017	2016
U.S. federal statutory rate	\$(3,734,000)	\$ (835,000)
State taxes, net of federal benefit	(414,000)	(286,000)
Federal tax rate change	1,401,000	—
Permanent differences		
– Change in fair value of derivative liabilities	(2,000)	(2,019,000)
– Other permanent differences	(161,000)	46,000
Change in valuation allowance	2,890,000	2,966,000
Other	20,000	128,000
Income tax provision (benefit)	<u>\$ —</u>	<u>\$ —</u>

ASC 740 prescribes a recognition threshold and a measurement attribute for the financial statement recognition and measurement of tax positions taken or expected to be taken in a tax return. For those benefits to be recognized, a tax position must be more-likely-than-not to be sustained upon examination by taxing authorities. As of December 31, 2017 and 2016, there were no unrecognized tax benefits. The Company recognizes accrued interest and penalties as income tax expense. No amounts were accrued for the payment of interest and penalties at December 31, 2017 and 2016. The Company is currently not aware of any issues under review that could result in significant payments, accruals or material deviation from its position in the next year.

Upon completion of our 2017 U.S. income tax return in 2018 we may identify additional remeasurement adjustments to our recorded deferred tax liabilities and the one-time transition tax. We will continue to assess our provision for income taxes as future guidance is issued, but do not currently anticipate significant revisions will be necessary. Any such revisions will be treated in accordance with the measurement period guidance outlined in Staff Accounting Bulletin No. 118.

A reconciliation of the Company's effective tax rate to the statutory U.S. federal rate is as follows:

	For the years ended December 31,	
	2017	2016
U.S. federal statutory rate	(34.0)%	(34.0)%
State taxes, net of federal benefit	(3.6)%	(11.6)%
Federal tax rate change	12.3%	0.0%
Permanent differences		
– Change in fair value of derivative liabilities	(0.0)%	(82.2)%
– Other permanent differences	(1.5)%	1.9%
Change in valuation allowance	26.3%	120.8%
Other	0.5%	5.2%
Income tax provision (benefit)	<u>(0.0)%</u>	<u>0.0%</u>

EXHIBIT INDEX

Exhibit number	Exhibit description	Incorporated by Reference				Filed herewith
		Form	File no.	Exhibit	Filing date	
3.1	Articles of Incorporation as Amended	10-Q	001-37939	3.1	11/4/16	
3.2	Certificate of Change to Articles of Incorporation (reverse split)	8-K	000-27239	3.1	9/15/16	
3.3	Amended and Restated Bylaws	8-K	000-27239	3.1	7/15/16	
4.0	Form of Stock Certificate					X
4.1	Form of Common Stock Purchase Warrant	8-K	000-27239	4.1	8/14/14	
4.2	Form of Placement Agent Warrant Common Stock Purchase Warrants- Series A	8-K	000-27239	4.6	1/12/15	
4.3	Form of Placement Agent Warrant Common Stock Purchase Warrants- Series C	8-K	000-27239	4.8	1/12/15	
4.4	Form of Placement Agent Warrant Common Stock Purchase Warrants- Series D	8-K	000-27239	4.9	1/12/15	
4.5	Form of Placement Agent Warrant Common Stock Purchase Warrants- Series E	8-K	000-27239	4.10	1/12/15	
4.6	Form of Placement Agent Warrant Common Stock Purchase Warrants- Series A-1	8-K	000-27239	4.6	3/10/15	
4.7	Form of Placement Agent Warrant Common Stock Purchase Warrants- Series C-1	8-K	000-27239	4.8	3/10/15	
4.8	Form of Placement Agent Warrant Common Stock Purchase Warrants- Series D-1	8-K	000-27239	4.9	3/10/15	
4.9	Form of Placement Agent Warrant Common Stock Purchase Warrants- Series E-1	8-K	000-27239	4.10	3/10/15	
4.10	Form of Amended Series A Warrant	8-K	000-27239	4.2	8/11/16	
4.11	Form of Amended Series C Warrant	8-K	000-27239	4.3	8/11/16	
4.12	Form of Amended Series D Warrant	8-K	000-27239	4.4	8/11/16	
4.13	Form of Amended Series E Warrant	8-K	000-27239	4.5	8/11/16	
4.14	Form of Amended Series A-1 Warrant	8-K	000-27239	4.6	8/11/16	
4.15	Form of Amended Series D-1 Warrant	8-K	000-27239	4.7	8/11/16	
4.16	Form of Amended Series E-1 Warrant	8-K	000-27239	4.8	8/11/16	
4.17	Form of Series F Warrant	8-K	000-27239	4.9	8/11/16	
4.18	Form of Series F-1 Warrant	8-K	000-27239	4.10	8/11/16	
4.19	Form of August 2016 Private Placement Warrant	8-K	000-27239	4.1	8/11/16	

Exhibit number	Exhibit description	Incorporated by Reference				Filed herewith
		Form	File no.	Exhibit	Filing date	
4.20	Form of 2016 Private Placement Agent Warrant	8-K	000-27239	4.11	8/11/16	
4.21	Form of June 2017 Private Placement Warrant	8-K	001-37939	4.1	6/22/17	
4.22	Form of 2017 Private Placement Agent Warrant	8-K	001-37939	4.2	6/22/17	
4.23	Form of Registration Rights Agreement August 2016 Private Placement	8-K	000-27239	10.2	8/11/16	
4.24	Form of Registration Rights Agreement June 2017 Private Placement	8-K	001-37939	10.2	6/22/17	
10.1	Form of Securities Purchase Agreement, dated as of January 12, 2015, by and among the Company and the Purchasers	8-K	000-27239	10.1	1/12/15	
10.2	Securities Purchase Agreement, dated as of March 9, 2015, by and among the Company and Eastern Capital Limited	8-K	000-27239	10.1	3/9/15	
10.3	Form of Restructuring Agreement dated May 28, 2015	8-K	000-27239	10.1	6/3/15	
10.4	Amended and Restated Restructuring Agreement, dated as of June 2, 2015	8-K	000-27239	10.1	6/5/15	
10.5	Form of Subscription Agreement August 2016 Private Placement	8-K	000-27239	10.1	8/11/16	
10.6	Form of Registration Rights Agreement August 2016 Private Placement	8-K	000-27239	10.2	8/11/16	
10.7	Form of Warrant Amendment Agreement August 2016 Private Placement	8-K	000-27239	10.3	8/11/16	
10.8	Agency Agreement August 2016 Private Placement	8-K	000-27239	10.4	8/11/16	
10.9	Form of Subscription Agreement June 2017 Private Placement	8-K	001-37939	10.1	6/22/17	
10.10	Form of Registration Rights Agreement June 2017 Private Placement	8-K	001-37939	10.2	6/22/17	
10.11	Form of Warrant Exercise Agreement	8-K	001-37939	10.3	6/22/17	
10.12	Agency Agreement June 2017 Private Placement	8-K	001-37939	10.4	6/22/17	
10.13	First Amendment to Agency Agreement June 2017 Private Placement	8-K	001-37939	10.1	6/26/17	
10.14	License and Assignment Agreement, dated July 21, 2015, with The Mayo Foundation for Medical Education and Research**	10-Q	000-27239	10.1	8/14/15	

Exhibit number	Exhibit description	Incorporated by Reference				Filed herewith
		Form	File no.	Exhibit	Filing date	
10.15	License and Assignment Agreement with Mayo Foundation for Medical Education and Research dated May 19, 2016**	10-Q	000-27239	10.7	8/15/16	
10.16	2009 Stock Incentive Plan*	DEF14-C	000-27239	B	1/29/10	
10.17	2014 Omnibus Stock Ownership Plan, as amended through August 29, 2017*	8-K	001-37939	10.1	9/5/17	
10.18	Form of Stock Option Award Agreement — Key Employee*	10-Q	000-27239	10.4	11/16/15	
10.19	Form of Stock Option Award Agreement — Non-employee Director*	10-Q	000-27239	10.5	11/16/15	
10.20	Form of Stock Option Award Agreement — Consultant*	10-Q	000-27239	10.6	11/16/15	
10.21	Form of Restricted Stock Award Agreement — Consultant*	10-Q	000-27239	10.7	11/16/15	
10.22	Employment Agreement between TapImmune, Inc. and Dr. Glynn Wilson, dated November 12, 2015*	10-Q	000-27239	10.8	11/16/15	
10.23	Amendment to Employment Agreement between TapImmune Inc. and Glynn Wilson, dated as of July 18, 2016*	8-K	000-27239	10.1	7/19/16	
10.24	Amendment to Employment Agreement between TapImmune Inc. and Glynn Wilson, dated as of September 22, 2017	8-K	001-37939	10.2	9/25/17	
10.25	Employment Agreement between TapImmune Inc. and Peter Hoang dated as of September 22, 2017	8-K	001-37939	10.1	9/25/17	
10.26	Employment Agreement by and between TapImmune Inc. and Michael J. Loiacono dated as of August 25, 2016*	8-K	000-27239	10.1	8/25/16	
10.27	Form of Director and Officer Indemnification Agreement*					X
14	Code of Ethics	10-Q	000-27239	14	11/16/15	
23.1	Consent of Marcum LLP, an independent public accounting firm.					X
24.1	Powers of Attorney (included on signature page).					X
31.1	Certification of Chief Executive Officer pursuant to Securities Exchange Act of 1934 Rule 13a-14(a) or 15d-14(a).					X
31.2	Certification of Chief Financial Officer and Chief Accounting Officer pursuant to Securities Exchange Act of 1934 Rule 13a-14(a) or 15d-14(a).					X

Exhibit number	Exhibit description	Incorporated by Reference				Filed herewith
		Form	File no.	Exhibit	Filing date	
32.1	Certification of Chief Executive Officer pursuant to 18 U. S. C. Section 1350 as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.					X
32.2	Certification of Chief Financial Officer and Chief Accounting Officer pursuant to 18 U. S. C. Section 1350 as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.					X
101.INS	XBRL Instance Document					X
101.SCH	XBRL Taxonomy Extension Schema Document					X
101.CAL	XBRL Taxonomy Extension Calculation Linkbase Document					X
101.DEF	XBRL Taxonomy Extension Definition Linkbase Document					X
101.LAB	XBRL Taxonomy Extension Label Linkbase Document					X
101.PRE	XBRL Taxonomy Extension Presentation Linkbase Document					X

* Executive management contract or compensatory plan or arrangement.

** Confidential treatment has been granted as to certain portions of this exhibit pursuant to Rule 406 of the Securities Act of 1933, as amended, or Rule 24b-2 of the Securities Exchange Act of 1934, as amended.

CERTIFICATION PURSUANT TO SECTION 302 OF SARBANES-OXLEY ACT OF 2002

I, Peter Hoang, certify that:

1. I have reviewed this Annual Report on Form 10-K of TapImmune Inc.;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
 - a. Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - b. designed such internal control over financial reporting or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurances regarding the reliability of financial reporting in the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - c. Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation;
 - d. Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the Audit Committee of the registrant's Board of Directors (or persons performing the equivalent functions):
 - a. All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting, which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
 - b. Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: March 23, 2018

/s/ Peter Hoang

By: **Peter Hoang**

Title: Chief Executive Officer

CERTIFICATION PURSUANT TO SECTION 302 OF SARBANES-OXLEY ACT OF 2002

I, Michael J. Loiacono, certify that:

1. I have reviewed this Annual Report on Form 10-K of TapImmune Inc.;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
 - a. Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - b. designed such internal control over financial reporting or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurances regarding the reliability of financial reporting in the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - c. Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation;
 - d. Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the Audit Committee of the registrant's Board of Directors (or persons performing the equivalent functions):
 - a. All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting, which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
 - b. Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: March 23, 2018

/s/ Michael J. Loiacono

By: **Michael J. Loiacono**

Title: Chief Financial Officer and Chief Accounting Officer

**CERTIFICATION PURSUANT TO
18 U.S.C. Section 1350,
AS ADOPTED PURSUANT TO
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002**

In connection with the Annual Report of TapImmune, Inc. (the “Company”) on Form 10-K for the period ended December 31, 2017 as filed with the Securities and Exchange Commission on the date hereof (the “Report”), I, Peter Hoang, Principal Executive Officer of the Company, certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that:

- (1) The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and
- (2) The information contained in this Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: March 23, 2018

/s/ Peter Hoang

Peter Hoang
Chief Executive Officer

**CERTIFICATION PURSUANT TO
18 U.S.C. Section 1350,
AS ADOPTED PURSUANT TO
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002**

In connection with the Annual Report of TapImmune, Inc. (the “Company”) on Form 10-K for the period ended December 31, 2017 as filed with the Securities and Exchange Commission on the date hereof (the “Report”), I, Michael J. Loiacono, Principal Accounting Officer of the Company, certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that:

- (1) The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and
- (2) The information contained in this Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: March 23, 2018

/s/ Michael J. Loiacono

Michael J. Loiacono
Chief Financial Officer and Chief Accounting Officer

**UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549**

FORM 10-Q

- Quarterly Report Under Section 13 or 15(d) of the Securities Exchange Act of 1934 for the quarterly period ended **June 30, 2018**
- Transition Report Under Section 13 or 15(d) of the Securities Exchange Act of 1934 for the transition period from to .

Commission File Number: **001-37939**



TAPIMMUNE
TAPIMMUNE INC.
(Name of registrant in its charter)

NEVADA

(State or other jurisdiction of incorporation or organization)

**5 West Forsyth Street, Suite 200
Jacksonville, FL**

(Address of principal executive offices)

45-4497941

(I.R.S. Employer Identification No.)

32202

(Zip Code)

904-516-5436

(Issuer's telephone number)

Indicate by check mark whether the registrant (1) filed all reports required to be filed by Section 13 or 15(d) of the Exchange Act during the past 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes No

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). Yes No

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, non-accelerated filer, a smaller reporting company, or an emerging growth company. See definition of "accelerated filer", "large accelerated filer", "smaller reporting company", and "emerging growth company" in Rule 12b-2 of the Exchange Act (check one):

- | | |
|--|---|
| <input type="checkbox"/> Large accelerated filer | <input type="checkbox"/> Accelerated filer |
| <input type="checkbox"/> Non-accelerated filer | <input checked="" type="checkbox"/> Smaller reporting company |
| (Do not check if smaller reporting company) | <input type="checkbox"/> Emerging growth company |

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act.

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act). Yes No

As of August 2, 2018, the Company had 13,710,544 shares of common stock issued and outstanding.

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PART I. FINANCIAL INFORMATION**Item 1. Financial Statements**

TAPIMMUNE INC.
CONDENSED CONSOLIDATED BALANCE SHEETS
(UNAUDITED)

	June 30, 2018	December 31, 2017
ASSETS		
Current assets:		
Cash	\$ 7,782,962	\$ 5,129,289
Prepaid expenses and deposits	108,716	51,150
Total current assets	7,891,678	5,180,439
Total assets	<u>\$ 7,891,678</u>	<u>\$ 5,180,439</u>
LIABILITIES AND STOCKHOLDERS' EQUITY		
Current liabilities:		
Accounts payable and accrued liabilities	\$ 3,595,152	\$ 1,508,312
Warrant liability	147,000	9,000
Promissory note	5,000	5,000
Total current liabilities	3,747,152	1,522,312
Total liabilities	<u>3,747,152</u>	<u>1,522,312</u>
COMMITMENTS AND CONTINGENCIES		
Stockholders' equity:		
Preferred stock – \$0.001 par value, 5 million shares authorized at June 30, 2018 and December 31, 2017, respectively		
Series A, \$0.001 par value, 1.25 million shares designated, 0 shares issued and outstanding as of June 30, 2018 and December 31, 2017, respectively	—	—
Series B, \$0.001 par value, 1.5 million shares designated, 0 shares issued and outstanding as of June 30, 2018 and December 31, 2017, respectively	—	—
Common stock, \$0.001 par value, 41.7 million shares authorized, 13.6 million and 10.6 million shares issued and outstanding as of June 30, 2018 and December 31, 2017, respectively	13,624	10,616
Additional paid-in capital	170,287,725	161,067,538
Accumulated deficit	(166,156,823)	(157,420,027)
Total stockholders' equity	4,144,526	3,658,127
Total liabilities and stockholders' equity	<u>\$ 7,891,678</u>	<u>\$ 5,180,439</u>

See accompanying notes to these unaudited condensed consolidated financial statements.

TAPIMMUNE INC.
CONDENSED CONSOLIDATED STATEMENTS OF OPERATIONS
(UNAUDITED)

	For the three months ended June 30,		For the six months ended June 30,	
	2018	2017	2018	2017
Revenues:				
Grant income	\$ 205,994	\$ —	\$ 205,994	\$ —
Total revenues	<u>205,994</u>	<u>—</u>	<u>205,994</u>	<u>—</u>
Operating expenses:				
Research and development	\$ 1,826,837	\$ 1,202,725	\$ 3,426,387	\$ 2,191,817
General and administrative	3,052,954	1,190,517	4,650,890	2,618,310
Total operating expenses	<u>4,879,791</u>	<u>2,393,242</u>	<u>8,077,277</u>	<u>4,810,127</u>
Loss from operations	(4,673,797)	(2,393,242)	(7,871,283)	(4,810,127)
Other income (expense):				
Change in fair value of warrant liabilities	(139,000)	7,500	(138,000)	4,500
Debt extinguishment gain	—	492,365	—	492,365
Net loss	<u>\$(4,812,797)</u>	<u>\$(1,893,377)</u>	<u>\$(8,009,283)</u>	<u>\$(4,313,262)</u>
Net loss per share, Basic and Diluted	<u>\$ (0.41)</u>	<u>\$ (0.22)</u>	<u>\$ (0.71)</u>	<u>\$ (0.51)</u>
Weighted average number of common shares outstanding	<u>11,838,371</u>	<u>8,576,634</u>	<u>11,233,755</u>	<u>8,503,521</u>

See accompanying notes to these unaudited condensed consolidated financial statements.

TAPIMUNE INC.
CONDENSED CONSOLIDATED STATEMENT OF STOCKHOLDERS' EQUITY
(UNAUDITED)

	Common Stock		Additional Paid-in Capital	Accumulated Deficit	Total Stockholders' Equity
	Shares	Par value			
Balance at January 1, 2018	10,615,724	\$10,616	\$161,067,538	\$(157,420,027)	\$ 3,658,127
Issuance of common stock in private placement	1,300,000	1,300	3,118,700	—	3,120,000
Stock options exercised for cash	10,416	10	18,115	—	18,125
Stock warrants exercised for cash	1,446,881	1,447	4,259,638	—	4,261,085
Stock warrants cashless exercised	118,425	118	(118)	—	—
Stock-based compensation	132,825	133	1,096,339	—	1,096,472
Fair value of repriced warrants as inducement	—	—	727,513	(727,513)	—
Net loss	—	—	—	(8,009,283)	(8,009,283)
Balance, June 30, 2018	<u>13,624,271</u>	<u>\$13,624</u>	<u>\$170,287,725</u>	<u>\$(166,156,823)</u>	<u>\$ 4,144,526</u>

See accompanying notes to these unaudited condensed consolidated financial statements.

TAPIMMUNE INC.
CONDENSED CONSOLIDATED STATEMENTS OF CASH FLOWS
(UNAUDITED)

	For the six months ended June 30,	
	2018	2017
Cash Flows from Operating Activities:		
Net loss	\$(8,009,283)	\$(4,313,262)
Reconciliation of net loss to net cash used in operating activities:		
Changes in fair value of warrant liabilities	138,000	(4,500)
Stock-based compensation	1,096,472	647,387
Debt extinguishment gain	—	(492,365)
Changes in operating assets and liabilities:		
Prepaid expenses and deposits	(57,566)	(109,032)
Accounts payable and accrued expenses	2,086,840	336,135
Net cash used in operating activities	<u>(4,745,537)</u>	<u>(3,935,637)</u>
Cash Flows from Financing Activities:		
Proceeds from issuance of common stock and warrants in private placement, net of offering costs	3,120,000	5,408,343
Proceeds from exercise of stock warrants, net of offering costs	4,261,085	638,666
Proceeds from exercise of stock options	18,125	—
Net cash provided by financing activities	<u>7,399,210</u>	<u>6,047,009</u>
Net increase in cash	2,653,673	2,111,372
Cash at beginning of period	5,129,289	7,851,243
Cash at end of period	<u>\$ 7,782,962</u>	<u>\$ 9,962,615</u>
Supplemental schedule of non-cash financing activities:		
Fair value of repriced warrants as inducement	\$ 727,513	\$ 622,042
Stock warrants cashless exercised	\$ 118	\$ —

See accompanying notes to these unaudited condensed consolidated financial statements.

TAPIMMUNE INC.

NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS

June 30, 2018

*(Unaudited)***NOTE 1: NATURE OF OPERATIONS**

TapImmune Inc. (the “Company” or “we”), a Nevada corporation incorporated in 1991, is a biotechnology company focusing on immunotherapy specializing in the development of innovative peptide and gene-based immunotherapeutics and vaccines for the treatment of oncology. Unlike other vaccine technologies that narrowly address the initiation of an immune response, TapImmune’s approach broadly stimulates the cellular immune system by enhancing the function of killer T-cells and T-helper cells and by restoring antigen presentation in tumor cells allowing their recognition by the immune system.

NOTE 2: BASIS OF PRESENTATION

The accompanying unaudited condensed consolidated financial statements have been prepared in accordance with the accounting principles generally accepted in the United States of America (“U.S. GAAP”) for interim financial information and pursuant to the instructions to Form 10-Q and Article 8 of Regulation S-X of the Securities and Exchange Commission (“SEC”) and on the same basis as the Company prepares its annual audited consolidated financial statements. In the opinion of management, the accompanying unaudited condensed consolidated financial statements reflect all adjustments, consisting of normal recurring adjustments, considered necessary for a fair presentation of such interim results.

The results for the condensed consolidated statement of operations are not necessarily indicative of results to be expected for the year ending December 31, 2018 or for any future interim period. The condensed consolidated balance sheet at June 30, 2018 has been derived from unaudited financial statements; however, it does not include all of the information and notes required by U.S. GAAP for complete financial statements. The accompanying condensed consolidated financial statements should be read in conjunction with the consolidated financial statements for the year ended December 31, 2017, and notes thereto included in the Company’s annual report on Form 10-K filed on March 23, 2018.

NOTE 3: LIQUIDITY AND FINANCIAL CONDITION

The Company’s activities since inception have consisted principally of acquiring product and technology rights, raising capital, and performing research and development. Successful completion of the Company’s development programs and, ultimately, the attainment of profitable operations are dependent on future events, including, among other things, its ability to access potential markets; secure financing, develop a customer base; attract, retain and motivate qualified personnel; and develop strategic alliances and collaborations. From inception, the Company has been funded by a combination of equity and debt financings.

The Company expects to continue to incur substantial losses over the next several years during its development phase. To fully execute its business plan, the Company will need to complete certain research and development activities and clinical studies. Further, the Company’s product candidates will require regulatory approval prior to commercialization. These activities may span many years and require substantial expenditures to complete and may ultimately be unsuccessful. Any delays in completing these activities could adversely impact the Company. The Company plans to meet its capital requirements primarily through issuances of debt and equity securities and, in the longer term, revenue from product sales.

As of June 30, 2018, the Company had cash of approximately \$7.8 million. Historically, the Company had net losses and negative cash flows from operations. Management intends to continue its research efforts and to finance operations of the Company through debt and/or equity financings. Management plans to seek additional debt and/or equity financing through private or public offerings. There can be no assurance that the Company will be successful in obtaining additional financing on favorable terms, or at all. The Company has no sources of revenue to provide incoming cash flows to sustain its future operations. The

Company's ability to pursue its planned business activities is dependent upon successful efforts to raise additional capital. These factors raise substantial doubt regarding the Company's ability to continue as a going concern. The financial statements do not include any adjustments that might result from the outcome of these uncertainties.

NOTE 4: SIGNIFICANT ACCOUNTING POLICIES

There have been no material changes in the Company's significant accounting policies to those previously disclosed in the Company's annual report on Form 10-K, which was filed with the SEC on March 23, 2018.

New Accounting Pronouncements

From time to time, new accounting pronouncements are issued by the Financial Accounting Standards Board ("FASB") or other standard setting bodies that we adopt as of the specified effective date. Unless otherwise discussed, we do not believe that the impact of recently issued standards that are not yet effective will have a material impact on our financial position or results of operations upon adoption.

Recent Accounting Pronouncements Adopted in the Year

Compensation-Stock Compensation

In May 2017, the FASB issued Accounting Standards Update ("ASU") No. 2017-09, Compensation — Stock Compensation (Topic 718): Scope of Modification Accounting, which clarifies when to account for a change to the terms or conditions of a share-based payment award as a modification. Under the new guidance, modification accounting is required only if the fair value, the vesting conditions, or the classification of the award (as equity or liability) changes as a result of the change in terms or conditions. It is effective prospectively for the annual period beginning after December 15, 2017 and interim periods within that annual period. Early adoption is permitted. The Company adopted ASU 2017-09 on January 1, 2018; the adoption of ASU 2017-09 did not have a material impact on its financial condition or results of operations, as the Company has not had any modifications to share-based payment awards. However, if the Company does have a modification to an award in the future, it will follow the guidance in ASU 2017-09.

Revenue from Contracts with Customers

In May 2014, the FASB issued ASU No. 2014-09, "Revenue from Contracts with Customers (Topic 606)" (ASU 2014-09) as modified by ASU No. 2015-14, "Revenue from Contracts with Customers (Topic 606): Deferral of the Effective Date," ASU 2016-08, "Revenue from Contracts with Customers (Topic 606): Principal versus Agent Considerations (Reporting Revenue Gross versus Net)," ASU No. 2016-10, "Revenue from Contracts with Customers (Topic 606): Identifying Performance Obligations and Licensing," and ASU No. 2016-12, "Revenue from Contracts with Customers (Topic 606): Narrow-Scope Improvements and Practical Expedients." The revenue recognition principle in ASU 2014-09 is that an entity should recognize revenue to depict the transfer of goods or services to customers in an amount that reflects the consideration to which the entity expects to be entitled in exchange for those goods or services. In addition, new and enhanced disclosures will be required. Companies may adopt the new standard either using the full retrospective approach, a modified retrospective approach with practical expedients, or a cumulative effect upon adoption approach. The Company adopted the new standard effective January 1, 2018, using the modified retrospective approach. The only impact of the adoption of ASU 2014-09 was to reclassify the Company's grant income as revenue.

Recent Accounting Pronouncements Not Yet Adopted

Accounting for Certain Financial Instruments with Down Round Features

On July 13, 2017, the FASB has issued a two-part ASU, No. 2017-11, (i). Accounting for Certain Financial Instruments with Down Round Features and (ii) Replacement of the Indefinite Deferral for Mandatorily Redeemable Financial Instruments of Certain Nonpublic Entities and Certain Mandatorily Redeemable Noncontrolling Interests With a Scope Exception.

The ASU is effective for public business entities for fiscal years, and interim periods within those fiscal years, beginning after December 15, 2018 and the interim periods within that annual period. Early adoption is permitted. The Company will be evaluating the impact of adopting this standard on the consolidated financial statements and disclosures.

Improvements to Nonemployee Share-Based Payment Accounting

In June 2018, the FASB issued ASU 2018-07 “Improvements to Nonemployee Share-Based Payment Accounting”, which simplifies the accounting for share-based payments granted to nonemployees for goods and services. Under the ASU, most of the guidance on such payments to nonemployees would be aligned with the requirements for share-based payments granted to employees. The amendments are effective for fiscal years beginning after December 15, 2019, and interim periods within fiscal years beginning after December 15, 2020. Early adoption is permitted, but no earlier than an entity’s adoption date of Topic 606. The Company is currently evaluating the impact of the new standard on its consolidated financial statements.

NOTE 5: NET LOSS PER SHARE APPLICABLE TO COMMON SHAREHOLDER

Basic loss per common share is computed by dividing net loss by the weighted average number of common shares outstanding during the reporting period. Diluted loss per common share is computed similarly to basic loss per common share except that it reflects the potential dilution that could occur if dilutive securities or other obligations to issue common stock were exercised or converted into common stock.

The following table sets forth the computation of net loss per share:

	Six Months Ended June 30,		Six Months Ended June 30,	
	2018	2017	2018	2017
Numerator:				
Net loss	\$ (4,812,797)	\$ (1,893,377)	\$ (8,009,283)	\$ (4,313,262)
Denominator:				
Weighted average common shares outstanding	11,838,371	8,576,634	11,233,755	8,503,521
Net loss per share data:				
Basic and Diluted	<u>\$ (0.41)</u>	<u>\$ (0.22)</u>	<u>\$ (0.71)</u>	<u>\$ (0.51)</u>

The following securities, rounded to the thousand, were not included in the diluted net loss per share calculation because their effect was anti-dilutive for the periods presented:

	Six Months Ended June 30,	
	2018	2017
Common stock options	439,000	455,000
Common stock purchase warrants	4,871,000	6,544,000
Potentially dilutive securities	<u>5,310,000</u>	<u>6,999,000</u>

NOTE 6: WARRANT LIABILITY AND FAIR VALUE MEASUREMENTS

A summary of quantitative information with respect to valuation methodology and significant unobservable inputs used for the Company's common stock purchase warrants that are categorized within Level 3 of the fair value hierarchy for the six months ended June 30, 2018 and 2017 is as follows:

	June 30, 2018	June 30, 2017
Stock price	\$9.43	\$3.88
Exercise price	\$8.67	\$1.20
Contractual term (years)	1.32	1.03
Volatility (annual)	83%	78%
Risk-free rate	1%	1%
Dividend yield (per share)	0%	0%

The foregoing assumptions are reviewed quarterly and are subject to change based primarily on management's assessment of the probability of the events described occurring. Accordingly, changes to these assessments could materially affect the valuations.

Financial Liabilities Measured at Fair Value on a Recurring Basis

Financial liabilities measured at fair value on a recurring basis are summarized below and disclosed on the balance sheet under Warrant liability:

	Fair value measured at June 30, 2018			Fair value at June 30, 2018
	Quoted prices in active markets (Level 1)	Significant other observable inputs (Level 2)	Significant unobservable inputs (Level 3)	
Warrant liability	\$—	\$—	\$147,000	\$147,000

	Fair value measured at December 31, 2017			Fair value at December 31, 2017
	Quoted prices in active markets (Level 1)	Significant other observable inputs (Level 2)	Significant unobservable inputs (Level 3)	
Warrant liability	\$—	\$—	\$9,000	\$9,000

The fair value accounting standards define fair value as the amount that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants. As such, fair value is determined based upon assumptions that market participants would use in pricing an asset or liability. Fair value measurements are rated on a three-tier hierarchy as follows:

- Level 1 inputs: Quoted prices (unadjusted) for identical assets or liabilities in active markets;
- Level 2 inputs: Inputs, other than quoted prices included in Level 1, that are observable either directly or indirectly; and
- Level 3 inputs: Unobservable inputs for which there is little or no market data, which require the reporting entity to develop its own assumptions.

There were no transfers between Level 1, 2 or 3 during the six months ended June 30, 2018.

The following table presents changes in Level 3 liabilities measured at fair value for the six months ended June 30, 2018:

	Warrant Liability
Balance – December 31, 2017	\$ 9,000
Change in fair value of warrant liability	138,000
Balance – June 30, 2018	<u>\$147,000</u>

NOTE 7: STOCKHOLDERS' EQUITY

2018 Common Stock Transactions

Common Stock Purchase Agreement

On May 14, 2018, the Company's largest stockholder Eastern Capital Limited entered into a Common Stock Purchase Agreement with the Company pursuant to which it purchased 1,300,000 shares of common stock at a price per share of \$2.40 providing gross proceeds to the Company of \$3.12 million.

Exercise and Repricing of Warrants Held by Existing Institutional Investors

On May 14, 2018, certain institutional holders of outstanding warrants entered into Warrant Exercise Agreements with the Company that provide for an amendment to the exercise price of the warrants being exercised at \$2.50 per share. Upon closing of the Warrant Exercise Agreements, such institutional holders immediately exercised warrants for 782,505 shares of common stock providing aggregate proceeds to the Company of approximately \$2.0 million.

The fair value relating to the modification of exercise prices on the repriced and exercised warrants was treated as deemed dividend on the statement of stockholders' equity of \$728,000.

A weighted average summary of quantitative information with respect to valuation methodology and significant unobservable inputs used for the Company's common stock purchase warrants that are included in the modification is as follows:

	Weighted Average Inputs	
	Before Modification	After Modification
Exercise price	\$9.93	\$2.50
Contractual term (years)	2.37	2.37
Volatility (annual)	79%	79%
Risk-free rate	1.5%	1.5%
Dividend yield (per share)	0%	0%

Exercise of Stock Warrants

During June 2018, shareholders exercised 782,800 shares of common stock pursuant to stock warrants providing aggregate proceeds to the Company of approximately \$2.3 million. 118,425 of the stock warrants exercised were exercised on a cashless basis, resulting in a cancellation of 83,130 stock warrants.

Exercise of Stock Options

In January 2018, 10,416 shares of common stock were issued pursuant to stock option exercises at an exercise price equal to \$1.74 per share.

Consulting Arrangements

During the six months ended June 30, 2018, the Company issued 132,825 shares of common stock as part of consulting agreements. The fair value of the common stock of approximately \$644,000 was recognized as stock-based compensation, \$563,000 in general and administrative expenses and \$81,000 in research and development expenses.

Share Purchase Warrants

A summary of the Company's share purchase warrants as of June 30, 2018 and changes during the period is presented below:

	Number of Warrants	Weighted Average Exercise Price	Weighted Average Remaining Contractual Life (in years)	Total Intrinsic Value
Balance – January 1, 2018	6,520,000	\$ 6.11	3.16	\$ 1,739,000
Issued	—	—	—	—
Cashless exercised	(118,000)	4.01	—	—
Exercised for cash	(1,447,000)	2.95	—	—
Expired or Cancelled	(84,000)	4.01	—	—
Balance – June 30, 2018	<u>4,871,000</u>	<u>\$ 5.94</u>	<u>2.76</u>	<u>\$20,417,000</u>

NOTE 8: STOCK-BASED COMPENSATION

The Company recorded approximately \$960,000 and \$271,000 of stock-based compensation expense for the three months ended June 30, 2018 and 2017, respectively. The Company recorded approximately \$1,096,000 and \$647,000 of stock-based compensation expense for the six months ended June 30, 2018 and 2017, respectively.

At June 30, 2018, the total stock-based compensation cost related to unvested awards not yet recognized was \$159,000. The expected weighted average period compensation costs to be recognized was 0.48 years. Future option grants will impact the compensation expense recognized.

\$596,000 and \$364,000 of stock-based compensation expenses for the three months ended June 30, 2018 were included in general and administrative expenses and research and development expenses, respectively, on the condensed consolidated statements of operations.

\$629,000 and \$467,000 of stock-based compensation expenses for the six months ended June 30, 2018 were included in general and administrative expenses and research and development expenses, respectively, on the condensed consolidated statements of operations.

NOTE 9: GRANT INCOME

During the six months ended June 30, 2018, the Company received \$0.2 million of a grant awarded to Mayo Foundation from the U.S. Department of Defense for the Phase II Clinical Trial of TPIV200. The grant compensated the Company for clinical supplies manufactured and provided by the Company for the clinical study. In accordance with Accounting Standards Update No. 2014-09, "Revenue from Contracts with Customers (Topic 606)" issued by the Financial Accounting Standards Board, the Company recorded the \$0.2 million of grant income as revenue.

Item 2. Management’s Discussion and Analysis of Financial Condition and Results of Operations

This quarterly report on Form 10-Q contains forward-looking statements within the meaning of Section 21E of the Securities and Exchange Act of 1934, as amended, that involve risks and uncertainties. All statements other than statements relating to historical matters including statements to the effect that we “believe”, “expect”, “anticipate”, “plan”, “target”, “intend” and similar expressions should be considered forward-looking statements. Our actual results could differ materially from those discussed in the forward-looking statements as a result of a number of important factors, including factors discussed in this section and elsewhere in this quarterly report on Form 10-Q, and the risks discussed in our other filings with the Securities and Exchange Commission. Readers are cautioned not to place undue reliance on these forward-looking statements, which reflect management’s analysis, judgment, belief or expectation only as the date hereof. We assume no obligation to update these forward-looking statements to reflect events or circumstance that arise after the date hereof.

As used in this quarterly report: (i) the terms “we”, “us”, “our”, “TapImmune” and the “Company” mean TapImmune Inc. and its wholly owned subsidiary, GeneMax Pharmaceuticals Inc. which wholly owns GeneMax Pharmaceuticals Canada Inc., unless the context otherwise requires; (ii) “SEC” refers to the Securities and Exchange Commission; (iii) “Securities Act” refers to the Securities Act of 1933, as amended; (iv) “Exchange Act” refers to the Securities Exchange Act of 1934, as amended; and (v) all dollar amounts refer to United States dollars unless otherwise indicated.

The following should be read in conjunction with our unaudited condensed consolidated interim financial statements and related notes for the three and six months ended June 30, 2018 included in this quarterly report, as well as our Annual Report on Form 10-K for the year ended December 31, 2017 filed on March 23, 2018.

Company Overview

We are a clinical-stage immuno-oncology company specializing in the development of innovative peptide and gene-based immunotherapeutics and vaccines for the treatment of cancer and metastatic disease. We are actively advancing our clinical programs by expanding our Folate Receptor Alpha program (TPIV200) for breast and ovarian cancers and our HER2/neu peptide antigen program (TPIV110) in Phase II clinical trials. In parallel, we are developing a proprietary DNA expression technology named PolyStart™ to improve the ability of the cellular immune system to recognize and destroy diseased cells. We plan to complete the pre-clinical development of our PolyStart™ vaccine and move it into the clinic as an integral component of a prime-boost vaccine methodology.

We are a leader in the development of immunotherapies for women’s cancers, with multiple Phase 2 and Phase 1b/2 clinical studies for the treatment of ovarian and breast cancer. The company’s peptide or nucleic acid-based immunotherapeutic products comprise one or multiple naturally processed epitopes (NPEs) designed to comprehensively stimulate a patient’s killer T-cells and helper T-cells, and to restore or further augment antigen presentation by using proprietary nucleic acid-based expression systems. Our technologies may be used as stand-alone medications or in combination with current treatment modalities.

Immuno-oncology has become the most rapidly growing sector in the pharmaceutical and biotech industry. The approval and success of checkpoint inhibitors, including ipilimumab and nivolumab (Yervoy® and Opdivo®, respectively, Bristol Myers Squibb), pembrolizumab (Keytruda®, Merck & Co.), avelumab (Bavencio®, EMD Serono), durvalumab (Imfinzi™, AstraZeneca), and atezolizumab (Tecentriq®, Genentech), together with the development and approval of CAR T-cell therapies sponsored by Novartis, Juno Therapeutics, and Kite Pharma, has provided much momentum in this sector. In addition, new evidence points to the increasing use of combination immunotherapies for the treatment of cancer. This has provided greater justification and opportunities for the successful development of T-cell vaccines in combination with other approaches.

On May 23, 2017, the U.S. Food and Drug Administration (“FDA”) approved expanded use of Keytruda for immunotherapy. The FDA granted accelerated approval to a treatment for patients whose cancers have a specific genetic feature (biomarker). This is the first time the FDA has approved a cancer treatment based on a common biomarker rather than the location in the body where the tumor originated.

We believe the strength of our science and development approaches is becoming more widely appreciated, particularly as our clinical program has now generated positive Phase I data using our two products in clinical programs in breast and ovarian cancers.

We continue to focus primarily on our Phase II triple-negative breast cancer trials using TPIV200 (which has achieved Fast Track and Orphan Drug Status), and are planning for the next Phase II HER2/neu breast cancer trial.

We expect to continue to prosecute our PolyStart™ patent filings and develop new PolyStart™ constructs to facilitate collaborative efforts in our current clinical indications. We will also evaluate those indications where others have already indicated interest in combination therapies.

We believe that these fundamental programs and corporate activities have positioned our company to capitalize on the acceptance of immunotherapy as a leading therapeutic strategy in cancer and infectious diseases.

We are continuously working on improving our product formulation and supply. TPIV200 and TPIV110 are both off-the-shelf, lyophilized products that only require reconstitution and mixing with GM-CSF at the clinical site before injection. We believe our off-the-shelf product may provide a significant competitive advantage over autologous products that require preparation for each patient. We also believe the investments we have made in the formulation work for both very stable products will result in commercially viable products consistent with typically high pharmaceutical profit margins.

The Phase I data produced for both TPIV200 and TPIV100 in collaboration with the Mayo Clinic are the driving force behind the high-value collaborations we have established and maintained with organizations such as Mayo Clinic, AstraZeneca, Memorial Sloan Kettering, and the U.S. Department of Defense. As we move forward into advanced Phase II studies, some of which incorporate collaborations with prestigious third-party organizations, we believe they will represent further independent validation of the potential of our technology.

Recent Developments

Merger Agreement

On May 15, 2018, we and our wholly owned subsidiary, (formed for purposes of the Merger) Timberwolf Merger Sub, Inc., a Delaware corporation (“Merger Sub”), and Marker Therapeutics, Inc., a Delaware corporation (“Marker”), entered into an Agreement and Plan of Merger and Reorganization (the “Merger Agreement”). Subject to the terms and conditions set forth in the Merger Agreement, MergerSub will merge with and into Marker (the “Merger”), with Marker surviving the Merger as a wholly owned subsidiary of TapImmune (the “Surviving Corporation”).

At the effective time of the Merger (the “Effective Time”), each outstanding share of Marker’s common stock will be converted into the right to receive (i) shares of TapImmune’s common stock, par value \$0.001 per share (“TapImmune Common Stock”), in an amount equal to the exchange ratio calculated pursuant to the Merger Agreement (the “Stock Exchange Ratio”), and (ii) warrants to purchase TapImmune Common Stock, in an amount equal to the exchange ratio calculated pursuant to the Merger Agreement (the “Warrant Exchange Ratio”).

The Merger Agreement contains customary representations, warranties and covenants made by us and Marker, including covenants relating to obtaining the requisite approvals of the stockholders of TapImmune and Marker, indemnification of directors and officers, and TapImmune’s and Marker’s conduct of their respective businesses between the date of signing of the Merger Agreement and the closing of the Merger.

The issuance of TapImmune Common Stock and other transactions contemplated by the Merger Agreement are subject to approval by TapImmune’s stockholders. The Merger is subject to other customary closing conditions, including, among other things, the accuracy of the representations and warranties, subject generally to an overall material adverse effect qualification, compliance by the parties with their respective covenants and no existence of any law or order preventing the Merger and related transactions.

The Merger Agreement contains certain termination rights for both us and Marker and provides for the payment of a termination fee of \$1,500,000 by us to Marker upon termination of the Merger Agreement under specified circumstances. In connection with a termination of the Merger Agreement under specified circumstances involving competing transactions, a willful, intentional and material breach

of the non-solicitation obligations by us, a change in our board of directors' recommendation of the Merger to the stockholders or other triggering events, we may be required to pay Marker reimbursement for certain fees and expenses up to \$500,000. In connection with a termination of the Merger Agreement under specified circumstances involving the failure of Marker stockholders to approve the Merger Agreement within 24 hours of signing the Merger Agreement, intentional and material breach of the non-solicitation obligations by Marker or other triggering events, Marker may be required to pay our reimbursement for certain fees and expenses up to \$500,000. The Merger Agreement may also be terminated by either us or Marker if the merger has not been consummated by September 15, 2018, subject to an extension of an additional 60 days if our proxy statement is being reviewed or commented upon by the SEC.

Following the Merger, the board of directors of the Company will consist of six directors and will be comprised of (i) three members designated by Marker, and (ii) three members designated by us.

Common Stock Purchase Agreement

On May 18, 2018, we closed on the sale of 1,300,000 shares of common stock for \$2.40 per share pursuant to a Common Stock Purchase Agreement with an existing accredited investor in a private placement under Rule 506 of Regulation D. Aggregate gross proceeds were approximately \$3.1 million.

Exercise of Warrants Held by Existing Institutional Investors

Also on May 18, 2018, we and certain existing institutional investors, who are holders of various warrants to purchase shares of TapImmune common stock, closed on Warrant Exercise Agreements in which TapImmune agreed to reduce the exercise price for a portion of the investors' previously purchased Series C, Series D, Series E and Series F warrants from \$6.00, \$9.00, \$15.00 and \$7.20, respectively per share to \$2.50 per share, provided that the investors exercise such warrants for cash immediately, which they did, for 782,506 shares and aggregate proceeds of approximately \$2.0 million. The shares of common stock underlying the exercised warrants are registered for resale under the Form S-3 Registration Statement (File no. 333-220538) declared effective by the SEC on December 29, 2017.

Private Placement

On June 8, 2018, in connection with, and in furtherance of, the Merger Agreement, we entered into Securities Purchase Agreements for a private placement with a select group of institutional and accredited investors (the "Purchasers"). Pursuant to the Securities Purchase Agreements, the Purchasers have agreed to purchase 17,500,000 shares of the Company's common stock, par value \$0.001, at \$4.00 per share, for gross offering proceeds of \$70 million. Each share of common stock will be issued with a warrant to purchase 0.75 additional shares of the Company's common stock at an exercise price of \$5.00 per share for an aggregate of 13,125,000 Warrants. In accordance with NASDAQ Stock Market Rule 5635, the completion of the issuance and sale of the common stock and Warrants pursuant to the Securities Purchase Agreements is subject to the approval of the private placement by the Company's stockholders. The Warrants will be immediately exercisable upon issuance at closing and will have a term of five years. Subject to obtaining shareholder approval of the private placement, the issuance and sale of the common stock and Warrants pursuant to the Securities Purchase Agreements is expected to close concurrently with our merger with Marker.

Intellectual Property Strategies

A key component to success is having a comprehensive patent strategy that continually updates and extends patent coverage for key products. It is highly unlikely that early patents will extend through ultimate product marketing, so extending patent life is an important strategy for ensuring product protection.

We have three active patent families that we are supporting:

1. Filed patents on the PolyStart™ expression vector (owned by TapImmune and filed in 2014: this IP covers the use with TAP). We announced the allowance of this patent in February 2016.
2. Filed patents on HER2/neu Class II and Class I antigens: exclusive license from Mayo Foundation; and
3. Filed patents on Folate Receptor Alpha antigens: exclusive license from Mayo Foundation.

While doing the studies on the path to successful product development takes time, we believe we have put together a team that can deliver the highest quality data in the least amount of time. The strength of our product pipeline and access to leading scientists and institutions gives us a unique opportunity to make a major contribution to global health care.

With respect to the broader market, a major driver and positive influence on our activities has been the emergence and general acceptance of the potential of a new generation of immunotherapies that promise to change the standard of care for cancer. The immunotherapy sector has been greatly stimulated by the approval of Provenge[®] for prostate cancer and Yervoy[™] for metastatic melanoma, progression of the areas of immune checkpoint inhibitors and adoptive T-cell therapy, as well as multiple other approaches reaching Phase II and Phase III status.

We believe that through our combination of technologies, we are well positioned to be a leading player in this emerging market. It is important to note that many of the late-stage immunotherapies currently in development do not represent competition to our programs, but instead offer synergistic opportunities to partner our antigen-based immunotherapeutics and the PolyStart[™] expression system. Thus, the use of naturally processed T-cell antigens discovered using samples derived from cancer patients, plus our PolyStart[™] expression technology to improve antigen presentation to T-cells, could not only produce an effective cancer vaccine in its own right, but could also enhance the efficacy of other immunotherapy approaches such as CAR-T and checkpoint inhibitors.

Products and Technology in Development-Clinical

TPIV200

Phase I Human Clinical Trials — Folate Alpha Breast and Ovarian Cancers — Mayo Clinic

Folate Receptor Alpha (“FRa”) is overexpressed in over 80% of breast cancers and in addition, over 90% of ovarian cancers, for which the only treatment options are surgery, radiation therapy and chemotherapy, leaving a very important and urgent clinical need for a new therapeutic. Time to recurrence is relatively short for ovarian cancer and survival prognosis is extremely poor after recurrence. In the United States alone, there are approximately 30,000 ovarian cancer patients and 40,000 triple-negative breast cancer patients newly diagnosed every year.

We have completed a 21-patient Phase I clinical trial for the FRa vaccine. Twenty-one patients with breast or ovarian cancer, who had undergone standard surgery and adjuvant treatment, were treated with one cycle of cyclophosphamide. Following this, patients were vaccinated intradermally with a mixture of the five FRa peptides adjuvanted with GM-CSF (now called TPIV200) on day one of a 28-day cycle for a maximum of six vaccination cycles. The vaccine was well-tolerated and safe and 20 out of 21 evaluable patients showed positive immune responses, providing a strong rationale for progressing to Phase II trials. Further, the data showed that 16 out of 16 patients in the observation stage still showed immune responses (Source: published online 15Mar2018; DOI: 10.1158/1078-0432.CCR-17-2499). We have developed a commercial quality lyophilized formulation of the peptides in a single vial for reconstitution and injection. Good Manufacturing Practice (“GMP”) manufacturing for the Phase II trials has been completed.

On July 27, 2015, we exercised our option agreement with Mayo Foundation with the signing of a worldwide exclusive license agreement to commercialize a proprietary Folate Receptor Alpha vaccine technology for all cancer indications. As part of this agreement, the IND from the Folate Receptor Alpha Phase I Trial was transferred from Mayo Foundation to us for amendment for Phase II Clinical Trials on our lead product.

On September 15, 2015, we announced that our collaborators at the Mayo Foundation had been awarded a grant of \$13.3 million from the U.S. Department of Defense. This grant, commencing September 15, 2015, covers the costs for a 280-patient Phase II Clinical Trial of Folate Receptor Alpha Vaccine in patients with triple-negative breast cancer. We are working closely with Mayo Foundation on this clinical trial by providing clinical and manufacturing expertise, as well as providing GMP vaccine formulations. These vaccine formulations are being developed for multiple Phase II clinical programs in triple-negative breast and ovarian cancer in combination with other immunotherapeutics. This Phase II study of TPIV200 in the treatment of triple-negative breast cancer began enrolling patients in late 2017.

On December 9, 2015, we announced that we received Orphan Drug Designation from the U.S. Food & Drug Administration's Office of Orphan Products Development ("OOPD") for our cancer vaccine TPIV200 in the treatment of ovarian cancer. The TPIV200 ovarian cancer clinical program will now receive benefits including tax credits on clinical research and seven-year market exclusivity upon receiving marketing approval. TPIV200 is a multi-epitope peptide vaccine that targets Folate Receptor Alpha which is overexpressed in multiple cancers including over 90% of ovarian cancer cells.

On February 3, 2016, we announced that the U.S. FDA designated the investigation of multiple-epitope FRA Vaccine (TPIV200) for maintenance therapy in subjects with platinum-sensitive advanced ovarian cancer who achieved stable disease or partial response following completion of standard-of-care chemotherapy, as a Fast Track Development Program. We began enrolling a Phase II study in this indication in 2017.

We have opened multiple clinical sites and have completed enrollment of patients in a Phase II trial of our Folate Receptor Alpha cancer vaccine, TPIV200, in the treatment of triple-negative breast cancer, one of the most difficult-to-treat cancers representing a clear unmet medical need. The open-label, 80-patient clinical trial is designed to evaluate dosing regimens, efficacy, and immune responses in women with triple-negative breast cancer and is fully enrolled. Key data from the trial is expected to be included in a future New Drug Application submission to the FDA for marketing clearance. This trial is sponsored and conducted by TapImmune.

On April 21, 2016, we announced our participation in an ovarian cancer study sponsored by Memorial Sloan Kettering Cancer Center in New York City in collaboration with AstraZeneca Pharmaceuticals in ovarian cancer patients who are not responsive to platinum, a commonly used chemotherapy for ovarian cancer. This study, a Phase II study of TPIV200 is currently enrolling ovarian cancer patients and is designed to look at the effects of combination therapy with AstraZeneca's checkpoint inhibitor durvalumab. The study will enroll 40 patients and is open-label. Because they are unresponsive to platinum, these patients have no real options left. If the combination therapy proves effective, we believe it would address a critical unmet need. TPIV200 has received Orphan Drug designation for use in the treatment of ovarian cancer. Although we have no business relationship with AstraZeneca, we are paying for one-half of the costs of the clinical study, in addition to providing our TPIV200 for the study.

A Company-sponsored Phase II study in platinum-sensitive ovarian cancer patients was initiated in 2017. This study is designed to evaluate TPIV200 with GM-CSF in a randomized, placebo-controlled fashion during the first maintenance period after primary surgery and chemotherapy. Patients at this stage of their treatment have the highest potential for an immunotherapeutic effect and no other approved treatment options. The study will enroll up to 120 patients over the next year and a half, with an interim analysis planned in the first half of 2019.

TPIV 100/110

Phase I Human Clinical Trials — HER2/neu + Breast Cancer — Mayo Clinic

A Phase I study using TPIV 100 (four HER2/neu peptides adjuvanted with GM-CSF) was completed in 2015. Final safety analysis on all the patients treated is complete and shown to be safe. In addition, 19 out of 20 evaluable patients showed robust T-cell immune responses to the antigens in the vaccine composition providing a solid case for advancement to Phase II in 2017. An additional secondary endpoint incorporated into this Phase I Trial will be a two-year follow on recording time to disease recurrence in the participating breast cancer patients.




For Phase I(b)/II studies, we plan to add a Class I peptide, licensed from the Mayo Clinic (April 16, 2012), to the four Class II peptides, producing TPIV 110 (five peptide product). Management believes that the combination of Class I and Class II HER2/neu antigens, gives us the leading HER2/neu vaccine platform. We are amending the IND to incorporate the fifth peptide in the Phase I(b)/II study. Discussions with the FDA have resulted in a pre-clinical development project that should allow us to file the amended IND in mid-2018.

Products and Technology-Pre-clinical

Polystart

On February 7, 2017, we announced that we received a Notice of Allowance from the U.S. Patent and Trademark Office of our patent application titled, “Chimeric nucleic acid molecules with non-AUG initiation sequences and uses thereof,” which represents our first patent on our Polystart program. We anticipate additional patent filings in connection with our research and development in this area. We plan to develop Polystart as both a stand-alone therapy and as a ‘boost strategy’ to be used synergistically with our peptide-based vaccines for breast and ovarian cancers.

TapImmune’s Clinical Program Pipeline

	Indication	Design	Preclin.	Phase 1	Phase 2	Sponsors/ Collaborators
Folate Receptor- α	Triple-Negative Breast Cancer	Dose & Boost Safety	Follow-up Phase 2			
	Ovarian Cancer (platinum-sensitive)	Time to progression	Enrolling Phase 2			
	Triple-Negative Breast Cancer	Time to progression	Enrolling Phase 2			Mayo Clinic / DoD Fully Funded
	Ovarian Cancer (platinum-resistant)	Combo with durvalumab (anti PD-L1)	Enrolling Phase 2			Memorial Sloan Kettering Cancer Center / AstraZeneca / TapImmune
HER2/neu	DCIS Breast Cancer	Preparing Phase 1B	Start in 2018			Mayo Clinic / DoD Fully Funded
	Her2/neu Breast Cancer	Preparing Phase 1/2	IND update			

Refer to the “Clinical Program Pipeline Status Updates” section below for latest updates on above clinical pipeline chart.

In addition to the exciting clinical developments, our peptide vaccine technology may be coupled with our recently developed in-house PolyStart™ nucleic acid-based technology, which is designed to make vaccines significantly more effective by producing four times the required peptides for the immune systems to recognize and act on.

Clinical Program Pipeline Status Updates

Completed GMP Manufacturing Scale Up and Second Clinical Lot of TPIV200; to Supply Additional Phase II Clinical Trials

We successfully completed a multi-gram production scale-up as well as GMP manufacturing of a second clinical lot of TPIV200. The vaccine supply will be used in the company’s ongoing Phase II study in platinum-sensitive ovarian cancer, as well as the planned 280-patient Phase II study sponsored by the Mayo Clinic and funded by the U.S. Department of Defense for treating triple-negative breast cancer. We also made various improvements to the vaccine manufacturing process, resulting in, what we believe to be, a superior formulation of the vaccine that is more amenable to large-scale manufacturing and commercialization.

Announcement of Publication of Clinical Trial Results for the TPIV200 Cancer Vaccine in Clinical Cancer Research

On March 15, 2018, we announced the publication of clinical data from a Phase I trial of TPIV200, our multi-epitope T-cell vaccine targeting Folate Receptor Alpha (“FRa”) in patients with ovarian and breast cancer. The results show that TPIV200 vaccination was well tolerated by all patients and over 90% developed robust and durable antigen-specific immune responses against FRa without regard for HLA type, which aligns with the intended mechanism of action of the vaccine.

Enrollment Completed: Phase II TPIV200 Trial in Triple-Negative Breast Cancer

We have completed enrollment and are now treating and following the patients in a Phase II trial of our Folate Receptor Alpha cancer vaccine, TPIV200, in the treatment of triple-negative breast cancer, one of the most difficult cancers to treat, representing a clear unmet medical need. The open-label, 80-patient clinical trial is designed to evaluate dosing regimens, pre-treatment, efficacy, and immune responses in women with triple-negative breast cancer. Key data from the trial is expected to be included in a future Biologics License Application submission to the FDA for marketing clearance. This trial is sponsored and conducted by TapImmune.

An independent Data Safety Monitoring Board (DSMB) reviews the safety every quarter in this ongoing Phase II study enrolling women with stage I-III triple-negative breast cancer who have completed initial surgery and chemo/radiation therapy. The randomized four-arm study is evaluating two doses of TPIV200 (a high dose and a low dose), each of which will be tested both with and without immune priming with cyclophosphamide prior to vaccination. Safety reviews are conducted quarterly and have shown no safety issues. The study completed enrollment at the end of 2017, with interim data expected in mid-2018. Details regarding this trial can be found at www.clinicaltrials.gov under identifier numbers NCT02593227 and FRV-002.

Enrolling Patients: Phase II TPIV200 Trial in Platinum-Sensitive Ovarian Cancer

We have opened multiple clinical sites and have enrolled half of the patients in a Phase II trial of TPIV200 for a 120-patient study on ovarian cancer patients who are responsive to platinum. We have received the FDA’s Fast Track designation to develop TPIV200 as a maintenance in women with Stage III and IV ovarian cancer who are in remission following their first round of successful platinum-based chemotherapy. This multi-center, double-blind efficacy study is sponsored and conducted by TapImmune. We expect to complete enrollment mid-2019. An interim analysis is planned based upon 50% patient progression, which we anticipate completing in the first half of 2019. Details regarding this trial can be found at www.clinicaltrials.gov under identifier numbers NCT02978222 and FRV-004. TPIV200 has also received Orphan Drug designation for use in the treatment of ovarian cancer.

Enrolling Patients: Phase II Mayo Clinic-U.S. DOD Trial of TPIV200 in Triple-Negative Breast Cancer

Patients are being enrolled in this Phase II study of TPIV200 in the treatment of triple-negative breast cancer, conducted by the Mayo Clinic and sponsored by the U.S. DOD. The 280-patient study is led by Dr. Keith Knutson of the Mayo Clinic in Jacksonville, Florida. Dr. Knutson is the inventor of the technology and a member of the Scientific Advisory Board at TapImmune. While we are supplying doses of TPIV200 for the trial and being reimbursed for the costs associated with manufacturing, the costs associated with conducting this study are being funded by a \$13.3 million grant made by the DOD to the Mayo Clinic.

Enrolling Patients: Phase II Trial at Memorial Sloan Kettering of TPIV200 in Platinum-Resistant Ovarian Cancer

A Phase II study of TPIV200 in ovarian cancer patients who are not responsive to platinum, a commonly used chemotherapy for ovarian cancer, being sponsored by Memorial Sloan Kettering Cancer Center (“MSKCC”) in collaboration with AstraZeneca and TapImmune, has begun enrollment for a 40-patient study. The open-label study is designed to evaluate a combination therapy which includes our TPIV200 T-cell vaccine and AstraZeneca’s checkpoint inhibitor, durvalumab. Because they are unresponsive to platinum, these patients have no real remaining options. If the combination therapy proves

effective, we believe it would address a critical unmet need. We successfully completed enrollment of the first safety cohort. This may enable MSKCC to increase the number of patients that can be enrolled and will subsequently increase the study's enrollment rate. Currently more than 50% of patients have been enrolled. An interim analysis is planned in the second half of 2018. Details regarding this trial can be found at www.clinicaltrials.gov under identifier numbers NCT02764333.

Open IND with FDA for TPIV110 in 2018: Phase II Protocol Now in Preparation

We have enhanced the formulation of our second cancer vaccine product, TPIV110 (the five-peptide product), following very strong safety and immune responses from a Phase I Mayo Clinic study using TPIV100 (the four-peptide product). TPIV110 targets HER2/neu+, which makes it applicable to breast, ovarian, and colorectal cancers. The enhanced TPIV product adds a fifth antigen that should produce an even more robust immune response activating both CD4+ (helper) and CD8+ (killer) T-cells. We have participated in a pre-Investigational New Drug ("pre-IND") meeting with the FDA and will file the amended IND containing the fifth peptide in mid-2018.

Mayo Clinic to Vaccinate Women With Ductal Carcinoma In Situ (DCIS) Using TapImmune TPIV100 HER2-targeted T-Cell Vaccine

On March 14, 2017, we announced that our partners at the Mayo Clinic received a grant from the U.S. Department of Defense to conduct a Phase IB study of our HER2-targeted vaccine candidate TPIV100 in an early form of breast cancer called DCIS. This is the second TapImmune vaccine to be tested in a fully funded study sponsored by the Mayo Clinic. Our collaborators at Mayo Clinic announced a \$3.8 million grant which we believe would fully fund this trial. If the study is successful, our vaccine may eventually augment or even replace standard surgery and chemotherapy, and potentially could become part of a routine immunization schedule for preventing breast cancer in healthy women. The study is expected to enroll 40-45 women with DCIS and begin to commence such enrollment in mid-2018.

Results of Operations

In this discussion of the Company's results of operations and financial condition, amounts, other than per-share amounts, have been rounded to the nearest thousand dollars.

Three Months Ended June 30, 2018 Compared to Three Months Ended June 30, 2017

We recorded a net loss of \$4.8 million or (\$0.41) basic and diluted per share during the three months ended June 30, 2018 compared to a net loss of \$1.9 million or (\$0.22) basic and diluted per share during the three months ended June 30, 2017. The change in net loss period over period was due to the following changes:

Revenue

Grant income

During the three months ended June 30, 2018, we received \$206,000 of a grant awarded to Mayo Foundation from the US Department of Defense for the Phase II Clinical Trial of TPIV200. The grant compensated us for clinical supplies manufactured by us and provided for the clinical study.

Operating Expenses

Operating expenses incurred during the three months ended June 30, 2018 were \$4.9 million compared to \$2.4 million in the prior period. Significant changes in operating expenses are outlined as follows:

- Research and development costs during the three months ended June 30, 2018 were \$1.8 million compared to \$1.2 million during the prior year period. The three months ended June 30, 2018 had increased expenses from the prior period relating to our clinical trials.

- General and administrative expenses increased to \$3.1 million during the three months ended June 30, 2018 from \$1.2 million during the prior year period. This was due to increased expenses relating to:
 - stock-based compensation for employees and outside consultants,
 - compensation expenses resulting from increased headcount,
 - expenses relating to the announced and proposed merger agreement,
 - investor relations expenses, and
 - increased legal, audit and other professional fees.

Other Expense

Change in fair value of warrant liabilities

The change in fair value of warrant liabilities for the three months ended June 30, 2018 was \$139,000 as compared to (\$8,000) for the three months ended June 30, 2017. This increase by \$139,000 for the three months ended June 30, 2018 is reflected by a corresponding expense in the condensed consolidated statement of operations.

Debt extinguishment gain

In 2003 we entered into a license agreement with a foreign based third-party for certain adenovirus technology. The license agreement was amended several times between inception and 2008 at which time it was amended and restated and had a fixed three-year term expiring in 2011. During such time, we did not pursue the technology and have not undertaken further work in the area covered by the technology license. Neither we nor the third-party took further actions under or pursuant to the license agreement. We carried a historical accrual of approximately \$0.5 million under the amended license agreement related to certain obligations provided for in the license agreement. The license agreement was governed by the laws of a foreign jurisdiction. We sought and obtained legal advice related to such accrued obligations under the expired license agreement. We relied upon a judicial conclusion, as opined upon by outside legal counsel in the applicable foreign jurisdiction, that a court in such foreign jurisdiction would grant relief releasing us from liability under the license agreement, and in accordance with Accounting Standards Codification 405 "Extinguishment of Liabilities", we recorded a debt extinguishment gain of \$0.5 million and reduced the liability amount owed to \$0 during the three months ended June 30, 2017.

Six Months Ended June 30, 2018 Compared to Six Months Ended June 30, 2017

We recorded a net loss of \$8.0 million or (\$0.71) basic and diluted per share during the six months ended June 30, 2018 compared to a net loss of \$4.3 million or (\$0.51) basic and diluted per share during the six months ended June 30, 2017. The change in net loss period over period was due to the following:

Revenue

Grant income

During the six months ended June 30, 2018, we received \$206,000 of a grant awarded to Mayo Foundation from the US Department of Defense for the Phase II Clinical Trial of TPIV200. The grant compensated us for clinical supplies manufactured by us and provided for the clinical study.

Operating Expenses

Operating expenses incurred during the six months ended June 30, 2018 were \$8.1 million compared to \$4.8 million in the prior period. Significant changes in operating expenses are outlined as follows:

- Research and development costs during the six months ended June 30, 2018 were \$3.4 million compared to \$2.2 million during the prior year period. The six months ended June 30, 2018 had increased expenses from the prior period relating to our clinical trials.

- General and administrative expenses increased to \$4.7 million during the six months ended June 30, 2018 from \$2.6 million during the prior year period. This was due to increased expenses relating to:
 - stock-based compensation for employees and outside consultants,
 - compensation expenses resulting from increased headcount,
 - expenses relating to the announced and proposed merger agreement,
 - investor relations expenses, and
 - increased legal, audit and other professional fees.

Other Expense

Change in fair value of warrant liabilities

The change in fair value of warrant liabilities for the six months ended June 30, 2018 was \$138,000 as compared to (\$5,000) for the six months ended June 30, 2017. This increase by \$138,000 for the six months ended June 30, 2018 is reflected by a corresponding expense in the condensed consolidated statement of operations.

Debt extinguishment gain

In 2003 we entered into a license agreement with a foreign based third-party for certain adenovirus technology. The license agreement was amended several times between inception and 2008 at which time it was amended and restated and had a fixed three-year term expiring in 2011. During such time, we did not pursue the technology and have not undertaken further work in the area covered by the technology license. Neither we nor the third-party took further actions under or pursuant to the license agreement. We carried a historical accrual of approximately \$0.5 million under the amended license agreement related to certain obligations provided for in the license agreement. The license agreement was governed by the laws of a foreign jurisdiction. We sought and obtained legal advice related to such accrued obligations under the expired license agreement. We relied upon a judicial conclusion, as opined upon by outside legal counsel in the applicable foreign jurisdiction, that a court in such foreign jurisdiction would grant relief releasing us from liability under the license agreement, and in accordance with Accounting Standards Codification 405 "Extinguishment of Liabilities", we recorded a debt extinguishment gain of \$0.5 million and reduced the liability amount owed to \$0 during the six months ended June 30, 2017.

Liquidity and Capital Resources

We have not generated any revenues since inception. We have financed our operations primarily through public and private offerings of our stock and debt including warrants and the exercises thereof.

The following table sets forth our cash and working capital as of June 30, 2018 and December 31, 2017:

	<u>June 30,</u> <u>2018</u>	<u>December 31,</u> <u>2017</u>
Cash	\$7,782,000	\$ 5,129,000
Working Capital	\$4,144,000	\$ 3,658,000

Cash Flows

The following table summarizes our cash flows for the six months ended June 30, 2018 and 2017:

	<u>Six Months Ended June 30,</u>	
	<u>2018</u>	<u>2017</u>
Net Cash provided by (used in):		
Operating activities	\$(4,746,000)	\$(3,936,000)
Financing activities	\$ 7,399,000	\$ 6,047,000
Net increase in cash	<u>\$ 2,653,000</u>	<u>\$ 2,111,000</u>

Financings

Our financing activities during the six months ended June 30, 2018 were as follows:

Common Stock Purchase Agreement

On May 14, 2018, the Company's largest stockholder Eastern Capital Limited entered into a Common Stock Purchase Agreement with the Company pursuant to which it purchased 1,300,000 shares of common stock at a price per share of \$2.40 providing gross proceeds to the Company of \$3.12 million.

Exercise and Repricing of Warrants Held by Existing Institutional Investors

On May 14, 2018, certain institutional holders of outstanding warrants entered into Warrant Exercise Agreements with the Company that provide for an amendment to the exercise price of the warrants being exercised at \$2.50 per share. Upon closing of the Warrant Exercise Agreements, such institutional holders immediately exercised warrants for 782,505 shares of common stock providing aggregate proceeds to the Company of approximately \$2.0 million.

The fair value relating to the modification of exercise prices on the repriced and exercised warrants was treated as deemed dividend on the statement of stockholders' equity of \$728,000.

Exercise of Stock Warrants

During June 2018, shareholders exercised warrants and acquired 782,800 shares of common stock providing aggregate proceeds to the Company of approximately \$2.3 million. 118,425 of the stock warrants exercised were exercised on a cashless basis, resulting in a cancellation of 83,130 stock warrants.

Exercise of Stock Options

In January 2018, a former officer exercised 10,416 shares of common stock pursuant to stock options providing proceeds of \$18,000.

Future Capital Requirements

As of June 30, 2018, we had working capital of \$4.1 million, compared to working capital of \$3.7 million as of December 31, 2017.

The discussion below excludes the closing of the proposed merger with Marker Therapeutics and the concurrent closing of the \$70 million private placement.

We expect our expenses to continue at a similar pace through 2018 primarily to continue funding our in-process Phase II clinical trials. Two of our clinical studies are expected to be funded by a total of \$17.1 million of grants made by the DOD to the Mayo Clinic. Our collaborators at Mayo Clinic announced a \$3.8 million grant which we expect would fully fund a Phase II clinical trial in DCIS that we had planned for our HER2/neu+ vaccine.

Our capital requirements for 2018 and beyond will depend on numerous factors, including the success of our research and development, the resources we devote to develop and support our technologies and our success in pursuing strategic licensing and funded product development collaborations with external partners as well as other strategic initiatives we may determine to pursue. Subject to our ability to raise additional capital, we expect to incur substantial expenditures to further develop our technologies including continued increases in costs related to research, nonclinical testing and clinical studies and trials, as well as costs associated with our capital raising efforts and being a public company.

We believe our existing cash will fund our operations into the first quarter of fiscal 2019. We will require substantial additional capital to conduct research and development, to fund nonclinical testing and Phase II clinical trials of our licensed, patented technologies, and to begin cultivating collaborative relationships for the Phase II and future Phase III clinical testing. Our plans could include seeking both equity and debt financing, alliances or other partnership agreements with entities interested in our technologies, or other business transactions that could generate sufficient resources to ensure continuation of our operations and research and development programs.

We expect to continue to seek additional funding for our operations. Any such required additional capital may not be available on reasonable terms, if at all. If we were unable to obtain additional financing, we may be required to reduce the scope of, delay or eliminate some or all of our planned clinical testing and research and development activities, which could harm our business. The sale of additional equity or debt securities may result in additional dilution to our shareholders. If we raise additional funds through the issuance of debt securities or preferred stock, these securities could have rights senior to those holders of our common stock and could contain covenants that could restrict our operations. We also will require additional capital beyond our currently forecasted amounts.

Because of the numerous risks and uncertainties associated with research, development and commercialization of our product candidates, we are unable to estimate the exact amounts of our future working capital requirements. Our future funding requirements will depend on many factors, including, but not limited to:

- the number and characteristics of the product candidates we pursue;
- the scope, progress, results and costs of researching and developing our product candidates, and conducting pre-clinical and clinical trials including the research and development expenditures we expect to make in connection with our license agreements with Mayo Foundation;
- the amount and timing of transaction expenses we incur in connection with the pending Marker merger agreement;
- strategic transactions we may undertake;
- the timing of, and the costs involved in, obtaining regulatory approvals for our product candidates;
- our ability to maintain current research and development licensing agreements and to establish new strategic partnerships and collaborations, licensing or other arrangements and the financial terms of such agreements;
- our ability to achieve our milestones under our licensing arrangements and the payment obligations we may have under such agreements;
- the costs involved in preparing, filing, prosecuting, maintaining, defending and enforcing patent claims, including litigation costs and the outcome of such litigation; and
- the timing, receipt and amount of sales of, or royalties on, our future products, if any.

We have based our estimates on assumptions that may prove to be wrong. We may need to obtain additional funds sooner or in greater amounts than we currently anticipate.

Various conditions outside of our control may detract from our ability to raise additional capital needed to execute our plan of operations, including overall market conditions in the international and local economies. We recognize that the United States economy has suffered through a period of uncertainty during which the capital markets have been impacted, and that there is no certainty that these levels will stabilize or reverse despite the optics of an improving economy. Any of these factors could have a material impact upon our ability to raise financing and, as a result, upon our short-term or long-term liquidity.

Critical Accounting Policies

The condensed consolidated financial statements are prepared in conformity with U.S. GAAP, which require the use of estimates, judgments and assumptions that affect the reported amounts of assets and liabilities, the disclosure of contingent liabilities at the date of the financial statements, and the reported amounts of expenses in the periods presented. We believe that the accounting estimates employed are appropriate and resulting balances are reasonable; however, due to inherent uncertainties in making estimates, actual results could differ from the original estimates, requiring adjustments to these balances in future periods. The critical accounting estimates that affect the consolidated financial statements and the judgments and assumptions used are consistent with those described under Part II, Item 7 of our Annual Report on Form 10-K for the year ended December 31, 2017.

Going Concern

The below excludes the closing of the proposed merger with Marker Therapeutics and the concurrent closing of the \$70 million private placement.

We have no sources of revenue to provide incoming cash flows to sustain our future operations. As outlined above, our ability to pursue our planned business activities is dependent upon our successful efforts to raise additional capital.

These factors raise substantial doubt regarding our ability to continue as a going concern. Our condensed consolidated financial statements have been prepared on a going concern basis, which implies that we will continue to realize our assets and discharge our liabilities in the normal course of business. Our financial statements do not include any adjustments to the recoverability and classification of recorded asset amounts and classification of liabilities that might be necessary should we be unable to continue as a going concern.

Off-Balance Sheet Arrangements

We have not entered into any off-balance sheet arrangements that have or are reasonably likely to have a current or future effect on our financial condition, changes of financial condition, revenues, expenses, results of operations, liquidity, capital expenditures or capital resources that are material to investors.

Item 3. Quantitative and Qualitative Disclosures About Market Risk

We are a smaller reporting company as defined by Rule 12b-2 of the Exchange Act and are not required to provide the information required under this item.

Item 4. Controls and Procedures**(a) Evaluation of Disclosure Controls and Procedures**

Our management, with the participation of our Chief Executive Officer and our Chief Financial Officer, has evaluated the effectiveness of our disclosure controls and procedures (as such term is defined in Rules 13a-15(e) and 15d-15(e) under the Exchange Act) as of the end of the period covered by this report. Disclosure controls and procedures include, without limitation, controls and procedures designed to ensure that information required to be disclosed in the reports we file or submit under the Exchange Act is accumulated and communicated to management, including our Chief Executive Officer and Chief Financial Officer, as appropriate, to allow timely decisions regarding required disclosure. Based on such evaluation, our Chief Executive Officer and our Chief Financial Officer have concluded that, as of the end of the period covered by this report, our disclosure controls and procedures are not effective in recording, processing, summarizing and reporting, on a timely basis, information required to be disclosed by us in the reports that we file or submit under the Exchange Act.

It should be noted that any system of controls is based in part upon certain assumptions designed to obtain reasonable (and not absolute) assurance as to its effectiveness, and there can be no assurance that any design will succeed in achieving its stated goals.

(b) Changes in Internal Control Over Financial Reporting

There have been no changes in our internal control over financial reporting during the three months ended June 30, 2018 that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

PART II — OTHER INFORMATION**Item 1. Legal Proceedings**

Management is not aware of any material legal proceedings and there are no pending material procedures that would affect the property of the Company. Management is not aware of any legal proceedings contemplated by any government authority or any other party involving the Company. As of the date of this Quarterly Report, no director, officer or affiliate is (i) a party adverse to us in any legal proceeding, or (ii) has an adverse interest to us in any legal proceeding.

Item 1A. Risk Factors

In addition to the risk factors set forth in Part I — Item 1A — “Risk Factors” of our Annual Report on Form 10-K for the fiscal year ended December 31, 2017 (the “10-K”) and Part II — Item 1A — “Risk Factors” of our Quarterly Report on Form 10-Q for the quarterly period ended March 31, 2018 (the “10-Q”), investors should consider the following risk factors arising from our intention to combine with Marker Therapeutics, Inc. (“Marker”) through a “merger of equals” business combination (the “merger”, and the Company and Marker following completion of the merger, the “Combined Company”) as well as the other risk factors set forth in the preliminary proxy statement we filed with the SEC on July 13, 2018 in connection with the proposed merger, which also include risks related to Marker, Marker’s product candidates, governmental regulation of Marker and Marker’s intellectual property which may affect the Combined Company upon completion of the Merger. On May 15, 2018, we entered into a definitive merger agreement (the “merger agreement”) with Marker. Pursuant to the terms of the merger agreement, Marker will be merged with and into a wholly-owned acquisition subsidiary of the Company formed by the Company in connection with the merger. Upon completion of the merger, the separate existence of the acquisition subsidiary will cease and Marker will be a wholly owned subsidiary of the Company and we will continue as the Combined Company in the merger and renamed Marker Therapeutics, Inc. Following a vote of the Company’s Stockholders, the merger is expected to close in the third or fourth quarter of 2018, although we cannot assure you that the transaction will close during that time or at all. The risk factors below related to the proposed merger with Marker and the Combined Company upon completion of the merger should be read in conjunction with the risk factors set forth in the 10-K and 10-Q and the other information contained in this report as our business, financial condition or results of operations could be adversely affected if any of these risks actually occur.

RISKS RELATED TO THE PROPOSED MERGER WITH MARKER

If the proposed merger with Marker is not consummated, TapImmune’s business could suffer materially and TapImmune’s stock price could decline.

The consummation of the proposed merger with Marker is subject to a number of closing conditions, including the approval of the stock issuance pursuant to the merger agreement by TapImmune stockholders, and other customary closing conditions.

If the proposed merger is not consummated, TapImmune may be subject to a number of material risks, and its business and stock price could be adversely affected, as follows:

- TapImmune has incurred, and expects to continue to incur, significant expenses related to the proposed merger with Marker even if the merger is not consummated.
- The market price of TapImmune common stock may decline to the extent that the current market price reflects a market assumption that the proposed merger will be completed.
- The merger agreement contains covenants relating to TapImmune’s solicitation of competing acquisition proposals and the conduct of TapImmune’s business between the date of signing the merger agreement and the closing of the merger. As a result, significant business decisions and transactions before the closing of the merger require the consent of Marker. Accordingly, TapImmune may be unable to pursue business opportunities that would otherwise be in its best

interest as a standalone company. If the merger agreement is terminated after TapImmune has invested significant time and resources in the merger process, TapImmune will have a limited ability to obtain additional financing to fund its operations on a standalone basis.

- TapImmune could be obligated to pay Marker a \$1.5 million termination fee in connection with the termination of the merger agreement, depending on the reason for the termination. Additionally, in connection with the termination of the merger agreement, depending on the reason for the termination, TapImmune may be obligated to pay up to \$500,000 of out-of-pocket costs incurred by Marker in connection with the transactions and any legal fees incurred by Marker in connection with preparation of the proxy statement.
- TapImmune would need to raise additional capital independently of the proposed merger to continue to operate its business on a stand-alone basis and this capital might not be available on acceptable terms, if at all.
- The merger agreement places certain restrictions on the conduct of our business, which may have delayed or prevented us from undertaking business opportunities that, absent the merger agreement, we may have pursued.
- Litigation related to any failure to complete the merger or related to any enforcement proceeding commenced against us to perform our obligations under the merger agreement.
- TapImmune's prospective customers, collaborators and other business partners and investors in general may view the failure to consummate the merger as a poor reflection on TapImmune's business or prospects.

In addition, if the merger agreement is terminated and TapImmune's board of directors determines to seek another business combination, it may not be able to find a third party willing to provide equivalent or more attractive consideration than the consideration to be provided by each party in the merger. In such circumstances, TapImmune's board of directors may elect to, among other things, divest all or a portion of TapImmune's business, or take the steps necessary to liquidate all of TapImmune's business and assets, and in either such case, the consideration that TapImmune receives may be less attractive than the consideration to be received by TapImmune pursuant to the merger agreement.

Any delay in completing the merger may reduce or eliminate the benefits expected to be achieved thereunder.

The merger is subject to a number of conditions beyond our control that may prevent, delay or otherwise materially adversely affect its completion. We cannot predict whether and when these conditions will be satisfied. Any delay in completing the merger could cause the Combined Company not to realize some or all of the operational and other benefits that we expect to achieve if the merger is successfully completed within its expected time frame.

Completion of the merger is subject to a number of conditions, which, if not satisfied or waived, may result in termination of the merger agreement.

The merger agreement contains a number of conditions to completion of the merger, including, among others:

- receipt of our requisite shareholder approval;
- the absence of any temporary restraining order, preliminary or permanent injunction or other judgment, order or decree issued by any court of competent jurisdiction or other legal restraint that prohibits or makes illegal the completion of the merger;
- the absence of a stop order or proceedings threatened or initiated by the SEC for that purpose;
- the accuracy of the representations and warranties made in the merger agreement by us, subject to certain materiality thresholds, and each party having performed, in all material respects, all obligations required to be performed by it under the merger agreement at or prior to the effective time of the merger; and

- the non-occurrence of any fact, circumstance, development, event, change, occurrence or effect that, individually or in the aggregate, has had or would reasonably be expected to have a material adverse effect on either party.

Many of the conditions to completion of the merger are not within our control, and we cannot predict when or if these conditions will be satisfied. If any of these conditions are not satisfied or waived prior to the outside deadline for consummating the merger, it is possible that the merger agreement may be terminated. The original deadline for consummating the merger is September 15, 2018, but it will be extended for 60 days to November 14, 2018 since the Company has received notice that the proxy statement is being reviewed by the SEC. Although we have agreed in the merger agreement to use reasonable best efforts, subject to certain limitations, to complete the merger in the most expeditious manner practicable, these and other conditions to completion of the merger may fail to be satisfied.

The merger will cause dilution to the Combined Company, which may negatively affect the market price of common stock of the Combined Company.

In connection with the completion of the merger, we expect to issue approximately 13.7 million shares of our common stock exclusive of any warrants that are expected to be issued and we expect to issue 17.5 million shares in connection with the concurrent private placement, exclusive of any warrants expected to be issued in connection therewith. The issuance of these new shares of our common stock could have the effect of depressing the market price of common stock of the Combined Company.

The announcement and pendency of the proposed merger with Marker could adversely affect TapImmune's business.

The announcement and pendency of the proposed merger could adversely affect TapImmune's business for a number of different reasons, many of which are not within TapImmune's control, including as follows:

- Some of TapImmune's suppliers, distributors, collaborators, and other business partners may seek to change or terminate their relationships with TapImmune as a result of the proposed merger;
- As a result of the proposed merger, current and prospective employees could experience uncertainty about their future roles within the Combined Company. This uncertainty may adversely affect TapImmune's ability to retain its key employees, who may seek other employment opportunities; and
- TapImmune's management team may be distracted from day-to-day operations as a result of the proposed merger.

Some of TapImmune's and Marker's officers and directors have conflicts of interest that may influence them to support or approve the merger.

Certain officers and directors of TapImmune and Marker participate in arrangements that provide them with interests in the merger that are different from yours, including, among others, to the extent applicable, their continued service as an officer or director of the Combined Company, severance benefits, the acceleration of restricted stock and stock option vesting and continued indemnification. These interests, among others, may influence such officers and directors of TapImmune and Marker to support or approve the merger.

The merger may be completed even though material adverse changes may result from the announcement of the merger, industry-wide changes and other causes.

In general, either party can refuse to complete the merger if there is a material adverse change affecting the other party between May 15, 2018, the date of the merger agreement, and the closing. However, some types of changes do not permit either party to refuse to complete the merger, even if such changes would have a material adverse effect on TapImmune or Marker, to the extent they resulted from the following (unless, in some cases, they have a materially disproportionate effect on TapImmune or Marker, as the case may be):

- any rejection by a governmental body of a registration or filing by TapImmune or Marker relating to TapImmune or Marker’s intellectual property rights;
- any change in the cash position of TapImmune or Marker that results from operations in the ordinary course of business;
- conditions generally affecting the industries in which TapImmune or Marker and its subsidiaries participate or the U.S. or global economy or capital markets as a whole, to the extent that such conditions do not have a disproportionate impact on Marker and its subsidiaries, taken as a whole;
- any failure by TapImmune or Marker or any of its subsidiaries to meet internal projections or forecasts on or after the date of the merger agreement, provided that any such effect, change, event, circumstance, or development causing or contributing to any such failure to meet projections or forecasts may constitute a material adverse effect of TapImmune or Marker and may be taken into account in determining whether a material adverse effect has occurred;
- the execution, delivery, announcement, or performance of obligations under the merger agreement or the announcement, pendency or anticipated consummation of the merger;
- any natural disaster or any acts of terrorism, sabotage, military action, or war or any escalation or worsening thereof; or
- any changes after the date of the merger agreement in U.S. GAAP or applicable laws.

If adverse changes occur but TapImmune and Marker must still complete the merger, the Combined Company’s stock price may suffer.

During the pendency of the merger, TapImmune may not be able to enter into a business combination with another party because of restrictions in the merger agreement.

Covenants in the merger agreement impede the ability of TapImmune or Marker to make acquisitions or complete other transactions that are not in the ordinary course of business pending completion of the merger. As a result, if the merger is not completed, the parties may be at a disadvantage to their competitors. In addition, while the merger agreement is in effect and subject to limited exceptions, each party is prohibited from soliciting, initiating, encouraging or taking actions designed to facilitate any inquiries or the making of any proposal or offer that could lead to the entering into certain extraordinary transactions with any third party, such as a sale of assets, an acquisition of TapImmune common stock, a tender offer for TapImmune common stock or a merger or other business combination outside the ordinary course of business, which transactions could be favorable to such party’s stockholders.

The market price of the Combined Company’s common stock may decline as a result of the merger.

The market price of the Combined Company’s common stock may decline as a result of the merger for a number of reasons including if:

- the Combined Company does not achieve the perceived benefits of the merger as rapidly or to the extent anticipated by financial or industry analysts;
- the effect of the merger on the Combined Company’s business and prospects is not consistent with the expectations of financial or industry analysts; or
- investors react negatively to the effect on the Combined Company’s business and prospects from the merger.

TapImmune stockholders may not realize a benefit from the merger commensurate with the ownership dilution they will experience in connection with the merger.

If the Combined Company is unable to realize the strategic and financial benefits currently anticipated from the merger, TapImmune stockholders will have experienced substantial dilution of their ownership interest without receiving any commensurate benefit. Significant management attention and resources will be required to integrate and operate the Combined Company. Delays in this process could adversely affect

the Combined Company's business, financial results, financial condition and stock price following the merger. Even if the Combined Company is able to integrate the business operations successfully, there can be no assurance that this integration will result in the realization of the full benefits of synergies, innovation, and operational efficiencies that may be possible from this integration and that these benefits will be achieved within a reasonable period of time.

Because the lack of a public market for the Marker shares makes it difficult to value Marker, TapImmune may pay consideration in the merger that is greater than the fair market value of the Marker shares.

The outstanding capital stock of Marker is privately held and is not traded in any public market. The lack of a public market makes it extremely difficult to determine the fair market value of Marker. Since the percentage of TapImmune's equity to be issued to Marker stockholders was determined based on negotiations between the parties, it is possible that the value of the TapImmune common stock to be issued in connection with the merger will be greater than the fair market value of Marker.

The Combined Company will incur significant transaction costs as a result of the merger, including investment banking, legal, and accounting fees. In addition, the Combined Company will incur significant consolidation and integration expenses which cannot be accurately estimated at this time. These costs could include the planned relocation of certain operations from Jacksonville, Florida to Houston, Texas as well as other transition and start-up costs associated with the clinical programs to be conducted by the Combined Company after the merger. Actual transaction costs may substantially exceed TapImmune's estimates and may have an adverse effect on the Combined Company's financial condition and operating results.

Marker's principal stockholders, executive officers, and directors will own a significant percentage of TapImmune common stock and will be able to exert significant control over matters submitted to the stockholders for approval.

Immediately following the effective time of the merger between Marker and TapImmune, and after taking into account the issuance of shares in the private placement transaction occurring concurrently with the merger, Marker's stockholders are expected to own, on a fully-diluted basis (assuming the exercise of all outstanding warrants and options), approximately 27.5%, and TapImmune's current stockholders are expected to own approximately 27.5%, of TapImmune common stock.

After the merger with TapImmune, Marker's stockholders will beneficially own a significant percentage of TapImmune common stock. This significant concentration of share ownership may adversely affect the trading price for TapImmune common stock because investors often perceive disadvantages in owning stock in companies with large stockholders. These stockholders, if they acted together, could significantly influence all matters requiring approval by the stockholders following the merger, including the election of directors and the approval of mergers or other business combination transactions. The interests of these stockholders may not always coincide with the interests of other stockholders.

The merger may limit the use of the NOL carryforwards and other tax attributes of both TapImmune and Marker to offset future taxable income of the Combined Company.

Under Section 382 of the Internal Revenue Code of 1986, as amended, or the Code, if a corporation undergoes an "ownership change" (generally defined as a greater than 50% change (by value) in its equity ownership over a three-year period), the corporation's ability to use its pre-change net operating loss, which is referred to as NOL, carryforwards, and other pre-change tax attributes (such as research tax credits) to offset its post-change income may be limited.

As of December 31, 2017, TapImmune had federal NOL carryforwards of approximately \$41.7 million and state NOL carryforwards of approximately \$21.9 million. The merger may result in an ownership change for TapImmune under Section 382 of the Code and may limit the use of the NOL carryforwards and other tax attributes of TapImmune to offset future taxable income of the Combined Company for both federal and state income tax purposes. These tax attributes are subject to expiration at various times in the future to the extent that they have not been applied to offset the taxable income of the Combined Company. These limitations may affect the Combined Company's effective tax rate in the future.

RISKS RELATED TO THE COMBINED COMPANY UPON COMPLETION OF MERGER***Risks Related to the Combined Company's Business and Product Candidates***

The Combined Company's future success will be highly dependent upon its key personnel, and its ability to attract, retain, and motivate additional qualified personnel.

The Combined Company's ability to compete in the highly competitive biotechnology and pharmaceutical industries depends upon its ability to attract and retain highly qualified managerial, scientific, and medical personnel. The Combined Company will be highly dependent on its management, scientific, and medical personnel, including Peter Hoang, its President and Chief Executive Officer, Ann Leen, Ph.D., who is expected to be its Chief Scientific Officer following completion of the merger, and Juan Vera, M.D., who is expected to be its Chief Development Officer following completion of the merger. The loss of the services of any of the Combined Company's executive officers, other key employees, and other scientific and medical advisors, and the Combined Company's inability to find suitable replacements could result in delays in product development and harm to the Combined Company's business. In particular, Dr. Leen is the key person who has produced Marker's MultiTAA T cell therapy-based product. A priority of the Combined Company will be to quickly train additional qualified scientific and medical personnel in the Combined Company to ensure the ability to maintain business continuity. Any delays in training such personnel could delay the development, manufacture, and clinical trials of the Combined Company's product candidates.

The Combined Company also anticipates hiring additional scientific and medical personnel to grow its business. The Combined Company will conduct operations in Houston, Texas. This region is headquarters to many other biopharmaceutical companies and many academic and research institutions. Competition for skilled personnel in the combined companies market is intense and may limit its ability to hire and retain highly qualified personnel on acceptable terms or at all. If the Combined Company is not successful in attracting and retaining highly qualified personnel, it may not be able to successfully implement its business strategy.

The Combined Company's strategic relationship with Baylor College of Medicine, or BCM, is dependent, in part, upon its relationship with key medical and scientific personnel and advisors.

Marker's therapy has been developed through its collaboration with the Center for Cell and Gene Therapy at BCM, founded by Malcom K. Brenner, M.D., Ph.D., a recognized pioneer in immuno-oncology. In addition to Dr. Brenner, Marker's founders include, Ann Leen, Ph.D., Juan Vera, M.D., Helen Heslop, M.D., DSc (Hon) and Cliona Rooney, Ph.D., who have significant experience in this field and are all affiliated with the Center for Cell and Gene Therapy at BCM. Dr. Leen and Dr. Vera are expected to serve as the Combined Company's Chief Scientific Officer and Chief Development Officer, respectively, following completion of the merger. In addition, Dr. Brenner, Dr. Heslop and Dr. Rooney have agreed to join the Combined Company's newly formed Scientific Advisory Board that will become effective in conjunction with the merger.

The Combined Company's strategic relationship with BCM will be dependent, in part, on its relationship with these key employees and advisors, and in particular Dr. Leen and Dr. Vera, who are also employed with the Center for Cell and Gene Therapy at BCM. If the Combined Company loses Dr. Leen or Dr. Vera, or if either leaves their position at BCM, the Combined Company's relationship with BCM may deteriorate, and its business could be harmed.

The Combined Company, and certain of its key medical and scientific personnel, will need additional agreements in place with BCM to expand its development, manufacture, and clinical trial efforts.

Although the Combined Company will have an exclusive license agreement with BCM under which Marker received a worldwide, exclusive license to BCM's rights in and to three patent families to develop and commercialize the MultiTAA product candidates, the Combined Company will need to enter into additional agreements with BCM with respect to (i) a strategic alliance to advance pre-clinical research, early stage clinical trials, and Phase II clinical trials with respect to the Combined Company's product candidates, as well as continued access to its clinical data, (ii) sponsored research for investigators within the

Center for Cell and Gene Therapy at BCM, and (iii) product manufacturing and support, including personnel and space at the institution for the foreseeable future. Any delays in entering into new strategic agreements with BCM related to the Combined Company's product candidates could delay the development, manufacture, and clinical trials of its product candidates.

The multiple roles of certain of the Combined Company's officers and directors could limit their time and availability to the Combined Company, and create, or appear to create, conflicts of interest.

After completion of the merger, Dr. Leen and Dr. Vera will continue to be employees of BCM, and will be contractually obligated to spend a significant portion of their time for BCM. In addition, Dr. Leen and Dr. Vera are co-founders and members of ViraCyte, and perform services from time to time for ViraCyte LLC, or ViraCyte. ViraCyte is owned by the same principal stockholder group as Marker and has technology which is being developed under a license agreement with BCM by the same research group at BCM. More specifically, ViraCyte is a clinical stage biopharmaceutical company, which is investigating and developing virus-specific T cell therapy technology for the prevention and/or treatment of viral infections. Accordingly, Dr. Leen and Dr. Vera may have other commitments that would, at times, limit their availability to the Combined Company, and other research being conducted by Dr. Leen and Dr. Vera may, at times, receive higher priority than research on the Combined Company's programs, which may, in turn, delay the development or commercialization of the Combined Company's product candidates.

In addition, John Wilson is a member, director and officer of ViraCyte and will be a director of the Combined Company after the consummation of the merger. Dr. Leen and Dr. Vera are also co-founders and members of ViraCyte, and perform services for ViraCyte from time to time, and Dr. Vera will be a director of the Combined Company after the consummation of the merger. All of these individuals will have certain fiduciary or other obligations to the Combined Company after the consummation of the merger and certain fiduciary or other obligations to ViraCyte and, in the case of Dr. Leen and Dr. Vera, to BCM. Such multiple obligations may in the future result in a conflict of interest with respect to presenting other potential business opportunities to the Combined Company or to ViraCyte. A conflict of interest also may arise concerning the timing of the parties' planned and ongoing clinical trials, investigational new drug application filings and the parties' opportunities for marketing their respective product candidates. In addition, they may be faced with decisions that could have different implications for the Combined Company than for ViraCyte. Consequently, there is no assurance that these members of the Combined Company's board and management would always act in the Combined Company's best interests in all situations should a conflict arise.

Product development involves a lengthy and expensive process with an uncertain outcome, and results of earlier pre-clinical and clinical trials may not be predictive of future clinical trial results.

Clinical testing is expensive and generally takes many years to complete, and the outcome is inherently uncertain. Failure can occur at any time during the clinical trial process. The results of pre-clinical testing and early clinical trials of the Combined Company's product candidates may not be predictive of the results of larger, later-stage controlled clinical trials. Product candidates that have shown promising results in early-stage clinical trials may still suffer significant setbacks in subsequent clinical trials. Marker's clinical trials to date have been conducted on a small number of patients in a single clinical site for a limited number of indications. The Combined Company will have to conduct larger, well-controlled trials in its proposed indications at multiple sites to verify the results obtained to date and to support any regulatory submissions for further clinical development of Marker's product candidates. TapImmune's and Marker's assumptions related to Marker's products, such as with respect to lack of toxicity and manufacturing cost estimates, are based on early limited clinical trials and current manufacturing process at BCM and may prove to be incorrect. In addition, the initial estimates of the clinical cost of development may prove to be inadequate, particularly if clinical trial timing or outcome is different than predicted or regulatory agencies require further testing before approval. A number of companies in the biopharmaceutical industry have suffered significant setbacks in advanced clinical trials due to lack of efficacy or adverse safety profiles despite promising results in earlier, smaller clinical trials. Moreover, clinical data are often susceptible to varying interpretations and analyses. The Combined Company does not know whether any Phase II, Phase III, or other clinical trials it may conduct will demonstrate consistent or adequate efficacy and safety with respect to the proposed indication for use sufficient to receive regulatory approval or market its product candidates.

The Combined Company may not be able to expand its manufacturing processes to other third-party manufacturing facilities or successfully create its own manufacturing infrastructure for supply of its requirements of product candidates for use in clinical trials and for commercial sale.

The Combined Company will not own any facility that may be used as its clinical-scale manufacturing and processing facility following the merger. The Combined Company anticipates it will initially rely solely on the cGMP manufacturing facility within BCM for the manufacturing of its product candidates. If the cGMP manufacturing facility of BCM, which does manufacturing for itself and other parties, experiences capacity constraints, disruptions, or delays in manufacturing the Combined Company's products, the Combined Company's planned clinical trials and necessary manufacturing capabilities will be disrupted or delayed, which will adversely affect the Combined Company's ability to conduct and further develop its business as currently planned. Further, the cGMP manufacturing facility is most likely too small to conduct the pivotal clinical studies being planned by the Combined Company, so the Combined Company will need to develop its own cGMP manufacturing capacity that will be adequate for such clinical trials.

In 2019, the Combined Company currently intends to begin developing additional cGMP manufacturing capacity of its own that would be capable of supporting its manufacturing needs with respect to its clinical trials, particularly with respect to pivotal studies. TapImmune and Marker expect that the Combined Company's manufacturing strategy will involve the use of one or more Contract Manufacturing Organizations, or CMOs, or the Combined Company will establish its own capabilities and infrastructure, including a manufacturing facility. Establishment of the Combined Company's own manufacturing facility is subject to many risks. For example, the establishment of a cell-therapy manufacturing facility is a complex endeavor requiring knowledgeable individuals. Creating an internal manufacturing infrastructure will rely upon building out a complex facility and finding personnel with an appropriate background and training to staff and operate the facility. Should it be unable to find these individuals, the Combined Company may need to rely on external contractors or train additional personnel to fill needed roles. There are a small number of individuals with experience in cell therapy, and the competition for these individuals is high.

The Combined Company would expect that development of its own manufacturing facility could provide it with enhanced control of material supply for both clinical trials and the commercial market, enable the more rapid implementation of process changes, and allow for better long-term margins. However, neither TapImmune nor Marker has any experience as a company in developing a manufacturing facility and may never be successful in developing the Combined Company's own manufacturing facility or capability. The Combined Company may establish multiple manufacturing facilities as it expands its commercial footprint to multiple geographies, which may lead to regulatory delays or prove costly. Even if the Combined Company is successful, its manufacturing capabilities could be affected by cost-overruns, unexpected delays, equipment failures, labor shortages, natural disasters, power failures, transportation difficulties and numerous other factors that could prevent the Combined Company from realizing the intended benefits of its manufacturing strategy and have a material adverse effect on the Combined Company's clinical development and/or commercialization plans.

In addition, the manufacturing process for any products that the Combined Company may develop is subject to the U.S. Food and Drug Administration, or FDA, and foreign regulatory authority approval process, and the Combined Company will need to contract with manufacturers who can meet all applicable FDA and foreign regulatory authority requirements on an ongoing basis. If the Combined Company or its CMOs are unable to reliably produce products to specifications acceptable to the FDA, or other regulatory authorities, the Combined Company may not obtain or maintain the approvals it needs to commercialize such products. Even if the Combined Company obtains regulatory approval for any of its product candidates, there is no assurance that either the Combined Company or its CMOs will be able to manufacture the approved product to specifications acceptable to the FDA or other regulatory authorities, to produce it in sufficient quantities to meet the requirements for the potential launch of the product, or to meet potential future demand. Any of these challenges could delay completion of clinical trials, require bridging clinical trials or the repetition of one or more clinical trials, increase clinical trial costs, delay approval of the Combined Company's product candidate, impair commercialization efforts, increase its cost of goods, and have an adverse effect on its clinical development and/or commercialization plans.

Regardless of whether the Combined Company engages additional CMOs to manufacture its products or establishes its own manufacturing facility, in order to transfer the Combined Company's manufacturing from or expand its manufacturing capabilities beyond BCM pursuant to its development plans, whether through additional third parties or by developing its own manufacturing capabilities, the Combined Company will need access to the Standard Operating Procedures and the specific Batch Production Records that are used to manufacture the product candidates. If BCM fails to transfer Marker's manufacturing processes, or impedes the Combined Company's ability to transfer the manufacturing processes of its products to the Combined Company or third-party manufacturers, the Combined Company's planned clinical trials and additional necessary manufacturing capabilities will be delayed, which will adversely affect the Combined Company's ability to conduct and further develop its business as currently planned.

The Combined Company will be dependent on third-party vendors to design, build, maintain and support its manufacturing and cell processing facilities.

As a result of the Combined Company's strategy to outsource its manufacturing, it will rely very heavily on BCM and other third-party manufacturers to perform the Combined Company's manufacturing of Marker's products for its clinical trials. Marker also licenses a significant portion of its technology from others and, at this time, does not own any intellectual properties or technologies. The Combined Company intends to rely on its contract manufacturers to produce large quantities of materials needed for clinical trials and potential product commercialization. Third-party manufacturers may not be able to meet the Combined Company's needs concerning timing, quantity, or quality. If the Combined Company is unable to contract for a sufficient supply of needed materials on acceptable terms, or if it should encounter delays or difficulties in its relationships with manufacturers, its clinical testing may be delayed, thereby delaying the submission of products for regulatory approval or the market introduction and subsequent sales of its products. Any such delay may lower the Combined Company's revenues and potential profitability.

If any third party breaches or terminates its agreement with the Combined Company, or fails to conduct its activities in a timely manner, the commercialization of the Combined Company's products under development could be slowed down or blocked completely. It is possible that third parties relied upon by the Combined Company will change their strategic focus, pursue alternative technologies, or develop alternative products, either on their own or in collaboration with others, as a means for developing treatments for the diseases targeted by the Combined Company's collaborative programs, or for other reasons. The effectiveness of these third parties in marketing their own products may also affect the revenues and earnings of the Combined Company.

The Combined Company intends to continue to enter into additional third-party agreements in the future. However, the Combined Company may not be able to negotiate any additional agreements successfully. Even if established, these relationships may not be scientifically or commercially successful.

The Combined Company's manufacturing process is reliant upon the specialized equipment, and other specialty materials, which may not be available to the Combined Company on acceptable terms or at all. For some of this equipment and materials, the Combined Company relies or may rely on sole source vendors or a limited number of vendors, which could impair its ability to manufacture and supply its products.

The Combined Company will depend on a limited number of vendors for supply of certain materials and equipment used in the manufacture of its product candidates. For example, the Combined Company will purchase equipment and reagents critical for the manufacture of its product candidates from Wilson Wolf Manufacturing Corporation (a company controlled by a Marker stockholder, John Wilson, who will become a director of the Combined Company), JPT Peptide Technologies and other suppliers. Some of the Combined Company's suppliers may not have the capacity to support commercial products manufactured under cGMP by biopharmaceutical firms or may otherwise be ill-equipped to support the Combined Company's needs. The Combined Company also may not have supply contracts with many of these suppliers, and may not be able to obtain supply contracts with them on acceptable terms or at all. Accordingly, the Combined Company may not be able to obtain key materials and equipment to support clinical or commercial manufacturing.

For some of this equipment and materials, the Combined Company will rely, and may in the future rely, on sole-source vendors or a limited number of vendors. An inability to continue to source product from any of these suppliers, which could be due to regulatory actions or requirements affecting the supplier,

adverse financial, or other strategic developments experienced by a supplier, labor disputes or shortages, unexpected demands, or quality issues, could adversely affect the Combined Company's ability to satisfy demand for its product candidates, which could adversely and materially affect the Combined Company's operating results or its ability to conduct clinical trials, either of which could significantly harm its business.

As the Combined Company continues to develop and scale its manufacturing process, it may need to obtain rights to and supplies of specific materials and equipment to be used as part of that process. For example, Marker's manufacturing process is based, in part, upon the G-Rex[®] cell culture device manufactured by Wilson Wolf Manufacturing Corporation, which is used by many cell therapy developers, both in commercial and academic settings. The Combined Company will not own any exclusive rights to the G-Rex[®] that could be used to prevent third parties from developing similar and competing processes. The Combined Company may not be able to obtain rights to such materials and equipment on commercially reasonable terms, or at all, and if the Combined Company is unable to alter its process in a commercially viable manner to avoid the use of such materials or find a suitable substitute, it would have a material adverse effect on its business.

The Combined Company may enter into one or more transactions with entities controlled by one of its directors, which could pose a conflict of interest.

John Wilson, currently a significant stockholder in Marker and who will be a director of the Combined Company, is also CEO and co-founder of Wilson Wolf Manufacturing Corporation, which is the sole source vendor that provides Marker with the G-Rex[®] cell culture device for the large-scale production of T cells used in Marker's manufacturing process. Marker does not currently have a supply contract with Wilson Wolf Manufacturing for the G-Rex[®]. The Combined Company plans to negotiate a supply contract with Wilson Wolf Manufacturing for the purchase of G-Rex[®] devices. The Combined Company also plans to engage Wilson Wolf Manufacturing in discussions to customize the G-Rex[®] further to optimally match the Combined Company's manufacturing requirements, as well as to develop a scalability plan to drive efficiencies for a commercial product. There may be conflicts of interest between the Combined Company and Wilson Wolf Manufacturing. There can be no assurance that Wilson Wolf Manufacturing will agree to enter into any contract with the Combined Company, or that the terms of any such agreements will be in the best interests of the Combined Company, or will have terms no less favorable to the Combined Company than could have been obtained from unaffiliated third parties.

The future results of the Combined Company will suffer if the Combined Company does not effectively manage its expanded operations following the completion of the merger.

Following the completion of the merger, the size of the business of the Combined Company will increase significantly beyond the current size of either us or Marker. The Combined Company's future success depends, in part, upon its ability to manage this expanded business, which will pose substantial challenges for management, including challenges related to the management and monitoring of new operations and associated increased costs, complexity and allocation of financial resources. If the Combined Company is unsuccessful in managing its integrated operations, or if it does not realize the expected operating efficiencies, cost savings and other benefits currently anticipated from the merger, the operations and financial condition of the Combined Company could be adversely affected and the Combined Company may not be able to take advantage of business development opportunities.

The Combined Company may be unable to fully realize the competitive synergies that are projected to be achieved through the combination of our services and Marker's offerings.

Part of the strategic rationale for the merger is the opportunity for the Combined Company to potentially drive additional value through the utilization by us of Marker's capabilities. However, the utilization of Marker's offerings is still evolving and subject to a number of risks and uncertainties, including the following:

- government regulatory agencies and legislative bodies, including agencies and legislatures regulating the use of clinical trials, may impose new conditions or restrictions which affect the Combined Company's use of Marker's data;

- implementation of any operational plans to develop new cancer treatments from the Marker offerings will likely be complex and challenging to achieve, and may be subject to delays and cost overruns and there is no assurance that the research and development can be carried out effectively;
- clinical research is a complex and evolving area, and creating effective approaches to drive more effective and efficient research outcomes is difficult and challenging; and
- third parties outside of our control (including suppliers and regulators) may impose restrictions or conditions which affect the projected timing and successful achievement of our benefits from the transaction.

The Combined Company is unable to predict the extent to which these factors will inhibit its business plans and any one of them could result in decreased or delays in post-closing performance by the Combined Company.

We may fail to realize all of the anticipated benefits of the merger or those benefits may take longer to realize than expected. The Combined Company may also encounter significant difficulties in integrating the two businesses.

Our ability to realize the anticipated benefits of the transaction will depend, to a large extent, on the Combined Company's ability to integrate the two businesses. The combination of two independent businesses is a complex, costly and time-consuming process. As a result, we and Marker will be required to devote significant management attention and resources to integrating the business practices and operations. The integration process may disrupt the businesses and, if implemented ineffectively, would restrict the realization of the full-expected benefits. The failure to meet the challenges involved in integrating the two businesses and to realize the anticipated benefits of the transaction could cause an interruption of or a loss of momentum in, the activities of the Combined Company and could adversely affect the results of operations of the Combined Company.

In addition, the overall integration of the businesses may result in material unanticipated problems, expenses, liabilities, competitive responses, and diversion of management's attention. The difficulties of combining the operations of the companies include, among others:

- difficulties in achieving successful development of Marker's offerings, business opportunities and growth prospects from the combination;
- difficulties in the integration of the companies' businesses;
- difficulties in managing the expanded operations of a significantly larger and more complex company;
- challenges in attracting and retaining key personnel; and
- potential unknown liabilities and unforeseen increased expenses or delays associated with the merger.

Many of these factors will be outside of the control of the Combined Company and any one of them could result in increased costs, and diversion of management's time and energy, which could materially impact the business, financial condition and results of operations of the Combined Company. In addition, even if the operations of the businesses are integrated successfully, the full benefits of the transaction may not be realized, including growth opportunities that are expected. These benefits may not be achieved within the anticipated time frame, or at all. Further, additional unanticipated costs may be incurred in the integration of the businesses of ours and Marker. All of these factors could negatively impact or decrease or delay the expected benefits of the transaction and negatively impact the price of the Combined Company's shares. As a result, there is no assurance that the combination of us and Marker will result in the realization of the full benefits anticipated from the merger.

Risks Related to Combined Company's Financial Condition and Need for Additional Capital

Management will have broad discretion as to the use of the proceeds from the private placement transaction, and the Combined Company may not use the proceeds effectively.

The Combined Company's management will have broad discretion as to the application of the net proceeds from the private placement transaction for general corporate purposes and working capital to

advance the development of the Combined Company's product candidates. Management may spend the proceeds in ways that do not necessarily improve its operating results or enhance the value of its common stock.

The Combined Company will require additional financing before it can generate any revenue from operations.

After consummation of the merger and the private placement transaction, the Combined Company anticipates having sufficient cash on hand to fund its operations for at least the next thirty months. The product candidates of the Combined Company, however, remain in the early stages of development and the Combined Company anticipates it will be years before it is able to generate any revenue from operations. Accordingly, the Combined Company will need additional debt or equity financing in the future to execute its business plan, complete its future clinical trials, and to add manufacturing, sales, marketing, and customer support personnel in the future to advance the commercialization of its products. The Combined Company will operate in a market that makes its prospects difficult to evaluate, and achievement of positive cash flow from operations will depend upon revenue resulting from the successful development of its product candidates, which depend upon regulatory clearance.

In the future, if the Combined Company fails to satisfy the continued listing standards of NASDAQ, it may not be able to sell shares of its common stock to raise additional capital. In addition, future market conditions may limit the ability of the Combined Company to raise capital on favorable terms, or at all, and the terms of any public or private offerings of debt or equity securities likely would be significantly dilutive to existing stockholders at such time. There is no guarantee that the Combined Company will be able to obtain any of the additional debt or equity financing that will be required after completion of the merger and the private placement transaction on commercially reasonable terms or at all. If the Combined Company fails to obtain the necessary debt or equity financing when needed, it may not be able to execute its planned development and commercialization efforts, which would have a material adverse effect on the Combined Company's growth strategy, the results of its operations and financial condition and stock price. If the Combined Company is unable to generate sufficient capital from operations or raise additional funds, it may need to consider other alternative actions, including one or more of the following:

- delay, scale-back, or eliminate research and development of some or all of the Combined Company's product candidates;
- license third parties to develop and commercialize products or technologies that TapImmune would otherwise seek to develop and commercialize ourselves;
- attempt to sell the company;
- cease operations; or
- declare bankruptcy.

The occurrence of any of the foregoing events would have a material adverse effect on the Combined Company's growth strategy, the results of its operations and financial condition, and stock price, and there can be no assurance that it would be able to continue as a going concern.

The issuance of additional equity securities may negatively impact the trading price of the Combined Company's common stock.

TapImmune has issued equity securities in the past, will issue equity securities in the merger and private placement transaction, and expects to continue to issue equity securities to finance the activities of the Combined Company in the future. In addition, outstanding options and warrants to purchase its common stock may be exercised, and additional options and warrants may be issued, resulting in the issuance of additional shares of common stock. The issuance by the Combined Company of additional equity securities, including the shares of common stock issuable upon exercise of the warrants issued by TapImmune in the private placement transaction, would result in dilution to the Combined Company's stockholders, and even the perception that such an issuance may occur could have a negative impact on the trading price of the Combined Company's common stock.

The Combined Company will have a significant number of outstanding warrants and options, and future sales of the shares obtained upon exercise of these options or warrants could adversely affect the market price of the Combined Company's common stock.

Upon completion of the merger and private placement transaction, the Combined Company will have outstanding warrants to purchase up to 23,657,372 shares of its common stock at a weighted average exercise price of \$4.74 per share, and options exercisable for an aggregate of 439,467 shares of common stock at a weighted average exercise price of \$6.77 per share, in each case calculated as if the merger had been consummated as of June 29, 2018. TapImmune has committed to register the resale of all the shares issuable upon exercise of these warrants, and they will be freely tradable by the exercising party upon issuance. Upon such registration, the holders may sell these shares in the public markets from time to time, without limitations on the timing, amount, or method of sale. If the Combined Company's stock price rises, the holders may exercise their warrants and options and sell a large number of shares. This could cause the market price of the Combined Company's common stock to decline and cause existing stockholders to experience significant further dilution.

Item 2. Unregistered Sales of Equity Securities and Use of Proceeds

- (a) We issued the following unrestricted securities during the period covered by this report to the named individual pursuant to exemptions under the Securities Act of 1933 including Section 4(2):

On April 10, 2018, we issued 15,000 shares of common stock to Omnicor Media, LLC pursuant to a vendor agreement.

On April 13, 2018, we issued 33,334 shares of common stock to Collision Capital, LLC pursuant to a vendor agreement.

On May 18, 2018, we issued 12,849 shares of common stock to Richard Kenney, pursuant to a consulting services agreement.

On May 31, 2018, we issued 50,000 shares of common stock to Caro Partners, LLC pursuant to a vendor agreement.

On June 18, 2018, we issued 11,600 shares of common stock to Corporate Profile pursuant to a vendor agreement.

Item 3. Defaults Upon Senior Securities

None.

Item 4. Mine Safety Disclosure

Not applicable.

Item 5. Other Information

Not applicable.

Item 6. Exhibits

The following exhibits are included with this Quarterly Report on Form 10-Q:

Exhibit number	Exhibit description	Incorporated by Reference			Filing date	Filed herewith
		Form	File no.	Exhibit		
2.1	Agreement and Plan of Merger and Reorganization, dated as of May 15, 2018, by and among TapImmune Inc., Timberwolf Merger Sub, Inc. and Marker Therapeutics, Inc.	8-K	000-27239	2.1	5/15/18	
3.1	Articles of Incorporation as Amended	10-Q	001-37939	3.1	11/4/16	
3.2	Certificate of Change to Articles of Incorporation (reverse split)	8-K	000-27239	3.1	9/15/16	
3.3	Amended and Restated Bylaws	8-K	000-27239	3.1	7/15/16	
10.1	Common Stock Purchase Agreement	10-Q	001-37939	10.1	5/15/18	
10.2	Warrant Exercise Agreement	10-Q	001-37939	10.2	5/15/18	
10.3	Warrant Exercise Agreement	10-Q	001-37939	10.3	5/15/18	
10.4	Warrant Exercise Agreement	10-Q	001-37939	10.4	5/15/18	
10.5	Warrant Exercise Agreement	10-Q	001-37939	10.5	5/15/18	
31.1	Certification of Chief Executive Officer Pursuant to Rule 13a-14(a) or 15d-14(a) of the Securities Exchange Act of 1933, as amended.					X
31.2	Certification of Chief Financial Officer and Chief Accounting Officer Pursuant to Rule 13a-14(a) or 15d-14(a) of the Securities Exchange Act of 1933, as amended.					X
32.1	Certification of Chief Executive Officer Pursuant to Rule 13a-14(a) or 15d-14(a) of the Securities Exchange Act of 1933, as amended.					X
32.2	Certification of Chief Financial Officer and Chief Principal Accounting Officer pursuant to 18 U.S.C. 1350 as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.					X

Exhibit 101

101.INS — XBRL Instance Document
101.SCH — XBRL Taxonomy Extension Schema Document
101.CAL — XBRL Taxonomy Extension Calculation Linkbase Document
101.DEF — XBRL Taxonomy Extension Definition Linkbase Document
101.LAB — XBRL Taxonomy Extension Label Linkbase Document
101.PRE — XBRL Taxonomy Extension Presentation Linkbase Document

SIGNATURES

In accordance with the requirements of the Exchange Act, the registrant caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

Date: August 9, 2018

TAPIMMUNE INC.

/s/ Peter L. Hoang

Peter L. Hoang
President and Chief Executive Officer and Principal Executive Officer

/s/ Michael J. Loiacono

Michael J. Loiacono
Chief Financial Officer and Principal Accounting Officer

CERTIFICATION

I, Peter L. Hoang, certify that:

- (1) I have reviewed this Report on Form 10-Q for the quarterly period ended June 30, 2018 of TapImmune Inc.;
- (2) Based on my knowledge, this Report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this Report;
- (3) Based on my knowledge, the financial statements, and other financial information included in this Report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this Report;
- (4) The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
 - (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - (b) Designed such internal control over financial reporting or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurances regarding the reliability of financial reporting in the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - (d) Disclosed in this Report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
- (5) The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of the internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
 - (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
 - (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: August 9, 2018

/s/ Peter L. Hoang

By: **Peter L. Hoang**

Title: Chief Executive Officer

CERTIFICATION

I, Michael J. Loiacono, certify that:

- (1) I have reviewed this Report on Form 10-Q for the quarterly period ended June 30, 2018 of TapImmune Inc.;
- (2) Based on my knowledge, this Report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this Report;
- (3) Based on my knowledge, the financial statements, and other financial information included in this Report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this Report;
- (4) The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
 - (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - (b) Designed such internal control over financial reporting or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurances regarding the reliability of financial reporting in the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - (d) Disclosed in this Report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
- (5) The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of the internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
 - (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
 - (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: August 9, 2018

/s/ Michael J. Loiacono

By: **Michael J. Loiacono**
Title: Chief Financial Officer and Chief Accounting Officer

CERTIFICATION OF PRINCIPAL EXECUTIVE OFFICER

**PURSUANT TO
18 U.S.C. SECTION 1350,
AS ADOPTED PURSUANT TO
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002**

The undersigned, Peter L. Hoang, the Chief Executive Officer of TapImmune Inc. (the “Company”) hereby certifies, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that the Report on Form 10-Q of TapImmune Inc., for the quarterly period ended June 30, 2018, fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934, and that the information contained in the Report on Form 10-Q fairly presents in all material respects the financial condition and results of operations of TapImmune Inc.

Date: August 9, 2018

/s/ Peter L. Hoang

Peter L. Hoang
Chief Executive Officer

CERTIFICATION OF PRINCIPAL ACCOUNTING OFFICER**PURSUANT TO
18 U.S.C. SECTION 1350,
AS ADOPTED PURSUANT TO
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002**

The undersigned, Michael J. Loiacono, the Chief Financial Officer and Chief Accounting Officer of TapImmune Inc. (the “Company”) hereby certifies, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that the Report on Form 10-Q of TapImmune Inc., for the quarterly period ended June 30, 2018, fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934, and that the information contained in the Report on Form 10-Q fairly presents in all material respects the financial condition and results of operations of TapImmune Inc.

Date: August 9, 2018

/s/ Michael J. Loiacono

Michael J. Loiacono

Chief Financial Officer and Chief Accounting Officer

Nomura Securities International, Inc.

Worldwide Plaza, 309 West 49th Street, New York, NY 10019-7316

Tel (212) 667-9000 Fax (212) 667-9100

May 14, 2018

The Board of Directors

TapImmune Inc.

5 West Forsyth Street, Suite 200

Jacksonville, FL 32202

Ladies and Gentlemen:

We understand that TapImmune Inc., a Nevada corporation (the “Company”), is considering a transaction whereby TapImmune Merger Sub, Inc., a Delaware corporation and wholly owned subsidiary of the Company (“Sub”), will effect a merger with Marker Therapeutics, Inc., a Delaware corporation (“Marker”). Pursuant to the terms of an Agreement and Plan of Merger and Reorganization, draft dated as of May 12, 2018 (the “Agreement”), among the Company, Sub and Marker:

(i) Sub will be merged with and into Marker and the separate existence of Sub shall cease and Marker will continue its existence under the General Corporation Law of the State of Delaware as the surviving corporation in such merger and become a wholly-owned subsidiary of the Company (the “Transaction”), and

(ii) each share of the common stock, par value \$0.0001 per share, of Marker (“Marker Common Stock”) outstanding immediately prior to the effective time of the Transaction (excluding (x) shares of Marker Common Stock or Maverick Preferred Stock (as defined in the Agreement) held as treasury stock or held or owned by Marker, the Company or Sub and (y) Dissenting Shares (as defined in the Agreement)) shall be converted solely into the right to receive:

(A) a number of shares of the common stock, par value \$0.001 per share, of the Company (“Company Common Stock”) equal to the ratio (calculated to eight decimals) that is equal to the quotient obtained by dividing (1) the total number of shares of Company Common Stock outstanding immediately prior to the effective time of the Transaction (which shall include any shares of Company Common Stock issued pursuant to any bridge financing completed prior to such time, but excluding any shares of Company Common Stock issued in a sale by the Company of Company Common Stock to third-party investors to be consummated contemporaneously with the consummation of the Transaction with aggregate gross cash proceeds to the Company of at least \$25 million (“Timberwolf Closing Financing”)) by (2) the total number of shares of Marker Common Stock outstanding immediately prior to the effective time of the Transaction (the “Stock Exchange Ratio”), and

(B) a number of warrants (the “Merger Warrants”), the terms of which are described in the Agreement, to purchase shares of Company Common Stock equal to the ratio (calculated to eight decimals) that is equal to the quotient obtained by dividing (1) the total number of outstanding warrants to purchase Company Common Stock set forth in the schedules to the Agreement and options to purchase shares of Company Common stock issued or granted by the Company, in each case, outstanding immediately prior to the effective time of the Transaction by (2) the total number of shares of Marker Common Stock outstanding immediately prior to the effective time of the Transaction (the “Warrant Exchange Ratio”)

in each case, subject to certain adjustments, limitations and procedures set forth in the Agreement, as to which adjustments, limitations and procedures we express no opinion (the Stock Exchange Ratio and the Warrant Exchange Ratio, taken together, the “Combined Consideration”). We also note that the Agreement provides for Additional Merger Warrants (as defined in the Agreement) to be issuable to the Marker stockholders in connection with the Transaction upon the occurrence of certain future events set forth in the Agreement, but we offer no opinion as to the Additional Merger Warrants in any respect, including the terms thereof or the likelihood of the occurrence of such future events, and the Additional Merger Warrants shall not be deemed to be included in the Combined Consideration for purposes of this opinion. The terms and conditions of the Transaction are more fully set forth in the Agreement.

You have requested our opinion as to the fairness, from a financial point of view, to the Company of the Combined Consideration provided for in the Transaction.

Nomura Securities International, Inc. (“Nomura”) has acted as exclusive financial advisor to the Company in connection with the Transaction and will receive a fee for its services, a portion of which is payable in connection with this opinion and a significant portion of which is contingent upon consummation of the Transaction. In addition, the Company has also agreed to reimburse Nomura’s expenses and indemnify Nomura against certain liabilities arising out of its engagement. Also, in connection with the Transaction, Nomura is acting as the Company’s exclusive placement agent in connection with the private placement of securities by the Company directly to potential investors and will receive a customary fee in connection therewith. Nomura and its affiliates are engaged in financial services, including, without limitation, investment banking, financial advisory, corporate finance, retail banking, securities and derivatives trading, asset finance, merchant banking and asset management. In the ordinary course of business, Nomura, its successors and affiliates may hold or trade, for their own accounts and the accounts of their customers, the equity, debt or other securities or financial instruments (including bank loans and other obligations) of the Company or any currency or commodity that may be involved in the Transaction and, accordingly, may at any time hold a long or short position in such securities, instruments, currencies or commodities (or in related derivatives).

Although this opinion was approved by our Fairness Opinion Committee, our opinion does not address the relative merits of the Transaction or any related transaction as compared to other business strategies or transactions that might be available to the Company or the Company’s underlying business decision to effect the Transaction or any related transaction. Our opinion does not constitute a recommendation to any shareholder as to how such shareholder should vote or act with respect to the Transaction or any related transaction. At your direction, we have not been asked to, nor do we, offer any opinion as to (i) the terms, other than the Combined Consideration to the extent expressly specified herein, of the Agreement or any related documents or the form of the Transaction or any related transaction or (ii) the Timberwolf Closing Financing in any respect, including the impact, terms and form of and any documents relating to the Timberwolf Closing Financing and the ability of the Timberwolf Closing Financing to be consummated. We express no opinion as to what the value of Company Common Stock will be when issued pursuant to the Transaction or any related transaction or the price at which Company Common Stock will trade at any time. In addition, we express no opinion as to any adjustment, or the effect of any adjustment, to the amount of the exercise price of any warrant or option issued by the Company. In rendering this opinion, we have assumed, with your consent, that (A) the final executed form of the Agreement will not differ in any material respect from the draft that we have reviewed, (B) the Company and Marker will comply with all material terms of the Agreement and (C) the Transaction will be consummated in accordance with the terms of the Agreement without any adverse waiver or amendment of any material term or condition thereof. We have also assumed that all governmental, regulatory or other consents and approvals necessary for the consummation of the Transaction will be obtained without any adverse effect on the Company, Marker or the expected benefits of the Transaction in any way meaningful to our analysis. We are not legal, regulatory, tax or accounting experts and have relied on the assessments made by the Company and its advisors with respect to such issues. We have not been authorized to solicit and have not solicited indications of interest in a business combination with the Company from any other party.

In arriving at our opinion, we have, among other things: (i) reviewed certain publicly available business and financial information relating to the Company and Marker; (ii) reviewed certain internal financial information and other data relating to the businesses and financial prospects of the Company that were provided to us by the management of the Company and not publicly available, including financial forecasts and estimates prepared by management of the Company; (iii) reviewed certain internal financial information and other data relating to the businesses and financial prospects of Marker that were provided to us by the Company and not publicly available, including financial forecasts and estimates prepared by the management of the Company after consultation with management of Marker; (iv) conducted discussions with members of the senior managements of the Company and Marker concerning the businesses and financial prospects of the Company and Marker; (v) performed a discounted cash flow analysis of each of the Company and Marker in which we analyzed their respective future cash flows (taking into account certain adjustments and on an unadjusted basis) using financial forecasts and estimates prepared by the management of the Company; (vi) reviewed publicly available financial and stock market data and product pipelines with respect to certain other companies we believe to be comparable to the Company or Marker; (vii) compared the financial terms of the Transaction with the publicly available financial terms of certain other transactions we believe to be generally comparable to the Transaction; (viii) reviewed current and historical market prices of Company Common Stock; (ix) considered certain pro forma effects of the Transaction on the Company's financial statements; (x) reviewed the Agreement; (xi) considered the Company's historical capital raising efforts and (xii) conducted such other financial studies, analyses and investigations, and considered such other information, as we deemed necessary or appropriate.

In connection with our review, with your consent, we have not independently verified, nor have we assumed any responsibility for independent verification of, any of the information provided to or reviewed by us for the purpose of this opinion and have, with your consent, relied on such information being complete and accurate in all material respects. In addition, with your consent, we have not made any independent evaluation or appraisal of any of the assets or liabilities (contingent or otherwise) of the Company or Marker, nor have we been furnished with any such evaluation or appraisal. We also have not evaluated, and do not express an opinion as to the impact of the Transaction on, the solvency, viability or fair value of the Company or Marker under any state, federal or foreign law relating to bankruptcy, insolvency or similar matters or the ability of the Company or Marker to pay its obligations when they become due. With respect to the financial forecasts, estimates and pro forma effects referred to above, we have assumed, at your direction, that they have been reasonably prepared on a basis reflecting the best currently available estimates and judgments of the management of each of the Company and Marker as to the future financial performance of such company and such pro forma effects. In addition, we have assumed with your approval that the financial forecasts and estimates referred to above will be achieved at the times and in the amounts projected and that each of the Company and Marker will raise additional capital during the periods covered by such forecasts and estimates. We have also assumed, with your consent, that the Company's ability to raise capital will be enhanced once the Transaction is consummated. We also have assumed, with your consent, that the Transaction will qualify for U.S. federal income tax purposes as a reorganization within the meaning of Section 368(a) of the Internal Revenue Code of 1986, as amended. We express no opinion regarding the fairness of the amount or nature of the compensation to any of the Company's officers, directors or employees, or class of such persons, relative to the compensation to the public shareholders of the Company, in connection with the Transaction. Our opinion is necessarily based on economic, monetary, market and other conditions as in effect on, and the information available to us as of, the date hereof. It should be understood that subsequent developments may affect this opinion and we do not have any obligation to update, revise or reaffirm this opinion.

Based upon and subject to the foregoing, it is our opinion that, as of the date hereof, the Combined Consideration provided for in the Transaction is fair, from a financial point of view, to the Company.

This opinion is provided solely for the benefit of the Board of Directors of the Company in connection with, and for the purpose of, its evaluation of the Transaction.

Very truly yours,

A handwritten signature in black ink that reads "Nomura Securities International, Inc." in a cursive, slightly stylized font.

Nomura Securities International, Inc.

VOTING AND LOCK-UP AGREEMENT

This Voting and Lock-Up Agreement (this “**Agreement**”) is made and entered into as of May 15, 2018, between Marker Therapeutics, Inc., a Delaware corporation (the “**Marker**”), and the Persons whose names appear on the signature pages hereto (each such Person, a “**Stockholder**” and, collectively, the “**Stockholders**”). Capitalized terms used but not otherwise defined herein shall have the respective meanings ascribed to such terms in the Merger Agreement (as defined below).

RECITALS

A. On May 15, 2018, Marker, TapImmune Inc., a Nevada corporation (“**TapImmune**”) and Timberwolf Merger Sub, Inc., a Delaware corporation and wholly owned subsidiary of TapImmune (“**Merger Sub**”), entered into an Agreement and Plan of Merger and Reorganization (the “**Merger Agreement**”), pursuant to which Merger Sub will merge with and into Marker with Marker surviving as a wholly owned subsidiary of TapImmune, all upon the terms and subject to the conditions set forth therein.

B. The Stockholders agree to enter into this Agreement with respect to shares of Voting Stock (as defined below) held by the Stockholders.

C. As of the date hereof, the Stockholders are the owners of, and have either sole or shared voting power over, such number of shares of Voting Stock as are indicated opposite each of their names on Schedule A attached hereto.

D. Each of Marker and the Stockholders have determined that it is in its best interests to enter into this Agreement.

NOW, THEREFORE, in consideration of the foregoing and the respective representations, warranties, covenants and agreements set forth below and for other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the parties hereto, intending to be legally bound, do hereby agree as follows:

1. **Definitions.** When used in this Agreement, except as set forth in the Preamble hereto, the following terms in all of their tenses, cases and correlative forms shall have the meanings assigned to them in this Section 1 or elsewhere in this Agreement.

“**Affiliate**” of any particular Person means any other Person controlling, controlled by or under common control with such Person. The term “**control**” means possession, directly or indirectly, of the power to direct or cause the direction of the management and policies of such Person, whether through the ownership of voting securities, by contract or otherwise. The terms “**controlled**”, “**controlling**”, and “**under common control with**” have meanings correlative thereto. Notwithstanding the foregoing, no Stockholder shall be deemed an Affiliate of Marker or TapImmune, and vice versa.

“**Beneficially Own**”, “**Beneficial Owner**” or “**Beneficial Ownership**” shall have the meaning (or the correlative meaning, as applicable) set forth in Rule 13d-3 and Rule 13d-5(b)(i) of the rules and regulations promulgated under the Securities Exchange Act.

“**Expiration Time**” shall mean the earlier to occur of (a) the Closing Date and (b) such date and time as the Merger Agreement shall be terminated in accordance with its terms.

“**Hedging Activities**” means any forward sale, hedging or similar transaction involving any Voting Stock, including any transaction by which any economic risks and/or rewards or ownership of, or voting rights with respect to, any such Voting Stock are Transferred or affected.

“**Joinder Agreement**” means a joinder to this Agreement reasonably satisfactory to the Board of Directors of Marker evidencing a transferee’s agreement to be bound by and subject to the terms and provisions hereof to the same effect as each Stockholder.

“**Lock-Up Period**” shall mean the period from the Closing Date to the date that is 180 days after the Closing Date.

“**SEC**” shall mean the United States Securities and Exchange Commission.

“*Securities Exchange Act*” shall mean the Securities Exchange Act of 1934, as amended, and the rules and regulations promulgated thereunder.

“*Term*” means the period from the date hereof until the end of the Lock-Up Period.

“*Transfer*” shall mean any offer, direct or indirect sale, assignment, encumbrance, option, pledge, hypothecation, disposition, loan or other transfer, whether directly or indirectly, or entry into any Contract with respect to any offer, sale, assignment, encumbrance, option, right to purchase, pledge, hypothecation, disposition, loan or other transfer, whether directly or indirectly, excluding entry into this Agreement and the Merger Agreement and the consummation of the transactions contemplated hereby and thereby.

“*Voting Stock*” shall mean, (i) prior to the Closing Date, any TapImmune Common Stock, or any securities convertible into, exchangeable for or otherwise exercisable to acquire TapImmune Common Stock, or any other securities having (or being convertible into, exchangeable for or otherwise exercisable to acquire any securities having) the ordinary power to vote in the election of members of the Board of Directors of TapImmune, or any right to acquire within sixty days any of the foregoing, whether now owned or hereafter acquired and (ii) after the Closing Date, any TapImmune Common Stock or other securities Beneficially Owned or of record as of the Closing.

2. Subject Shares. Each Stockholder agrees that any Voting Stock that such Stockholder Beneficially Owns or owns of record shall be subject to the terms and conditions of this Agreement so long as such Voting Stock is Beneficially Owned or owned of record by such Stockholder.

3. Restrictions Prior to Expiration Time.

3.1 No Transfer of Voting Stock. Until the Expiration Time, subject to Section 6, each Stockholder agrees not to: (x) Transfer any Voting Stock, (y) directly or indirectly engage in any Hedging Activities or (z) deposit any Voting Stock into a voting trust or enter into a voting agreement with respect to Voting Stock or grant any proxy, consent or power of attorney with respect thereto (other than pursuant to this Agreement); provided that any Stockholder may Transfer any such Voting Stock to any other Stockholder or any Affiliate of any such Stockholders if such Affiliate transferee executes a Joinder Agreement (each, a “*Permitted Transferee*”).

3.2 The limitations set forth in Section 3.1 shall not apply to (x) any Transfer as to which the Board of Directors of Marker gives its prior written consent or (y) any Transfer to another Stockholder or any of their respective Affiliates who has executed a Joinder Agreement.

3.3 Non-permitted Transfers. Any Transfer or attempted Transfer of any Voting Stock in violation of this Section 3 shall, to the fullest extent permitted by applicable Law, be null and void *ab initio*.

4. Agreement to Consent and Approve Prior to Expiration Time.

4.1 Until the Expiration Time, no Stockholder shall enter into any tender, voting or other agreement, or grant a proxy or power of attorney, with respect to the Voting Stock that is inconsistent with this Agreement or otherwise take any other action with respect to the Voting Stock that would in any way restrict, limit or interfere with the performance of such Stockholder’s obligations hereunder or the transactions contemplated hereby, including the receipt of the approval of the TapImmune Stockholder Matters and the consummation of the transactions contemplated by the Merger Agreement.

4.2 Until the Expiration Time, at any meeting of the stockholders of TapImmune, however called, or at any postponement or adjournment thereof, called to seek the affirmative vote of the holders of the outstanding shares of Voting Stock to adopt the Merger Agreement or in any other circumstances upon which a vote, consent or other approval with respect to the Merger Agreement or the transactions contemplated by the Merger Agreement is sought, each Stockholder shall vote (or cause to be voted) all shares of Voting Stock currently or hereinafter owned by such Stockholder (a) in favor of (A) the issuance of shares of TapImmune Common Stock, Marker Merger Warrants and Additional Merger Warrants, if any, to the Marker Stockholders pursuant to the terms of the Merger Agreement, (B) the

Reincorporation, (C) the increase in the authorized shares of TapImmune Common Stock in the TapImmune certificate of incorporation, (D) the name change of TapImmune in TapImmune's certificate of incorporation, and (E) an increase in the number of authorized shares reserved for issuance under the 2014 TapImmune Plan, and (b) against any Acquisition Proposal.

4.3 Until the Expiration Time, at any meeting of the stockholders of TapImmune, however called, or at any postponement or adjournment thereof or in any other circumstances upon which any Stockholder's vote, consent or other approval (including by written consent) is sought, each Stockholder shall vote (or cause to be voted) all shares of Voting Stock (to the extent such Voting Stock are then entitled to vote thereon), currently or hereinafter owned by such Stockholder against and withhold consent with respect to (i) any action or agreement that has or would be reasonably likely to result in any conditions to TapImmune's obligations under Articles VI and VIII of the Merger Agreement not being fulfilled, (ii) any amendments to TapImmune's certificate of incorporation or bylaws if such amendment would reasonably be expected to prevent or delay the consummation of the Closing or (iii) any other action or agreement that is intended, or could reasonably be expected, to impede, interfere with, delay, or postpone the transactions contemplated by the Merger Agreement or change in any manner the voting rights of any class of stock of TapImmune. No Stockholder shall commit or agree to take any action inconsistent with the foregoing that would be effective prior to the Expiration Time.

5. Litigation. Each Stockholder agrees not to commence, join in, facilitate, assist or encourage, and agrees to take all actions necessary to opt out of any class in any class action with respect to, any claim, derivative or otherwise, against Marker, TapImmune or any of their respective successors or directors (a) challenging the validity of, or seeking to enjoin the operation of, any provision of this Agreement or (b) alleging a breach of any fiduciary duty of any Person in connection with the evaluation, negotiation or entry into this Agreement or the Merger Agreement; provided, that a Stockholder may defend against, contest or settle any such action, claim, suit or cause of action brought against such Stockholder that relates solely to the Stockholder's capacity as a director, officer or securityholder of TapImmune.

6. Post-Closing Lock-Up Restrictions.

(a) During the Lock-Up Period, each Stockholder agrees not to Transfer any Voting Stock, or directly or indirectly engage in any Hedging Activities.

(b) The limitations set forth in Section 6(a) shall not apply to (i) any Transfer as to which the Board of Directors of TapImmune gives its prior written consent, (ii) any Transfer in connection with a net or cashless exercise of an option solely to cover tax withholding obligations in connection with any such option exercise, (iii) any Transfer effected solely to cover tax withholding obligations arising as a result of the vesting or delivery of Voting Stock with respect to restricted stock, (iv) the establishment of a trading plan pursuant to Rule 10b5-1 under the Exchange Act for the Transfer of TapImmune Common Stock, provided that such plan does not provide for any Transfers of Voting Stock during the Lock-Up Period, (v) any Transfer to an Affiliate of such Stockholder or, in the case of a Stockholder that is a corporation, limited liability company or partnership, the stockholders, members or general or limited partners of such Stockholder, in each case who has executed a Joinder Agreement, (vi) any Transfer to a charitable organization qualified under Rule 501(c)(3) of the Code, (vii) if the Stockholder is a natural person, to any member of Stockholder's immediate family or to a trust or other estate planning vehicle for the benefit of the Stockholder or any member of the Stockholder's immediate family, in each case who has executed a Joinder Agreement or (viii) any Transfer by will, other testamentary document or intestate succession to the legal representative, heir, beneficiary or a member of the immediate family of the Stockholder; provided that with respect to (ii) and (iii) above, any required filing under the Exchange Act shall include a footnote disclosure explaining that such exercise and sale was to cover tax withholding obligations of such Stockholder, and with respect to (iv) above, no filing under the Exchange Act or other public announcement shall be required or shall be made voluntarily in connection with the establishment of such a plan, provided that reasonable notice shall be provided to TapImmune prior to any such filing, and provided further that, for the avoidance of doubt, the underlying shares of Voting Stock shall continue to be subject to the restrictions on transfer set forth in this Agreement. For the avoidance of doubt, the restrictions set

forth in this Section 6(b), shall not apply to any TapImmune Common Stock acquired in the open market on or after the closing of the Merger. For purposes of this Agreement, “immediate family” shall mean any relationship by blood, marriage or adoption, not more remote than first cousin.

(c) Non-permitted Transfers. Any Transfer or attempted Transfer in violation of this Section 6 shall, to the fullest extent permitted by applicable Law, be null and void *ab initio*.

7. Legend on Securities; Stop Transfer Order.

(a) TapImmune and Marker may make a notation on its records or give instructions to any transfer agents or registrars for the Voting Stock in order to implement the restrictions on Transfer set forth in this Agreement.

(b) In connection with any Transfer of shares of Voting Stock, the transferor shall provide TapImmune or Marker with such certificates, opinions and other documents as TapImmune or Marker may reasonably request to assure that such Transfer complies fully with this Agreement.

(c) In furtherance of this Agreement, from and after the Closing Date, the Stockholders shall and hereby do authorize TapImmune to notify TapImmune’s transfer agent that there is a stop transfer order with respect to all Voting Stock subject to this Agreement (and that this Agreement places limits on the transfer of the Voting Stock). The Stockholders further agree to permit TapImmune, from and after the Closing, not to register the transfer of any certificate representing any of the Voting Stock unless such transfer is made in accordance with the terms of this Agreement.

8. Representations and Warranties of the Stockholders. Each Stockholder hereby represents and warrants to Marker as follows:

8.1 Organization. If such Stockholder is a corporation, partnership, limited liability company, limited liability partnership, syndicate, trust, association, organization or other entity, such Stockholder is duly organized, validly existing, and in good standing under the laws of the State of its respective jurisdiction.

8.2 Due Authority. Such Stockholder has the full power and authority to make, enter into and carry out the terms of this Agreement. This Agreement has been duly and validly executed and delivered by such Stockholder and constitutes a valid and binding agreement of such Stockholder enforceable against it in accordance with its terms, except to the extent enforceability may be limited by the effect of applicable bankruptcy, reorganization, insolvency, moratorium or other applicable Law affecting the enforcement of creditors’ rights generally and the effect of general principles of equity, regardless of whether such enforceability is considered in a proceeding at law or in equity.

8.3 Ownership of the Voting Stock. As of the date hereof, such Stockholder (a) is the record or beneficial owner of the shares of Voting Stock indicated on Schedule A hereto opposite such Stockholder’s name, which constitute all of the shares of Voting Stock of TapImmune owned by the Stockholder as of the date hereof, and (b) has good and marketable title to such Voting Stock, free and clear of any and all Encumbrances, other than those created by this Agreement. Such Stockholder has and will have until the expiration of the Term either sole or shared voting power (including the right to control such vote as contemplated herein), power of disposition, power to issue instructions with respect to the matters set forth in this Agreement and power to agree to all of the matters applicable to such Stockholder set forth in this Agreement, in each case, over all shares of Voting Stock currently or hereinafter owned by such Stockholder. As of the date hereof, such Stockholder does not own any capital stock or other voting securities of TapImmune, other than the shares of Voting Stock set forth on Schedule A opposite such Stockholder’s name. As of the date hereof, such Stockholder does not own any rights to purchase or acquire any shares of capital stock or other equity securities of TapImmune, except as set forth on Schedule A opposite such Stockholder’s name.

8.4 No Conflict; Consents.

(a) The execution and delivery of this Agreement by such Stockholder does not, and the performance by such Stockholder of the obligations under this Agreement and the compliance by such Stockholder with any provisions hereof do not and will not: (i) conflict with or violate any applicable Law applicable to such Stockholder, (ii) contravene or conflict with, or result in any violation or breach of, any provision of any charter, certificate of incorporation, articles of association, by-laws, operating agreement or similar formation or governing documents and instruments of such Stockholder, or (iii) result in any material breach of or constitute a material default (or an event that with notice or lapse of time or both would become a material default) under, or give to others any rights of termination, amendment, acceleration or cancellation of, or result in the creation of an Encumbrance on any of the shares of Voting Stock owned by such Stockholder pursuant to any Contract to which such Stockholder is a party or by which such Stockholder is bound, except, in the case of clause (i) or (iii), as would not reasonably be expected, either individually or in the aggregate, to materially impair the ability of such Stockholder to perform its obligations hereunder or to consummate the transactions contemplated hereby.

(b) No consent, approval, order or authorization of, or registration, declaration or filing with, any Governmental Body or any other Person is required by or with respect to such Stockholder in connection with the execution and delivery of this Agreement or the consummation by such Stockholder of the transactions contemplated hereby.

8.5 Reliance. The Stockholder has had the opportunity to review the Merger Agreement and this Agreement with counsel of the Stockholder's own choosing. The Stockholder understands and acknowledges that Marker is entering into the Merger Agreement in reliance upon the Stockholder's execution, delivery and performance of this Agreement.

8.6 Absence of Litigation. As of the date hereof, there is no Legal Proceeding pending against, or, to the knowledge of such Stockholder, threatened against such Stockholder that would reasonably be expected to materially impair the ability of such Stockholder to perform such Stockholder's obligations hereunder or to consummate the transactions contemplated hereby.

8.7 Absence of Other Voting Agreement. Except for this Agreement and the Merger Agreement, such Stockholder has not: (i) entered into any voting agreement, voting trust or similar agreement with respect to any Voting Stock or other equity securities of TapImmune owned by such Stockholder, or (ii) granted any proxy, consent or power of attorney with respect to any Voting Stock owned by such Stockholder (other than as contemplated by this Agreement or with another Stockholder who has executed this Agreement).

9. Representations and Warranties of Marker. Marker hereby represents and warrants to the Stockholders as follows:

9.1 Organization. Marker is duly organized, validly existing, and in good standing under the laws of its state of incorporation.

9.2 Due Authority. Marker has the full power and authority to make, enter into and carry out the terms of this Agreement. The execution and delivery of this Agreement by Marker and the consummation by Marker of the transactions contemplated hereby have been duly and validly authorized by all necessary action on the part of Marker. This Agreement has been duly and validly executed and delivered by Marker and constitutes a valid and binding agreement of Marker enforceable against it in accordance with its terms, except to the extent enforceability may be limited by the effect of applicable bankruptcy, reorganization, insolvency, moratorium or other applicable Law affecting the enforcement of creditors' rights generally and the effect of general principles of equity, regardless of whether such enforceability is considered in a proceeding at law or in equity.

9.3 No Conflict; Consents.

(a) The execution and delivery of this Agreement by Marker does not, and the performance by Marker of the obligations under this Agreement and the compliance by Marker with any provisions hereof do not and will not: (i) conflict with or violate any applicable Law applicable to

Marker, (ii) contravene or conflict with, or result in any violation or breach of, any provision of any charter, certificate of incorporation, articles of association, by-laws, operating agreement or similar formation or governing documents and instruments of Marker, or (iii) result in any material breach of or constitute a material default (or an event that with notice or lapse of time or both would become a material default) under any Contract to which Marker is a party or by which Marker is bound, except, in the case of clause (i) or (iii), as would not reasonably be expected, either individually or in the aggregate, to materially impair the ability of Marker to perform its obligations hereunder or to consummate the transactions contemplated hereby.

(b) No consent, approval, order or authorization of, or registration, declaration or filing with, any Governmental Body or any other Person is required by or with respect to Marker in connection with the execution and delivery of this Agreement or the consummation by Marker of the transactions contemplated hereby, except for filings with the SEC of such reports under the Securities Exchange Act as may be required in connection with this Agreement and the consummation of the transactions contemplated hereby.

9.4 Absence of Litigation. As of the date hereof, there is no Legal Proceeding pending against, or, to the knowledge of Marker, threatened against Marker that would reasonably be expected to materially impair the ability of Marker to perform the obligations of Marker hereunder or to consummate the transactions contemplated hereby.

10. Fiduciary Duties. The Stockholder makes no agreement or understanding in this Agreement in Stockholder's capacity as a director or officer of TapImmune or any of its subsidiaries (if Stockholder holds such office), and nothing in this Agreement: (a) will limit or affect any actions or omissions taken by Stockholder in stockholder's capacity as such a director or officer, including in exercising rights under the Merger Agreement, and no such actions or omissions shall be deemed a breach of this Agreement, or (b) will be construed to prohibit, limit or restrict Stockholder from exercising Stockholder's fiduciary duties as an officer or director to TapImmune or its stockholders. Each Stockholder is entering into this Agreement solely in his or her capacity as the owner of such Stockholder's shares of Voting Stock.

11. Documentation and Information. The Stockholder shall permit and hereby authorizes TapImmune and Marker to publish and disclose in all documents and schedules filed with the SEC, and any press release or other disclosure document that TapImmune or Marker reasonably determines to be necessary in connection with the Merger and any transactions contemplated by the Merger Agreement, the Stockholder's identity and ownership of the Subject Shares and the nature of the Stockholder's commitments and obligations under this Agreement. TapImmune is an intended third-party beneficiary of this Section 11.

12. Further Assurances. The Stockholders shall, without further consideration, from time to time, execute and deliver, or cause to be executed and delivered, such additional or further consents, documents and other instruments as Marker may reasonably request in order to vest, perfect, confirm or record the rights granted to Marker under this Agreement.

13. Joinder; Certain Events.

13.1 During the Term, in the event any Stockholder Transfers any shares of Voting Stock to a Person as permitted by and in accordance with this Agreement, such transferee shall be required, as a condition to such Transfer, to execute and deliver to Marker a Joinder Agreement.

13.2 Except as provided in Section 13.1, the Stockholders agree that this Agreement and the obligations hereunder shall attach to the shares of Voting Stock referenced in Section 2 and shall be binding on any Person to which legal or beneficial ownership of such shares of Voting Stock shall pass, whether by operation of Law or otherwise. In the event of any stock split, stock dividend, merger, amalgamation, reorganization, recapitalization or other change in the capital structure of TapImmune, affecting the Voting Stock, the number of shares of Voting Stock shall be deemed adjusted appropriately and this Agreement and the obligations hereunder shall attach to any additional shares of Voting Stock so issued to or acquired by the Stockholders.

14. Termination. Except as set forth herein with respect to specific provisions hereof, this Agreement shall not terminate and shall remain in full force and effect until the end of the Term; provided that this Agreement shall earlier terminate in the event the Closing does not occur (at such date and time as when the Merger Agreement is terminated in accordance with its terms); provided further, that nothing herein shall relieve any party from liability for any intentional breach of this Agreement prior to such termination.

15. No Ownership Interest. Nothing contained in this Agreement shall be deemed to vest in Marker any direct or indirect ownership or incidence of ownership of or with respect to the Stockholders' shares of Voting Stock. All rights, ownership and economic benefits of and relating to the Stockholders' shares of Voting Stock shall remain vested in and belong to the Stockholders, and Marker shall have no authority to direct the Stockholders in the voting or disposition of any of the shares of Voting Stock except as otherwise provided herein.

16. Miscellaneous.

16.1 Severability. The provisions of this Agreement shall be deemed severable and the invalidity or unenforceability of any provision shall not affect the validity or enforceability of the other provisions hereof. If any provision of this Agreement, or the application thereof to any Person or any circumstance, is invalid or unenforceable, (a) a suitable and equitable provision shall be substituted therefor in order to carry out, so far as may be valid and enforceable, the intent and purpose of such invalid or unenforceable provision; and (b) the remainder of this Agreement and the application of such provision to other Persons or circumstances shall not be affected by such invalidity or unenforceability, nor shall such invalidity or unenforceability affect the validity or enforceability of such provision, or the application thereof, in any other jurisdiction.

16.2 Non-survival of Representations and Warranties. None of the representations and warranties in this Agreement or in any schedule, instrument or other document delivered pursuant to this Agreement shall survive the termination of this Agreement. This Section 16.2 shall not limit any covenant or agreement contained in this Agreement that by its terms is to be performed in whole or in part after the Closing Date or the termination of this Agreement.

16.3 Assignment. Neither this Agreement nor any of the rights, interests or obligations under this Agreement may be assigned or delegated, in whole or in part, by operation of law or otherwise, by any of the parties hereto without the prior written consent of the other parties, and any such assignment without such prior written consent shall be null and void. Subject to the preceding sentence, this Agreement will be binding upon, inure to the benefit of, and be enforceable by, the parties and their respective successors and assigns.

16.4 Amendment and Modification. This Agreement may not be amended, modified or supplemented in any manner, whether by course of conduct or otherwise, except by an instrument in writing specifically designated as an amendment hereto, signed on behalf of each party.

16.5 Enforcement. The parties hereto agree that irreparable damage would occur in the event that any of the provisions of this Agreement were not performed in accordance with their specific terms or were otherwise breached. Accordingly, each of the parties hereto shall be entitled to specific performance of the terms hereof, including an injunction or injunctions to prevent breaches of this Agreement and to enforce specifically the terms and provisions of this Agreement in the Court of Chancery of the State of Delaware (or, if such court lacks subject matter jurisdiction, in the Superior Court of the State of Delaware or the United States District Court for the District of Delaware), this being in addition to any other remedy to which such party is entitled at law or in equity. Each of the parties hereby further waives (a) any defense in any action for specific performance that a remedy at law would be adequate and (b) any requirement under any law to post security as a prerequisite to obtaining equitable relief.

16.6 Notices. All notices and other communications hereunder shall be in writing and shall be deemed duly given (a) on the date of delivery if delivered personally, (b) on the first Business Day following the date of dispatch if delivered utilizing a next-day service by a recognized next-day courier or (c) on the earlier of confirmed receipt or the fifth Business Day following the date of mailing if

delivered by registered or certified mail, return receipt requested, postage prepaid. All notices hereunder shall be delivered to the addresses set forth below, or pursuant to such other instructions as may be designated in writing by the party to receive such notice:

(i) if to any Stockholder, to the address set forth on such Stockholder's signature page attached hereto:

with a concurrent copy to (which shall not be considered notice):

Seyfarth Shaw LLP
700 Milam Street, Suite 1400
Houston, Texas 77002
Telephone No.: (713) 238-1887
Facsimile No.: (713) 225-2340
Attention: Paul Pryzant
E-Mail: ppryzant@seyfarth.com

(ii) if to Marker, to:

33 5th Avenue N.W., Suite 800
New Brighton, Minnesota 55112
Telephone No.: (651) 628-9259
Facsimile No.: (651) 628-9507
Attention: John Wilson
E-mail: john.wilson@wilsonwolf.com

with a concurrent copy to (which shall not be considered notice):

with a copy to:

Winthrop & Weinstine, P.A.
225 South Sixth Street, Suite 3500
Minneapolis, MN 55402-4629
Telephone No.: (612) 604-6677
Facsimile No.: (612) 604-6877
Attention: Mark R. Gleeman
E-Mail: mgleeman@winthrop.com

16.7 Governing Law; Submission to Jurisdiction. This Agreement shall be governed by, and construed in accordance with, the laws of the State of Delaware, regardless of the laws that might otherwise govern under applicable principles of conflicts of laws. In any action or suit between any of the Parties arising out of or relating to this Agreement or any of the Contemplated Transactions: (a) each of the Parties irrevocably and unconditionally consents and submits to the exclusive jurisdiction and venue of the state and federal courts located in the State of Texas; and (b) if any such action or suit is commenced in a state court, then, subject to applicable Legal Requirements, no Party shall object to the removal of such action or suit to any federal court located in the Southern District of Texas.

16.8 WAIVER OF JURY TRIAL. EACH OF THE PARTIES TO THIS AGREEMENT HEREBY IRREVOCABLY WAIVES ALL RIGHT TO A TRIAL BY JURY IN ANY ACTION, PROCEEDING OR COUNTERCLAIM ARISING OUT OF OR RELATING TO THIS AGREEMENT OR THE TRANSACTIONS CONTEMPLATED HEREBY.

16.9 Entire Agreement; Third-Party Beneficiaries. This Agreement constitutes the entire agreement, and supersedes all prior written agreements, arrangements, communications and understandings and all prior and contemporaneous oral agreements, arrangements, communications and understandings among the parties hereto with respect to the subject matter hereof. Nothing in this Agreement, express or implied, is intended to or shall confer upon any Person other than the parties and their respective successors and permitted assigns any legal or equitable right, benefit or remedy of any nature under or by reason of this Agreement.

16.10 Counterparts; Facsimile Signature. This Agreement may be executed in two or more counterparts, all of which shall be considered one and the same instrument and shall become effective when one or more counterparts have been signed by each of the parties and delivered to the other party. This Agreement may be executed by facsimile signature or other electronic signature and such signature shall constitute an original for all purposes.

16.11 Effect of Headings. Headings of the articles and sections of this Agreement and the table of contents, schedules and exhibits are for convenience of the parties only and shall be given no substantive or interpretative effect whatsoever.

16.12 No Presumption Against Drafting Party. The parties hereto have participated jointly in the negotiation and drafting of this Agreement. Each of the parties hereto acknowledges that each party to this Agreement has been represented by counsel in connection with this Agreement and the transactions contemplated by this Agreement. Accordingly, any rule of law or any legal decision that would require interpretation of any claimed ambiguities in this Agreement against the drafting party has no application and is expressly waived.

16.13 Expenses. Except as otherwise provided herein or in the Merger Agreement, all fees and expenses incurred in connection with or related to this Agreement and the transactions contemplated hereby shall be paid by the party incurring such fees or expenses, whether or not such transactions are consummated. In the event of termination of this Agreement, the obligation of each party to pay its own expenses will be subject to any rights of such party arising from a breach of this Agreement by the other.

16.14 No Recourse. Notwithstanding anything to the contrary contained herein or otherwise, but without limiting any provision in the Merger Agreement, this Agreement may only be enforced against, and any claims or causes of action that may be based upon, arise out of or relate to this Agreement, or the negotiation, execution or performance of this Agreement or the transactions contemplated hereby, may only be made against the entities and Persons that are expressly identified as parties to this Agreement in their capacities as such and no former, current or future stockholders, equity holders, controlling persons, directors, officers, employees, general or limited partners, members, managers, agents or affiliates of any party hereto, or any former, current or future direct or indirect stockholder, equity holder, controlling person, director, officer, employee, general or limited partner, member, manager, agent or affiliate of any of the foregoing (each, a "Non-Recourse Party") shall have any liability for any obligations or liabilities of the parties to this Agreement or for any claim (whether in tort, contract or otherwise) based on, in respect of, or by reason of, the transactions contemplated hereby or in respect of any oral representations made or alleged to be made in connection herewith. Without limiting the rights of any party against the other parties hereto, in no event shall any party or any of its affiliates seek to enforce this Agreement against, make any claims for breach of this Agreement against, or seek to recover monetary damages from, any Non-Recourse Party.

[Remainder of Page Intentionally Left Blank]

In witness whereof, the parties hereto have caused this Agreement to be executed as of the date first set forth above.

MARKER THERAPEUTICS, INC.

By: /s/ John R. Wilson

Name: John R. Wilson

Title: President

[Signature page to Voting and Lock-Up Agreement]

STOCKHOLDER:

/s/ Peter Hoang

Name: Peter Hoang

Notice Address:

c/o TAPIMMUNE INC.
5 West Forsyth Street, Suite 200
Jacksonville, Florida 32202
Telephone No.: (904) 556-5436
Attention: Peter Hoang
E-Mail: phoang@tapimmune.com

[Signature page to Voting and Lock-Up Agreement]

STOCKHOLDER:

/s/ Glynn Wilson

Name: Dr. Glynn Wilson

Notice Address:

c/o TAPIMMUNE INC.
5 West Forsyth Street, Suite 200
Jacksonville, Florida 32202
Telephone No.: (904) 556-5436
Attention: Peter Hoang
E-Mail: phoang@tapimmune.com

[Signature page to Voting and Lock-Up Agreement]

STOCKHOLDER:

/s/ Michael J. Loiacono

Name: Michael J. Loiacono

Notice Address:

c/o TAPIMMUNE INC.
5 West Forsyth Street, Suite 200
Jacksonville, Florida 32202
Telephone No.: (904) 556-5436
Attention: Peter Hoang
E-Mail: phoang@tapimmune.com

[Signature page to Voting and Lock-Up Agreement]

STOCKHOLDER:

/s/ Sherry Grisewood

Name: Sherry Grisewood

Notice Address:

c/o TAPIMMUNE INC.
5 West Forsyth Street, Suite 200
Jacksonville, Florida 32202
Telephone No.: (904) 556-5436
Attention: Peter Hoang
E-Mail: phoang@tapimmune.com

[Signature page to Voting and Lock-Up Agreement]

STOCKHOLDER:

/s/ David Laskow-Pooley

Name: David Laskow-Pooley

Notice Address:

c/o TAPIMMUNE INC.
5 West Forsyth Street, Suite 200
Jacksonville, Florida 32202
Telephone No.: (904) 556-5436
Attention: Peter Hoang
E-Mail: phoang@tapimmune.com

[Signature page to Voting and Lock-Up Agreement]

STOCKHOLDER:

/s/ Mark Reddish

Name: Mark Reddish

Notice Address:

c/o TAPIMMUNE INC.
5 West Forsyth Street, Suite 200
Jacksonville, Florida 32202
Telephone No.: (904) 556-5436
Attention: Peter Hoang
E-Mail: phoang@tapimmune.com

[Signature page to Voting and Lock-Up Agreement]

STOCKHOLDER:

/s/ Joshua Silverman

Name: Joshua Silverman

Notice Address:

c/o TAPIMMUNE INC.
5 West Forsyth Street, Suite 200
Jacksonville, Florida 32202
Telephone No.: (904) 556-5436
Attention: Peter Hoang
E-Mail: phoang@tapimmune.com

[Signature page to Voting and Lock-Up Agreement]

D-1-17

STOCKHOLDER:

/s/ Frederick Wasserman

Name: Frederick Wasserman

Notice Address:

c/o TAPIMMUNE INC.
5 West Forsyth Street, Suite 200
Jacksonville, Florida 32202
Telephone No.: (904) 556-5436
Attention: Peter Hoang
E-Mail: phoang@tapimmune.com

[Signature page to Voting and Lock-Up Agreement]

VOTING AND LOCK-UP AGREEMENT

This Voting and Lock-Up Agreement (this “*Agreement*”) is made and entered into as of May 15, 2018, between TapImmune Inc., a Nevada corporation (“*TapImmune*”), and the Persons whose names appear on the signature pages hereto (each such Person, a “*Stockholder*” and, collectively, the “*Stockholders*”). Capitalized terms used but not otherwise defined herein shall have the respective meanings ascribed to such terms in the Merger Agreement (as defined below).

RECITALS

A. On May 15, 2018, TapImmune, Timberwolf Merger Sub, Inc., a Delaware corporation and wholly owned subsidiary of TapImmune (“*Merger Sub*”), and Marker Therapeutics, Inc., a Delaware corporation (“*Marker*”), entered into an Agreement and Plan of Merger and Reorganization (the “*Merger Agreement*”), pursuant to which Merger Sub will merge with and into Marker with Marker surviving as a wholly owned subsidiary of TapImmune, all upon the terms and subject to the conditions set forth therein.

B. The Stockholders agree to enter into this Agreement with respect to shares of Voting Stock (as defined below) held by the Stockholders.

C. As of the date hereof, the Stockholders are the owners of, and have either sole or shared voting power over, such number of shares of Voting Stock as are indicated opposite each of their names on Schedule A attached hereto.

D. Each of TapImmune and the Stockholders have determined that it is in its best interests to enter into this Agreement.

NOW, THEREFORE, in consideration of the foregoing and the respective representations, warranties, covenants and agreements set forth below and for other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the parties hereto, intending to be legally bound, do hereby agree as follows:

1. Definitions. When used in this Agreement, except as set forth in the Preamble hereto, the following terms in all of their tenses, cases and correlative forms shall have the meanings assigned to them in this Section 1 or elsewhere in this Agreement.

“*Affiliate*” of any particular Person means any other Person controlling, controlled by or under common control with such Person. The term “*control*” means possession, directly or indirectly, of the power to direct or cause the direction of the management and policies of such Person, whether through the ownership of voting securities, by contract or otherwise. The terms “*controlled*”, “*controlling*”, and “*under common control with*” have meanings correlative thereto. Notwithstanding the foregoing, no Stockholder shall be deemed an Affiliate of Marker or TapImmune, and vice versa.

“*Beneficially Own*”, “*Beneficial Owner*” or “*Beneficial Ownership*” shall have the meaning (or the correlative meaning, as applicable) set forth in Rule 13d-3 and Rule 13d-5(b)(i) of the rules and regulations promulgated under the Securities Exchange Act.

“*Expiration Time*” shall mean the earlier to occur of (a) the Closing Date and (b) such date and time as the Merger Agreement shall be terminated in accordance with its terms.

“*Hedging Activities*” means any forward sale, hedging or similar transaction involving any Voting Stock, including any transaction by which any economic risks and/or rewards or ownership of, or voting rights with respect to, any such Voting Stock are Transferred or affected.

“*Joinder Agreement*” means a joinder to this Agreement reasonably satisfactory to the Board of Directors of TapImmune evidencing a transferee’s agreement to be bound by and subject to the terms and provisions hereof to the same effect as each Stockholder.

“*Lock-Up Period*” shall mean the period from the Closing Date to the date that is 180 days after the Closing Date.

“**SEC**” shall mean the United States Securities and Exchange Commission.

“**Securities Exchange Act**” shall mean the Securities Exchange Act of 1934, as amended, and the rules and regulations promulgated thereunder.

“**Term**” means the period from the date hereof until the end of the Lock-Up Period.

“**Transfer**” shall mean any offer, direct or indirect sale, assignment, encumbrance, option, pledge, hypothecation, disposition, loan or other transfer, whether directly or indirectly, or entry into any Contract with respect to any offer, sale, assignment, encumbrance, option, right to purchase, pledge, hypothecation, disposition, loan or other transfer, whether directly or indirectly, excluding entry into this Agreement and the Merger Agreement and the consummation of the transactions contemplated hereby and thereby.

“**Voting Stock**” shall mean, (i) prior to the Closing Date, any Marker Common Stock or any securities convertible into, exchangeable for or otherwise exercisable to acquire Marker Common Stock, or any other securities having (or being convertible into, exchangeable for or otherwise exercisable to acquire any securities having) the ordinary power to vote in the election of members of the Board of Directors of Marker, or any right to acquire within sixty days any of the foregoing, whether now owned or hereafter acquired, (ii) after the Closing Date, any TapImmune Common Stock acquired by the Stockholders pursuant to the Merger Agreement, any Marker Merger Warrants acquired by the Stockholders pursuant to the Merger Agreement and the TapImmune Common Stock which may be issued upon exercise of any Marker Merger Warrants.

2. Subject Shares. Each Stockholder agrees that any Voting Stock that such Stockholder Beneficially Owns or owns of record shall be subject to the terms and conditions of this Agreement so long as such Voting Stock is Beneficially Owned or owned of record by such Stockholder.

3. Restrictions Prior to Expiration Time.

3.1. No Transfer of Voting Stock. Until the Expiration Time, subject to Section 6, each Stockholder agrees not to: (x) Transfer any Voting Stock, (y) directly or indirectly engage in any Hedging Activities or (z) deposit any Voting Stock into a voting trust or enter into a voting agreement with respect to Voting Stock or grant any proxy, consent or power of attorney with respect thereto (other than pursuant to this Agreement); provided that any Stockholder may Transfer any such Voting Stock to any other Stockholder or any Affiliate of any such Stockholders if such Affiliate transferee executes a Joinder Agreement (each, a “**Permitted Transferee**”).

3.2. The limitations set forth in Section 3.1 shall not apply to (x) any Transfer as to which the Board of Directors of TapImmune gives its prior written consent, or (y) any Transfer to another Stockholder or any of their respective Affiliates who has executed a Joinder Agreement.

3.3. Non-permitted Transfers. Any Transfer or attempted Transfer of any Voting Stock in violation of this Section 3 shall, to the fullest extent permitted by applicable Law, be null and void *ab initio*.

4. Agreement to Consent and Approve Prior to Expiration Time.

4.1. Until the Expiration Time, no Stockholder shall enter into any tender, voting or other agreement, or grant a proxy or power of attorney, with respect to the Voting Stock that is inconsistent with this Agreement or otherwise take any other action with respect to the Voting Stock that would in any way restrict, limit or interfere with the performance of such Stockholder’s obligations hereunder or the transactions contemplated hereby, including the receipt of the Marker Stockholder Written Consent, attached hereto as Exhibit A, and the consummation of the transactions contemplated by the Merger Agreement.

4.2. Until the Expiration Time, at any meeting of the stockholders of Marker, however called, or at any postponement or adjournment thereof, called to seek the affirmative vote of the holders of the outstanding shares of Voting Stock to adopt the Merger Agreement or in any other circumstances upon which a vote, consent or other approval with respect to the Merger Agreement or the transactions contemplated by the Merger Agreement is sought, each Stockholder shall vote (or cause to be voted)

all shares of Voting Stock currently or hereinafter owned by such Stockholder in favor of (A) adopting the Merger Agreement, and approving the Merger, and the other actions contemplated by the Merger Agreement; (B) acknowledging that the approval given thereby is irrevocable and that the Stockholder is aware of its rights to demand appraisal for its shares pursuant to Section 262 of the DGCL, a copy of which was attached thereto, and that such stockholder has received and read a copy of Section 262 of the DGCL; (C) acknowledging that by its approval of the Merger it is not entitled to appraisal rights with respect to its shares in connection with the Merger and thereby waives any rights to receive payment of the fair value of its capital stock under the DGCL; (D) approving any proposal to adjourn or postpone the meeting to a later date, if there are not sufficient votes for the adoption of the Merger Agreement on the date on which such meeting is held; and (E) any other matters necessary to consummate the Contemplated Transactions that are considered and voted upon by the Marker Stockholders. Without limiting the foregoing, as promptly as practicable, and in no event later than 24 hours after the execution of the Merger Agreement, each Stockholder shall execute and deliver, or cause to be executed and delivered, to each of TapImmune and Marker, the written consent attached hereto as Exhibit A, which written consent shall adopt and approve the Merger Agreement and the Merger, and shall not be amended, rescinded or modified. Each Stockholder shall retain at all times the right to vote such Stockholder's Voting Stock in Stockholder's sole discretion and without any other limitation on those matters other than those set forth in this Section 4.2 and Section 4.3 that are at any time or from time to time presented for consideration to the Marker Stockholders.

4.3. Until the Expiration Time, at any meeting of the stockholders of Marker, however called, or at any postponement or adjournment thereof or in any other circumstances upon which any Stockholder's vote, consent or other approval (including by written consent) is sought, each Stockholder shall vote (or cause to be voted) all shares of Voting Stock (to the extent such Voting Stock are then entitled to vote thereon), currently or hereinafter owned by such Stockholder against and withhold consent with respect to (i) any action or agreement that has or would be reasonably likely to result in any conditions to Marker's obligations under Articles VI and VII of the Merger Agreement not being fulfilled, (ii) any amendments to Marker's certificate of incorporation or bylaws if such amendment would reasonably be expected to prevent or delay the consummation of the Closing or (iii) any other action or agreement that is intended, or could reasonably be expected, to impede, interfere with, delay, or postpone the transactions contemplated by the Merger Agreement or change in any manner the voting rights of any class of stock of Marker. No Stockholder shall commit or agree to take any action inconsistent with the foregoing that would be effective prior to the Expiration Time.

5. Litigation. Each Stockholder agrees not to commence, join in, facilitate, assist or encourage, and agrees to take all actions necessary to opt out of any class in any class action with respect to, any claim, derivative or otherwise, against Marker, TapImmune or any of their respective successors or directors (a) challenging the validity of, or seeking to enjoin the operation of, any provision of this Agreement or (b) alleging a breach of any fiduciary duty of any Person in connection with the evaluation, negotiation or entry into this Agreement or the Merger Agreement; provided, that a Stockholder may defend against, contest or settle any such action, claim, suit or cause of action brought against such Stockholder that relates solely to the Stockholder's capacity as a director, officer or securityholder of Marker.

6. Post-Closing Lock-Up Restrictions.

(a) During the Lock-Up Period, each Stockholder agrees not to Transfer any Voting Stock, or directly or indirectly engage in any Hedging Activities.

(b) The limitations set forth in Section 6(a) shall not apply to (i) any Transfer as to which the Board of Directors of TapImmune gives its prior written consent, (ii) any Transfer in connection with a net or cashless exercise of an option solely to cover tax withholding obligations in connection with any such option exercise, (iii) the establishment of a trading plan pursuant to Rule 10b5-1 under the Exchange Act for the Transfer of TapImmune Common Stock, provided that such plan does not provide for any Transfers of Voting Stock during the Lock-Up Period, (iv) any Transfer to an Affiliate of such Stockholder or, in the case of a Stockholder that is a corporation, limited liability company or partnership, the stockholders, members or general or limited partners of such Stockholder, in each case who has executed a Joinder Agreement, (v) any

Transfer to a charitable organization qualified under Rule 501(c)(3) of the Code, (vi) if the Stockholder is a natural person, to any member of Stockholder's immediate family or to a trust or other estate planning vehicle for the benefit of the Stockholder or any member of the Stockholder's immediate family, in each case who has executed a Joinder Agreement or (vii) any Transfer by will, other testamentary document or intestate succession to the legal representative, heir, beneficiary or a member of the immediate family of the Stockholder; provided that with respect to (ii) above, any required filing under the Exchange Act shall include a footnote disclosure explaining that such exercise and sale was to cover tax withholding obligations of such Stockholder, and with respect to (iii) above, no filing under the Exchange Act or other public announcement shall be required or shall be made voluntarily in connection with the establishment of such a plan, provided that reasonable notice shall be provided to TapImmune prior to any such filing, and provided further that, for the avoidance of doubt, the underlying shares of Voting Stock shall continue to be subject to the restrictions on transfer set forth in this Agreement. For the avoidance of doubt, the restrictions set forth in this Section 6 shall not apply to any TapImmune Common Stock acquired in the open market on or after the closing of the Merger. For purposes of this Agreement, "immediate family" shall mean any relationship by blood, marriage or adoption, not more remote than first cousin.

(c) Non-permitted Transfers. Any Transfer or attempted Transfer in violation of this Section 6 shall, to the fullest extent permitted by applicable Law, be null and void *ab initio*.

7. Legend on Securities; Stop Transfer Order.

(a) TapImmune and Marker may make a notation on its records or give instructions to any transfer agents or registrars for the Voting Stock in order to implement the restrictions on Transfer set forth in this Agreement.

(b) In connection with any Transfer of shares of Voting Stock, the transferor shall provide TapImmune with such certificates, opinions and other documents as TapImmune may reasonably request to assure that such Transfer complies fully with this Agreement.

(c) In furtherance of this Agreement, from and after the Closing Date, the Stockholders shall and hereby do authorize TapImmune to notify TapImmune's transfer agent that there is a stop transfer order with respect to all Voting Stock subject to this Agreement (and that this Agreement places limits on the transfer of the Voting Stock). Subject to the terms of the Registration Rights Agreement between TapImmune and the Stockholders dated as of the Closing Date, the Stockholders further agree to permit TapImmune, from and after the Closing, not to register the transfer of any certificate representing any of the Voting Stock unless such transfer is made in accordance with the terms of this Agreement.

8. Representations and Warranties of the Stockholders. Each Stockholder hereby represents and warrants to TapImmune as follows:

8.1. Organization. If such Stockholder is a corporation, partnership, limited liability company, limited liability partnership, syndicate, trust, association, organization or other entity, such Stockholder is duly organized, validly existing, and in good standing under the laws of the State of its respective jurisdiction.

8.2. Due Authority. Such Stockholder has the full power and authority to make, enter into and carry out the terms of this Agreement. This Agreement has been duly and validly executed and delivered by such Stockholder and constitutes a valid and binding agreement of such Stockholder enforceable against it in accordance with its terms, except to the extent enforceability may be limited by the effect of applicable bankruptcy, reorganization, insolvency, moratorium or other applicable Law affecting the enforcement of creditors' rights generally and the effect of general principles of equity, regardless of whether such enforceability is considered in a proceeding at law or in equity.

8.3. Ownership of the Voting Stock. As of the date hereof, such Stockholder (a) is the record or beneficial owner of the shares of Voting Stock indicated on Schedule A hereto opposite such Stockholder's name, which constitute all of the shares of Voting Stock of Marker owned by the

Stockholder as of the date hereof, and (b) has good and marketable title to such Voting Stock, free and clear of any and all Encumbrances, other than those created by this Agreement. Such Stockholder has and will have until the expiration of the Term either sole or shared voting power (including the right to control such vote as contemplated herein), power of disposition, power to issue instructions with respect to the matters set forth in this Agreement and power to agree to all of the matters applicable to such Stockholder set forth in this Agreement, in each case, over all shares of Voting Stock currently or hereinafter owned by such Stockholder. As of the date hereof, such Stockholder does not own any capital stock or other voting securities of Marker, other than the shares of Voting Stock set forth on Schedule A opposite such Stockholder's name. As of the date hereof, such Stockholder does not own any rights to purchase or acquire any shares of capital stock or other equity securities of Marker, except as set forth on Schedule A opposite such Stockholder's name.

8.4. No Conflict; Consents.

(a) The execution and delivery of this Agreement by such Stockholder does not, and the performance by such Stockholder of the obligations under this Agreement and the compliance by such Stockholder with any provisions hereof do not and will not: (i) conflict with or violate any applicable Law applicable to such Stockholder, (ii) contravene or conflict with, or result in any violation or breach of, any provision of any charter, certificate of incorporation, articles of association, by-laws, operating agreement or similar formation or governing documents and instruments of such Stockholder, or (iii) result in any material breach of or constitute a material default (or an event that with notice or lapse of time or both would become a material default) under, or give to others any rights of termination, amendment, acceleration or cancellation of, or result in the creation of an Encumbrance on any of the shares of Voting Stock owned by such Stockholder pursuant to any Contract to which such Stockholder is a party or by which such Stockholder is bound, except, in the case of clause (i) or (iii), as would not reasonably be expected, either individually or in the aggregate, to materially impair the ability of such Stockholder to perform its obligations hereunder or to consummate the transactions contemplated hereby.

(b) No consent, approval, order or authorization of, or registration, declaration or filing with, any Governmental Body or any other Person is required by or with respect to such Stockholder in connection with the execution and delivery of this Agreement or the consummation by such Stockholder of the transactions contemplated hereby.

8.5. Reliance. The Stockholder has had the opportunity to review the Merger Agreement and this Agreement with counsel of the Stockholder's own choosing. The Stockholder understands and acknowledges that TapImmune and Merger Sub are entering into the Merger Agreement in reliance upon the Stockholder's execution, delivery and performance of this Agreement.

8.6. Absence of Litigation. As of the date hereof, there is no Legal Proceeding pending against, or, to the knowledge of such Stockholder, threatened against such Stockholder that would reasonably be expected to materially impair the ability of such Stockholder to perform such Stockholder's obligations hereunder or to consummate the transactions contemplated hereby.

8.7. Absence of Other Voting Agreement. Except for this Agreement and the Merger Agreement, and the prior Investor Agreements that have been terminated, such Stockholder has not: (i) entered into any voting agreement, voting trust or similar agreement with respect to any Voting Stock or other equity securities of Marker owned by such Stockholder, or (ii) granted any proxy, consent or power of attorney with respect to any Voting Stock owned by such Stockholder (other than as contemplated by this Agreement or with another Stockholder who has executed this Agreement).

9. Representations and Warranties of TapImmune. TapImmune hereby represents and warrants to the Stockholders as follows:

9.1. Organization. TapImmune is duly organized, validly existing, and in good standing under the laws of its state of incorporation.

9.2. Due Authority. TapImmune has the full power and authority to make, enter into and carry out the terms of this Agreement. The execution and delivery of this Agreement by TapImmune and the consummation by TapImmune of the transactions contemplated hereby have been duly and validly

authorized by all necessary action on the part of TapImmune. This Agreement has been duly and validly executed and delivered by TapImmune and constitutes a valid and binding agreement of TapImmune enforceable against it in accordance with its terms, except to the extent enforceability may be limited by the effect of applicable bankruptcy, reorganization, insolvency, moratorium or other applicable Law affecting the enforcement of creditors' rights generally and the effect of general principles of equity, regardless of whether such enforceability is considered in a proceeding at law or in equity.

9.3. No Conflict; Consents.

(a) The execution and delivery of this Agreement by TapImmune does not, and the performance by TapImmune of the obligations under this Agreement and the compliance by TapImmune with any provisions hereof do not and will not: (i) conflict with or violate any applicable Law applicable to TapImmune, (ii) contravene or conflict with, or result in any violation or breach of, any provision of any charter, certificate of incorporation, articles of association, by-laws, operating agreement or similar formation or governing documents and instruments of TapImmune, or (iii) result in any material breach of or constitute a material default (or an event that with notice or lapse of time or both would become a material default) under any Contract to which TapImmune is a party or by which TapImmune is bound, except, in the case of clause (i) or (iii), as would not reasonably be expected, either individually or in the aggregate, to materially impair the ability of TapImmune to perform its obligations hereunder or to consummate the transactions contemplated hereby.

(b) No consent, approval, order or authorization of, or registration, declaration or filing with, any Governmental Body or any other Person is required by or with respect to TapImmune in connection with the execution and delivery of this Agreement or the consummation by TapImmune of the transactions contemplated hereby, except for filings with the SEC of such reports under the Securities Exchange Act as may be required in connection with this Agreement and the consummation of the transactions contemplated hereby.

9.4. Absence of Litigation. As of the date hereof, there is no Legal Proceeding pending against, or, to the knowledge of TapImmune, threatened against TapImmune that would reasonably be expected to materially impair the ability of TapImmune to perform the obligations of TapImmune hereunder or to consummate the transactions contemplated hereby.

10. Capacity as a Stockholder. Each Stockholder signs this Agreement solely in the Stockholder's capacity as a stockholder of Marker, and not in the Stockholder's capacity as a director, officer or employee of Marker.

11. Documentation and Information. The Stockholder shall permit and hereby authorizes TapImmune and Marker to publish and disclose in all documents and schedules filed with the SEC, and any press release or other disclosure document that TapImmune or Marker reasonably determines to be necessary in connection with the Merger and any transactions contemplated by the Merger Agreement, the Stockholder's identity and ownership of the Subject Shares and the nature of the Stockholder's commitments and obligations under this Agreement. Marker is an intended third-party beneficiary of this Section 11.

12. Further Assurances. The Stockholders shall, without further consideration, from time to time, execute and deliver, or cause to be executed and delivered, such additional or further consents, documents and other instruments as TapImmune may reasonably request in order to vest, perfect, confirm or record the rights granted to TapImmune under this Agreement.

13. Joinder; Certain Events.

13.1. During the Term, in the event any Stockholder Transfers any shares of Voting Stock to a Person as permitted by and in accordance with this Agreement, such transferee shall be required, as a condition to such Transfer, to execute and deliver to TapImmune a Joinder Agreement.

13.2. Except as provided in Section 13.1, the Stockholders agree that this Agreement and the obligations hereunder shall attach to the shares of Voting Stock referenced in Section 2 and shall be binding on any Person to which legal or beneficial ownership of such shares of Voting Stock shall pass,

whether by operation of Law or otherwise. In the event of any stock split, stock dividend, merger, amalgamation, reorganization, recapitalization or other change in the capital structure of Marker or, after the Closing Date, TapImmune, affecting the Voting Stock, the number of shares of Voting Stock shall be deemed adjusted appropriately and this Agreement and the obligations hereunder shall attach to any additional shares of Voting Stock so issued to or acquired by the Stockholders.

14. Termination. Except as set forth herein with respect to specific provisions hereof, this Agreement shall not terminate and shall remain in full force and effect until the end of the Term; provided, that this Agreement shall earlier terminate in the event the Closing does not occur (at such date and time as when the Merger Agreement is terminated in accordance with its terms); provided further, that nothing herein shall relieve any party from liability for any intentional breach of this Agreement prior to such termination.

15. No Ownership Interest. Nothing contained in this Agreement shall be deemed to vest in TapImmune any direct or indirect ownership or incidence of ownership of or with respect to the Stockholders' shares of Voting Stock. All rights, ownership and economic benefits of and relating to the Stockholders' shares of Voting Stock shall remain vested in and belong to the Stockholders, and TapImmune shall have no authority to direct the Stockholders in the voting or disposition of any of the shares of Voting Stock except as otherwise provided herein.

16. Miscellaneous.

16.1. Severability. The provisions of this Agreement shall be deemed severable and the invalidity or unenforceability of any provision shall not affect the validity or enforceability of the other provisions hereof. If any provision of this Agreement, or the application thereof to any Person or any circumstance, is invalid or unenforceable, (a) a suitable and equitable provision shall be substituted therefor in order to carry out, so far as may be valid and enforceable, the intent and purpose of such invalid or unenforceable provision; and (b) the remainder of this Agreement and the application of such provision to other Persons or circumstances shall not be affected by such invalidity or unenforceability, nor shall such invalidity or unenforceability affect the validity or enforceability of such provision, or the application thereof, in any other jurisdiction.

16.2. Non-survival of Representations and Warranties. None of the representations and warranties in this Agreement or in any schedule, instrument or other document delivered pursuant to this Agreement shall survive the termination of this Agreement. This Section 16.2 shall not limit any covenant or agreement contained in this Agreement that by its terms is to be performed in whole or in part after the Closing Date or the termination of this Agreement.

16.3. Assignment. Neither this Agreement nor any of the rights, interests or obligations under this Agreement may be assigned or delegated, in whole or in part, by operation of law or otherwise, by any of the parties hereto without the prior written consent of the other parties, and any such assignment without such prior written consent shall be null and void. Subject to the preceding sentence, this Agreement will be binding upon, inure to the benefit of, and be enforceable by, the parties and their respective successors and assigns.

16.4. Amendment and Modification. This Agreement may not be amended, modified or supplemented in any manner, whether by course of conduct or otherwise, except by an instrument in writing specifically designated as an amendment hereto, signed on behalf of each party.

16.5. Enforcement. The parties hereto agree that irreparable damage would occur in the event that any of the provisions of this Agreement were not performed in accordance with their specific terms or were otherwise breached. Accordingly, each of the parties hereto shall be entitled to specific performance of the terms hereof, including an injunction or injunctions to prevent breaches of this Agreement and to enforce specifically the terms and provisions of this Agreement in the Court of Chancery of the State of Delaware (or, if such court lacks subject matter jurisdiction, in the Superior Court of the State of Delaware or the United States District Court for the District of Delaware), this being in addition to any other remedy to which such party is entitled at law or in equity. Each of the parties hereby further waives (a) any defense in any action for specific performance that a remedy at law would be adequate and (b) any requirement under any law to post security as a prerequisite to obtaining equitable relief.

16.6. Notices. All notices and other communications hereunder shall be in writing and shall be deemed duly given (a) on the date of delivery if delivered personally, (b) on the first Business Day following the date of dispatch if delivered utilizing a next-day service by a recognized next-day courier or (c) on the earlier of confirmed receipt or the fifth Business Day following the date of mailing if delivered by registered or certified mail, return receipt requested, postage prepaid. All notices hereunder shall be delivered to the addresses set forth below, or pursuant to such other instructions as may be designated in writing by the party to receive such notice:

(i) if to any Stockholder, to the address set forth on such Stockholder's signature page attached hereto:

with a concurrent copy to (which shall not be considered notice):

Winthrop & Weinstine, P.A.
225 South Sixth Street, Suite 3500
Minneapolis, MN 55402-4629
Telephone No.: (612) 604-6677
Facsimile No.: (612) 604-6877
Attention: Mark R. Gleeman
E-Mail: mgleeman@winthrop.com

(ii) if to TapImmune, to:

5 West Forsyth Street, Suite 200
Jacksonville, Florida 32202
Telephone No.: (904) 862-6496
Attention: Peter Hoang
E-Mail: phoang@tapimmune.com

with a concurrent copy to (which shall not be considered notice):

Seyfarth Shaw LLP
700 Milam Street, Suite 1400
Houston, Texas 77002
Telephone No.: (713) 238-1887
Facsimile No.: (713) 225-2340
Attention: Paul Pryzant
E-Mail: ppryzant@seyfarth.com

16.7. Governing Law; Submission to Jurisdiction. This Agreement shall be governed by, and construed in accordance with, the laws of the State of Delaware, regardless of the laws that might otherwise govern under applicable principles of conflicts of laws. In any action or suit between any of the Parties arising out of or relating to this Agreement or any of the Contemplated Transactions: (a) each of the Parties irrevocably and unconditionally consents and submits to the exclusive jurisdiction and venue of the state and federal courts located in the State of Texas; and (b) if any such action or suit is commenced in a state court, then, subject to applicable Legal Requirements, no Party shall object to the removal of such action or suit to any federal court located in the Southern District of Texas.

16.8. WAIVER OF JURY TRIAL. EACH OF THE PARTIES TO THIS AGREEMENT HEREBY IRREVOCABLY WAIVES ALL RIGHT TO A TRIAL BY JURY IN ANY ACTION, PROCEEDING OR COUNTERCLAIM ARISING OUT OF OR RELATING TO THIS AGREEMENT OR THE TRANSACTIONS CONTEMPLATED HEREBY.

16.9. Entire Agreement; Third-Party Beneficiaries. This Agreement constitutes the entire agreement, and supersedes all prior written agreements, arrangements, communications and understandings and all prior and contemporaneous oral agreements, arrangements, communications and understandings among the parties hereto with respect to the subject matter hereof. Nothing in this Agreement, express or implied, is intended to or shall confer upon any Person other than the parties and their respective successors and permitted assigns any legal or equitable right, benefit or remedy of any nature under or by reason of this Agreement.

16.10. Counterparts; Facsimile Signature. This Agreement may be executed in two or more counterparts, all of which shall be considered one and the same instrument and shall become effective when one or more counterparts have been signed by each of the parties and delivered to the other party. This Agreement may be executed by facsimile signature or other electronic signature and such signature shall constitute an original for all purposes.

16.11. Effect of Headings. Headings of the articles and sections of this Agreement and the table of contents, schedules and exhibits are for convenience of the parties only and shall be given no substantive or interpretative effect whatsoever.

16.12. No Presumption Against Drafting Party. The parties hereto have participated jointly in the negotiation and drafting of this Agreement. Each of the parties hereto acknowledges that each party to this Agreement has been represented by counsel in connection with this Agreement and the transactions contemplated by this Agreement. Accordingly, any rule of law or any legal decision that would require interpretation of any claimed ambiguities in this Agreement against the drafting party has no application and is expressly waived.

16.13. Expenses. Except as otherwise provided herein or in the Merger Agreement, all fees and expenses incurred in connection with or related to this Agreement and the transactions contemplated hereby shall be paid by the party incurring such fees or expenses, whether or not such transactions are consummated. In the event of termination of this Agreement, the obligation of each party to pay its own expenses will be subject to any rights of such party arising from a breach of this Agreement by the other.

16.14. No Recourse. Notwithstanding anything to the contrary contained herein or otherwise, but without limiting any provision in the Merger Agreement, this Agreement may only be enforced against, and any claims or causes of action that may be based upon, arise out of or relate to this Agreement, or the negotiation, execution or performance of this Agreement or the transactions contemplated hereby, may only be made against the entities and Persons that are expressly identified as parties to this Agreement in their capacities as such and no former, current or future stockholders, equity holders, controlling persons, directors, officers, employees, general or limited partners, members, managers, agents or affiliates of any party hereto, or any former, current or future direct or indirect stockholder, equity holder, controlling person, director, officer, employee, general or limited partner, member, manager, agent or affiliate of any of the foregoing (each, a "Non-Recourse Party") shall have any liability for any obligations or liabilities of the parties to this Agreement or for any claim (whether in tort, contract or otherwise) based on, in respect of, or by reason of, the transactions contemplated hereby or in respect of any oral representations made or alleged to be made in connection herewith. Without limiting the rights of any party against the other parties hereto, in no event shall any party or any of its affiliates seek to enforce this Agreement against, make any claims for breach of this Agreement against, or seek to recover monetary damages from, any Non-Recourse Party.

[Remainder of Page Intentionally Left Blank]

In witness whereof, the parties hereto have caused this Agreement to be executed as of the date first set forth above.

TAPIMMUNE INC.

By: /s/ Peter Hoang

Name: Peter Hoang

Title: Chief Executive Officer, President

[Signature page to Voting and Lock-Up Agreement]

STOCKHOLDERS:

/s/ John R. Wilson

John R. Wilson

Notice Address:

/s/ Juan Vera

Juan F. Vera

Notice Address:

/s/ Ann M. Leen

Ann M. Leen

Notice Address:

[Signature page to Voting and Lock-Up Agreement]

SALT FREE LP

By: /s/ Malcolm K. Brenner

Name: Malcolm K. Brenner
Title: General Partner

By: /s/ Cliona M. Rooney

Name: Cliona M. Rooney
Title: General Partner

Notice Address:

/s/ Helen E. Heslop

Helen E. Heslop

Notice Address:

[Signature page to Voting and Lock-Up Agreement]

BAYLOR COLLEGE OF MEDICINE

By: /s/ Adam Kuspa

Name: Adam Kuspa, Ph.D.

Title: Sr. Vice President & Dean of Research

Notice Address:

[Signature page to Voting and Lock-Up Agreement]

REGISTRATION RIGHTS AGREEMENT

THIS REGISTRATION RIGHTS AGREEMENT (this “**Agreement**”) is made and entered into effective as of [•], 2018 (the “**Effective Date**”) between TAPIMMUNE INC., a Nevada corporation (the “**Company**”), and the persons who have executed the signature page(s) hereto (each, a “**Holder**” and collectively, the “**Holders**”).

RECITALS:

WHEREAS, on even date herewith, the Company, Timberwolf Merger Sub, Inc., a Delaware corporation and wholly-owned subsidiary of the Company (“**Merger Sub**”), and Marker Therapeutics, Inc., a Delaware corporation (“**Marker**”), entered into an Agreement and Plan of Merger and Reorganization (the “**Merger Agreement**”), pursuant to which Merger Sub has been merged with and into Marker, with Marker being the surviving corporation and becoming a wholly-owned subsidiary of the Company (the “**Merger**”); and

WHEREAS, in connection with the Merger and pursuant to the Merger Agreement, the Holders acquired shares (the “**Shares**”) of the Company’s common stock, par value \$0.001 per share (“**Company Common Stock**”), and warrants to purchase share of the Company Common Stock (the “**Warrants**”); and

WHEREAS, in order to induce the Holders to adopt and approve the Merger Agreement and approve the Merger and other transactions contemplated in the Merger Agreement, the Company has agreed to provide the registration rights set forth in this Agreement.

NOW, THEREFORE, in consideration of the mutual promises, representations, warranties, covenants, and conditions set forth herein, the parties mutually agree as follows:

1. **Certain Definitions.** As used in this Agreement, the following terms shall have the following respective meanings:

“**Allowed Delay**” has the meaning set forth in **Section 3(d)(2)**.

“**Approved Market**” means the Over-the-Counter Bulletin Board, the OTC Markets, the Pink Sheets, the Nasdaq Stock Market, the New York Stock Exchange or the NYSE MKT Exchange.

“**Blackout Period**” means, with respect to a registration, a period, in each case commencing on the day immediately after the Company notifies the Holders that they are required to suspend offers and sales of Registrable Securities because a Suspension Event has occurred and ending on the earlier of (1) the date upon which the material non-public information commencing the Blackout Period is disclosed to the public or ceases to be material and (2) such time as the Company notifies the selling Holders that the Company will no longer delay such filing of the Registration Statement, recommence taking steps to make such Registration Statement effective, or allow sales pursuant to such Registration Statement to resume.

“**Business Day**” means any day of the year, other than a Saturday, Sunday, or other day on which the Commission is required or authorized to close.

“**Commission**” means the U. S. Securities and Exchange Commission or any other federal agency at the time administering the Securities Act.

“**Common Stock**” means the common stock, par value \$0.001 per share, of the Company and any and all shares of capital stock or other equity securities of: (i) the Company which are added to or exchanged or substituted for the Common Stock by reason of the declaration of any stock dividend or stock split, the issuance of any distribution or the reclassification, readjustment, recapitalization or other such modification of the capital structure of the Company; and (ii) any other corporation, now or hereafter organized under the laws of any state or other governmental authority, with which the Company is merged, which results from any consolidation or reorganization to which the Company is a party, or to which is sold all or substantially all of the shares or assets of the Company, if immediately after such merger, consolidation, reorganization or sale, the Company or the stockholders of the Company own equity securities having in the aggregate more than 50% of the total voting power of such other corporation.

“Effective Date” has the meaning given it in the preamble to this Agreement.

“Exchange Act” means the Securities Exchange Act of 1934, as amended, and the rules and regulations of the Commission promulgated thereunder.

“Family Member” means (a) with respect to any individual, such individual’s spouse, any descendants (whether natural or adopted), any trust all of the beneficial interests of which are owned by any of such individuals or by any of such individuals together with any organization described in Section 501(c)(3) of the Internal Revenue Code of 1986, as amended, the estate of any such individual, and any corporation, association, partnership or limited liability company all of the equity interests of which are owned by those above described individuals, trusts or organizations, and (b) with respect to any trust, the owners of the beneficial interests of such trust.

“Initial Registration Statement” means the initial Registration Statement filed pursuant to this Agreement.

“Majority Holders” means at any time Holders representing a majority of the Registrable Securities.

“Permitted Assignee” means (a) with respect to a partnership, its partners or former partners, (b) with respect to a corporation, its stockholders, (c) with respect to a limited liability company, its members or former members, (d) with respect to an individual party, any Family Member of such party, (e) an entity that is controlled by, controls, or is under common control with a transferor, or (f) a party to this Agreement.

“Piggyback Registration” means, in any registration of Common Stock as set forth in Section 3(b), the ability of holders of Registrable Securities to include Registrable Securities in such registration.

The terms “register,” “registered,” and “registration” refer to a registration effected by preparing and filing a registration statement in compliance with the Securities Act, and the declaration or ordering of the effectiveness of such registration statement.

“Registrable Warrant Shares” means the shares of Common Stock issuable upon the exercise of the Warrants.

“Registrable Securities” means the Shares and the Registrable Warrant Shares, but excluding, subject to Section 3(d), (i) any Registrable Securities that have been publicly sold or may be sold immediately without registration under the Securities Act either pursuant to Rule 144 of the Securities Act or otherwise, without any limitations or restrictions, (ii) any Registrable Securities sold by a person in a transaction pursuant to a registration statement filed under the Securities Act, or (iii) any Registrable Securities that are at the time subject to an effective registration statement under the Securities Act.

“Registration Filing Date” means the date that is 180 days after the date of the closing of the Merger.

“Registration Statement” means the registration statement that the Company is required to file pursuant to this Agreement to register the Registrable Securities.

“Rule 144” means Rule 144 promulgated by the Commission under the Securities Act.

“Rule 145” means Rule 145 promulgated by the Commission under the Securities Act.

“Rule 415” means Rule 415 promulgated by the Commission pursuant to the Securities Act, as such Rule may be amended from time to time, or any similar rule or regulation hereafter adopted by the SEC having substantially the same purpose and effect as such Rule.

“Securities Act” means the Securities Act of 1933, as amended, or any similar federal statute promulgated in replacement thereof, and the rules and regulations of the Commission thereunder, all as the same shall be in effect at the time.

“SEC Effective Date” means the date the Registration Statement is declared effective by the Commission.

“Shelf Registration Statement” means a Shelf Registration Statement as defined in Section 3(a).

“Suspension Event” means the occurrence of any of the following events:

(i) a majority of the board of directors of the Company determines in good faith that (A) the offer or sale of any Registrable Securities would materially impede, delay or interfere with any proposed financing, offer or sale of securities, acquisition, corporate reorganization or other material transaction involving the Company, (B) the sale of Registrable Securities pursuant to such Shelf Registration Statement or other registration statement would require disclosure of non-public material information not otherwise required to be disclosed under applicable law, or (C)(x) the Company has a bona fide business purpose for preserving the confidentiality of a material transaction, (y) disclosure would have a material adverse effect on the Company or the Company’s ability to consummate such a material transaction, or (z) such a material transaction renders the Company unable to comply with Commission requirements, in each case under circumstances that would make it impractical or inadvisable to cause the Shelf Registration Statement or other registration statement (or such filings) to become effective or to promptly amend or supplement the Shelf Registration Statement or other registration statement on a post-effective basis, as applicable;

(ii) a majority of the board of directors of the Company determines in good faith that it is in the Company’s best interest or it is required by law, rule or regulation to supplement the Shelf Registration Statement or other registration statement or file a post-effective amendment to such Shelf Registration Statement or other registration statement in order to ensure that the prospectus included in the Shelf Registration Statement or other registration statement (1) contains the information required by the form on which such Shelf Registration Statement or other registration statement was filed, or (2) discloses any facts or events arising after the effective date of the Shelf Registration Statement or other registration statement (or of the most recent post-effective amendment) that, individually or in the aggregate, represents a fundamental change in the information set forth therein; or

(iii) a majority of the Company’s board of directors determines in good faith that an event has occurred or is continuing as a result of which the Shelf Registration Statement, other registration statement or Prospectus contained therein contains an untrue statement of a material fact or omits any fact necessary to make the statements therein not misleading causing such Shelf Registration Statement, other registration statement or Prospectus contained therein not to be usable for resale of the Registrable Shares during the period required by this Agreement.

“Trading Day” means (a) if the Common Stock is listed or quoted on an Approved Market, then any day during which securities are generally eligible for trading on the Approved Market, or (b) if the Common Stock is not then listed or quoted and traded on an Approved Market, then any business day.

2. Term. This Agreement shall continue in full force and effect until the one (1) year anniversary of the SEC Effective Date, unless terminated sooner hereunder.

3. Registration.

(a) Mandatory Shelf Registration.

(i) Not later than the Registration Filing Date, if the Company has not already filed a Registration Statement in which Holders exercised their Piggyback Registration rights under Section 3(b) below and such Registration Statement has not been declared effective, the Company shall file with the Commission a shelf Registration Statement on Form S-3 or such other form under the Securities Act then available to the Company providing for the resale pursuant to Rule 415 from time to time by the Holders of any and all Registrable Securities beneficially owned by the Holders (the “**Shelf Registration Statement**”). The Company agrees to use its commercially reasonable efforts to cause the Shelf Registration Statement to be declared effective by the SEC within 90 calendar days after the initial date of filing thereof. Except as may be provided herein, the Company shall have no right to withdraw the Shelf Registration Statement.

(ii) The Company shall use its commercially reasonable efforts to cause the Shelf Registration Statement to remain continuously effective until the earliest of (A) the sale pursuant to a registration statement of all of the Registrable Securities covered by the Shelf Registration Statement, (B) the sale, transfer or other disposition pursuant to Rule 144 of all of the Registrable

Securities covered by the Shelf Registration Statement, (C) such time as the Registrable Securities covered by the Shelf Registration Statement that are not held by Affiliates of the Company are, in the opinion of counsel to the Company, eligible for resale pursuant to Rule 144 without any limitations or restrictions, or (D) such time as all of the Registrable Securities covered by the Shelf Registration Statement have been sold to the Company or any of its subsidiaries. The Shelf Registration Statement shall provide for the resale of Registrable Securities from time to time, and pursuant to any method or combination of methods legally available to, and requested by, any Holder.

(iii) If the Majority Holders intend to distribute Registrable Securities under the Shelf Registration Statement by means of an underwritten offering, the Majority Holders will so advise the Company. In such event, the Majority Holders will have the right to select one bookrunner for the offering, provided that such bookrunner is reasonably satisfactory to the Company. The expenses and compensation of any underwriters in any underwritten offering pursuant to the Shelf Registration Statement shall be the sole responsibility of the Holders whose Registrable Securities are included in any such Registration Statement.

(b) Piggyback Registration. In addition to the Company agreement pursuant to Section 3(a) above, if the Company shall determine to register for sale for cash any of its Common Stock, for its own account or for the account of others (other than the Holders), other than (i) a registration relating solely to employee benefit plans or securities issued or issuable to employees, consultants (to the extent the securities owned or to be owned by such consultants could be registered on Form S-8) or any of their Family Members (including a registration on Form S-8) or (ii) a registration relating solely to a Securities Act Rule 145 transaction or a registration on Form S-4 in connection with a merger, acquisition, divestiture, reorganization or similar event, the Company shall promptly give to the Holders written notice thereof (and in no event shall such notice be given less than 20 calendar days prior to the filing of such registration statement), and shall, subject to Section 3(d), include as a Piggyback Registration of all of the Registrable Securities specified in a written request delivered by the Holder thereof within 10 calendar days after receipt of such written notice from the Company together with a completed and duly executed Selling Securityholder Notice and Questionnaire in the form attached hereto as Annex A. However, the Company may, without the consent of the Holders, withdraw such registration statement prior to its becoming effective if the Company or such other stockholders have elected to abandon the proposal to register the securities proposed to be registered thereby.

(c) Underwriting. If a Piggyback Registration is for a registered public offering that is to be made by an underwriting, the Company shall so advise the Holders of the Registrable Securities eligible for inclusion in such Registration Statement pursuant to Section 3(b). In that event, the right of any Holder to Piggyback Registration shall be conditioned upon such Holder's participation in such underwriting and the inclusion of such Holder's Registrable Securities in the underwriting to the extent provided herein. All Holders proposing to sell any of their Registrable Securities through such underwriting shall (together with the Company and any other stockholders of the Company selling their securities through such underwriting) enter into an underwriting agreement in customary form with the underwriter selected for such underwriting by the Company or the selling stockholders, as applicable. Notwithstanding any other provision of this Section, if the underwriter or the Company determines that marketing factors require a limitation on the number of shares of Common Stock or the amount of other securities to be underwritten, the underwriter may exclude some or all Registrable Securities from such registration and underwriting. The Company shall so advise all Holders (except those Holders who failed to timely elect to include their Registrable Securities through such underwriting or have indicated to the Company their decision not to do so), and indicate to each such Holder the number of shares of Registrable Securities that may be included in the registration and underwriting, if any. The number of shares of Registrable Securities to be included in such registration and underwriting shall be allocated among such Holders as follows:

(i) If the Piggyback Registration was initiated by the Company, the number of shares that may be included in the registration and underwriting shall be allocated first to the Company and then, subject to obligations and commitments existing as of the date hereof, to all selling stockholders, including the Holders, who have requested to sell in the registration on a pro rata

basis according to the number of shares requested to be included therein but in no event less than 50% of the Registrable Securities; and

(ii) If the Piggyback Registration was initiated by the exercise of demand registration rights by a stockholder or stockholders of the Company (other than the Holders), then the number of shares that may be included in the registration and underwriting shall be allocated first to such selling stockholders who exercised such demand and then, subject to obligations and commitments existing as of the date hereof, to all other selling stockholders, including the Holders, who have requested to sell in the registration on a pro rata basis according to the number of shares requested to be included therein.

No Registrable Securities excluded from the underwriting by reason of the underwriter's marketing limitation shall be included in such registration. If any Holder disapproves of the terms of any such underwriting, such Holder may elect to withdraw such Holder's Registrable Securities therefrom by delivering a written notice to the Company and the underwriter. The Registrable Securities so withdrawn from such underwriting shall also be withdrawn from such registration; provided, however, that, if by the withdrawal of such Registrable Securities, a greater number of Registrable Securities held by other Holders may be included in such registration (up to the maximum of any limitation imposed by the underwriters), then the Company shall offer to all Holders who have included Registrable Securities in the registration the right to include additional Registrable Securities pursuant to the terms and limitations set forth herein in the same proportion used above in determining the underwriter limitation.

(d) Cutbacks:

(1)(a) if the Commission does not declare the Registration Statement effective, or (b) if the Commission allows the Registration Statement to be declared effective, subject to the withdrawal of certain Registrable Securities from the Registration Statement, and the reason for (a) or (b) is the Commission's determination that (x) the offering of any of the Registrable Securities constitutes a primary offering of securities by the Company, (y) Rule 415 may not be relied upon for the registration of the resale of any or all of the Registrable Securities, and/or (z) a Holder of any Registrable Securities must be named as an underwriter, the Holders understand and agree that in the case of (b) the Company may reduce, on a *pro rata* basis, the total number of Registrable Securities to be registered on behalf of each such Holder. In any such *pro rata* reduction, the number of Registrable Securities to be registered on such Registration Statement will first be reduced by (i) first, the Registrable Securities represented by the Registrable Warrant Shares (applied, in the case that some Registrable Warrant Shares may be registered, to the Holders on a *pro rata* basis based on the total number of unregistered Registrable Warrant Shares held by such Holders on a fully diluted basis), and (ii) second, Registrable Securities represented by Shares (applied, in the case that some Shares may be registered, to the Holders on a *pro rata* basis based on the total number of unregistered Shares held by such Holders) only if the issue of the Commission with the Registration Statement is the inclusion of the Registrable Securities. In addition, any such affected Holder shall be entitled to Piggyback Registration rights after the Registration Statement is declared effective by the Commission until such time as: (AA) all Registrable Securities have been registered pursuant to an effective Registration Statement, (BB) the Registrable Securities may be resold pursuant to Rule 144 of the Securities Act without any limitations or restrictions, or (CC) the Holder agrees to be named as an underwriter in any such registration statement. The Holders acknowledge and agree the provisions of this paragraph may apply to more than one Registration Statement; and

(2) For not more than thirty (30) consecutive days or for a total of not more than ninety (90) days in any twelve (12) month period, the Company may suspend the use of any prospectus included in any Registration Statement contemplated by this Section upon the occurrence of any Suspension Event (an "**Allowed Delay**"); provided, that the Company shall promptly (a) notify each Holder in writing of the commencement of an Allowed Delay, but shall not (without the prior written consent of an Holder) disclose to such Holder any material non-public information giving rise to an Allowed Delay, (b) advise the Holders in writing to cease all sales under the Registration Statement until the end of the Allowed Delay and (c) use commercially reasonable efforts to terminate an Allowed Delay as promptly as practicable.

4. Registration Procedures for Registrable Securities. The Company will keep each Holder included as a selling stockholder in the Registration Statement reasonably advised as to the filing and effectiveness of the Registration Statement. At its expense with respect to the Registration Statement, the Company will:

(a) prepare and file with the Commission with respect to the Registrable Securities, a Registration Statement on Form S-3, or any other form for which the Company then qualifies or which counsel for the Company shall deem appropriate and which form shall be available for the sale of the Registrable Securities in accordance with the intended methods of distribution thereof, and use its commercially reasonable efforts to cause such Registration Statement to become effective and shall remain effective for a period of three years or for such shorter period ending on the earlier to occur of (i) the date as of which all of the Holders as selling stockholders thereunder may sell all of the Registrable Securities registered for resale thereon without any limitations or restrictions under paragraphs (e) or (f) of Rule 144 or (ii) the date when all of the Registrable Securities registered thereunder shall have been sold (the “**Effectiveness Period**”). Thereafter, the Company shall be entitled to withdraw such Registration Statement and the Holders shall have no further right to offer or sell any of the Registrable Securities registered for resale thereon pursuant to the respective Registration Statement (or any prospectus relating thereto);

(b) if the Registration Statement is subject to review by the Commission, respond in a commercially reasonable manner to all comments and diligently pursue resolution of any comments to the satisfaction of the Commission;

(c) prepare and file with the Commission such amendments and supplements to such Registration Statement as may be necessary to keep such Registration Statement effective during the Effectiveness Period and to permit Holders to sell;

(d) furnish, without charge, to each Holder of Registrable Securities covered by such Registration Statement (i) a reasonable number of copies of such Registration Statement (including any exhibits thereto other than exhibits incorporated by reference), each amendment and supplement thereto as such Holder may reasonably request, (ii) such number of copies of the prospectus included in such Registration Statement (including each preliminary prospectus and any other prospectus filed under Rule 424 of the Securities Act) as such Holders may reasonably request, in conformity with the requirements of the Securities Act, and (iii) such other documents as such Holder may require to consummate the disposition of the Registrable Securities owned by such Holder, but only during the Effectiveness Period;

(e) use its commercially reasonable efforts to register or qualify such registration under such other applicable securities laws of such jurisdictions as any Holder of Registrable Securities covered by such Registration Statement reasonably requests and as may be necessary for the marketability of the Registrable Securities (such request to be made by the time the applicable Registration Statement is deemed effective by the Commission) and do any and all other acts and things necessary to enable such Holder to consummate the disposition in such jurisdictions of the Registrable Securities owned by such Holder; provided, that the Company shall not be required to (i) qualify generally to do business in any jurisdiction where it would not otherwise be required to qualify but for this paragraph, (ii) subject itself to taxation in any such jurisdiction, or (iii) consent to general service of process in any such jurisdiction.

(f) notify each Holder of Registrable Securities, the disposition of which requires delivery of a prospectus relating thereto under the Securities Act, of any Suspension Event, and the Company shall promptly thereafter prepare and furnish to such Holder a supplement or amendment to such prospectus (or prepare and file appropriate reports under the Exchange Act) so that, as thereafter delivered to the purchasers of such Registrable Securities, such prospectus shall not contain an untrue statement of a material fact or omit to state any material fact required to be stated therein or necessary to make the statements therein not misleading, unless suspension of the use of such prospectus otherwise is authorized herein or in the event of a Blackout Period, in which case no supplement or amendment need be furnished (or Exchange Act filing made) until the termination of such suspension or Blackout Period;

(g) comply, and continue to comply during the Effectiveness Period, in all material respects with the Securities Act and the Exchange Act and with all applicable rules and regulations of the Commission with respect to the disposition of all securities covered by such Registration Statement;

(h) as promptly as practicable after becoming aware of such event, notify each Holder of Registrable Securities being offered or sold pursuant to the Registration Statement of the issuance by the Commission of any stop order or other suspension of effectiveness of the Registration Statement;

(i) use its commercially reasonable efforts to cause all the Registrable Securities covered by the Registration Statement to be quoted on the OTC Bulletin Board or such other Approved Market on which securities of the same class or series issued by the Company are then listed or traded;

(j) provide a transfer agent and registrar, which may be a single entity, for the shares of Common Stock at all times;

(k) if requested by the Holders, cooperate with the Holders to facilitate the timely preparation and delivery of any necessary prospectus supplements with respect to the resale or certificates representing Registrable Securities to be delivered to a transferee pursuant to the Registration Statement, which certificates shall be free, to the extent permitted by applicable law, of all restrictive legends, and to enable such Registrable Securities to be in such denominations and registered in such names as any such Holders may request; and

(l) take all other reasonable actions necessary to expedite and facilitate the disposition by the Holders of the Registrable Securities pursuant to the Registration Statement.

5. Suspension of Offers and Sales. Each Holder agrees that, upon receipt of any notice from the Company of a Suspension Event or of the commencement of a Blackout Period, such Holder shall discontinue the disposition of Registrable Securities included in the Registration Statement until such Holder's receipt of the copies of the supplemented or amended prospectus contemplated by Section 4(f) hereof or notice of the end of the Blackout Period, and, if so directed by the Company, such Holder shall deliver to the Company (at the Company's expense) all copies (including, without limitation, any and all drafts), other than permanent file copies, then in such Holder's possession, of the prospectus covering such Registrable Securities current at the time of receipt of such notice.

6. Registration Expenses. The Company shall pay all expenses in connection with any registration obligation provided herein, including, without limitation, all registration, filing, stock exchange fees, printing expenses, all fees and expenses of complying with applicable securities laws, and the fees and disbursements of counsel for the Company and of its independent accountants and up to \$15,000 for the legal fees for one legal counsel to Holders; provided, that, in any registration, each party shall pay for its own underwriting discounts and commissions and transfer taxes. Except as provided in this Section and Section 9, the Company shall not be responsible for the expenses of any attorney or other advisor employed by a Holder.

7. Assignment of Rights. No Holder may assign its rights under this Agreement to any party without the prior written consent of the Company; provided, however, that any Holder may assign its rights under this Agreement without such consent to a Permitted Assignee as long as (a) such transfer or assignment is effected in accordance with applicable securities laws; (b) such transferee or assignee agrees in writing to become subject to the terms of this Agreement; and (c) such Holder notifies the Company in writing of such transfer or assignment, stating the name and address of the transferee or assignee and identifying the Registrable Securities with respect to which such rights are being transferred or assigned.

8. Information by Holder. A Holder of Registrable Securities included in any registration agrees to timely cooperate with the Company as reasonably requested by the Company in connection with the preparation and filing of a Shelf Registration Statement or other registration statement hereunder and shall furnish to the Company such information regarding itself, the Registrable Securities held by it, and the intended method of disposition of such securities as shall be required in order to comply with any applicable law or regulation in connection with the registration of such Holder's Registrable Securities or any qualification or compliance with respect to such Holder's Registrable Securities and referred to in this Agreement.

9. Indemnification

(a) In the event of the offer and sale of Registrable Securities under the Securities Act, the Company shall, and hereby does, defend, indemnify and hold harmless, to the fullest extent permitted by law, each Holder, its directors, officers, partners, each other person who participates as an underwriter in the offering or sale of such securities, and each other person, if any, who controls or is under common control with such Holder or any such underwriter within the meaning of Section 15 of the Securities Act, against any losses, claims, damages or liabilities, joint or several, and expenses to which the Holder or any such director, officer, partner or underwriter or controlling person may become subject under the Securities Act, the Exchange Act, or any other federal or state law, insofar as such losses, claims, damages, liabilities or expenses (or actions or proceedings, whether commenced or threatened, in respect thereof) arise out of or are based upon any untrue statement of any material fact contained in any registration statement prepared and filed by the Company under which Registrable Securities were registered under the Securities Act, any preliminary prospectus, final prospectus or summary prospectus contained therein, or any amendment or supplement thereto, or any omission to state therein a material fact required to be stated or necessary to make the statements therein in light of the circumstances in which they were made not misleading, or any violation or alleged violation of the Securities Act, the Exchange Act, any state securities law or any rule or regulation promulgated under the Securities Act, the Exchange Act or any state securities law in connection with this Agreement; and, upon request, the Company shall reimburse the Holder, and each such director, officer, partner, underwriter and controlling person for any legal or any other expenses reasonably incurred by them in connection with investigating, defending or settling any such loss, claim, damage, liability, action or proceeding; provided, that the Company shall not be liable in any such case to the extent that any such loss, claim, damage, liability (or action or proceeding in respect thereof) or expense arises out of or is based upon an untrue statement in or omission from such registration statement, any such preliminary prospectus, final prospectus, summary prospectus, amendment or supplement in reliance upon and in conformity with written information furnished to the Company by the Holder specifically for use in the preparation thereof. Such indemnity shall remain in full force and effect regardless of any investigation made by or on behalf of the Holders, or any such director, officer, partner, underwriter or controlling person and shall survive the transfer of such shares by the Holder.

(b) As a condition to including Registrable Securities in any registration statement filed pursuant to this Agreement, each Holder agrees to be bound by the terms of this Section 9 and to indemnify and hold harmless, to the fullest extent permitted by law, the Company, its directors and officers, and each other person, if any, who controls the Company within the meaning of Section 15 of the Securities Act, against any losses, claims, damages or liabilities, joint or several, to which the Company or any such director or officer or controlling person may become subject under the Securities Act, the Exchange Act, or any other federal or state law, to the extent arising out of or based solely upon: any untrue or alleged untrue statement of a material fact contained in any registration statement, any prospectus, or any form of prospectus, or in any amendment or supplement thereto or in any preliminary prospectus, or arising out of or relating to any omission or alleged omission of a material fact required to be stated therein or necessary to make the statements therein not misleading (i) to the extent, but only to the extent, that such untrue statement or omission is contained in any information so furnished in writing by such Holder to the Company specifically for inclusion in the registration statement or such prospectus or (ii) to the extent that (1) such untrue statements or omissions are based solely upon information regarding such Holder furnished in writing to the Company by such Holder expressly for use therein, or to the extent that such information relates to such Holder or such Holder's proposed method of distribution of Registrable Securities and was reviewed and expressly approved in writing by such Holder expressly for use in the Registration Statement, such prospectus or such form of prospectus or in any amendment or supplement thereto or (2) in the case of an occurrence of an event of the type specified in Section 4(f) hereof, the use by such Holder of an outdated or defective prospectus after the Company has notified such Holder in writing that the prospectus is outdated or defective and prior to the receipt by such Holder of the advice contemplated in Section 4(f). In no event shall the liability of any selling Holder hereunder be greater in amount than the dollar amount of the net proceeds received by such Holder upon the sale of the Registrable Securities giving rise to such indemnification obligation.

(c) Promptly after receipt by an indemnified party of notice of the commencement of any action or proceeding involving a claim referred to in this Section (including any governmental action), such indemnified party shall, if a claim in respect thereof is to be made against an indemnifying party, give written notice to the indemnifying party of the commencement of such action; provided, that the failure of any indemnified party to give notice as provided herein shall not relieve the indemnifying party of its obligations under this Section, except to the extent that the indemnifying party is actually prejudiced by such failure to give notice. In case any such action is brought against an indemnified party, unless in the reasonable judgment of counsel to such indemnified party a conflict of interest between such indemnified and indemnifying parties may exist or the indemnified party may have defenses not available to the indemnifying party in respect of such claim, the indemnifying party shall be entitled to participate in and to assume the defense thereof, with counsel reasonably satisfactory to such indemnified party and, after notice from the indemnifying party to such indemnified party of its election so to assume the defense thereof, the indemnifying party shall not be liable to such indemnified party for any legal or other expenses subsequently incurred by the latter in connection with the defense thereof, unless in such indemnified party's reasonable judgment a conflict of interest between such indemnified and indemnifying parties arises in respect of such claim after the assumption of the defenses thereof or the indemnifying party fails to defend such claim in a diligent manner, other than reasonable costs of investigation. Neither an indemnified nor an indemnifying party shall be liable for any settlement of any action or proceeding effected without its consent. No indemnifying party shall, without the consent of the indemnified party, consent to entry of any judgment or enter into any settlement, which does not include as an unconditional term thereof the giving by the claimant or plaintiff to such indemnified party of a release from all liability in respect of such claim or litigation. Notwithstanding anything to the contrary set forth herein, and without limiting any of the rights set forth above, in any event any party shall have the right to retain, at its own expense, counsel with respect to the defense of a claim.

(d) If the indemnification provided for in Section 9(a) or 9(b) is held by a court of competent jurisdiction to be unavailable to an indemnified party with respect to any loss, liability, claim, damage or expense referred to herein, the indemnifying party, in lieu of indemnifying such indemnified party hereunder, shall (i) contribute to the amount paid or payable by such indemnified party as a result of such loss, liability, claim, damage or expense as is appropriate to reflect the proportionate relative fault of the indemnifying party on the one hand and the indemnified party on the other (determined by reference to, among other things, whether the untrue or alleged untrue statement of a material fact or omission relates to information supplied by the indemnifying party or the indemnified party and the parties' relative intent, knowledge, access to information and opportunity to correct or prevent such untrue statement or omission), or (ii) if the allocation provided by clause (i) above is not permitted by applicable law or provides a lesser sum to the indemnified party than the amount hereinafter calculated, not only the proportionate relative fault of the indemnifying party and the indemnified party, but also the relative benefits received by the indemnifying party on the one hand and the indemnified party on the other, as well as any other relevant equitable considerations. No indemnified party guilty of fraudulent misrepresentation (within the meaning of Section 11(f) of the Securities Act) shall be entitled to contribution from any indemnifying party who was not guilty of such fraudulent misrepresentation.

(e) Other Indemnification. Indemnification similar to that specified in this Section (with appropriate modifications) shall be given by the Company and each Holder of Registrable Securities with respect to any required registration or other qualification of securities under any federal or state law or regulation or governmental authority other than the Securities Act.

10. Rule 144. With a view to making available to the Holders the benefits of Rule 144 and any other rule or regulation of the Commission that may at any time permit the Holders to sell the Registrable Securities to the public without registration, the Company agrees: (i) to make and keep public information available as those terms are understood in Rule 144, (ii) to file with the Commission in a timely manner all reports and other documents required to be filed by an issuer of securities registered under the Securities Act or the Exchange Act pursuant to Rule 144, (iii) as long as any Holder owns any Registrable Securities, to furnish in writing upon such Holder's request a written statement by the Company that it has complied with the reporting requirements of Rule 144 and of the Securities Act and the Exchange Act, and to furnish

to such Holder a copy of the most recent annual or quarterly report of the Company, and such other reports and documents so filed by the Company as may be reasonably requested in availing such Holder of any rule or regulation of the Commission permitting the selling of any such Registrable Securities without registration, and (iv) undertake any additional actions commercially reasonably necessary to maintain the availability of the use of Rule 144.

11. Independent Nature of Each Holder's Obligations and Rights. The obligations of each Holder under this Agreement are several and not joint with the obligations of any other Holder, and each Holder shall not be responsible in any way for the performance of the obligations of any other Holder under this Agreement. Nothing contained herein and no action taken by any Holder pursuant hereto, shall be deemed to constitute such Holders as a partnership, an association, a joint venture, or any other kind of entity, or create a presumption that the Holders are in any way acting in concert or as a group with respect to such obligations or the transactions contemplated by this Agreement. Each Holder shall be entitled to independently protect and enforce its rights, including without limitation the rights arising out of this Agreement, and it shall not be necessary for any other Holder to be joined as an additional party in any proceeding for such purpose.

12. Miscellaneous.

(a) Governing Law. This Agreement shall be governed by and construed in accordance with the laws of the United States of America and the State of Delaware, both substantive and remedial, without regard to Delaware conflicts of law principles. Any judicial proceeding brought against either of the parties to this Agreement or any dispute arising out of this Agreement or any matter related hereto shall be brought in the Court of Chancery of the State of Delaware, or in the United States District Court for the District of Delaware and, by its execution and delivery of this Agreement, each party to this Agreement accepts the jurisdiction of such courts. The foregoing consent to jurisdiction shall not be deemed to confer rights on any person other than the parties to this Agreement.

(b) Remedies. In the event of a breach by the Company or by a Holder of any of their respective obligations under this Agreement, each Holder or the Company, as the case may be, in addition to being entitled to exercise all rights granted by law and under this Agreement, including recovery of damages, shall be entitled to specific performance of its rights under this Agreement. The Company and each Holder agree that monetary damages would not provide adequate compensation for any losses incurred by reason of a breach by it of any of the provisions of this Agreement and hereby further agrees that, in the event of any action for specific performance in respect of such breach, it shall not assert or shall waive the defense that a remedy at law would be adequate.

(c) Successors and Assigns. Except as otherwise provided herein, the provisions hereof shall inure to the benefit of, and be binding upon, the successors, Permitted Assignees, executors and administrators of the parties hereto.

(d) No Inconsistent Agreements. The Company has not entered, as of the date hereof, and shall not enter, on or after the date of this Agreement, into any agreement with respect to its securities that would have the effect of impairing the rights granted to the Holders in this Agreement or otherwise conflicts with the provisions hereof.

(e) Entire Agreement. This Agreement constitutes the full and entire understanding and agreement between the parties with regard to the subjects hereof.

(f) Notices, etc. All notices or other communications which are required or permitted under this Agreement shall be in writing and sufficient if delivered by hand, by facsimile transmission, by registered or certified mail, postage pre-paid, by electronic mail, or by courier or overnight carrier, to the persons at the addresses set forth below (or at such other address as may be provided hereunder), and shall be deemed to have been delivered as of the date so delivered:

If to the Company to:

TapImmune Inc.
5 West Forsyth Street, Suite 200
Jacksonville, Florida 32202
Telephone No.: (904) 862-6496
Attention: Peter Hoang
E-Mail: phoang@tapimmune.com

with copy to:

Seyfarth Shaw LLP
700 Milam Street, Suite 1400
Houston, Texas 77002
Telephone No.: (713) 238-1887
Facsimile No.: (713) 225-2340
Attention: Paul Pryzant
E-Mail: ppryzant@seyfarth.com

If to the Holders:

To each Holder at the address set forth on the signature page hereto or at such other address as any party shall have furnished to the other parties in writing, with a copy to:

Winthrop & Weinstine, P.A.
225 South Sixth Street, Suite 3500
Minneapolis, MN 55402-4629
Telephone No.: (612) 604-6677
Facsimile No.: (612) 604-6877
Attention: Mark R. Gleeman
E-Mail: mgleeman@winthrop.com

(g) Delays or Omissions. No delay or omission to exercise any right, power or remedy accruing to any Holder, upon any breach or default of the Company under this Agreement, shall impair any such right, power or remedy of such Holder nor shall it be construed to be a waiver of any such breach or default, or an acquiescence therein, or of any similar breach or default thereunder occurring; nor shall any waiver of any single breach or default be deemed a waiver of any other breach or default theretofore or thereafter occurring. Any waiver, permit, consent or approval of any kind or character on the part of any Holder of any breach or default under this Agreement, or any waiver on the part of any Holder of any provisions or conditions of this Agreement, must be in writing and shall be effective only to the extent specifically set forth in such writing. All remedies, either under this Agreement, or by law or otherwise afforded to any holder, shall be cumulative and not alternative.

(h) Counterparts. This Agreement may be executed in any number of counterparts, each of which shall be enforceable against the parties actually executing such counterparts, and all of which together shall constitute one instrument. In the event that any signature is delivered by facsimile transmission or electronic transmission via .PDF file, such signature shall create a valid and binding obligation of the party executing (or on whose behalf such signature is executed) with the same force and effect as if such facsimile or electronic signature page were an original thereof.

(i) Severability. In the case any provision of this Agreement shall be invalid, illegal or unenforceable, the validity, legality and enforceability of the remaining provisions shall not in any way be affected or impaired thereby.

(j) Amendments. The provisions of this Agreement may be amended at any time and from time to time, and particular provisions of this Agreement may be waived, with and only with an agreement or consent in writing signed by the Company and the Majority Holders. The Holders acknowledge that by the operation of this Section, the Majority Holders may have the right and power to diminish or eliminate all rights of the Holders under this Agreement.

[SIGNATURE PAGES FOLLOW]

This Registration Rights Agreement is hereby executed as of the date first above written.

COMPANY:

TAPIMMUNE INC.

By: _____

Name:

Title: CEO

MARKER STOCKHOLDER:

Name:

**Certificate of Amendment to Articles of Incorporation
For Nevada Profit Corporations
(Pursuant to NRS 78.385 and 78.390 — After Issuance of Stock)**

1. **Name of corporation:**

TapImmune Inc.

2. **The articles have been amended as follows: (provide article numbers, if available)**

1 The name of the Corporation is hereby amended to “Marker Therapeutics, Inc.”

3: The number of authorized shares is 150,000,000 shares of common stock and 5,000,000 shares of preferred stock (the terms of which are to be determined at the sole discretion of the Board of Directors), each class with a par value of \$0.001.

3. The vote by which the stockholders holding shares in the corporation entitling them to exercise at least a majority of the voting power or such greater proportion of the voting power as may be required in the case of a vote by classes or series, or as may be required by the provisions of the articles of incorporation have voted in favor of the amendment is %.

4. Effective date and time of filing: (optional) Date: Time: (must not be later than 90 days after the certificate if filed)

5. Signature: (required)

Signature of Officer

**PLAN OF CONVERSION
OF
MARKER THERAPEUTICS, INC., A NEVADA CORPORATION
INTO
MARKER THERAPEUTICS, INC., A DELAWARE CORPORATION**

This Plan of Conversion (this “Plan of Conversion”), dated as of [], 2018, provides for the conversion of Marker Therapeutics, Inc., a Nevada corporation (the “Converting Corporation”), into Marker Therapeutics, Inc., a Delaware corporation (the “Converted Corporation”), pursuant to Section 92A.120 and 92A.250 of the Nevada Revised Statutes, as amended (the “NRS”), and Section 265 of the General Corporation Law of the State of Delaware (the “DGCL”).

RECITALS

WHEREAS, the Converting Corporation and Marker Cell Therapy, Inc., a Delaware corporation formerly known as Marker Therapeutics, Inc. (“MCT”) entered into an Agreement and Plan of Merger and Reorganization dated May 15, 2018 (the “Merger Agreement”; capitalized terms used but not defined in this Plan of Conversion shall have the meanings ascribed to them in the Merger Agreement), pursuant to which (and upon the terms and subject to the conditions set forth therein), a wholly-owned subsidiary of the Converting Corporation will be merged with and into MCT, with MCT continuing as the surviving corporation and a wholly-owned subsidiary of the Converting Corporation;

WHEREAS, it is a condition to the closing of the transaction contemplated by the Merger Agreement that the Converting Corporation has effected the Conversion (as hereinafter defined);

WHEREAS, the Converting Corporation intends for (i) the Conversion (as defined below) to be treated as a “reorganization” under Section 368(a)(1)(F) of the Code, and (ii) this Plan of Conversion to constitute a “plan of reorganization” within the meaning of Treasury Regulation Section 1.368-2(g);

WHEREAS, the Conversion and the form, terms and provisions of this Plan of Conversion have been authorized, approved and adopted by the Board of Directors of the Converting Corporation;

WHEREAS, the Board of Directors of the Converting Corporation has submitted this Plan of Conversion to the stockholders of the Converting Corporation for approval; and

WHEREAS, this Plan has been authorized, approved and adopted by the holders of a majority of the voting power of the stockholders of the Converting Corporation.

NOW, THEREFORE, the Converting Corporation hereby adopts this Plan as follows:

1. **Conversion; and Continuing Existence.** Immediately prior to the Effective Time on the Closing Date, in accordance with this Plan of Conversion, the DGCL and the NRS, the Converting Corporation shall convert into a Delaware corporation, with the Converted Corporation as the resulting corporation (the “Conversion”), and the existence of the Converting Corporation shall continue in the organizational form of the Converted Corporation. The Converted Corporation shall be incorporated, formed and organized as a Delaware corporation pursuant to the DGCL. Notwithstanding Section 106 of the DGCL, the existence of the Converted Corporation shall be deemed to have commenced on the date the Converting Corporation commenced its existence in the State of Nevada.

2. **Conditions.** The Conversion is conditioned upon this Plan of Conversion being approved by the stockholders of the Converting Corporation in accordance with the requirements of the NRS and DGCL which approval has been obtained.

3. **Filings.** Upon the terms and subject to the provisions of this Plan of Conversion, immediately prior to the Effective Time on the Closing Date, the Converting Corporation shall cause the Conversion to be consummated by:

a. executing and filing (or causing the execution and filing of) Articles of Conversion pursuant to Sections 92A.205 and 92A.250 of the NRS, substantially in the form of Exhibit A hereto (the “Articles of Conversion”) with the Secretary of State of the State of Nevada;

b. executing and filing (or causing the execution and filing of) a Certificate of Conversion pursuant to Sections 103 and 265 of the DGCL, substantially in the form of Exhibit B hereto (the “Certificate of Conversion”) with the Secretary of State of the State of Delaware; and

c. executing and filing (or causing the execution and filing of) a Certificate of Incorporation of the Converted Corporation, substantially in the form of Exhibit C hereto (the “Certificate of Incorporation”) with the Secretary of State of the State of Delaware.

4. Conversion Effective Time. The Conversion shall become effective at the later of the time the Articles of Conversion, Certificate of Conversion and Certificate of Incorporation are duly filed or at such later date and time as MCT and the Converting Corporation shall agree in writing and shall specify in the Certificate of Conversion and the Articles of Conversion (the time the Conversion becomes effective being the “Conversion Effective Time”).

5. Effect of the Conversion. The Conversion shall have the effects set forth in this Plan of Conversion, the Merger Agreement and in the relevant provisions of the DGCL and NRS. Pursuant to Section 265(f) of the DGCL, upon the Conversion Effective Time the Converted Corporation shall for all purposes of the law of the State of Delaware be deemed to be the same entity as the Converting Corporation. Upon the Conversion Effective Time, by virtue of the Conversion, for all purposes of the laws of the State of Delaware, all of the rights, privileges and powers of the Converting Corporation, all property, real, personal and mixed, and all debts due to the Converting Corporation, as well as all other things and causes of action belonging to the Converting Corporation existing immediately prior to the Conversion Effective Time, shall remain vested in the Converted Corporation and shall be the property of the Converted Corporation and the title to any real property vested by deed or otherwise in the Converting Corporation existing immediately prior to the Conversion Effective Time shall not revert or be in any way impaired by reason of the Conversion, but shall vest in the Converted Corporation. Upon the Conversion Effective Time, all rights of creditors and all liens upon the property of the Converting Corporation shall be preserved unimpaired, limited to the property affected by such liens at the time of the Conversion becoming effective, and all debts, contracts, liabilities, obligations and duties of the Converting Corporation shall thenceforth attach to the Converted Corporation and may be enforced against it to the same extent as they had been incurred or contracted by it.

6. Conversion of Capital Stock. At the Conversion Effective Time, by virtue of the Conversion and without any action on the part of the Converting Corporation, Converted Corporation, the holders or any shares of capital stock of the Converting Corporation or any other person:

a. Each share of Common Stock, \$0.001 par value per share, of the Converting Corporation (“Converting Corporation Common Stock”) issued and outstanding immediately prior to the Conversion Effective Time shall thereupon be converted into and become one validly issued, fully paid and nonassessable share of Common Stock, \$0.001 par value per share, of the Converted Corporation (“Converted Corporation Common Stock”). As of the Conversion Effective Time, all such shares of Converting Corporation Common Stock shall no longer be outstanding and shall automatically be cancelled and shall cease to exist, and shall thereafter only represent shares of Converted Corporation Common Stock.

b. Each option to acquire shares of Converting Corporation Common Stock outstanding immediately prior to the Conversion Effective Time shall thereupon be converted into and become an equivalent option to acquire the same number of shares of Converted Corporation Common Stock, upon the same terms and conditions (including the vesting schedule and exercise price per share applicable to each such option) as were in effect immediately prior to the Conversion Effective Time.

c. Each warrant or other right to acquire shares of Converting Corporation Common Stock outstanding immediately prior to the Conversion Effective Time shall thereupon be converted into and become an equivalent warrant or other right to acquire the same number of shares of Converted Corporation Common Stock, upon the same terms and conditions (including the vesting schedule and exercise price per share applicable to each such warrant or other right) as were in effect immediately prior to the Conversion Effective Time.

There are no shares of Preferred Stock of the Converting Corporation issued and outstanding.

7. Stock Certificates. From and after the Conversion Effective Time, all of the outstanding certificates that prior to that time represented shares of the Converting Corporation Common Stock shall be deemed for all purposes to evidence ownership of and to represent shares of Converted Corporation Common Stock. The registered owner on the books and records of the Converted Corporation or its transfer agent of any such outstanding stock certificate shall, until such certificate shall have been surrendered for transfer or conversion or otherwise accounted for to the Converted Corporation or its transfer agent, have and be entitled to exercise any voting and other rights with respect to and to receive any dividend and other distributions upon the shares of the Converted Corporation evidenced by such outstanding certificate as provided above.

8. Effect on Employee Benefit, Equity Incentive or Other Similar Plans. Upon the Conversion Effective Time, by virtue of the Conversion and without any further action on the part of the Converting Corporation or its stockholders, each employee benefit plan, equity incentive plan or other similar plan to which the Converting Corporation is a party shall continue to be a plan of the Converted Corporation. To the extent that any such plan provides for the issuance of Converting Corporation Common Stock, upon the Conversion Effective Time, such plan shall be deemed to provide for the issuance of Converted Corporation Common Stock.

9. Bylaws. At the Conversion Effective Time, the bylaws of the Converted Corporation shall be as set forth on Exhibit D hereto and shall be the bylaws of the Converted Corporation until thereafter amended in accordance with its terms, the certificate of incorporation of the Converted Corporation and as provided by applicable law.

10. Directors and Officers. The directors and officers of the Converting Corporation immediately prior to the Conversion Effective Time shall be the directors and officers of the Converted Corporation until their successors shall have been duly elected and qualified.

11. Governing Law. This Plan of Conversion shall be governed and construed in accordance with the laws of the State of Delaware and, so far as applicable, the conversion provisions of the NRS.

12. Copy of Plan of Conversion. After the Conversion, a copy of this Plan of Conversion will be kept on file at the offices of the Converted Corporation, and any stockholder of the Converted Corporation (or former stockholder of the Converting Corporation) may request a copy of this Plan of Conversion at no charge at any time.

13. Abandonment. At any time before the Conversion Effective Time, this Plan of Conversion may be terminated and the Conversion may be abandoned for any reason whatsoever by the Board of Directors of the Converting Corporation (with the prior written consent of MCT), notwithstanding the approval of this Plan of Conversion by the stockholders of the Converting Corporation. In the event of termination of this Plan of Conversion, this Plan of Conversion shall become void and of no further force or effect.

14. Amendment. The Board of Directors of the Converting Corporation (with the prior written consent of MCT) may amend this Plan of Conversion at any time prior to the filing of a Certificate of Conversion with the Delaware Secretary of State or the Articles of Conversion with the Nevada Secretary of State.

15. Tax Treatment. The Converting Corporation intends for (i) the Conversion (as defined below) to be treated as a "reorganization" under Section 368(a)(1)(F) of the Code, and (ii) this Plan of Conversion to constitute a "plan of reorganization" within the meaning of Treasury Regulation Section 1.368-2(g).

16. Third-Party Beneficiaries. This Plan of Conversion shall not confer any rights or remedies upon any person other than as expressly provided herein.

17. Severability. Whenever possible, each provision of this Plan will be interpreted in such manner as to be effective and valid under applicable law, but if any provision of this Plan is held to be prohibited by or invalid under applicable law, such provision will be ineffective only to the extent of such prohibition or invalidity, without invalidating the remainder of this Plan.

IN WITNESS WHEREOF, the undersigned hereby causes this Plan of Conversion to be duly executed as of the date hereof.

**MARKER THERAPEUTICS, INC.,
a Nevada corporation**

By: _____

Name: Peter L. Hoang

Title: Chief Executive Officer

State of Nevada

Articles of Conversion

(PURSUANT TO NRS 92A.205)

1. Name and jurisdiction of organization of constituent entity and resulting entity:**Name of constituent entity: Marker Therapeutics, Inc.**

Jurisdiction: Nevada

Entity type: Corporation

Name of resulting entity: Marker Therapeutics, Inc.

Jurisdiction: Delaware

Entity type: Corporation

2. A plan of conversion has been adopted by the constituent entity in compliance with the law of the jurisdiction governing the constituent entity.**3. Location of plan of conversion: (check one)** **The entire plan of conversion is attached to these articles.** **The complete executed plan of conversion is on file at the registered office or principal place of business of the resulting entity.** **The complete executed plan of conversion for the resulting domestic limited partnership is on file at the records office required by NRS 88.330.****4. Forwarding address where copies of process may be sent by the Secretary of State of Nevada (if a foreign entity is the resulting entity in the conversion):**

Attn: Peter Hoang, Chief Executive Officer

c/o: Marker Therapeutics, Inc.
5 West Forsyth Street, Suite 200
Jacksonville, FL 32202**5. Effective date and time of filing: (optional) (must not be later than 90 days after the certificate is filed)****Date:** _____ **Time:** _____**6. Signatures — must be signed by:**

1. If constituent entity is a Nevada entity: an officer of each Nevada corporation; all general partners of each Nevada limited partnership or limited-liability limited partnership; a manager of each Nevada limited-liability company with managers or one member if there are no managers; a trustee of each Nevada business trust; a managing partner of a Nevada limited-liability partnership (a.k.a. general partnership governed by NRS chapter 87).

2. If constituent entity is a foreign entity: must be signed by the constituent entity in the manner provided by the law governing it.

Name of constituent entity: Marker Therapeutics, Inc.

_____	<u>Chief Executive Officer</u>	_____
Signature	Title	Date

**STATE OF DELAWARE
CERTIFICATE OF CONVERSION
FROM A NON-DELAWARE CORPORATION
TO A DELAWARE CORPORATION
PURSUANT TO SECTION 265 OF THE
DELAWARE GENERAL CORPORATION LAW**

FIRST: The jurisdiction where the Non-Delaware Corporation first formed is Nevada.

SECOND: The jurisdiction immediately prior to filing this Certificate is Nevada.

THIRD: The date the Non-Delaware Corporation first formed is October 22, 1991.

FOURTH: The name of the Non-Delaware Corporation immediately prior to filing this Certificate is Marker Therapeutics, Inc.

FIFTH: The name of the Corporation as set forth in the Certificate of Incorporation is Marker Therapeutics, Inc.

IN WITNESS WHEREOF, the undersigned being duly authorized to sign on behalf of the converting Non-Delaware Corporation has executed this Certificate on the [] day of [], 2018.

**MARKER THERAPEUTICS, INC.,
a Nevada corporation**

By: _____
Name: Peter L. Hoang
Title: Chief Executive Officer

**CERTIFICATE OF INCORPORATION
OF
MARKER THERAPEUTICS, INC.**

The undersigned, a natural person (the “Incorporator”), for the purpose of organizing a corporation to conduct the business and promote the purposes hereinafter stated, under the provisions and subject to the requirements of the laws of the State of Delaware hereby certifies that:

ARTICLE I

The name of the Corporation is “Marker Therapeutics, Inc.” (hereinafter referred to as the “Corporation”).

ARTICLE II

The street address and county of the registered office of the Corporation in the State of Delaware is 1209 Orange Street, Wilmington, Delaware 19801, County of New Castle. The name of the registered agent at such address is The Corporation Trust Company.

ARTICLE III

The nature of the business or purposes for which the Corporation is organized is to engage in any lawful act or activity for which a corporation may be organized under the Delaware General Corporation Law (the “DGCL”).

ARTICLE IV

A. Authorization of Stock. The Corporation is authorized to issue two classes of stock to be designated, respectively, “Common Stock” and “Preferred Stock.” The total number of shares that the Corporation is authorized to issue is One Hundred Fifty Five Million (155,000,000) shares, consisting of (i) One Hundred Fifty Million (150,000,000) shares of Common Stock, \$0.001 par value per share, and (ii) Five Million (5,000,000) shares of Preferred Stock, \$0.001 par value per share.

B. Common Stock. The rights, preferences, privileges and restrictions granted to and imposed on the Common Stock are as set forth below in this Article IV(B).

1. General. The voting, dividend and liquidation rights of the holders of the Common Stock are subject to and qualified by the rights of the holders of the Preferred Stock of any series as may be designated by the board of directors of the Corporation (the “Board of Directors”) upon any issuance of the Preferred Stock of any series.

2. Voting Rights. The holder of each share of Common Stock shall have the right to one vote for each such share, and shall be entitled to notice of any stockholders’ meeting in accordance with the Bylaws of the Corporation, and shall be entitled to vote upon such matters and in such manner as may be provided by law; provided, however, that, except as otherwise required by law, holders of Common Stock, as such, shall not be entitled to vote on any amendment to the Certificate of Incorporation that relates solely to the terms of one or more outstanding series of Preferred Stock if the holders of such affected series are entitled, either separately or together with the holders of one or more other such series, to vote thereon pursuant to the Certificate of Incorporation or pursuant to the DGCL. The number of authorized shares of Common Stock may be increased or decreased (but not below the number of shares thereof then outstanding) by the affirmative vote of the holders of a majority of the stock of the Corporation entitled to vote, irrespective of the provisions of Section 242(b)(2) of the DGCL.

3. Dividends. Subject to the prior rights of holders of all classes of stock at the time outstanding having prior rights as to dividends, the holders of the Common Stock shall be entitled to receive, when, as and if declared by the Board of Directors, out of any assets of the Corporation legally available therefor, any dividends as may be declared from time to time by the Board of Directors.

4. Liquidation. The holders of the Common Stock will be entitled to share ratably, on the basis of the number of shares of Common Stock then held by each such holder, in all distributions to the holders of the Common Stock in any liquidation, dissolution or winding up of the Corporation.

5. Redemption. The Common Stock is not redeemable at the option of the holder.

C. Preferred Stock. The Preferred Stock may be issued from time to time in one or more series. The Board of Directors is hereby expressly authorized to provide for the issue of all or any of the shares of the Preferred Stock in one or more series, and to fix the number of shares and to determine or alter for each such series, such voting powers, full or limited, or no voting powers, and such designation, preferences, and relative, participating, optional, or other rights and such qualifications, limitations, or restrictions thereof, as shall be stated and expressed in the resolution or resolutions adopted by the Board of Directors providing for the issuance of such shares and as may be permitted by the DGCL. The Board of Directors is also expressly authorized to increase or decrease the number of shares of any series subsequent to the issuance of shares of that series, but not below the number of shares of such series then outstanding. In case the number of shares of any series shall be decreased in accordance with the foregoing sentence, the shares constituting such decrease shall resume the status that they had prior to the adoption of the resolution originally fixing the number of shares of such series. The number of authorized shares of Preferred Stock may be increased or decreased (but not below the number of shares thereof then outstanding) by the affirmative vote of the holders of a majority of the voting power of the stock of the Corporation entitled to vote thereon, without a separate vote of the holders of the Preferred Stock, or of any series thereof, unless a vote of any such holders is required pursuant to the terms of any certificate of designation filed with respect to any series of Preferred Stock.

ARTICLE V

Except as otherwise provided in this Certificate of Incorporation, in furtherance and not in limitation of the powers conferred by statute, the Board of Directors is expressly authorized to make, repeal, alter, amend and rescind any or all of the Bylaws of the Corporation.

ARTICLE VI

The number of directors which shall constitute the Board of Directors shall be determined in the manner set forth in the Bylaws of the Corporation.

ARTICLE VIII

The directors of the Corporation need not be elected by written ballot unless the Bylaws of the Corporation so provide.

ARTICLE IX

Meetings of stockholders may be held within or without the State of Delaware, as the Bylaws of the Corporation may provide. The books of the Corporation may be kept (subject to any provision contained in the statutes) outside the State of Delaware at such place or places as may be designated from time to time by the Board of Directors or in the Bylaws of the Corporation

ARTICLE X

To the fullest extent permitted by applicable law, the Corporation is authorized to provide indemnification of (and advancement of expenses to) directors, officer, employees and agents of the Corporation (and any other persons to which the DGCL permits the Corporation to provide indemnification) through Bylaw provisions, agreements with such persons, vote of stockholders or disinterested directors or otherwise, in excess of the indemnification and advancement otherwise permitted by such applicable law, subject only to limits created by applicable DGCL (statutory or non-statutory) with respect to actions for breach of duty to the Corporation, its stockholders and others.

Any amendment, repeal or modification of the foregoing provisions of this Article X shall not adversely affect any right or protection of a director, officer, employee, agent or other person existing at the time of, or increase the liability of any such person with respect to any acts or omissions of such person occurring prior to, such amendment, repeal or modification.

The Corporation shall have the power to purchase and maintain insurance on behalf of any person who is or was a director, officer, employee or agent of the Corporation, or was servicing at the request of the Corporation as a director, officer, employee or agent of another entity, against any liability asserted against the person and incurred by the person in any such capacity, or arising out of his or her status as such, whether or not the Corporation would have the power or the obligation to indemnify such person against such liability under the provisions of this Article X or the DGCL.

ARTICLE XI

To the fullest extent provided by law, a director of the Corporation shall not be personally liable to the Corporation or its stockholders for monetary damages for breach of fiduciary duty as a director. If the DGCL is amended after approval by the stockholders of this Article XI to authorize corporate action further eliminating or limiting the personal liability of directors, then the liability of a director of the Corporation shall be eliminated or limited to the fullest extent permitted by the DGCL as so amended.

Any amendment, repeal or modification of the foregoing provisions of this Article XI shall not adversely affect any right or protection of a director of the Corporation existing at the time of, or increase the liability of any director of the Corporation with respect to any acts or omissions of such director occurring prior to, such amendment, repeal or modification.

ARTICLE XII

Unless the Corporation consents in writing to the selection of an alternative forum, the Court of Chancery of the State of Delaware (or, if the Court of Chancery does not have jurisdiction, the federal district court for the District of Delaware) shall, to the fullest extent permitted by law, be the sole and exclusive forum for (1) any derivative action or proceeding brought on behalf of the Corporation; (2) any action asserting a claim of breach of a fiduciary duty owed by, or any other wrongdoing by, any director, officer or other employee of the Corporation to the Corporation or the Corporation's stockholders; (3) any action asserting a claim against the Corporation or any director or officer or other employee of the Corporation arising pursuant to any provision of the DGCL, the Corporation's Certificate of Incorporation or the Bylaws of the Corporation; (4) any action to interpret, apply, enforce or determine the validity of the Delaware Certificate of Incorporation or the Bylaws, or (5) any action asserting a claim against the Corporation or any director or officer or other employee of the Corporation governed by the internal affairs doctrine. Any person or entity purchasing or otherwise acquiring or holding any interest in shares of capital stock of the Corporation shall be deemed to have notice of and consented to the provisions of this Article XII.

If any action the subject matter of which is within the scope of this Article XII is filed in a court other than a court located within the State of Delaware (a "Foreign Action") in the name of any stockholder, such stockholder shall be deemed to have consented to (i) the personal jurisdiction of the state and federal courts located within the State of Delaware in connection with any action brought in any such court to enforce this Article XII (an "FSC Enforcement Action") and (ii) having service of process made upon such stockholder in any such FSC Enforcement Action by service upon such stockholder's counsel in the Foreign Action as agent for such stockholder.

If any provision or provisions of this Article XII shall be held to be invalid, illegal or unenforceable as applied to any person or entity or circumstance for any reason whatsoever, then, to the fullest extent permitted by law, the validity, legality and enforceability of such provisions in any other circumstance and of the remaining provisions of this Article XII (including, without limitation, each portion of any sentence of this Article XII containing any such provision held to be invalid, illegal or unenforceable that is not itself held to be invalid, illegal or unenforceable) and the application of such provision to other persons or entities and circumstances shall not in any way be affected or impaired thereby.

ARTICLE XIII

The Corporation reserves the right to amend, alter, change or repeal any provision contained in this Certificate of Incorporation, in the manner now or hereafter prescribed by statute, and all rights conferred upon the stockholders herein are granted subject to this reservation.

ARTICLE XIV

The name and the mailing address of the Incorporator are as follows:

Name	MAILING ADDRESS
PETER L. HOANG	Marker Therapeutics, Inc. 5 West Forsyth Street, Suite 200 Jacksonville, FL 32202

I, the undersigned, for the purpose of forming a corporation pursuant to the DGCL, do make, file and record this Certificate of Incorporation, hereby acknowledging, declaring and certifying that this Certificate of Incorporation is my act and deed and that the facts herein stated are true, and have accordingly hereunto set my hand this [] day of [], 2018.

PETER HOANG
Incorporator

**BYLAWS
OF
MARKER THERAPEUTICS, INC.
(A Delaware Corporation)**

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ARTICLE I OFFICES

1.1 **Registered Office.** The registered office of Marker Therapeutics, Inc. (the “Corporation”) in the State of Delaware shall be established and maintained at the office of The Corporation Trust Company, 1209 Orange Street, Wilmington, Delaware 19801, County of New Castle, and The Corporation Trust Company shall be the registered agent of the Corporation in charge thereof.

1.2 **Offices.** The Corporation shall also have and maintain an office or principal place of business at such place as may be fixed by the Board of Directors, and may also have offices at such other places, both within and without the State of Delaware as the Board of Directors may from time to time determine or the business of the Corporation may require.

ARTICLE II STOCKHOLDERS AND MEETINGS THEREOF

2.1 **Place of Meetings.** Meetings of the stockholders of the Corporation may be held at such place, either within or without the State of Delaware, as shall be designated from time to time by the Board of Directors and stated in the notice of the meeting; provided, however, that the Board of Directors may, in its sole discretion, determine that the meeting shall not be held at any place, but may instead be held solely by means of remote communication as authorized by Section 211 of the Delaware General Corporations Law (“DGCL”).

2.2 **Annual Meetings.** Annual meetings of stockholders shall be held on such date and at such time as shall be designated from time to time by the Board of Directors and stated in the notice of the meeting, at which they shall elect a Board of Directors by a plurality vote, and transact such other business as may properly be brought before the meeting.

2.3 **Special Meetings.** Special meetings of the stockholders, for any purpose or purposes, unless otherwise prescribed by statute or by the certificate of incorporation (the “Certificate of Incorporation”), may be called by (i) the Chairman of the Board of Directors; (ii) the Chief Executive Officer; or (iii) the Board of Directors pursuant to a resolution adopted by a majority of the total number of authorized directors (whether or not there exist any vacancies in previously authorized directorships at the time any such resolution is presented to the Board of Directors for adoption).

2.4 **Notice of Meeting.** Written notice of any stockholder meeting stating the place, if any, date and hour of the meeting, the record date for determining stockholders entitled to vote at the meeting (if such date is different from the record date for stockholders entitled to notice of the meeting), the means of remote communication, if any, by which stockholders and proxyholders may be deemed to be present in person and vote at such meeting, and, in the case of a special meeting, the purpose or purposes for which the meeting is called, shall be given to each stockholder entitled to vote at such meeting not fewer than ten (10) nor more than sixty (60) days before the date of the meeting.

2.5 **Fixing a Record Date.** In order that the Corporation may determine the stockholders entitled to notice of or to vote at any meeting of stockholders or any adjournment thereof, or to express consent to corporate action in writing without a meeting, or entitled to receive payment of any dividend or other distribution or allotment of any rights, or entitled to exercise any rights in respect of any change, conversion or exchange of stock or for the purpose of any other lawful action, the Board of Directors may fix a record date which shall not be more than sixty (60) nor less than ten (10) days before the date of such meeting, nor more than sixty (60) days prior to any other action. A determination of stockholders of record entitled to notice of or to vote at a meeting of stockholders shall apply to any adjournment of the meeting; provided, however, that the Board of Directors may fix a new record date for the adjourned meeting.

2.6 **Stockholders’ Records.** The officer who has charge of the stock ledger of the Corporation shall prepare and make, at least ten (10) days before every meeting of stockholders, a complete list of the stockholders entitled to vote at the meeting, arranged in alphabetical order, and showing the address (but not the electronic address or other electronic contact information) of each stockholder and the number of shares registered in the name of each stockholder. Such list shall be open to the examination of any stockholder, for any purpose germane to the meeting for a period of at least 10 days prior to the meeting:

(i) on a reasonably accessible electronic network, provided that the information required to gain access to such list is provided with the notice of the meeting, or (ii) during ordinary business hours, at the principal place of business of the Corporation. In the event that the Corporation determines to make the list available on an electronic network, the Corporation may take reasonable steps to ensure that such information is available only to stockholders of the Corporation. If the meeting is to be held at a place, then the list shall be produced and kept at the time and place of the meeting during the whole time thereof, and may be inspected by any stockholder who is present. If the meeting is to be held solely by means of remote communication, then the list shall also be open to the examination of any stockholder during the whole time of the meeting on a reasonably accessible electronic network, and the information required to access such list shall be provided with the notice of the meeting.

2.7 Business Transacted at Special Meeting. Business transacted at any special meeting of stockholders shall be limited to the purposes stated in the notice.

2.8 Quorum; Meeting Adjournment; Presence by Remote Means.

(a) *Quorum; Meeting Adjournment.* The holders of one-third of the outstanding shares of the Corporation entitled to vote at any meeting of stockholders, present in person or represented by proxy, shall constitute a quorum at all meetings of the stockholders for the transaction of business except as otherwise provided by statute or by the Certificate of Incorporation. If, however, such quorum shall not be present or represented at any meeting of the stockholders, the stockholders entitled to vote thereat, present in person or represented by proxy, shall have power to adjourn the meeting from time to time, without notice other than announcement at the meeting, until a quorum shall be present or represented. At such adjourned meeting at which a quorum shall be present or represented, any business may be transacted that might have been transacted at the meeting as originally notified. If the adjournment is for more than thirty (30) days, or if after the adjournment a new record date is fixed for the adjourned meeting, a notice of the adjourned meeting shall be given to each stockholder of record entitled to vote at the meeting.

(b) *Presence by Remote Means.* If authorized by the Board of Directors in its sole discretion, and subject to such guidelines and procedures as the Board of Directors may adopt, stockholders and proxyholders not physically present at a meeting of stockholders may, by means of remote communication:

(1) participate in a meeting of stockholders; and

(2) be deemed present in person and vote at a meeting of stockholders whether such meeting is to be held at a designated place or solely by means of remote communication, provided that (i) the Corporation shall implement reasonable measures to verify that each person deemed present and permitted to vote at the meeting by means of remote communication is a stockholder or proxyholder, (ii) the Corporation shall implement reasonable measures to provide such stockholders and proxyholders a reasonable opportunity to participate in the meeting and to vote on matters submitted to the stockholders, including an opportunity to read or hear the proceedings of the meeting substantially concurrently with such proceedings, and (iii) if any stockholder or proxyholder votes or takes other action at the meeting by means of remote communication, a record of such vote or other action shall be maintained by the Corporation.

2.9 Voting. When a quorum is present at any meeting, the vote of the holders of a majority of the stock having voting power present in person or represented by proxy shall decide any question brought before such meeting other than the election of directors, unless the question is one upon which by express provision of the statutes, the Certificate of Incorporation or these bylaws, a different vote is required, in which case such express provision shall govern and control the decision of such question. All elections of directors shall be determined by a plurality of the votes cast.

2.10 Number of Votes Per Share. Unless otherwise provided in the Certificate of Incorporation, each stockholder shall at every meeting of the stockholders be entitled to one vote by such stockholder or by proxy for each share of the capital stock having voting power held by such stockholder, but no proxy shall be voted on after three years from its date, unless the proxy provides for a longer period.

2.11 Action by Written Consent of Stockholders.

(a) *Action by Written Consent of Stockholders.* Unless otherwise provided by the Certificate of Incorporation, any action required or permitted to be taken at any annual or special meeting of the stockholders may be taken without a meeting, without prior notice and without a vote, if a consent in writing setting forth the action so taken, is signed in a manner permitted by law by the holders of outstanding stock having not less than the number of votes that would be necessary to authorize or take such action at a meeting at which all shares entitled to vote thereon were present and voted. Written stockholder consents shall bear the date of signature of each stockholder who signs the consent in the manner permitted by law and shall be delivered to the Corporation as provided in subsection (b) below. No written consent shall be effective to take the action set forth therein unless, within sixty (60) days of the earliest dated consent delivered to the Corporation in the manner provided above, written consents signed by a sufficient number of stockholders to take the action set forth therein are delivered to the Corporation in the manner provided above.

(b) *Electronic Consent.* An electronic transmission consenting to an action to be taken and transmitted by a stockholder or proxyholder, or a person or persons authorized to act for a stockholder or proxyholder, shall be deemed to be written, signed and dated for the purposes of this section, provided that any such electronic transmission sets forth or is delivered with information from which the Corporation can determine (1) that the electronic transmission was transmitted by the stockholder or proxyholder or by a person or persons authorized to act for the stockholder or proxyholder and (2) the date on which such stockholder or proxyholder or authorized person or persons transmitted such electronic transmission. The date on which such electronic transmission is transmitted shall be deemed to be the date on which such consent was signed. No consent given by electronic transmission shall be deemed to have been delivered until such consent is reproduced in paper form and until such paper form is delivered to the Corporation by delivery to its registered office in the State of Delaware, its principal place of business or an officer or agent of the Corporation having custody of the book in which proceedings of meetings of stockholders are recorded. Delivery made to a corporation's registered office shall be made by hand or by certified or registered mail, return receipt requested. Notwithstanding the foregoing limitations on delivery, consents given by electronic transmission may be otherwise delivered to the principal place of business of the Corporation or to an officer or agent of the Corporation having custody of the book in which proceedings of meetings of stockholders are recorded if, to the extent and in the manner provided by resolution of the Board of Directors of the Corporation.

(c) *Notice of Action.* Prompt notice of any action taken pursuant to this Section 2.11 shall be provided to the stockholders in accordance with Section 228(e) of the DGCL.

2.12 Nominations and Proposals of Business.

(a) Nominations of persons for election to the Board of Directors and proposals for other business to be transaction by the stockholders at an annual meeting of stockholders may be made (i) pursuant to the Corporation's notice with respect to such meeting (or any supplement thereto), (ii) by or at the direction of the Board of Directors or any committee thereof or (iii) by any stockholder of record of the Corporation who (A) was a stockholder of record at the time of the giving of the notice contemplated in Section 2.12(b), (B) is entitled to vote at such meeting and (C) has complied with the notice procedures set forth in this Section 2.12. Subject to Section 1.2(i) and except as otherwise required by law, clause (iii) of this Section 2.12 (a) shall be the exclusive means for a stockholder to make nominations or propose other business (other than nominations and proposals properly brought pursuant to applicable provisions of federal law, including the Securities Exchange Act of 1934 (as amended from time to time, the "Act") and the rules and regulations of the Securities and Exchange Commission thereunder) before an annual meeting of stockholders.

(b) Except as otherwise required by law, for nominations or proposals to be properly brought before an annual meeting by a stockholder pursuant to clause (iii) of Section 2.12(a), (i) the stockholder must have given timely notice thereof in writing to the Secretary of the Corporation with the information contemplated by Section 2.12(c) including, where applicable, delivery to the Corporation of timely and completed questionnaires as contemplated by Section 2.12(c), and (ii) the

business must be a proper matter for stockholder action under the DGCL. The notice requirements of this Section 2.12 shall be deemed satisfied by a stockholder with respect to business other than a nomination if the stockholder has notified the Corporation of his, her or its intention to present a proposal at an annual meeting in compliance with the applicable rules and regulations promulgated under the Act and such stockholder's proposal has been included in a proxy statement prepared by the Corporation to solicit proxies for such annual meeting.

(c) To be timely for purposes of Section 2.12(b), a stockholder's notice must be delivered to the Secretary of the Corporation at the principal executive office of the Corporation on a date (i) not later than the close of business on the 90th day nor earlier than the close of business on the 120th day prior to the anniversary date of the prior year's annual meeting or (ii) if there was no annual meeting in the prior year or if the date of the current year's annual meeting is more than 30 days before or more than 60 days after the anniversary date of the prior year's annual meeting, not earlier than the close of business on the 120th day prior to such annual meeting and not later than the close of business on the later of (x) the 90th day prior to such annual meeting or (y) 10 days after the day on which the date of the current year's annual meeting is first disclosed in a public announcement. In no event shall any adjournment or postponement of an annual meeting or the announcement thereof commence a new time period for the delivery of such notice.

Such notice form a stockholder must state (i) as to each nominee that the stockholder proposed for election or reelection as a director: (A) All information relating to such nominee that would be required to be disclosed in solicitations of proxies for the election of such nominee as a director pursuant to Regulation 14A under the Act, including such person's written consent to being named in the proxy statement as a nominee and serving as a director if elected, and (B) a description of all direct and indirect compensation and other material monetary arrangements, agreements or understandings during the past three years, and any other material relationship, if any, between or concerning such stockholder, and Stockholder Associated Person (as defined below) or any of their respective affiliates or associates, on the one hand, and the proposed nominee or any of his or her affiliates or associates, on the other hand; (ii) as to each proposal that the stockholder seeks to bring before the meeting, a brief description of such proposal, the reasons for making the proposal at the meeting, the text of the proposal or business (including the text of any resolutions proposed for consideration and in the event that such business includes a proposal to amend the bylaws of the Corporation, the language of the proposed amendment) and any material interest that the stockholder has in the proposal; and (iii) (A) the name and address of the stockholder giving the notice and the Stockholder Associated Persons, if any, on whose behalf the nomination or proposal is made, (B) the class (and, if applicable, series) and number of shares of stock of the Corporation that are, directly or indirectly, owned beneficially or of record by the stockholder, (C) any option, warrant, convertible security, stock appreciation right or similar right with an exercise or conversion privilege or a settlement payment or mechanism at a price related to any class (or, if applicable, series) of shares of stock of the Corporation or with a value derived in whole or in part from the value of any class (or, if applicable, series) of shares of stock of the Corporation, whether or not such instrument or right shall be subject to settlement in the underlying class or series of capital stock of the Corporation or otherwise (each a "Derivative Instrument") directly or indirectly owned beneficially or of record by such stockholder or any Stockholder Associated Person and any other direct or indirect opportunity to profit or share in any profit derived from any increase or decrease in the value of shares of stock of the Corporation of the stockholder or any Stockholder Associated Person, (D) any proxy, contract, arrangement, understanding or relationship pursuant to which such stockholder or any Stockholder Associated Person has a right to vote any securities of the Corporation, (E) any proportionate interest in shares of the Corporation or Derivative Instruments held, directly or indirectly, by a general or limited partnership in which such stockholder or any Stockholder Associated Person is a general partner or beneficially owns, directly or indirectly, an interest in a general partner, (F) any performance-related fees (other than an asset-based fee) that such stockholder or any Stockholder Associated Person is entitled to based on any increase or decrease in the value of the shares of stock of the Corporation or Derivative Instruments, (G) any other information relating to such stockholder or any Stockholder Associated Person, if any, required to be disclosed in a proxy statement or other filing required to be made in connection with solicitations of proxies for, as applicable, the proposal and/or for the election

of directors in an election contest pursuant to and in accordance with Section 14(a) of the Act and the rules and regulations of the Securities and Exchange Commission thereunder, (H) a representation that the stockholder is a holder of record of the Corporation entitled to vote at such meeting and intends to appear in person or by proxy at the meeting to propose such business or nomination, (I) a certificate as to whether or not the stockholder and all Stockholder Associated Persons have complied with all applicable federal, state and other legal requirements in connection with the stockholder's and each Stockholder Associated Person's acquisitions of shares of capital stock or other securities of the Corporation and the stockholder's and each Stockholder Associated Person's acts or omissions as a stockholder (or beneficial owner of securities) of the Corporation, and (J) whether either the stockholder intends to deliver a proxy statement and form of proxy to holders of, in the case of a proposal, at least the percentage of the Corporation's voting shares required under applicable law to carry the proposal or, in the case of a nomination or nominations, a sufficient number of holders of the Corporation's voting shares reasonably believed by such stockholder to be sufficient to elect such nominee or nominees or otherwise to solicit proxies or votes from stockholders in support of such proposal or nomination.

For purposes of these bylaws, a "Stockholder Associated Person" of any stockholder means (i) any "affiliate" or "associate" (as those terms are defined in Rule 12b-2 under the Act) of such stockholder, (ii) any beneficial owner of any capital stock or other securities of the Corporation owned of record or beneficially by such stockholder, (iii) any person directly or indirectly controlling, controlled by or under common control with any such Stockholder Associated Person referred to in clause (i) or (ii) above, and (iv) any person acting in concert in respect of any matter involving the Corporation or its securities with either such stockholder or any beneficial owner of any capital stock or other securities of the Corporation owned of record or beneficially by such stockholder.

In addition, in order for a nomination to be properly brought before an annual or special meeting by a stockholder pursuant to clause (iii) of Section 2.12(a), subject to Section 2.12(i), any nominee proposed by a stockholder shall complete a questionnaire in a form provided by the Corporation, and deliver a signed copy of such completed questionnaire to the Corporation within 10 days of the date that the Corporation makes available to the stockholder seeking to make such nomination or such nominee the form of such questionnaire and shall deliver a written and signed statement that such person (i) is not and will not become a party to (A) any agreement, arrangement or understanding with, and has not given any commitment or assurance to, any person or entity as to how such person, if elected as a director of the Corporation, will act or vote on any issue or questions (a "Voting Commitment") that has not been disclosed to the Corporation or (B) any Voting Commitment that could limit or interfere with such person's ability to comply, if elected as a director of the Corporation, with such person's fiduciary duties under applicable law, (ii) is not and will not become a party to any agreement, arrangement or understanding with any person or entity other than the Corporation with respect to any direct or indirect compensation, reimbursement or indemnification in connection with the service or action as a director of the Corporation that has not been disclosed in the notice required by this Section 2.12, and (iii) in such person's individual capacity and on behalf of any person, entity or group on whose behalf the nomination is being made, would be in compliance, if elected as a director of the Corporation and will comply with all applicable publicly disclosed codes of ethics and conduct, corporate governance, conflict of interest, confidentiality and stock ownership and trading policies and guidelines of the Corporation. The Corporation may require any proposed nominee to furnish such other information as may be reasonably requested by the Corporation to determine the eligibility of the proposed nominee to serve as an independent director of the Corporation or that could be material to a reasonable stockholder's understanding of the independence, or lack thereof, of the nominee. The information required to be included in a notice pursuant to this Section 2.12(c) shall be provided as of the date of such notice and shall be supplemented by the stockholder not later than 10 days after the record date for the determination of stockholders entitled to notice of the meeting to disclose any changes to such information as of the record date. If any of the facts set forth in any notice provided pursuant to this Section 2.12(c) change between the date that such notice is sent and the date of the annual meeting to which such notice pertains, the stockholder must deliver to the Secretary of the Corporation at the principal executive offices of the Corporation, by the earlier of (i) the close of business on the date that is five days after the event giving rise to such change, or (ii) the

commencement of such annual meeting, a supplemental notice providing such revised information. The information required to be included in a notice pursuant to this Section 2.12(c) shall not include any ordinary course business activities of any broker, dealer, commercial bank, trust company or other nominee who is directed to prepare and submit the notice required by this Section 2.12(c) on behalf of a beneficial owner of the shares held of record by such broker, dealer, commercial bank, trust company or other nominee and who is not otherwise affiliated or associate with such beneficial owner. For purposes of these bylaws, "beneficial ownership" shall be determined in accordance with Rule 13d-3 promulgated under the Act.

(d) Subject to the Certificate of Incorporation of the Corporation, Section 2.12(c) and applicable law, only persons nominated in accordance with procedures stated in this Section 2.12 shall be eligible for election as and to serve as members of the Board of Directors and the only business that shall be conducted at an annual meeting of stockholders is the business that has been brought before the meeting in accordance with the procedures set forth in this Section 2.12. The chairman of the meeting shall have the power and the duty to determine whether a nomination or any proposal has been made according to the procedure stated in this Section 2.12 and, if any nomination or proposal does not comply with this Section 2.12, unless otherwise required by law, the nomination or proposal shall be disregarded.

(e) For purposes of this Section 2.12, "public announcement" means disclosure in a press release reported by the Dow Jones News Service, Associated Press or a comparable news service or in a document publicly filed or furnished by the Corporation with the Securities and Exchange Commission pursuant to Section 13, 14 or 15(d) of the Act.

(f) Notwithstanding the foregoing provisions of this Section 2.12, a stockholder shall also comply with applicable requirements of the Act and the rules and regulations thereunder with respect to matters set forth in this Section 2.12. Nothing in this Section 2.12 shall affect any rights, if any, of stockholders to request inclusion of nominations or proposals in the Corporation's proxy statement pursuant to applicable provisions of federal law, including the Act.

(g) Notwithstanding the foregoing provisions of this Section 2.12, unless otherwise required by law, if the stockholder (or a qualified representative of the stockholder) does not appear at the annual or special meeting of stockholders of the Corporation to present a nomination or proposed business or does not provide the information required by Section 2.12(c), including any required supplement thereto, such nomination shall be disregarded and such proposed business shall not be transacted, notwithstanding that proxies in respect of such vote may have been received by the Corporation. For purposes of this Section 2.12, to be considered a qualified representative of the stockholder, a person must be a duly authorized officer, manager or partner of such stockholder or must be authorized by a writing executed by such stockholder or an electronic transmission delivered by such stockholder to act for such stockholder as proxy at the meeting of stockholders and such person must produce such writing or electronic transmission, or a reliable reproduction of the writing or electronic transmission, at the meeting of stockholders.

(h) Only such business shall be conducted at a special meeting of stockholders as shall have been brought before the meeting pursuant to the Corporation's notice of meeting. Nominations of persons for election to the Board of Directors may be made at a special meeting of stockholders at which directors are to be elected pursuant to the Corporation's notice of meeting (1) by or at the direction of the Board of Directors or any committee thereof or (2) provided that the Board of Directors has determined that directors shall be elected at such meeting, by any stockholder of the Corporation who is a stockholder of record at the time the notice provided for in this Section 2.12 is delivered to the Secretary of the Corporation, who is entitled to vote at the meeting upon such election and who complies with the notice procedures set forth in this Section 2.12. In the event the Corporation calls a special meeting of stockholders for the purpose of electing one or more directors to the Board of Directors, any such stockholder entitled to vote in such election of directors may nominate a person or persons (as the case may be) for election to such position(s) as specified in the Corporation's notice of meeting, if the stockholder's notice required by Section 2.12(b) shall be delivered to the Secretary of the Corporation at the principal executive offices of the Corporation not earlier than the close of

business on the 120th day prior to such special meeting and not later than the close of business on the later of (x) the 90th day prior to such meeting or (y) the 10th day following the day on which public announcement is first made of the date of the special meeting and of the nominees proposed by the Board of Directors to be elected at such meeting. In no event shall the public announcement of an adjournment or postponement of a special meeting commence a new time period (or extend any time period) for the giving of a stockholder's notice as described above.

(i) All provisions of this Section 2.12 are subject to, and nothing in this Section 2.12 shall in any way limit the exercise, or the method or timing of the exercise of, the rights of any person granted by the Corporation to nominate directors.

2.13 Postponement and Cancellation of Meeting. Any previously scheduled annual or special meeting of the stockholders may be postponed, and any previously scheduled annual or special meeting of the stockholders may be canceled, by resolution of the Board of Directors upon public notice given prior to the time previously scheduled for such meeting.

ARTICLE III DIRECTORS

3.1 Board Authority. The business of the Corporation shall be managed by or under the direction of its Board of Directors, which may exercise all such powers of the Corporation and do all such lawful acts and things as are not by statute or by the Certificate of Incorporation or by these bylaws directed or required to be exercised or done by the stockholders.

3.2 Number of Directors. The number of directors that shall constitute the whole Board of Directors shall be fixed from time to time by resolution of the Board of Directors, provided that the Board of Directors shall consist of at least one (1) member. No reduction of the authorized number of directors shall have the effect of removing any director before that director's term of office expires.

3.3 Election of Directors. Directors shall be elected at each annual meeting of stockholders. Each director shall serve until his successor is duly elected and qualified or until his earlier death, resignation or removal. Directors need not be stockholders.

3.4 Removal or Resignation of Directors. Unless otherwise provided by the Corporation's Certificate of Incorporation or these bylaws, any director or the entire Board of Directors may be removed, with or without cause, by the affirmative vote of the holders of a majority of the shares entitled to vote at an election of directors. However, whenever a director has been elected by a voting group of stockholders, only the stockholders from that voting group may participate in the vote to remove him or her, and such vacancy may be filled only by the stockholders of that voting group. Any director may resign at any time upon written notice, including by electronic transmission, to the Corporation.

3.5 Vacancies. Unless otherwise provided by the Corporation's Certificate of Incorporation or these bylaws, vacancies and newly created directorships resulting from any increase in the authorized number of directors may be filled by a majority of the directors then in office, though less than a quorum, or by a sole remaining director, and the directors so chosen shall hold office until the next annual election and until their successors are duly elected and shall qualify, unless sooner displaced. If there are no directors in office, then an election of directors may be held in the manner provided by statute. If, at the time of filling any vacancy or any newly created directorship, the directors then in office shall constitute less than a majority of the whole Board of Directors (as constituted immediately prior to any such increase), the Court of Chancery may, upon application of any stockholder or stockholders holding at least ten percent (10%) of the total number of the shares at the time outstanding having the right to vote for such directors, summarily order an election to be held to fill any such vacancies or newly created directorships, or to replace the directors chosen by the directors then in office.

3.6 Place of Meetings. The Board of Directors of the Corporation may hold meetings, both regular and special, either within or without the State of Delaware.

3.7 Telephonic Meetings. Unless otherwise restricted by the Certificate of Incorporation or these bylaws, members of the Board of Directors or any committee designated by the Board of Directors may participate in a meeting of the Board of Directors or any committee, by means of conference telephone or other means of communication by which all persons participating in the meeting can hear each other, and such participation shall constitute presence in person at the meeting.

3.8 Regular Meetings. Regular meetings of the Board of Directors may be held without notice at such time and at such place as shall from time to time be determined by the Board of Directors.

3.9 Special Meetings. Special meetings of the Board of Directors may be called by the Chairman of the Board or Chief Executive Officer upon notice to each director; special meetings shall be called by the Chairman of the Board or Chief Executive Officer in like manner and on like notice on the written request of two (2) directors unless the Board of Directors consists of only one director, in which case special meetings shall be called by the Chairman of the Board or Chief Executive Officer in like manner and on like notice on the written request of the sole director. Notice of any special meeting shall be given to each director at his or her business or residence in writing by mail or delivered personally by hand, or by facsimile transmission, telephone communication or electronic transmission (provided, with respect to electronic transmission, that the director has consented to receive the form of transmission at the address to which it is directed). If mailed, such notice shall be deemed adequately delivered when deposited in the United States mails so addressed, with postage thereon prepaid, at least five (5) days before such meeting. If by facsimile transmission or other electronic transmission, such notice shall be transmitted at least twenty-four (24) hours before such meeting. If by telephone, the notice shall be given at least twelve (12) hours prior to the time set for the meeting. Neither the business to be transacted at, nor the purpose of, any regular or special meeting of the Board of Directors need be specified in the notice of such meeting, except for amendments to these bylaws as provided under Section 9.1 of Article VIII hereof. A meeting may be held at any time without notice if all the directors are present (except as otherwise provided by law) or if those not present waive notice of the meeting in writing, either before or after such meeting.

3.10 Quorum. At all meetings of the Board of Directors a majority of the directors shall constitute a quorum for the transaction of business and any act of a majority of the directors present at any meeting at which there is a quorum shall be an act of the Board of Directors, except as may be otherwise specifically provided by statute or by the Certificate of Incorporation. If a quorum is not present at any meeting of the Board of Directors, the directors present thereat may adjourn the meeting from time to time, without notice other than announcement at the meeting, until a quorum shall be present.

3.11 Action Without a Meeting. Unless otherwise restricted by the Certificate of Incorporation or these bylaws, any action required or permitted to be taken at any meeting of the Board of Directors or of any committee thereof may be taken without a meeting if all members of the Board of Directors or committee, as the case may be, consent thereto in writing or by electronic transmission, and the writing, writings, electronic transmission or transmissions are filed with the minutes of proceedings of the Board of Directors or committee.

3.12 Committees. The Board of Directors may designate one or more committees, each committee to consist of one or more of the directors of the Corporation. The Board of Directors may designate one or more directors as alternate members of any committee, who may replace any absent or disqualified member at any meeting of the committee.

In the absence or disqualification of a member of a committee, the member or members thereof present at any meeting and not disqualified from voting, whether or not he or she or they constitute a quorum, may unanimously appoint another member of the Board of Directors to act at the meeting in the place of any such absent or disqualified member.

Any such committee, to the extent provided in the resolution of the Board of Directors, shall have and may exercise all the powers and authority of the Board of Directors in the management of the business and affairs of the Corporation, and may authorize the seal of the Corporation to be affixed to all papers which may require it, but no such committee shall have the power or authority in reference to the following matters: (i) approving or adopting, or recommending to the stockholders, any action or matter expressly required by the DGCL to be submitted to stockholders for approval or (ii) adopting, amending or repealing any provision of these bylaws.

3.13 Minutes of Committee Meetings. Each committee shall keep regular minutes of its meetings and report the same to the Board of Directors when required.

3.14 Compensation of Directors. Unless otherwise restricted by the Certificate of Incorporation or these bylaws, the Board of Directors shall have the authority to fix the compensation of directors. The directors may be paid their expenses, if any, of attendance at each meeting of the Board of Directors and

may be paid a fixed sum for attendance at each meeting of the Board of Directors or a stated salary as director. No such payment shall preclude any director from serving the Corporation in any other capacity and receiving compensation therefor. Members of special or standing committees may be allowed like compensation for attending committee meetings.

ARTICLE IV NOTICES

4.1 Notice. Unless otherwise provided in these bylaws, whenever, under the provisions of the statutes or of the Certificate of Incorporation or of these bylaws, notice is required to be given to any director or stockholder, it shall not be construed to mean personal notice, but such notice may be given in writing (i) by mail, addressed to such director or stockholder, at his or her address as it appears on the records of the Corporation, with postage thereon prepaid, and such notice shall be deemed to be given at the time when the same shall be deposited in the United States mail; or (ii) by electronic transmission as provided in Section 4.3 of these bylaws.

4.2 Waiver of Notice. Whenever any notice is required to be given under the provisions of the statutes or of the Certificate of Incorporation or of these bylaws, a waiver thereof in writing, signed by the person or persons entitled to said notice, whether before or after the time stated therein, shall be deemed equivalent thereto. Attendance at any meeting shall constitute waiver of notice except attendance for the sole purpose of objecting, at the beginning of the meeting, to the transaction of any business because the meeting is not lawfully called or convened.

4.3 Electronic Notice.

(a) *Electronic Transmission.* Without limiting the manner by which notice otherwise may be given effectively to stockholders and directors, any notice to stockholders or directors given by the Corporation under any provision of the DGCL, the Certificate of Incorporation or these bylaws shall be effective if given by a form of electronic transmission consented to by the stockholder or director to whom the notice is given. Any such consent shall be revocable by the stockholder or director by written notice to the Corporation. Any such consent shall be deemed revoked if (1) the Corporation is unable to deliver by electronic transmission two consecutive notices given by the Corporation in accordance with such consent and (2) such inability becomes known to the secretary or an assistant secretary of the Corporation or to the transfer agent, or other person responsible for the giving of notice; provided, however, the inadvertent failure to treat such inability as a revocation shall not invalidate any meeting or other action.

(b) *Effective Date of Notice.* Notice given pursuant to subsection (a) of this section shall be deemed given: (1) if by facsimile telecommunication, when directed to a number at which the stockholder or director has consented to receive notice; (2) if by electronic mail, when directed to an electronic mail address at which the stockholder or director has consented to receive notice; (3) if by a posting on an electronic network together with separate notice to the stockholder or director of such specific posting, upon the later of (i) such posting and (ii) the giving of such separate notice; and (4) if by any other form of electronic transmission, when directed to the stockholder or director. An affidavit of the secretary or an assistant secretary or of the transfer agent or other agent of the Corporation that the notice has been given by a form of electronic transmission shall, in the absence of fraud, be prima facie evidence of the facts stated therein.

(c) *Form of Electronic Transmission.* For purposes of these bylaws, "electronic transmission" means any form of communication, not directly involving the physical transmission of paper, that creates a record that may be retained, retrieved, and reviewed by a recipient thereof, and that may be directly reproduced in paper form by such a recipient through an automated process.

ARTICLE V OFFICERS

5.1 Required and Permitted Officers. The officers of the Corporation shall include, if and when designated by the Board of Directors, a Chief Executive Officer and/or a President, a Chief Financial Officer, a Treasurer and a Secretary. The Board of Directors may elect from among its members a

Chairman of the Board and a Vice-Chairman of the Board. The Board of Directors may also choose one or more vice-presidents, assistant secretaries and assistant treasurers, and such other officers with such powers and duties as it shall deem necessary. Any number of offices may be held by the same person, unless the Certificate of Incorporation or these bylaws otherwise provide.

5.2 Appointment of Required Officers. The Board of Directors at its first meeting after each annual meeting of stockholders shall choose a Chief Executive Officer and/or a President, a Chief Financial Officer, Treasurer, and a Secretary.

5.3 Appointment of Permitted Officers. The Board of Directors may appoint such other officers and agents as it shall deem necessary, who shall hold their offices for such terms and shall exercise such powers and perform such duties as shall be determined from time to time by the Board of Directors.

5.4 Officer Compensation. The salaries of all officers and agents of the Corporation shall be fixed by the Board of Directors.

5.5 Removal; Resignation; Vacancies. Subject to the rights, if any of an officer under any contract or employment, any officer may be removed, either with or without cause, by the Board of Directors at any regular or special meeting of the Board of Directors, at any time by the affirmative vote of a majority of the Board of Directors. Any officer may resign at any time by giving notice to the Corporation in writing or by electronic transmission to the Board of Directors or to the Chairman of the Board. Any vacancy occurring in any office of the Corporation shall be filled by the Board of Directors.

5.6 President. Unless otherwise determined by the Board of Directors, the President shall be the Chief Executive Officer of the Corporation. Subject to the provisions of these bylaws and the direction of the Board of Directors, he or she shall have the responsibility for the general management and control of the business and affairs of the Corporation and shall perform all duties and have all powers that are commonly incident to the office of chief executive or which are delegated to him or her by the Board of Directors. He or she shall have the power to sign all stock certificates, contracts and other instruments of the Corporation that are authorized and shall have general supervision and direction of all of the other officers, employees and agents of the Corporation.

5.7 Vice President. Each Vice President shall have the powers and duties delegated to him or her by the Board of Directors or the President. One Vice President may be designated by the Board of Directors to perform the duties and exercise the powers of the President in the event of the President's absence or disability.

5.8 Secretary and Assistant Secretary. The secretary shall attend all meetings of the Board of Directors and all meetings of the stockholders and record all the proceedings of the meetings of the Corporation and of the Board of Directors in a book to be kept for that purpose and shall perform like duties for the standing committees when required. He or she shall give, or cause to be given, notice of all meetings of the stockholders and special meetings of the Board of Directors, and shall perform such other duties as may be prescribed by the Board of Directors or the Chief Executive Officer, under whose supervision he or she shall be. He or she shall have custody of the corporate seal of the Corporation and he or she, or an assistant secretary, shall have authority to affix the same to any instrument requiring it and when so affixed, it may be attested by his or her signature or by the signature of such assistant secretary. The Board of Directors may give general authority to any other officer to affix the seal of the Corporation and to attest the affixing by his or her signature. The assistant secretary shall, in the absence of the secretary or in the event of his or her inability or refusal to act, perform the duties and exercise the powers of the secretary and shall perform such other duties and have such other powers as the Board of Directors may from time to time prescribe.

5.9 Chief Financial Officer, Treasurer and Assistant Treasurer. The Chief Financial Officer shall keep or cause to be kept the books of account of the Corporation in a thorough and proper manner and shall render statements of the financial affairs of the Corporation in such form and as often as required by the Board of Directors or the President. The Chief Financial Officer, subject to the order of the Board of Directors, shall have the custody of all funds and securities of the Corporation. The Chief Financial Officer shall perform other duties commonly incident to this or her office and shall also perform such other duties and have such other powers as the Board of Directors or the President shall designate from time to time.

The President may direct the Treasurer or any Assistant Treasurer to assume and perform the duties of the Chief Financial Officer in the absence or disability of the Chief Financial Officer, and each Treasurer and Assistant Treasurer shall perform other duties commonly incident to his or her office and shall also perform such other duties and have such other powers as the Board of Directors or the President shall designate from time to time.

5.10 Delegation of Authority. The Board of Directors may from time to time delegate the powers or duties of any officer to any other officer or agent, notwithstanding any provision hereof.

ARTICLE VI CERTIFICATE OF STOCK

6.1 Stock Certificates. Shares of capital stock of the Corporation may be certificated or uncertificated, as provided in the DGCL. Stock certificates shall be signed by, or in the name of the Corporation by, (i) the Chairman of the Board (if any) or the Vice Chairman of the Board (if any), the President or a Vice President, and (ii) the Secretary or an Assistant Secretary, or the Treasurer or an Assistant Treasurer, or the Chief Financial Officer, certifying the number of shares owned by such stockholder. Any signature on a certificate may be by facsimile.

If the Corporation shall be authorized to issue more than one class of stock or more than one series of any class, the powers, designations, preferences and relative participating, optional or other special rights of each class of stock or series thereof and the qualification, limitations or restrictions of such preferences and/or rights shall be set forth in full or summarized on the face or back of the certificate which the Corporation shall issue to represent such class or series of stock, provided that, except as otherwise provided in Section 202 of the DGCL, in lieu of the foregoing requirements, there may be set forth on the face or back of the certificate which the Corporation shall issue to represent such class or series of stock, a statement that the Corporation will furnish without charge to each stockholder who so requests the powers, designations, preferences and relative participating, optional or other special rights of each class of stock or series thereof and the qualifications, limitations or restrictions of such preferences and/or rights.

6.2 Lost, Stolen or Destroyed Certificates. The Board of Directors may direct a new certificate or certificates to be issued in place of any certificate or certificates theretofore issued by the Corporation alleged to have been lost, stolen or destroyed upon the making of an affidavit of that fact by the person claiming the certificate to be lost, stolen or destroyed. When authorizing such issuance of a new certificate or certificates, the Board of Directors may, in its discretion and as a condition precedent to the issuance, require the owner of such lost, stolen or destroyed certificate or certificates, or his or her legal representative, to advertise the same in such manner as it shall require and/or to give the Corporation a bond in such sum as it may direct as indemnity against any claim that may be made against the Corporation with respect to the certificate alleged to have been lost, stolen or destroyed.

6.3 Transfer of Stock. Upon surrender to the Corporation or the transfer agent of the Corporation of a certificate for shares duly endorsed or accompanied by proper evidence of succession, assignment or authority to transfer, it shall be the duty of the Corporation to issue a new certificate to the person entitled thereto, cancel the old certificate and record the transaction upon its books.

6.4 Registered Stockholders. The Corporation shall be entitled to recognize the exclusive right of a person registered on its books as the owner of shares to receive dividends, to vote as such owner, to hold liable for calls and assessments a person registered on its books as the owner of shares and shall not be bound to recognize any equitable or other claim to or interest in such share or shares on the part of any other person, whether or not it shall have express or other notice thereof, except as otherwise provided by the laws of Delaware.

ARTICLE VII GENERAL PROVISIONS

7.1 Dividends. Dividends upon the capital stock of the Corporation, if any, subject to the provisions of the Certificate of Incorporation and applicable law, may be declared by the Board of Directors at any regular or special meeting. Dividends may be paid in cash, in property or in shares of the capital stock, subject to the provisions of the Certificate of Incorporation and applicable law.

7.2 Reserve for Dividends. Before payment of any dividend, there may be set aside out of any funds of the Corporation available for dividends such sum or sums as the directors from time to time, in their sole discretion, think proper as a reserve or reserves to meet contingencies, or for equalizing dividends, or for repairing or maintaining any property of the Corporation, or for such other purposes as the directors think conducive to the interests of the Corporation, and the directors may modify or abolish any such reserve in the manner in which it was created.

7.3 Checks. All checks or demands for money and notes of the Corporation shall be signed by such officer or officers or such other person or persons as the Board of Directors may from time to time designate.

7.4 Fiscal Year. The fiscal year of the Corporation shall be fixed by resolution of the Board of Directors.

7.5 Corporate Seal. The Board of Directors may adopt a corporate seal having inscribed thereon the name of the Corporation, the year of its organization and the words "Corporate Seal, Delaware." The seal may be used by causing it or a facsimile thereof to be impressed or affixed or otherwise reproduced.

7.6 Inconsistencies. If any provision of these bylaws is or becomes inconsistent with any provision of the Certificate of Incorporation, the DGCL or any other applicable law, the provision of these bylaws shall not be given any effect to the extent of the inconsistency, but shall otherwise be given full force and effect.

7.7 Severability. If any provision or provisions of these bylaws shall be held to be invalid, illegal, or unenforceable for any reason whatsoever: (1) the validity, legality, and enforceability of the remaining provisions of these bylaws (including, without limitation, each portion of any paragraph or clause containing any such provision held to be invalid, illegal, or unenforceable, that is not itself held to be invalid, illegal, or unenforceable) shall not in any way be affected or impaired thereby; and (2) to the fullest extent possible, the provisions of these bylaws (including, without limitation, each such portion of any paragraph or clause containing any such provision held to be invalid, illegal, or unenforceable) shall be construed so as to give effect to the intent manifested by the provision held invalid, illegal, or unenforceable.

ARTICLE VIII INDEMNIFICATION

The Corporation shall, to the fullest extent authorized under the laws of the State of Delaware, as those laws may be amended and supplemented from time to time, indemnify any person made, or threatened to be made, a party to an action or proceeding, whether criminal, civil, administrative or investigative, by reason of being a director or officer of the Corporation or a predecessor corporation or a director or officer of another corporation, if such person served in such position at the request of the Corporation; provided, however, that the Corporation shall indemnify any such director or officer in connection with a proceeding initiated by such director or officer only if such proceeding was authorized by the Board of Directors of the Corporation. The indemnification provided for in this Section 8.1 shall not be deemed exclusive of any other rights to which those indemnified may be entitled under these bylaws, agreement or vote of stockholders or disinterested directors or otherwise, both as to action in their official capacities and as to action in another capacity while holding such office. The Corporation's obligation to provide indemnification under this Section 8.1 shall be offset to the extent of any other source of indemnification or any otherwise applicable insurance coverage under a policy maintained by the Corporation or any other person.

Expenses incurred by a director or officer of the Corporation in defending a civil or criminal action, suit or proceeding by reason of the fact that he or she is or was a director or officer of the Corporation (or was serving at the Corporation's request as a director or officer of another corporation) shall be paid by the Corporation in advance of the final disposition of such action, suit or proceeding upon receipt of an undertaking by or on behalf of such director to repay such amount if it shall ultimately be determined that he or she is not entitled to be indemnified by the Corporation as authorized by relevant sections of the DGCL. Notwithstanding the foregoing, the Corporation shall not be required to advance such expenses to an agent who is a party to an action, suit or proceeding brought by the Corporation and approved by a majority of the Board of Directors of the Corporation that alleges willful misappropriation of corporate assets by such agent, disclosure of confidential information in violation of such agent's fiduciary or contractual obligations to the Corporation or any other willful and deliberate breach in bad faith of such agent's duty to the Corporation or its stockholders.

The foregoing provisions of this Section 8.1 shall be deemed to be a contract between the Corporation and each director or officer who serves in such capacity at any time while this bylaw is in effect, and any repeal or modification thereof shall not affect any rights or obligations then existing with respect to any state of facts then or theretofore existing or any action, suit or proceeding theretofore or thereafter brought based in whole or in part upon any such state of facts.

The Board of Directors in its sole discretion shall have power on behalf of the Corporation to indemnify any person, other than a director or officer, made a party to any action, suit or proceeding by reason of the fact that he or she, his or her testator or intestate, is or was an officer or employee of the Corporation.

The Corporation may purchase and maintain insurance, at its expense, to protect itself and any director, officer, employee or agent of the Corporation or another corporation, partnership, joint venture, trust or other enterprise against any expense, liability or loss incurred by him or her in any such capacity, or arising out of his or her status as such, whether or not the Corporation would have the power to indemnify such person against such expense, liability or loss under the DGCL.

To assure indemnification under this Section 8.1 of all directors, officers and employees who are determined by the Corporation or otherwise to be or to have been "fiduciaries" of any employee benefit plan of the Corporation that may exist from time to time, Section 145 of the DGCL shall, for the purposes of this Section 8.1, be interpreted as follows: an "other enterprise" shall be deemed to include such an employee benefit plan, including without limitation, any plan of the Corporation that is governed by the Act of Congress entitled "Employee Retirement Income Security Act of 1974," as amended from time to time; the Corporation shall be deemed to have requested a person to serve the Corporation for purposes of Section 145 of the DGCL, as administrator of an employee benefit plan where the performance by such person of his or her duties to the Corporation also imposes duties on, or otherwise involves services by, such person to the plan or participants or beneficiaries of the plan; excise taxes assessed on a person with respect to an employee benefit plan pursuant to such Act of Congress shall be deemed "fines."

ARTICLE IX AMENDMENTS

These bylaws may be altered, amended or repealed, or new bylaws may be adopted by the stockholders or by the Board of Directors, when such power is conferred upon the Board of Directors by the Certificate of Incorporation at any regular meeting of the stockholders or of the Board of Directors, or at any special meeting of the stockholders or the Board of Directors if notice of such alteration, amendment repeal or adoption of new bylaws be contained in the notice of such special meeting. If the power to adopt, amend or repeal bylaws is conferred upon the Board of Directors by the Certificate of Incorporation, it shall not divest or limit the power of the stockholders to adopt, amend or repeal bylaws.

ARTICLE X LOANS TO OFFICERS

The Corporation may lend money to, or guarantee any obligation of or otherwise assist any officer or other employee of the Corporation or of its subsidiaries, including any officer or employee who is a director of the Corporation or its subsidiaries, whenever, in the judgment of the Board of Directors, such loan, guarantee or assistance may reasonably be expected to benefit the Corporation. The loan, guarantee or other assistance may be with or without interest and may be unsecured or secured in such manner as the Board of Directors shall approve, including, without limitation, a pledge of shares of stock of the Corporation. Nothing in these bylaws shall be deemed to deny, limit or restrict the powers of guaranty or warranty of the Corporation at common law or under any statute.

**ARTICLE XI
MISCELLANEOUS**

Unless the Corporation consents in writing to the selection of an alternative forum, the Court of Chancery of the State of Delaware (or, if the Court of Chancery does not have jurisdiction, the federal district court for the District of Delaware) shall, to the fullest extent permitted by law, be the sole and exclusive forum for (1) any derivative action or proceeding brought on behalf of the Corporation; (2) any action asserting a claim of breach of a fiduciary duty owed by, or any other wrongdoing by, any director, officer or other employee of the Corporation to the Corporation or the Corporation's stockholders; (3) any action asserting a claim against the Corporation or any director or officer or other employee of the Corporation arising pursuant to any provision of the DGCL, the Corporation's Certificate of Incorporation or the Bylaws of the Corporation; (4) any action to interpret, apply, enforce or determine the validity of the Delaware Certificate of Incorporation or the Bylaws, or (5) any action asserting a claim against the Corporation or any director or officer or other employee of the Corporation governed by the internal affairs doctrine.

**CERTIFICATE OF SECRETARY OF
MARKER THERAPEUTICS, INC.**

The undersigned hereby certifies that he is the duly elected and acting Secretary of Marker Therapeutics, Inc., a Delaware corporation (the "Corporation"), and that the bylaws attached hereto constitute the bylaws of said Corporation as duly adopted by Action by Written Consent of the Board of Directors on [], 2018.

IN WITNESS WHEREOF, the undersigned has hereunto subscribed his name this [] day of [], 2018.

Michael Loiacono,
Secretary

SECURITIES PURCHASE AGREEMENT

This Securities Purchase Agreement (this “Agreement”) is dated as of June [•], 2018, between TapImmune Inc., a Nevada corporation (the “Company”), and the purchaser identified on the signature pages hereto (the “Purchaser”).

NOW, THEREFORE, IN CONSIDERATION of the mutual covenants contained in this Agreement, and for other good and valuable consideration the receipt and adequacy of which are hereby acknowledged, the Company and the Purchaser agree as follows:

ARTICLE I.

DEFINITIONS

1.1 Definitions. In addition to the terms defined elsewhere in this Agreement, for all purposes of this Agreement, the following terms have the meanings set forth in this Section 1.1:

“Acquiring Person” shall have the meaning ascribed to such term in Section 5.3.

“Action” shall have the meaning ascribed to such term in Section 3.1(j).

“Affiliate” means any Person that, directly or indirectly through one or more intermediaries, controls or is controlled by or is under common control with a Person as such terms are used in and construed under Rule 405 under the Securities Act.

“Aggregate Purchase Price” means, as to each Purchaser, the aggregate amount to be paid for Shares and Warrants purchased hereunder as specified below such Purchaser’s name on the signature page of this Agreement and next to the heading “Aggregate Purchase Price,” in United States dollars and in immediately available funds.

“Applicable Rule 144 Full Liquidity Date” shall have the meaning ascribed to such term in Section 4.2(h).

“Board of Directors” means the board of directors of the Company.

“Bridge Financing Agreements” means the following agreements: (i) Common Stock Purchase Agreement, dated as of May 14, 2018, by and among the Company and Eastern Capital Limited; (ii) Warrant Exercise Agreement, dated as of May 14, 2018, by and between the Company and Empery Asset Master, Ltd, Empery Tax Efficient, LP and Empery Tax Efficient II, LP; (iii) Warrant Exercise Agreement, dated as of May 14, 2018, by and between the Company and Brio Capital Master Fund Ltd, (iv) Warrant Exercise Agreement, dated as of May 14, 2018, by and between the Company and The Bennett Abbe Irrevocable Trust, Iroquois Master Fund Ltd., The Merav Abbe Irrevocable Trust, The Samantha Abbe Irrevocable Trust, The Talia Abbe Irrevocable Trust; and (v) Warrant Exercise Agreement, dated as of May 14, 2018, by and between the Company and Kensington Investment Partners LLC.

“Business Day” means any day except any Saturday, any Sunday, any day which is a federal legal holiday in the United States or any day on which banking institutions in the State of New York are authorized or required by law or other governmental action to close.

“Closing” shall have the meaning ascribed to such term in Section 2.2(a).

“Closing Conditions” shall have the meaning ascribed to such term in Section 2.2(a).

“Closing Date” shall have the meaning ascribed to such term in Section 2.2(a).

“Co-Placement Agent” means Nomura Securities International, Inc.

“Commission” means the United States Securities and Exchange Commission.

“Common Stock” means the common stock of the Company, par value \$0.001 per share, and any other class of securities into which such securities may hereafter be reclassified or changed.

“Common Stock Equivalents” means any securities of the Company or the Subsidiaries which would entitle the holder thereof to acquire at any time Common Stock, including, without limitation, any debt, preferred stock, right, option, warrant or other instrument that is at any time convertible into or exercisable or exchangeable for, or otherwise entitles the holder thereof to receive, Common Stock.

“Company Counsel” means Seyfarth Shaw LLP, with offices located at 700 Milam St., Suite #1400, Houston, Texas, 77002.

“Difference” shall have the meaning ascribed to such term in Section 4.2(e).

“Disclosure Schedules” means the Disclosure Schedules of the Company delivered concurrently herewith.

“Effective Deadline” shall have the meaning ascribed to such term in Section 4.1(b).

“Environmental Law” shall have the meaning ascribed to such term in Section 3.1(jj).

“Escrow Agent” means [], with offices at [].

“Escrow Agreement” means the escrow agreement entered into prior to the date hereof, by and among the Company, the Escrow Agent and the Lead Placement Agent pursuant to which the Purchasers shall deposit the Aggregate Purchase Price with the Escrow Agent to be applied to the transactions contemplated hereunder.

“Evaluation Date” shall have the meaning ascribed to such term in Section 3.1(r).

“Exchange Act” means the Securities Exchange Act of 1934, as amended, and the rules and regulations promulgated thereunder.

“Exempt Issuance” means the issuance of (1) shares of Common Stock or options to employees, consultants, officers or directors of the Company pursuant to any stock or option plan duly adopted for such purpose by the Company’s Board of Directors or a majority of the members of a committee established for such purpose; provided that securities to be issued to consultants are issued as “restricted securities” (as defined in Rule 144) and carry no registration rights that require or permit the filing of any registration statement in connection therewith during the prohibition period in Section 4.4 herein (2) shares of Common Stock upon exercise, exchange or conversion of securities that are issued and outstanding on the Closing Date and that are exercisable, exchangeable for or convertible into shares of Common Stock, provided that such securities have not been amended since the Closing Date to increase the number of such shares of Common Stock, to decrease the exercise, exchange or conversion price of such securities or extend the term of such securities; and (3) securities issued pursuant to acquisitions or strategic transactions approved by a majority of the disinterested directors of the Company, provided that such securities are issued as “restricted securities” (as defined in Rule 144) and carry no registration rights that require or permit the filing of any registration statement in connection therewith during the prohibition period in Section 4.4 herein, and provided that any such issuance shall only be to a Person (or to the equityholders of a Person) which is, itself or through its subsidiaries, an operating company or an owner of an asset in a business synergistic with the business of the Company and shall provide to the Company additional benefits in addition to the investment of funds, but shall not include a transaction in which the Company is issuing securities primarily for the purpose of raising capital or to an entity whose primary business is investing in securities.

“FCPA” means the Foreign Corrupt Practices Act of 1977, as amended.

“FDA” shall have the meaning ascribed to such term in Section 3.1(dd).

“FDCA” shall have the meaning ascribed to such term in Section 3.1(dd).

“Federal Reserve” shall have the meaning ascribed to such term in Section 3.1(gg).

“Filing Deadline” shall have the meaning ascribed to such term in Section 4.1(a).

“FINRA” shall have the meaning ascribed to such term in Appendix I.

“FINRA Member” shall have the meaning ascribed to such term in Appendix I.

- “GAAP” shall have the meaning ascribed to such term in Section 3.1(h).
- “Hazardous Materials” shall have the meaning ascribed to such term in Section 3.1(ii).
- “Indebtedness” shall have the meaning ascribed to such term in Section 3.1(z).
- “Intellectual Property Rights” shall have the meaning ascribed to such term in Section 3.1(o).
- “Lead Placement Agent” means the sole lead placement agent, Piper Jaffray & Co.
- “Legend Removal Date” shall have the meaning ascribed to such term in Section 3.2(h).
- “Liens” means a lien, charge, pledge, security interest, encumbrance, right of first refusal, preemptive right or other restriction.
- “Material Adverse Effect” shall have the meaning assigned to such term in Section 3.1(b).
- “Material Permits” shall have the meaning ascribed to such term in Section 3.1(m).
- “Mayer Brown” means Mayer Brown LLP, with offices located at 1221 Avenue of the Americas, New York, New York 10020.
- “Merger” means the merger of the Company and Marker Therapeutics, Inc., as contemplated by the Merger Agreement.
- “Merger Agreement” means the Agreement and Plan of Merger and Reorganization entered into among the Company, Timberwolf Merger Sub, Inc. and Marker Therapeutics, Inc., dated as of May 15, 2018.
- “Money Laundering Laws” shall have the meaning ascribed to such term in Section 3.1(hh).
- “OFAC” shall have the meaning ascribed to such term in Section 3.1(ee).
- “Other Agreements” means the agreements in the form of this Agreement signed by the Other Purchasers.
- “Other Purchasers” shall have the meaning ascribed to such term in Section 2.1.
- “Other Warrants” means the warrants in the form of the Warrant attached hereto as Exhibit A executed by the Company and delivered to the Other Purchasers.
- “Person” means an individual or corporation, partnership, trust, incorporated or unincorporated association, joint venture, limited liability company, joint stock company, government (or an agency or subdivision thereof) or other entity of any kind.
- “Pharmaceutical Product” shall have the meaning ascribed to such term in Section 3.1(ff).
- “Placement Agents” means both the Lead Placement Agent and the Co-Placement Agent.
- “Proceeding” means an action, claim, suit, investigation or proceeding (including, without limitation, an informal investigation or partial proceeding, such as a deposition), whether commenced or threatened.
- “Prospectus” shall have the meaning ascribed to such term in Section 3.2(k)(a).
- “Public Information Failure” shall have the meaning ascribed to such term in Section 4.1(h).
- “Purchasers” shall have the meaning ascribed to such term in Section 2.1.
- “Reduction Securities” shall have the meaning ascribed to such term in Section 4.1(d).
- “Reincorporation” means the anticipated reincorporation of the Company from a Nevada corporation to a Delaware corporation contemporaneously with the completion of the Merger.
- “Required Shareholder Approval” means the approval of the Merger and the issuance of the Securities pursuant to this Agreement by the shareholders of the Company in accordance with Section 5635 of the Nasdaq Stock Market Rules.
- “Resale Registration Statement” shall have the meaning ascribed to such term in Section 2.2(a).

“Rule 144” means Rule 144 promulgated by the Commission pursuant to the Securities Act, as such Rule may be amended or interpreted from time to time, or any similar rule or regulation hereafter adopted by the Commission having substantially the same purpose and effect as such Rule.

“Rule 424” means Rule 424 promulgated by the Commission pursuant to the Securities Act, as such Rule may be amended or interpreted from time to time, or any similar rule or regulation hereafter adopted by the Commission having substantially the same purpose and effect as such Rule.

“Rules and Regulations” shall have the meaning ascribed to such term in Section 3.2(a).

“Sanctions” shall have the meaning ascribed to such term in Section 3.1(ee).

“SEC Reports” shall have the meaning ascribed to such term in Section 3.1(h).

“Securities” means the Shares, the Warrants and the Warrant Shares.

“Securities Act” means the Securities Act of 1933, as amended, and the rules and regulations promulgated thereunder.

“Selling Stockholder” shall have the meaning ascribed to such term in Appendix I.

“Shares” means the shares of Common Stock issued or issuable to the Purchaser pursuant to this Agreement.

“Short Sales” means all “short sales” as defined in Rule 200 of Regulation SHO under the Exchange Act (but shall not be deemed to include the location and/or reservation of borrowable shares of Common Stock).

“Standard Settlement Period” shall have the meaning ascribed to such term in Section 3.2(h).

“Stock Plan” shall have the meaning ascribed to such term in Section 3.1(ii).

“Subsidiary” means any subsidiary of the Company as set forth on Schedule 3.1(a), and shall, where applicable, also include any direct or indirect subsidiary of the Company formed or acquired after the date hereof.

“Suspension” shall have the meaning ascribed to such term in Section 3.2(k)(a).

“Trading Day” means a day on which the principal Trading Market is open for trading.

“Trading Market” means any of the following markets or exchanges on which the Common Stock is listed or quoted for trading on the date in question: the NYSE American LLC, the Nasdaq Capital Market, the Nasdaq Global Market, the Nasdaq Global Select Market, the New York Stock Exchange or the OTCQB or OTCQX (or any successors to any of the foregoing).

“Transaction Documents” means this Agreement, the Other Agreements, the Warrants, the Other Warrants, the Merger Agreement, including the exhibits and schedules thereto, the Bridge Financing Agreements, and any other documents or agreements executed in connection with the transactions contemplated hereunder.

“Transfer Agent” means Island Stock Transfer, the current transfer agent of the Company, with a mailing address of 1550 Roosevelt Blvd., Suite 301, Clearwater, Florida, 33760, and a facsimile number of (727) 289-0069, and any successor transfer agent of the Company.

“Warrants” means, collectively, the Common Stock purchase warrants delivered to the Purchasers at the Closing in accordance with Section 2.1 hereof, which Warrants shall be exercisable immediately and have a term of exercise equal to five years, in the form of Exhibit A attached hereto.

“Warrant Shares” means the shares of Common Stock issuable upon exercise of the Warrants.

ARTICLE II.

PURCHASE AND SALE

2.1 Closing. On the Closing Date, upon the terms and subject to the conditions set forth herein, substantially concurrent with the execution and delivery of this Agreement by the parties hereto, the Company agrees to sell, and the Purchaser, agrees to purchase:

<u>Number of Shares to be Purchased</u>	<u>Price Per Share</u>	<u>Number of Warrants to be Purchased</u>	<u>Aggregate Purchase Price</u>
[•]	[\$•]	[•]	[\$•]

The Company proposes to enter into this same form of securities purchase agreement, including the form of warrant attached hereto as Exhibit A, with certain other investors (the “Other Purchasers”) and expects to complete sales of shares of Common Stock and warrants to purchase Common Stock to them. The Purchaser and the Other Purchasers are hereinafter sometimes collectively referred to as the “Purchasers,” and this Agreement, the Warrant, and the purchase agreements and warrants executed by the Other Purchasers are hereinafter sometimes collectively referred to as the “Agreements.” The Warrants shall have an exercise price equal to \$[] per Warrant Share (subject to adjustment as provided in such Warrants).

2.2 Deliveries.

(a) The completion of the purchase and sale of the Shares and the Warrants being purchased hereunder (the “Closing”) shall occur remotely via the exchange of documents and signatures on the Effective Date, promptly following the satisfaction of all conditions for Closing set forth below (the “Closing Conditions”), or on such later date or at such different location as the parties shall agree to in writing, but not prior to or later than the third business day after the date that the Closing Conditions have been satisfied or waived by the appropriate party (the “Closing Date”).

At the Closing, the Purchaser shall deliver to the Escrow Agent, via wire transfer of immediately available funds, the Aggregate Purchase Price as set forth on the signature page hereto executed by such Purchaser, and the Company shall deliver to each Purchaser (or its designated custodian per its delivery instructions), (i) the Shares in electronic, book-entry form, registered in the name of the Purchaser, or in such nominee name(s) as designated by the Purchaser in writing representing, or confirmation of instruction given by the Company to the Transfer Agent to register the Shares in electronic, book-entry form with respect to, the number of Shares set forth in Section 2.1 above and bearing an appropriate legend referring to the fact that the Shares were sold in reliance upon the exemption from registration under the Securities Act, provided by Section 4(a)(2) thereof; and (ii) the Warrants, registered in the name of the Purchaser, or in such nominee name(s) as designated by the Purchaser in writing, in substantially the form attached hereto as Exhibit A, representing the number of Warrants set forth in Section 2 above and bearing an appropriate legend referring to the fact that the Warrants were sold in reliance upon the exemption from registration under the Securities Act provided by Section 4(a)(2) thereof. At such time as the registration statement filed by the Company pursuant to Section 4.1 hereof (the “Resale Registration Statement”) becomes effective, the Company shall deliver to the Company’s transfer agent written instructions in proper form to the effect that, notwithstanding any legend contemplated under Section 3.2(h) hereof that is set forth in any certificate or certificates or book-entry designation representing any of the Shares or the Warrants being purchased hereunder, the Company’s transfer agent can implement and effect any proposed sale by the Purchaser of any of such Shares or Warrants if such proposed sale is under the Resale Registration Statement and the Purchaser has complied with all of its obligations under Section 3.2(k)(a) hereof.

2.3 Closing Conditions.

(a) The obligations of the Company hereunder in connection with the Closing are subject to the following conditions being met:

(i) the accuracy in all material respects (or to the extent representations or warranties are qualified by materiality or Material Adverse Effect, in all respects) on the Closing Date of the representations and warranties made by the Purchaser (unless as of a specific date therein in which case they shall be accurate as of such date);

(ii) the fulfillment in all material respects of those undertakings of the Purchaser to be fulfilled prior to the Closing;

(iii) receipt by the Escrow Agent of a wire transfer to the account specified in the Escrow Agreement of same-day funds in the full amount of the Aggregate Purchase Price for the Shares and the Warrants being purchased hereunder and the shares of Common Stock and the Other Warrants being purchased under each of the Other Agreements executed by an Other Purchaser;

(iv) the execution and delivery to the Company by the Purchaser and the Other Purchasers of this Agreement and Other Agreements representing an aggregate gross purchase price of at least \$[•] million;

(v) the approval by the shareholders of the Company of the Merger, and the execution and delivery of the Merger Agreement;

(vi) the consummation of the Merger.

(b) The obligations of the Purchaser hereunder in connection with the Closing are subject to the following conditions being met:

(i) the accuracy in all material respects (or, to the extent representations or warranties are qualified by materiality or Material Adverse Effect, in all respects) when made and on the Closing Date of the representations and warranties of the Company contained herein (unless as of a specific date therein, in which case they shall be accurate as of such date);

(ii) the fulfillment in all material respects of those undertakings of the Company to be fulfilled prior to the Closing;

(iii) confirmation by the Company that the aggregate gross purchase price represented by all executed Agreements with the Purchaser and all Other Purchasers is equal to at least \$[•] million;

(iv) the receipt by the Placement Agents of a legal opinion addressed to the Placement Agents from Company Counsel and a comfort letter addressed to the Placement Agents from Marcum LLP;

(v) the receipt by the Purchasers of a legal opinion addressed to the Purchasers from Company Counsel in form and substance reasonably acceptable to the Purchasers;

(vi) receipt by the Placement Agents of a certificate executed by the chief executive officer and the chief financial or accounting officer of the Company, dated as of the Closing Date, to the effect that the conditions set forth in the foregoing clauses (i) and (ii) have been satisfied;

(vii) receipt from Nasdaq of the approval of the listing of the shares of Common Stock issuable pursuant to this Agreement and the Warrants;

(viii) the Company obtaining the Required Shareholder Approval;

(ix) the consummation of the Merger;

(x) there shall have been no Material Adverse Effect with respect to the Company since the date hereof; and

(xi) from the date hereof to the Closing Date, trading in the Common Stock shall not have been suspended by the Commission or the Company's principal Trading Market, and, at any time prior to the Closing Date, trading in securities generally as reported by Bloomberg L.P. shall not have been suspended or limited, or minimum prices shall not have been established on securities whose trades are reported by such service, or on any Trading Market, nor shall a banking moratorium have been declared either by the United States or New York State authorities nor shall there have occurred any material outbreak or escalation of hostilities or other national or international calamity of such magnitude in its effect on, or any material adverse change in, any financial market which, in each case, in the reasonable judgment of such Purchaser, makes it impracticable or inadvisable to purchase the Securities at the Closing.

ARTICLE III.

REPRESENTATIONS AND WARRANTIES

3.1 Representations and Warranties of the Company. Except as set forth in the Disclosure Schedules, which Disclosure Schedules shall be deemed a part hereof and shall qualify any representation or otherwise made herein to the extent of the disclosure contained in the corresponding section of the Disclosure Schedules, the Company hereby makes the following representations and warranties to the Purchaser as of the date hereof unless otherwise specified:

(a) Subsidiaries. All of the direct and indirect subsidiaries of the Company are set forth on Schedule 3.1(a). The Company owns, directly or indirectly, all of the capital stock or other equity interests of each Subsidiary free and clear of any Liens, and all of the issued and outstanding shares of capital stock of each Subsidiary are validly issued and are fully paid, non-assessable and free of preemptive and similar rights to subscribe for or purchase securities. If the Company has no subsidiaries, all other references to the Subsidiaries or any of them in the Transaction Documents shall be disregarded.

(b) Organization and Qualification. The Company and each of the Subsidiaries is an entity duly incorporated or otherwise organized, validly existing and in good standing under the laws of the jurisdiction of its incorporation or organization, with the requisite power and authority to own and use its properties and assets and to carry on its business as currently conducted. Neither the Company nor any Subsidiary is in violation nor default of any of the provisions of its respective certificate or articles of incorporation, bylaws or other organizational or charter documents. Each of the Company and the Subsidiaries is duly qualified to conduct business and is in good standing as a foreign corporation or other entity in each jurisdiction in which the nature of the business conducted or property owned by it makes such qualification necessary, except where the failure to be so qualified or in good standing, as the case may be, could not have or reasonably be expected to result in: (i) a material adverse effect on the legality, validity or enforceability of any Transaction Document, (ii) a material adverse effect on the results of operations, assets, business, prospects or condition (financial or otherwise) of the Company and the Subsidiaries, taken as a whole, or (iii) a material adverse effect on the Company's ability to perform in any material respect on a timely basis its obligations under any Transaction Document (any of (i), (ii) or (iii), a "Material Adverse Effect") and no Proceeding has been instituted in any such jurisdiction revoking, limiting or curtailing or seeking to revoke, limit or curtail such power and authority or qualification.

(c) Authorization; Enforcement. The Company has the requisite corporate power and authority to enter into and to consummate the transactions contemplated by this Agreement and each of the other Transaction Documents and otherwise to carry out its obligations hereunder and thereunder. The execution and delivery of this Agreement and each of the other Transaction Documents by the Company and the consummation by it of the transactions contemplated hereby and thereby have been duly authorized by all necessary action on the part of the Company and no further action is required by the Company, the Board of Directors or the Company's stockholders in connection herewith or therewith other than the Required Shareholder Approval. This Agreement and each other Transaction Document to which it is a party has been (or upon delivery will have been) duly executed by the Company and, when delivered in accordance with the terms hereof and thereof, will constitute the valid and binding obligation of the Company enforceable against the Company in accordance with its terms, except (i) as limited by general equitable principles and applicable bankruptcy, insolvency, reorganization, moratorium and other laws of general application affecting enforcement of creditors' rights generally, (ii) as limited by laws relating to the availability of specific performance, injunctive relief or other equitable remedies and (iii) insofar as indemnification and contribution provisions may be limited by applicable law.

(d) No Conflicts. The execution, delivery and performance by the Company of this Agreement and the other Transaction Documents to which it is a party, the issuance and sale of the Securities and the consummation by it of the transactions contemplated hereby and thereby do not and will not (i) conflict with or violate any provision of the Company's or any Subsidiary's certificate or articles of incorporation, bylaws or other organizational or charter documents, or (ii) conflict with, or constitute

a default (or an event that with notice or lapse of time or both would become a default) under, result in the creation of any Lien upon any of the properties or assets of the Company or any Subsidiary, or give to others any rights of termination, amendment, acceleration or cancellation (with or without notice, lapse of time or both) of, any agreement, credit facility, debt or other instrument (evidencing a Company or Subsidiary debt or otherwise) or other understanding to which the Company or any Subsidiary is a party or by which any property or asset of the Company or any Subsidiary is bound or affected, or (iii) conflict with or result in a violation of any law, rule, regulation, order, judgment, injunction, decree or other restriction of any court or governmental authority to which the Company or a Subsidiary is subject (including federal and state securities laws and regulations), or by which any property or asset of the Company or a Subsidiary is bound or affected; except in the case of each of clauses (ii) and (iii), such as could not have or reasonably be expected to result in a Material Adverse Effect.

(e) Filings, Consents and Approvals. The Company is not required to obtain any consent, waiver, authorization or order of, give any notice to, or make any filing or registration with, any court or other federal, state, local or other governmental authority or other Person in connection with the execution, delivery and performance by the Company of the Transaction Documents other than as contemplated by Section 2.3.

(f) Issuance of the Securities. The Securities are duly authorized and, when issued and paid for in accordance with the applicable Transaction Documents, will be duly and validly issued, fully paid and nonassessable, free and clear of all Liens imposed by the Company. The Warrant Shares, when issued in accordance with the terms of the Warrants, will be validly issued fully paid and nonassessable, free and clear of all Liens imposed by the Company. The Company has reserved from its duly authorized capital stock the maximum number of shares of Common Stock issuable pursuant to this Agreement and the Warrants.

(g) Capitalization. The capitalization of the Company is as set forth on Schedule 3.1(g). Except as set forth on Schedule 3.1(g), the Company has not issued any capital stock since its most recently filed periodic report under the Exchange Act, other than pursuant to the exercise of employee stock options under the Company's stock option plans, the issuance of shares of Common Stock to employees pursuant to the Company's employee stock purchase plans and pursuant to the conversion and/or exercise of Common Stock Equivalents outstanding as of the date of the most recently filed periodic report under the Exchange Act. No Person has any right of first refusal, preemptive right, right of participation, or any similar right to participate in the transactions contemplated by the Transaction Documents. Except as a result of the purchase and sale of the Securities or as disclosed on Schedule 3.1(g), there are no outstanding options, warrants, scrip rights to subscribe to, calls or commitments of any character whatsoever relating to, or securities, rights or obligations convertible into or exercisable or exchangeable for, or giving any Person any right to subscribe for or acquire, any shares of Common Stock, or contracts, commitments, understandings or arrangements by which the Company or any Subsidiary is or may become bound to issue additional shares of Common Stock or Common Stock Equivalents or capital stock of any Subsidiary. The issuance and sale of the Securities will not obligate the Company or any Subsidiary to issue shares of Common Stock or other securities to any Person (other than the Purchasers) and will not result in a right of any holder of Company securities to adjust the exercise, conversion, exchange or reset price under any of such securities. Except as set forth on Schedule 3.1(g), there are no outstanding securities or instruments of the Company or any Subsidiary that contain any redemption or similar provisions, and there are no contracts, commitments, understandings or arrangements by which the Company or any Subsidiary is or may be bound to redeem a security of the Company or such Subsidiary. The Company does not have any stock appreciation rights or "phantom stock" plans or agreements or any similar plan or agreement. All of the outstanding shares of capital stock of the Company are duly authorized, validly issued, fully paid and nonassessable, have been issued in compliance with all federal and state securities laws, and none of such outstanding shares was issued in violation of any preemptive rights or similar rights to subscribe for or purchase securities. No further approval or authorization of any stockholder, the

Board of Directors or others is required for the issuance and sale of the Securities. There are no stockholders agreements, voting agreements or other similar agreements with respect to the Company's capital stock to which the Company is a party or, to the knowledge of the Company, between or among any of the Company's stockholders.

(h) SEC Reports; Financial Statements. The Company has filed all reports, schedules, forms, statements and other documents required to be filed by the Company under the Securities Act and the Exchange Act, including pursuant to Section 13(a) or 15(d) thereof, for the two years preceding the date hereof (or such shorter period as the Company was required by law or regulation to file such material) (the foregoing materials, including the exhibits thereto and documents incorporated by reference therein, being collectively referred to herein as the "SEC Reports") on a timely basis or has received a valid extension of such time of filing and has filed any such SEC Reports prior to the expiration of any such extension. As of their respective dates, the SEC Reports complied in all material respects with the requirements of the Securities Act and the Exchange Act, as applicable, and none of the SEC Reports, when filed, contained any untrue statement of a material fact or omitted to state a material fact required to be stated therein or necessary in order to make the statements therein, in the light of the circumstances under which they were made, not misleading. The Company has never been an issuer subject to Rule 144(i) under the Securities Act. The financial statements of the Company included in the SEC Reports comply in all material respects with applicable accounting requirements and the rules and regulations of the Commission with respect thereto as in effect at the time of filing. Such financial statements have been prepared in accordance with United States generally accepted accounting principles applied on a consistent basis during the periods involved ("GAAP"), except as may be otherwise specified in such financial statements or the notes thereto and except that unaudited financial statements may not contain all footnotes required by GAAP, and fairly present in all material respects the financial position of the Company and its consolidated Subsidiaries as of and for the dates thereof and the results of operations and cash flows for the periods then ended, subject, in the case of unaudited statements, to normal, immaterial, year-end audit adjustments.

(i) Material Changes; Undisclosed Events, Liabilities or Developments. Since the date of the latest unaudited financial statements included within the SEC Reports, or in any subsequent SEC Report filed prior to the date hereof, except as specifically disclosed on Schedule 3.1(i), (i) there has been no event, occurrence or development that has had or that could reasonably be expected to result in a Material Adverse Effect, (ii) the Company has not incurred any liabilities (contingent or otherwise) other than (A) trade payables and accrued expenses incurred in the ordinary course of business consistent with past practice and (B) liabilities not required to be reflected in the Company's financial statements pursuant to GAAP or disclosed in filings made with the Commission, (iii) the Company has not altered its method of accounting, (iv) the Company has not declared or made any dividend or distribution of cash or other property to its stockholders or purchased, redeemed or made any agreements to purchase or redeem any shares of its capital stock and (v) the Company has not issued any equity securities to any officer, director or Affiliate, except pursuant to existing Company stock option plans. The Company does not have pending before the Commission any request for confidential treatment of information. Except for the issuance of the Securities contemplated by the Transaction Documents and the Reincorporation, no event, liability, fact, circumstance, occurrence or development has occurred or exists or is reasonably expected to occur or exist with respect to the Company or its Subsidiaries or their respective businesses, prospects, properties, operations, assets or financial condition that would be required to be disclosed by the Company under applicable securities laws at the time this representation is made or deemed made that has not been publicly disclosed at least one Trading Day prior to the date that this representation is made.

(j) Litigation. Except as set forth on Schedule 3.1(j), there is no action, suit, inquiry, notice of violation, proceeding or investigation pending or, to the knowledge of the Company, threatened against or affecting the Company, any Subsidiary or any of their respective properties before or by any court, arbitrator, governmental or administrative agency or regulatory authority (federal, state, county, local or foreign) (collectively, an "Action"). None of the Actions set forth on Schedule 3.1(j) (i) adversely affects or challenges the legality, validity or enforceability of any of the Transaction Documents or the Securities or (ii) could, if there were an unfavorable decision, have or reasonably be expected to result in a Material Adverse Effect. Neither the Company nor any Subsidiary, nor any

director or officer thereof, is or has been the subject of any Action involving a claim of violation of or liability under federal or state securities laws or a claim of breach of fiduciary duty. There has not been, and to the knowledge of the Company, there is not pending or contemplated, any investigation by the Commission involving the Company or any current or former director or officer of the Company. The Commission has not issued any stop order or other order suspending the effectiveness of any registration statement filed by the Company or any Subsidiary under the Exchange Act or the Securities Act.

(k) Labor Relations. No labor dispute exists or, to the knowledge of the Company, is imminent with respect to any of the employees of the Company, which could reasonably be expected to result in a Material Adverse Effect. None of the Company's or its Subsidiaries' employees is a member of a union that relates to such employee's relationship with the Company or such Subsidiary, and neither the Company nor any of its Subsidiaries is a party to a collective bargaining agreement, and the Company and its Subsidiaries believe that their relationships with their employees are good. To the knowledge of the Company, no executive officer of the Company or any Subsidiary, is, or is now expected to be, in violation of any material term of any employment contract, confidentiality, disclosure or proprietary information agreement or non-competition agreement, or any other contract or agreement or any restrictive covenant in favor of any third party, and the continued employment of each such executive officer does not subject the Company or any of its Subsidiaries to any liability with respect to any of the foregoing matters. The Company and its Subsidiaries are in compliance with all U.S. federal, state, local and foreign laws and regulations relating to employment and employment practices, terms and conditions of employment and wages and hours, except where the failure to be in compliance could not, individually or in the aggregate, reasonably be expected to have a Material Adverse Effect.

(l) Compliance. Neither the Company nor any Subsidiary: (i) is in default under or in violation of (and no event has occurred that has not been waived that, with notice or lapse of time or both, would result in a default by the Company or any Subsidiary under), nor has the Company or any Subsidiary received notice of a claim that it is in default under or that it is in violation of, any indenture, loan or credit agreement or any other agreement or instrument to which it is a party or by which it or any of its properties is bound (whether or not such default or violation has been waived), (ii) is in violation of any judgment, decree or order of any court, arbitrator or other governmental authority or (iii) is or has been in violation of any statute, rule, ordinance or regulation of any governmental authority, including without limitation all foreign, federal, state and local laws relating to taxes, environmental protection, occupational health and safety, product quality and safety and employment and labor matters, except in each case as could not have or reasonably be expected to result in a Material Adverse Effect.

(m) Regulatory Permits. The Company and the Subsidiaries possess all certificates, authorizations and permits issued by the appropriate federal, state, local or foreign regulatory authorities necessary to conduct their respective businesses as described in the SEC Reports, except where the failure to possess such permits could not reasonably be expected to result in a Material Adverse Effect ("Material Permits"), and neither the Company nor any Subsidiary has received any notice of proceedings relating to the revocation or modification of any Material Permit.

(n) Title to Assets. The Company and the Subsidiaries have good and marketable title in fee simple to all real property owned by them and good and marketable title in all personal property owned by them that is material to the business of the Company and the Subsidiaries, in each case free and clear of all Liens, except for (i) Liens as do not materially affect the value of such property and do not materially interfere with the use made and proposed to be made of such property by the Company and the Subsidiaries and (ii) Liens for the payment of federal, state or other taxes, for which appropriate reserves have been made in accordance with GAAP and, the payment of which is neither delinquent nor subject to penalties. Any real property and facilities held under lease by the Company and the Subsidiaries are held by them under valid, subsisting and enforceable leases with which the Company and the Subsidiaries are in compliance.

(o) Intellectual Property. The Company and the Subsidiaries have, or have rights to use, all patents, patent applications, trademarks, trademark applications, service marks, trade names, trade secrets, inventions, copyrights, licenses and other intellectual property rights and similar rights necessary or required for use in connection with their respective businesses as described in the SEC Reports and which the failure to so have could have a Material Adverse Effect (collectively, the “Intellectual Property Rights”). None of, and neither the Company nor any Subsidiary has received a notice (written or otherwise) that any of, the Intellectual Property Rights has expired, terminated or been abandoned, or is expected to expire or terminate or be abandoned, within two (2) years from the date of this Agreement. Neither the Company nor any Subsidiary has received, since the date of the latest audited financial statements included within the SEC Reports, a written notice of a claim or otherwise has any knowledge that the Intellectual Property Rights violate or infringe upon the rights of any Person, except as could not have or reasonably be expected to not have a Material Adverse Effect. To the knowledge of the Company, all such Intellectual Property Rights are enforceable and there is no existing infringement by another Person of any of the Intellectual Property Rights. The Company and its Subsidiaries have taken reasonable security measures to protect the secrecy, confidentiality and value of all of their intellectual properties, except where failure to do so could not, individually or in the aggregate, reasonably be expected to have a Material Adverse Effect.

(p) Insurance. The Company and the Subsidiaries are insured by insurers of recognized financial responsibility against such losses and risks and in such amounts as are prudent and customary in the businesses in which the Company and the Subsidiaries are engaged, including, but not limited to, directors and officers insurance coverage at least equal to the sum of all of the Purchasers’ Aggregate Purchase Prices. Neither the Company nor any Subsidiary has any reason to believe that it will not be able to renew its existing insurance coverage as and when such coverage expires or to obtain similar coverage from similar insurers as may be necessary to continue its business without a significant increase in cost.

(q) Transactions With Affiliates and Employees. Except as set forth on Schedule 3.1(q), none of the officers or directors of the Company or any Subsidiary and, to the knowledge of the Company, none of the employees of the Company or any Subsidiary is presently a party to any transaction with the Company or any Subsidiary (other than for services as employees, officers and directors), including any contract, agreement or other arrangement providing for the furnishing of services to or by, providing for rental of real or personal property to or from, providing for the borrowing of money from or lending of money to or otherwise requiring payments to or from any officer, director or such employee or, to the knowledge of the Company, any entity in which any officer, director, or any such employee has a substantial interest or is an officer, director, trustee, stockholder, member or partner, in each case in excess of \$120,000 other than for (i) payment of salary or consulting fees for services rendered, (ii) reimbursement for expenses incurred on behalf of the Company and (iii) other employee benefits, including stock option agreements under any stock option plan of the Company.

(r) Sarbanes-Oxley; Internal Accounting Controls. The Company and the Subsidiaries are in compliance with any and all applicable requirements of the Sarbanes-Oxley Act of 2002 that are effective as of the date hereof, and any and all applicable rules and regulations promulgated by the Commission thereunder that are effective as of the date hereof and as of the Closing Date. The Company and the Subsidiaries maintain a system of internal accounting controls sufficient to provide reasonable assurance that: (i) transactions are executed in accordance with management’s general or specific authorizations, (ii) transactions are recorded as necessary to permit preparation of financial statements in conformity with GAAP and to maintain asset accountability, (iii) access to assets is permitted only in accordance with management’s general or specific authorization, and (iv) the recorded accountability for assets is compared with the existing assets at reasonable intervals and appropriate action is taken with respect to any differences. The Company and the Subsidiaries have established disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) for the Company and the Subsidiaries and designed such disclosure controls and procedures to ensure that information required to be disclosed by the Company in the reports it files or submits under the Exchange Act is recorded, processed, summarized and reported, within the time periods specified in the Commission’s rules and forms. The Company’s certifying officers have evaluated the effectiveness of the disclosure controls and procedures of the Company and the Subsidiaries as of the

end of the period covered by the most recently filed periodic report under the Exchange Act (such date, the “Evaluation Date”). The Company presented in its most recently filed periodic report under the Exchange Act the conclusions of the certifying officers about the effectiveness of the disclosure controls and procedures based on their evaluations as of the Evaluation Date. Since the Evaluation Date, there have been no changes in the internal control over financial reporting (as such term is defined in the Exchange Act) of the Company and its Subsidiaries that have materially affected, or is reasonably likely to materially affect, the internal control over financial reporting of the Company and its Subsidiaries.

(s) Certain Fees. Except with respect to the Placement Agents, no brokerage or finder’s fees or commissions are or will be payable by the Company or any Subsidiary to any broker, financial advisor or consultant, finder, placement agent, investment banker, bank or other Person with respect to the transactions contemplated by the Transaction Documents. The Purchasers shall have no obligation with respect to any fees or with respect to any claims made by or on behalf of other Persons for fees of a type contemplated in this Section that may be due in connection with the transactions contemplated by the Transaction Documents.

(t) Investment Company. The Company is not, and is not an Affiliate of, and immediately after receipt of payment for the Securities, will not be or be an Affiliate of, an “investment company” within the meaning of the Investment Company Act of 1940, as amended. The Company shall conduct its business in a manner so that it will not become an “investment company” subject to registration under the Investment Company Act of 1940, as amended.

(u) Registration Rights; Private Placement. Except as set forth on Schedule 3.1(u) or pursuant to the Agreements, no Person has any right to cause the Company or any Subsidiary to effect the registration under the Securities Act of any securities of the Company or any Subsidiary. Assuming the accuracy of the Purchasers’ representations and warranties set forth in this Agreement and the Other Agreements, no registration under the Securities Act is required for the offer and sale of the Securities by the Company to the Purchasers as contemplated hereby. Subject to obtaining the Required Shareholder Approval, the issuance and sale of the Securities does not contravene the rules and regulations of the Trading Market.

(v) Listing and Maintenance Requirements. The Common Stock is registered pursuant to Section 12(b) or 12(g) of the Exchange Act, and the Company has taken no action designed to, or which to its knowledge is likely to have the effect of, terminating the registration of the Common Stock under the Exchange Act nor has the Company received any notification that the Commission is contemplating terminating such registration. The Company has not, in the 12 months preceding the date hereof, received notice from any Trading Market on which the Common Stock is or has been listed or quoted to the effect that the Company is not in compliance with the listing or maintenance requirements of such Trading Market. The Company is, and has no reason to believe that it will not in the foreseeable future continue to be, in compliance with all such listing and maintenance requirements.

(w) Application of Takeover Protections. The Company and the Board of Directors have taken all necessary action, if any, in order to render inapplicable any control share acquisition, business combination, poison pill (including any distribution under a rights agreement) or other similar anti-takeover provision under the Company’s certificate of incorporation (or similar charter documents) or the laws of its state of incorporation that is or could become applicable to the Purchasers as a result of the Purchasers and the Company fulfilling their obligations or exercising their rights under the Transaction Documents, including without limitation as a result of the Company’s issuance of the Securities and the Purchasers’ ownership of the Securities.

(x) No Integrated Offering. Assuming the accuracy of the Purchasers’ representations and warranties set forth in Section 3.2, neither the Company, nor any of its Affiliates, nor any Person acting on its or their behalf has, directly or indirectly, made any offers or sales of any security or solicited any offers to buy any security, under circumstances that would cause this offering of the Securities to be integrated with prior offerings by the Company for purposes of (i) the Securities Act which would require the registration of any such securities under the Securities Act, or (ii) any applicable shareholder approval provisions of any Trading Market on which any of the securities of the Company are listed or designated.

(y) Solvency. Based on the consolidated financial condition of the Company as of the Closing Date, after giving effect to the receipt by the Company of the proceeds from the sale of the Securities hereunder, (i) the fair saleable value of the Company's assets exceeds the amount that will be required to be paid on or in respect of the Company's existing debts and other liabilities (including known contingent liabilities) as they mature, (ii) the Company's assets do not constitute unreasonably small capital to carry on its business as now conducted and as proposed to be conducted including its capital needs taking into account the particular capital requirements of the business conducted by the Company, consolidated and projected capital requirements and capital availability thereof, and (iii) the current cash flow of the Company, together with the proceeds the Company would receive, were it to liquidate all of its assets, after taking into account all anticipated uses of the cash, would be sufficient to pay all amounts on or in respect of its liabilities when such amounts are required to be paid. The Company does not intend to incur debts beyond its ability to pay such debts as they mature (taking into account the timing and amounts of cash to be payable on or in respect of its debt). The Company has no knowledge of any facts or circumstances which lead it to believe that it will file for reorganization or liquidation under the bankruptcy or reorganization laws of any jurisdiction within one year from the Closing Date. Schedule 3.1(y), sets forth as of the date hereof all outstanding secured and unsecured Indebtedness of the Company or any Subsidiary, or for which the Company or any Subsidiary has commitments. For the purposes of this Agreement, "Indebtedness" means (x) any liabilities for borrowed money or amounts owed in excess of \$50,000 (other than trade accounts payable incurred in the ordinary course of business), (y) all guaranties, endorsements and other contingent obligations in respect of indebtedness of others, whether or not the same are or should be reflected in the Company's consolidated balance sheet (or the notes thereto), except guaranties by endorsement of negotiable instruments for deposit or collection or similar transactions in the ordinary course of business; and (z) the present value of any lease payments in excess of \$50,000 due under leases required to be capitalized in accordance with GAAP. Neither the Company nor any Subsidiary is in default with respect to any Indebtedness.

(z) Tax Status. Except for matters that would not, individually or in the aggregate, have or reasonably be expected to result in a Material Adverse Effect, the Company and its Subsidiaries each (i) has made or filed all United States federal, state and local income and all foreign income and franchise tax returns, reports and declarations required by any jurisdiction to which it is subject, (ii) has paid all taxes and other governmental assessments and charges that are material in amount, shown or determined to be due on such returns, reports and declarations and (iii) has set aside on its books provision reasonably adequate for the payment of all material taxes for periods subsequent to the periods to which such returns, reports or declarations apply. There are no unpaid taxes in any material amount claimed to be due by the taxing authority of any jurisdiction, and the officers of the Company or of any Subsidiary know of no basis for any such claim.

(aa) Foreign Corrupt Practices. Neither the Company nor any Subsidiary, nor to the knowledge of the Company or any Subsidiary, any agent or other person acting on behalf of the Company or any Subsidiary, has (i) directly or indirectly, used any funds for unlawful contributions, gifts, entertainment or other unlawful expenses related to foreign or domestic political activity, (ii) made any unlawful payment to foreign or domestic government officials or employees or to any foreign or domestic political parties or campaigns from corporate funds, (iii) failed to disclose fully any contribution made by the Company or any Subsidiary (or made by any person acting on its behalf of which the Company is aware) which is in violation of law, or (iv) violated in any material respect any provision of FCPA. The Company, the Subsidiaries and, to the knowledge of the Company, its affiliates have conducted their businesses in compliance with the FCPA and have instituted and maintain policies and procedures designed to ensure, and reasonably expected to ensure, continued compliance therewith.

(bb) Accountants. The Company's accounting firm is Marcum LLP. To the knowledge and belief of the Company, such accounting firm (i) is a registered public accounting firm as required by the Exchange Act and (ii) has expressed its opinion with respect to the financial statements included in the Company's Annual Report for the fiscal year ended December 31, 2017.

(cc) Regulation M Compliance. The Company has not, and to its knowledge no one acting on its behalf has, (i) taken, directly or indirectly, any action designed to cause or to result in the stabilization or manipulation of the price of any security of the Company to facilitate the sale or resale of any of

the Securities, (ii) sold, bid for, purchased, or, paid any compensation for soliciting purchases of, any of the Securities, or (iii) paid or agreed to pay to any Person any compensation for soliciting another to purchase any other securities of the Company, other than, in the case of clauses (ii) and (iii), compensation paid to the Placement Agents in connection with the placement of the Securities.

(dd) FDA. As to each product subject to the jurisdiction of the U.S. Food and Drug Administration (“FDA”) under the Federal Food, Drug and Cosmetic Act, as amended, and the regulations thereunder (“FDCA”) that is manufactured, packaged, labeled, tested, distributed, sold, and/or marketed by the Company or any of its Subsidiaries (each such product, a “Pharmaceutical Product”), such Pharmaceutical Product is being manufactured, packaged, labeled, tested, distributed, sold and/or marketed by the Company in compliance with all applicable requirements under FDCA and similar laws, rules and regulations relating to registration, investigational use, premarket clearance, licensure, or application approval, good manufacturing practices, good laboratory practices, good clinical practices, product listing, quotas, labeling, advertising, record keeping and filing of reports, except where the failure to be in compliance would not have a Material Adverse Effect. There is no pending, completed or, to the Company’s knowledge, threatened, action (including any lawsuit, arbitration, or legal or administrative or regulatory proceeding, charge, complaint, or investigation) against the Company or any of its Subsidiaries, and none of the Company or any of its Subsidiaries has received any notice, warning letter or other communication from the FDA or any other governmental entity, which (i) contests the premarket clearance, licensure, registration, or approval of, the uses of, the distribution of, the manufacturing or packaging of, the testing of, the sale of, or the labeling and promotion of any Pharmaceutical Product, (ii) withdraws its approval of, requests the recall, suspension, or seizure of, or withdraws or orders the withdrawal of advertising or sales promotional materials relating to, any Pharmaceutical Product, (iii) imposes a clinical hold on any clinical investigation by the Company or any of its Subsidiaries, (iv) enjoins production at any facility of the Company or any of its Subsidiaries, (v) enters or proposes to enter into a consent decree of permanent injunction with the Company or any of its Subsidiaries, or (vi) otherwise alleges any violation of any laws, rules or regulations by the Company or any of its Subsidiaries, and which, either individually or in the aggregate, would have a Material Adverse Effect. The properties, business and operations of the Company have been and are being conducted in all material respects in accordance with all applicable laws, rules and regulations of the FDA. The Company has not been informed by the FDA that the FDA will prohibit the marketing, sale, license or use in the United States of any product proposed to be developed, produced or marketed by the Company nor has the FDA expressed any concern as to approving or clearing for marketing any product being developed or proposed to be developed by the Company.

(ee) Office of Foreign Assets Control. None of the Company, any of the Subsidiaries or, to the knowledge of the Company, any director, officer, agent, employee affiliate or other person acting on behalf of the Company or any of the Subsidiaries is currently subject to or the target of any sanctions administered or enforced by the United States Government, including, without limitation, the Office of Foreign Assets Control of the U.S. Treasury Department (“OFAC”), the United Nations Security Council, the European Union, Her Majesty’s Treasury or any other relevant sanctions authority (collectively, “Sanctions”), nor is the Company located, organized or resident in a country or territory that is the subject of Sanctions. The Company will not directly or indirectly use the proceeds from its sale of the Securities contemplated hereby, or lend, contribute or otherwise make available such proceeds to any Subsidiary, joint venture partner or other person or entity, to fund any activities of or business with any person or entity, or in any country or territory, that is then the subject of Sanctions or in any other manner that will result in a violation of Sanctions by any person or entity.

(ff) U.S. Real Property Holding Corporation. The Company is not and has never been a U.S. real property holding corporation within the meaning of Section 897 of the Internal Revenue Code of 1986, as amended, and the Company shall so certify upon Purchaser’s request.

(gg) Money Laundering. The operations of the Company and the Subsidiaries are and have been conducted at all times in compliance with applicable financial recordkeeping and reporting requirements of the Currency and Foreign Transactions Reporting Act of 1970, as amended, the money laundering statutes of all jurisdictions, the rules and regulations thereunder and any related or

similar rules, regulations or guidelines, issued, administered or enforced by any Regulatory Authority (collectively, the “Money Laundering Laws”), and no action, suit or proceeding by or before any court or governmental agency, authority or body or any arbitrator involving the Company or any Subsidiary with respect to the Money Laundering Laws is pending or, to the knowledge of the Company or any Subsidiary, threatened or contemplated.

(hh) Equity Compensation Awards. Each stock option granted under any stock option plan of the Company or any Subsidiary (each, a “Stock Plan”) was granted with a per share exercise price no less than the fair market value per share of Common Stock on the grant date of such option, and no such grant involved any “back-dating,” “forward-dating” or similar practice with respect to the effective date of such grant. Each such stock option (i) was granted in compliance with applicable law and with the applicable Stock Plan(s), (ii) was duly approved by the Board of Directors (or a duly authorized committee thereof) of the Company or such Subsidiary, as applicable, and (iii) has been properly accounted for in the Company’s consolidated financial statements in accordance with GAAP and disclosed in the SEC Reports.

(ii) Environmental Matters. The Company and the Subsidiaries and their respective properties, assets and operations are in compliance with, and the Company and each of the Subsidiaries hold all permits, authorizations and approvals required under, Environmental Laws (as defined below). There are no past, present or, to the Company’s knowledge, reasonably anticipated future events, conditions, circumstances, activities, practices, actions, omissions or plans that could reasonably be expected to give rise to any material costs or liabilities to the Company or any Subsidiary under, or to interfere with or prevent compliance by the Company or any Subsidiary with, Environmental Laws. Neither the Company nor any of the Subsidiaries (i) is the subject of any investigation, (ii) has received any notice or claim, (iii) is a party to or affected by any pending or, to the Company’s knowledge, threatened action, suit or proceeding, (iv) is bound by any decree, judgment or order or (v) has entered into any agreement, in each case relating to any actual or alleged violation of any Environmental Law or any actual or alleged release or threatened release or cleanup at any location of any Hazardous Materials (as defined below) (as used herein, “Environmental Law” means any U.S. federal, state, local or foreign law, statute, ordinance, rule, regulation, order, decree, judgment, injunction, permit, license, authorization or other binding requirement, or common law, relating to the protection of human health, the environment (including, without limitation, ambient air, surface water, groundwater, land surface or subsurface strata) or wildlife, including, without limitation, those relating to the distribution, processing, generation, treatment, storage, disposal, transportation, other handling or release or threatened release of Hazardous Materials, and “Hazardous Materials” means any material (including, without limitation, any flammable explosives, radioactive materials, toxic chemicals, pollutants, contaminants, hazardous or toxic substances or wastes, petroleum or petroleum products, asbestos-containing materials or mold) or any other hazardous materials as defined or regulated by or which may give rise to liability under any Environmental Law). In the ordinary course of their business, the Company and each of the Subsidiaries conduct periodic reviews of the effect of the Environmental Laws on their respective properties, assets and operations, in the course of which they identify and evaluate associated costs and liabilities (including, without limitation, any capital or operating expenditures required for cleanup, closure of properties or compliance with the Environmental Laws or any permit, license or approval, any related constraints on operating activities and any potential liabilities to third parties).

(jj) Disclosure. All of the disclosure furnished by or on behalf of the Company to the Purchasers regarding the Company and its Subsidiaries, their respective businesses and the transactions contemplated hereby, including the Disclosure Schedules to this Agreement, is true and correct and does not contain any untrue statement of a material fact or omit to state any material fact necessary in order to make the statements made therein, in light of the circumstances under which they were made, not misleading. The press releases disseminated by the Company during the twelve months preceding the date of this Agreement taken as a whole do not contain any untrue statement of a material fact or omit to state a material fact required to be stated therein or necessary in order to make the statements therein, in light of the circumstances under which they were made and when made, not misleading. The

Company acknowledges and agrees that no Purchaser makes or has made any representations or warranties with respect to the transactions contemplated hereby other than those specifically set forth in Section 3.2 and set forth in the Confidentiality Agreement entered into between the Company and the Purchaser.

(kk) Acknowledgment Regarding Purchasers' Purchase of Securities. The Company acknowledges and agrees that each of the Purchasers is acting solely in the capacity of an arm's length purchaser with respect to the Transaction Documents and the transactions contemplated thereby. The Company further acknowledges that no Purchaser is acting as a financial advisor or fiduciary of the Company (or in any similar capacity) with respect to the Transaction Documents and the transactions contemplated thereby and any advice given by any Purchaser or any of their respective representatives or agents in connection with the Transaction Documents and the transactions contemplated thereby is merely incidental to the Purchasers' purchase of the Securities. The Company further represents to each Purchaser that the Company's decision to enter into this Agreement and the other Transaction Documents has been based solely on the independent evaluation of the transactions contemplated hereby by the Company and its representatives.

3.2 Representations, Warranties and Covenants of the Purchasers. The Purchaser represents and warrants to, and covenants with, the Company that:

(a) Experience. (i) The Purchaser is knowledgeable, sophisticated and experienced in financial and business matters, in making, and is qualified to make, decisions with respect to investments in shares representing an investment decision like that involved in the purchase of the Shares and the Warrants, including investments in securities issued by the Company and comparable entities, has the ability to bear the economic risks of an investment in the Shares and the Warrants; (ii) the Purchaser is acquiring the number of Shares and the Warrants set forth in Section 2 above in the ordinary course of its business and for its own account for investment only and with no present intention of distributing any of such Shares and the Warrants or any arrangement or understanding with any other persons regarding the distribution of such Shares or Warrants (this representation and warranty not limiting the Purchaser's right to sell pursuant to the Resale Registration Statement or in compliance with the Securities Act and the rules and regulations promulgated under the Exchange Act and the Securities Act (together, the "Rules and Regulations"), or, other than with respect to any claims arising out of a breach of this representation and warranty, the Purchaser's right to indemnification under Section 4.2); (iii) the Purchaser will not, directly or indirectly, offer, sell, pledge, transfer or otherwise dispose of (or solicit any offers to buy, purchase or otherwise acquire or take a pledge of) any of the Shares or the Warrants, nor will the Purchaser engage in any short sale that results in a disposition of any of the Shares or the Warrants by the Purchaser, except in compliance with the Securities Act and the Rules and Regulations and any applicable state securities laws; (iv) the Purchaser has completed or caused to be completed the Resale Registration Statement Questionnaire attached hereto as part of Appendix I, for use in preparation of the Resale Registration Statement, and the answers thereto are true and correct in all material respects as of the date hereof and will be true and correct in all material respects as of the effective date of the Resale Registration Statement and the Purchaser will notify the Company immediately of any material change in any such information provided in the Resale Registration Statement Questionnaire until such time as the Purchaser has sold all of its Shares and Warrants or until the Company is no longer required to keep the Resale Registration Statement effective; provided, that the Purchaser shall not be required to update the number of securities held by such Purchaser (v) any other written information furnished to the Company by or on behalf of the Purchaser expressly for inclusion in the Resale Registration Statement will be true and correct in all material respects as of the date such other written information is provided and will be true and correct as of the effective date of the Resale Registration Statement and the Purchaser will notify the Company immediately of any material change in any such other written information until such time as the Purchaser has sold all of its Securities or until the Company is no longer required to keep the Resale Registration Statement effective; (vi) the Purchaser has, in connection with its decision to purchase the number of Shares and Warrants set forth in Section 2 above, relied solely upon the representations and warranties of the Company contained herein; and (vii) the Purchaser has had an opportunity to discuss this investment with representatives of the Company and ask questions of them.

(b) Institutional Accredited Investor. The Purchaser is an “qualified institutional buyer” (as defined under Rule 144A under the Securities Act) or an institutional “accredited investor” (as defined in Rule 501(a)(1), (2), (3) or (7) of Regulation D under the Securities Act).

(c) Reliance on Exemptions. The Purchaser understands that the Shares and the Warrants are being offered and sold to it in reliance upon specific exemptions from the registration requirements of the Securities Act, the Rules and Regulations and state securities laws and that the Company is relying upon the truth and accuracy of, and the Purchaser’s compliance with, the representations, warranties, agreements, acknowledgments and understandings of the Purchaser set forth herein in order to determine the availability of such exemptions and the eligibility of the Purchaser to acquire the Shares and the Warrants.

(d) No Reliance on Placement Agents. In making a decision to purchase the Shares and the Warrants, the Purchaser has not received or relied on any communication, investment advice, or recommendation from the Placement Agents and the Purchaser: (i) is capable of evaluating investment risks independently, both in general and with regard to all transactions and investment strategies involving a security or securities; (ii) will exercise independent judgment in evaluating the recommendations of any broker-dealer or its associated persons, unless it has otherwise notified the Placement Agents in writing; and (iii) confirms that it has undertaken an independent analysis of the merits and risks of an investment in the Company, based on the Purchaser’s own financial circumstances.

(e) Confidentiality. The Purchaser understands that the information concerning this private placement is strictly confidential and proprietary to the Company and has been prepared from the Company’s publicly available documents and other information and is being submitted to the Purchaser for the Purchaser’s confidential use. The Purchaser agrees to use the information for the sole purpose of evaluating a possible investment in the Shares and the Warrants, and the Purchaser acknowledges that it is prohibited from reproducing or distributing the Investor Presentation, this Agreement, or any other offering materials or other information provided by the Company in connection with the Purchaser’s consideration of its investment in the Company, in whole or in part, or divulging or discussing any of their contents, except to its financial, investment or legal advisors in connection with its proposed investment in the Shares and the Warrants, and agrees to keep such information confidential. Further, the Purchaser understands that the existence and nature of all conversations and presentations, if any, regarding the Company and this offering must be kept strictly confidential. The Purchaser understands that the federal securities laws impose restrictions on trading based on information regarding this offering. This obligation will terminate upon the issuance of the press release relating to the transactions contemplated hereby on the Trading Day immediately following the Closing Date. In addition to the above, the Purchaser shall maintain in confidence the receipt and content of any notice of a Suspension (as defined in Section 3.2(k) below). The foregoing agreements shall not apply to any information that is or becomes publicly available through no fault of the Purchaser, or that the Purchaser is legally required to disclose; *provided, however*, that if the Purchaser is requested or ordered to disclose any such information pursuant to any court or other government order or any other applicable legal procedure, it shall provide the Company with prompt notice of any such request or order in time sufficient to enable the Company to seek an appropriate protective order.

(f) Investment Decision. The Purchaser understands that nothing in this Agreement or any other materials presented to the Purchaser in connection with the purchase and sale of the Shares and the Warrants constitutes legal, tax or investment advice. The Purchaser has consulted such legal, tax and investment advisors as it, in its sole discretion, has deemed necessary or appropriate in connection with its purchase of the Shares and Warrants. The Purchaser acknowledges that, as described in Section 5.2, after the Company issues the press release relating to the transactions contemplated hereby on the Trading Day immediately following the Closing Date, the Purchaser will not have any material, non-public information that had been delivered to the Purchaser by the Company or any of its Subsidiaries, or any of their respective officers, directors, employees or agents in connection with the transactions contemplated by the Transaction Documents.

(g) Risk of Loss. The Purchaser understands that its investment in the Shares and the Warrants involves a significant degree of risk, including a risk of total loss of the Purchaser's investment, and the Purchaser has full cognizance of and understands all of the risk factors related to the Purchaser's purchase of the Shares and the Warrants.

(h) Legend. The Purchaser understands that, until such time as the Shares and the Warrant Shares may be sold pursuant to Rule 144 under the Securities Act without any restriction as to the number of securities as of a particular date that can then be immediately sold and except if and to the extent otherwise provided below in this Section 3.2, the Shares and the Warrant Shares will bear a restrictive legend in substantially the following form:

“THE SHARES EVIDENCED BY THIS CERTIFICATE HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED (THE “SECURITIES ACT”), OR THE SECURITIES LAWS OF ANY STATE OR OTHER JURISDICTION. THE SHARES MAY NOT BE OFFERED, SOLD, PLEDGED OR OTHERWISE TRANSFERRED EXCEPT (1) PURSUANT TO AN EXEMPTION FROM REGISTRATION UNDER THE SECURITIES ACT OR (2) PURSUANT TO AN EFFECTIVE REGISTRATION STATEMENT UNDER THE SECURITIES ACT, IN EACH CASE IN ACCORDANCE WITH ALL APPLICABLE STATE SECURITIES LAWS AND THE SECURITIES LAWS OF OTHER JURISDICTIONS, AND IN THE CASE OF A TRANSACTION EXEMPT FROM REGISTRATION, UNLESS THE COMPANY HAS RECEIVED AN OPINION OF COUNSEL REASONABLY SATISFACTORY TO IT THAT SUCH TRANSACTION DOES NOT REQUIRE REGISTRATION UNDER THE SECURITIES ACT AND SUCH OTHER APPLICABLE LAWS.”

The Shares and the Warrant Shares shall not be required to contain any legend (including the legend set forth above in this Section 3.2 hereof), (i) while a registration statement (including the Resale Registration Statement) covering the resale of such security is effective under the Securities Act, (ii) following any sale of such Shares or Warrant Shares pursuant to Rule 144 (assuming cashless exercise of the Warrants), (iii) if such Shares or Warrant Shares are eligible for immediate sale under Rule 144 (assuming cashless exercise of the Warrants) without any volume or manner-of-sale restrictions, or (iv) if such legend is not required under applicable requirements of the Securities Act (including judicial interpretations and pronouncements issued by the Commission). The Company shall cause its counsel to issue a legal opinion to the Company's transfer agent or the Purchaser if required by the Company's transfer agent to effect the removal of the legend hereunder, or if requested by the Purchaser, respectively, *provided* that such legend is not required pursuant to the foregoing provisions of this paragraph. The Company agrees that at such time as such legend is no longer required under this Section 3.2 (including, without limitation, following the effective date of the Resale Registration Statement), it will, no later than the earlier of (i) two (2) Trading Days and (ii) the number of Trading Days comprising the Standard Settlement Period (as defined below) following the delivery by the Purchaser to the Company or the Company's transfer agent of a certificate representing Shares or Warrant Shares, as the case may be, issued with a restrictive legend (such date, the “Legend Removal Date”), deliver or cause to be delivered to the Purchaser such shares that are free from all restrictive and other legends in such manner as directed by the Purchaser. The Company may not make any notation on its records or give instructions to the Company's transfer agent that enlarge the restrictions on transfer set forth in this Section 3.2. The Company shall pay all reasonable fees and expenses (including the reasonable fees and expenses of legal counsel) relating to the removal of the restrictive legends pursuant to this Section 3.2(h). As used herein, “Standard Settlement Period” means the standard settlement period, expressed in a number of Trading Days, on the Company's primary trading market with respect to the Common Stock as in effect on the date of delivery of a certificate representing Shares or Warrant Shares, as the case may be, issued with a restrictive legend.

The Purchaser, severally and not jointly with the Other Purchasers, agrees with the Company that the Purchaser will sell any Securities pursuant to either the registration requirements of the Securities Act, including any applicable prospectus delivery requirements, or an exemption therefrom, and that if Securities are sold pursuant to a Resale Registration Statement, they will be sold in compliance with the plan of distribution set forth therein, and acknowledges that the removal of the restrictive legend from certificates representing Securities as set forth in this Section 3.2 is predicated upon the Company's reliance upon this understanding.

(i) Stop Transfer. When issued, the Shares and the Warrant Shares purchased hereunder will be subject to a stop transfer order with the Company's transfer agent that restricts the transfer of such shares except upon receipt by the transfer agent, in accordance with the provisions of Section 3.2(k) below, of a written confirmation from the Purchaser to the effect that the Purchaser has satisfied its prospectus delivery requirements or upon receipt by the transfer agent of written instructions from the Company authorizing such transfer.

(j) Residency. The Purchaser's principal executive offices are in the jurisdiction set forth immediately below the Purchaser's name on the signature pages hereto.

(k) Public Sale or Distribution. (a) The Purchaser hereby covenants with the Company not to make any sale of the Shares or the Warrant Shares under the Resale Registration Statement without complying with the provisions of this Agreement and without effectively causing the prospectus delivery requirement under the Securities Act to be satisfied (whether physically or through compliance with Rule 172 under the Securities Act or any similar rule), and the Purchaser acknowledges and agrees that such Shares and Warrant Shares are not transferable on the books of the Company unless the certificate submitted to the transfer agent evidencing the Shares or the Warrant Shares, as applicable, is accompanied by a separate Purchaser's Certificate of Subsequent Sale: (i) in the form of Appendix II hereto, (ii) executed by an officer of, or other authorized person designated by, the Purchaser, and (iii) to the effect that (A) the Shares or the Warrant Shares, as applicable, have been sold in accordance with the Resale Registration Statement, the Securities Act and any applicable state securities or Blue Sky laws and (B) the prospectus delivery requirement effectively has been satisfied. The Purchaser acknowledges that there may occasionally be times when the Company must suspend the use of the prospectus (the "Prospectus") forming a part of the Resale Registration Statement (a "Suspension") until such time as an amendment to the Resale Registration Statement has been filed by the Company and declared effective by the Commission, or until such time as the Company has filed an appropriate report with the Commission pursuant to the Exchange Act. Without the Company's prior written consent, which consent shall not unreasonably be withheld or delayed, the Purchaser shall not use any written materials to offer the Shares or the Warrant Shares for resale other than the Prospectus, including any "free writing prospectus" as defined in Rule 405 under the Securities Act. The Purchaser covenants that it will not sell any Shares or Warrant Shares pursuant to said Prospectus during the period commencing at the time when Company gives the Purchaser written notice of the Suspension of the use of said Prospectus and ending at the time when the Company gives the Purchaser written notice that the Purchaser may thereafter effect sales pursuant to said Prospectus. Notwithstanding the foregoing, (i) the Company agrees that no Suspension shall be for a period of longer than 30 consecutive days, and no Suspension shall be for a period longer than 60 days in the aggregate in any 360-day period, and (ii) the Company agrees that, if the legend removal process described in Section 3.2(h) commenced prior to the beginning of a Suspension, then after the completion of such legend removal process, the Company shall honor any transfer of the de-legended Shares or Warrant Shares, even if such transfer occurs during the Suspension period. The Purchaser further covenants to notify the Company promptly of the sale of all of its Shares and Warrant Shares.

(b) At any time that the Purchaser is an affiliate of the Company, any resale of the Shares or the Warrant Shares that purports to be effected under Rule 144 shall comply with all of the requirements of such rule, including the "manner of sale" requirements set forth in Rule 144(f).

(l) Organization; Validity; Enforcement. The Purchaser further represents and warrants to, and covenants with, the Company that (i) the Purchaser has full right, power, authority and capacity to enter into this Agreement and to consummate the transactions contemplated hereby and has taken all necessary action to authorize the execution, delivery and performance of this Agreement, (ii) the making and performance of this Agreement by the Purchaser and the consummation of the transactions herein contemplated will not violate any provision of the organizational documents of the Purchaser or conflict with, result in the breach or violation of, or constitute, either by itself or upon notice or the passage of time or both, a default under any material agreement, mortgage, deed of trust, lease, franchise, license, indenture, permit or other instrument to which the Purchaser is a party or, any statute or any authorization, judgment, decree, order, rule or regulation of any court or any regulatory body, administrative agency or other governmental agency or body applicable to the Purchaser, (iii) no

consent, approval, authorization or other order of any court, regulatory body, administrative agency or other governmental agency or body is required on the part of the Purchaser for the execution and delivery of this Agreement or the consummation of the transactions contemplated by this Agreement, (iv) upon the execution and delivery of this Agreement, this Agreement shall constitute a legal, valid and binding obligation of the Purchaser, enforceable in accordance with its terms, except as such enforceability may be limited by applicable bankruptcy, insolvency, reorganization, moratorium or other laws of general application relating to or the enforcement of creditor's rights and the application of equitable principles relating to the availability of remedies, and except as rights to indemnity or contribution, including, but not limited to, the indemnification provisions set forth in Section 4.2 of this Agreement, may be limited by federal or state securities laws or the public policy underlying such laws and (v) there is not in effect any order enjoining or restraining the Purchaser from entering into or engaging in any of the transactions contemplated by this Agreement.

(m) Certain Transactions and Confidentiality. Other than consummating the transactions contemplated hereunder, such Purchaser has not, nor has any Person acting on behalf of or pursuant to any understanding with such Purchaser, directly or indirectly executed any purchases or sales, including Short Sales, of the securities of the Company during the period commencing as of the time that such Purchaser first received a term sheet (written or oral) from the Company or any other Person representing the Company setting forth the material terms of the transactions contemplated hereunder and ending immediately prior to the execution hereof. Notwithstanding the foregoing, in the case of a Purchaser that is a multi-managed investment vehicle whereby separate portfolio managers manage separate portions of such Purchaser's assets and the portfolio managers have no direct knowledge of the investment decisions made by the portfolio managers managing other portions of such Purchaser's assets, the representation set forth above shall only apply with respect to the portion of assets managed by the portfolio manager that made the investment decision to purchase the Securities covered by this Agreement. Other than to other Persons party to this Agreement or to such Purchaser's representatives, including, without limitation, its officers, directors, partners, legal and other advisors, employees, agents and Affiliates, such Purchaser has maintained the confidentiality of all disclosures made to it in connection with this transaction (including the existence and terms of this transaction). Notwithstanding the foregoing, for the avoidance of doubt, nothing contained herein shall constitute a representation or warranty, or preclude any actions, with respect to the identification of the availability of, or securing of, available shares to borrow in order to effect Short Sales or similar transactions in the future.

(n) Access to Information. The Purchaser acknowledges that it has had the opportunity to review the Transaction Documents (including all exhibits and schedules thereto) and the SEC Reports and has been afforded (i) the opportunity to ask such questions as it has deemed necessary of, and to receive answers from, representatives of the Company concerning the terms and conditions of the offering of the Securities and the merits and risks of investing in the Securities; (ii) access to information about the Company and its financial condition, results of operations, business, properties, management and prospects sufficient to enable it to evaluate its investment; and (iii) the opportunity to obtain such additional information that the Company possesses or can acquire without unreasonable effort or expense that is necessary to make an informed investment decision with respect to the investment. The Purchaser acknowledges and agrees that neither the Placement Agents nor any Affiliate of the Placement Agents has provided the Purchaser with any information or advice with respect to the Securities nor is such information or advice necessary or desired. Neither the Placement Agents nor any of their Affiliates have made or makes any representation as to the Company or the quality of the Securities and the Placement Agents and any of their Affiliates may have acquired non-public information with respect to the Company which such Purchaser agrees need not be provided to it. In connection with the issuance of the Securities to the Purchaser, neither the Placement Agents nor any of their Affiliates have acted as a financial advisor or fiduciary to such Purchaser.

(o) Short Sales. The Purchaser shall not take, prior to the earlier to occur of (1) the date on which the Resale Registration Statement is declared effective by the Commission, or (2) the date that is 180 days from the Closing Date, any action that has caused or will cause the Purchaser to have, directly or indirectly, effected or agreed to effect any short sale, whether or not against the box, established any "put equivalent position" (as defined in Rule 16a-1(h) under the Exchange Act with respect to the

Common Stock, granted any other right (including, without limitation, any put or call option) with respect to the Common Stock or with respect to any security that includes, relates to or derived any significant part of its value from the Common Stock.

The Company acknowledges and agrees that the representations contained in Section 3.2 shall not modify, amend or affect such Purchaser's right to rely on the Company's representations and warranties contained in this Agreement or any representations and warranties contained in any other Transaction Document or any other document or instrument executed and/or delivered in connection with this Agreement or the consummation of the transaction contemplated hereby.

ARTICLE IV.

REGISTRATION OF THE SHARES; COMPLIANCE WITH THE SECURITIES ACT

4.1 Registration Procedures and Expenses. The Company shall:

(a) As soon as practicable, but in no event later than 15 days after the Closing Date (the "Filing Deadline"), prepare and file with the Commission the Resale Registration Statement on Form S-3 (or on Form S-1 in the event that the Company is not eligible to use Form S-3 on the Filing Deadline) relating to the resale of the Shares and the Warrant Shares by the Purchaser and the Other Purchasers and of shares of Common Stock held by other stockholders of the Company from time to time on the Trading Market, or the facilities of any national securities exchange on which the Common Stock is then traded or in privately-negotiated transactions.

(b) Use its best commercially reasonable efforts, subject to receipt of necessary information from the Purchasers, to cause the Commission to declare the Resale Registration Statement effective within 50 days after the Closing Date or, if the Resale Registration Statement is selected for review by the Commission, within 90 days after the Closing Date (the "Effective Deadline").

(c) Promptly prepare and file with the Commission such amendments and supplements to the Resale Registration Statement and the prospectus used in connection therewith as may be necessary to keep the Resale Registration Statement effective until the earliest of (i) two years after the effective date of the Resale Registration Statement, (ii) such time as all of the Shares and the Warrant Shares purchased hereunder have been sold pursuant to the Resale Registration Statement, or (iii) such time as the Shares and the Warrant Shares purchased hereunder become eligible for resale without any volume limitations or other restrictions pursuant to Rule 144 under the Securities Act without the requirement to be in compliance with Rule 144(c)(1).

(d) Notwithstanding anything express or implied in this Agreement or any Other Agreement to the contrary, in the event that the Commission for any reason limits the number of Shares and/or Warrant Shares that may be included and sold by the Purchasers in the Resale Registration Statement (it being understood and agreed that, for purposes of this Section 4, any reference to Shares and/or Warrant Shares may be a reference to (x) either the Shares and/or Warrant Shares purchased or that may be purchased by the Purchaser pursuant to this Agreement or upon exercise of any of the Warrants or (y) the shares of Common Stock and/or warrant shares purchased or that may be purchased by the Purchasers pursuant to the Other Agreements or upon exercise of any of the warrants issued pursuant to the Other Agreements, as the context may require), the Company shall: (i) first, reduce the number of Warrant Shares included in the Resale Registration Statement on behalf of the Purchasers in whole or in part (such portion shall be allocated pro rata among such Purchasers) and, second (after reducing the number of such Warrant Shares to zero), reduce the number of Shares included in the Resale Registration Statement on behalf of the Purchasers in whole or in part (such portion shall be allocated pro rata among such Purchasers) (such excluded Warrant Shares and/or Shares, the "Reduction Securities"), (ii) give the Purchasers prompt notice of the number of such Reduction Securities excluded and the Company will not be liable for any actual damages or liquidated damages under this Agreement (including, without limitation, any liquidated damages pursuant to Section 4.2(h) hereof) in connection with the exclusion of such Reduction Securities or in connection with any delay in the Effective Deadline arising from any interactions between the Company and the Commission with respect to the number of Shares and/or Warrant Shares that may be included and sold by the Purchasers in the Resale Registration Statement, and (iii) use its commercially reasonable

efforts at the first opportunity that is permitted by the Commission to register for resale the Reduction Securities (or such portion thereof as the Commission will allow to be registered for resale at such time) pursuant to a new registration statement covering the resale of the Reduction Securities (or such portion thereof as the Commission will allow to be registered for resale at such time) for an offering to be made on a continuous basis pursuant to Rule 415 and shall file such new registration statement with the Commission within thirty (30) calendar days following (x) the date that the Commission would allow or permit such additional registration statement to be filed or (y) the date on which the Company first learned the date that the Commission would allow or permit such additional registration statement to be filed, whichever of (x) or (y) is the later date.

(e) Furnish to the Purchaser with respect to the Shares and the Warrant Shares registered under the Resale Registration Statement (and to each underwriter, if any, of such Shares and Warrant Shares) such number of copies of prospectuses and such other documents as the Purchaser may reasonably request, in order to facilitate the public sale or other disposition of all or any of the Shares and the Warrant Shares by the Purchaser.

(f) File documents required of the Company for normal Blue Sky clearance in states specified in writing by the Purchaser; *provided, however*, that the Company shall not be required to qualify to do business or consent to service of process in any jurisdiction in which it is not now so qualified or has not so consented.

(g) Bear all expenses in connection with the procedures in paragraphs (a) through (f) of this Section 4.1 and the registration of the Shares and the Warrant Shares on behalf of the Purchasers pursuant to the Resale Registration Statement, other than fees and expenses, if any, of counsel or other advisers to the Purchaser or the Other Purchasers or underwriting discounts, brokerage fees and commissions incurred by the Purchaser or the Other Purchasers, if any in connection with the offering of the Shares and the Warrant Shares on behalf of the Purchasers pursuant to the Resale Registration Statement.

(h) Rule 144. At any time during the period commencing on the six (6) month anniversary of the date hereof and ending at such time that the Shares and the Warrant Shares may be sold without the requirement for the Company to be in compliance with Rule 144(c)(1) and otherwise without restriction or limitation pursuant to Rule 144, if the Company (1) shall fail for any reason to satisfy the current public information requirement under Rule 144(c) or (2) has ever been an issuer described in Rule 144(i)(1)(i) or becomes such an issuer in the future, and the Company shall fail to satisfy any condition set forth in Rule 144(i)(2) (each of the events described in the foregoing clause (1) or the foregoing clause (2) of this Section 4.1(h) being hereinafter referred to as a “Public Information Failure”), then the Company shall pay to the Purchaser, as partial liquidated damages and not as a penalty, with respect to any delay in or reduction of the Purchaser’s ability to sell Shares and Warrant Shares that is due to any such Public Information Failure, an amount per 30-day period equal to 1.0% of the purchase price paid by the Purchaser for its Securities pursuant to this Agreement commencing on the day that Purchaser is unable to or delayed in selling Shares and Warrant Shares due to a Public Information Failure (pro-rated for any period totaling less than thirty (30) days) until the earlier of (a) the date such Public Information Failure is cured and (b) such time that such Public Information Failure no longer prevents or delays the Purchaser from transferring the Shares and Warrant Shares pursuant to Rule 144; and for any such 30-day (or shorter) period, such payment shall be made no later than three business days following such 30-day (or shorter) period. Notwithstanding the foregoing provisions, in no event shall the Company be obligated to pay any liquidated damages pursuant to this Section 4.1(h) (x) if any registration statement covering the resale of the Shares and the Warrant Shares by the Purchasers pursuant to an offering to be made on a continuous basis pursuant to Rule 415 promulgated under the Securities Act has been declared effective by the Commission and remains effective, (y) with respect to any Shares or Warrant Shares for any period of time if the Company is obligated to pay to any Other Purchaser liquidated damages pursuant to this Section 4.1(h) of the Agreement executed by such Other Purchaser with respect to such Shares or Warrant Shares for the same period of time, or (z) in an aggregate amount that exceeds 10% of the purchase price paid by the Purchaser for the Shares and the Warrants pursuant to this Agreement.

A draft of the proposed form of the questionnaire related to the Resale Registration Statement to be completed by the Purchaser is attached hereto as Appendix I.

It is understood and agreed that the Company has the right to take any and all steps necessary to convert the Resale Registration Statement from a Form S-1 to a Form S-3 at any time after the Company becomes eligible to do so under applicable rules and regulations of the Commission.

(i) Transfer of Shares or Warrant Shares After Registration. The Purchaser agrees that it will not effect any disposition of the Shares or the Warrant Shares or its right to purchase the Shares or the Warrant Shares that would constitute a sale within the meaning of the Securities Act or pursuant to any applicable state securities laws, except as contemplated in the Resale Registration Statement referred to in Section 4.1 or as otherwise permitted by law, and that it will promptly notify the Company of any changes in the information set forth in the Resale Registration Statement regarding the Purchaser or its plan of distribution.

4.2 Indemnification. For the purposes of this Section 4.2:

(a) For the purpose of this Section 4.2: (i) the term “Purchaser/Affiliate” shall mean any affiliate of the Purchaser, including a transferee who is an affiliate of the Purchaser, and any person who controls the Purchaser or any affiliate of the Purchaser within the meaning of Section 15 of the Securities Act or Section 20 of the Exchange Act; and (ii) the term “Resale Registration Statement” shall include any preliminary prospectus, final prospectus, free writing prospectus, exhibit, supplement or amendment included in or relating to, and any document incorporated by reference in, the Resale Registration Statement referred to in Section 4.1.

(b) The Company agrees to indemnify and hold harmless the Purchaser and each Purchaser/Affiliate, against any losses, claims, damages, liabilities or expenses, joint or several, to which the Purchaser or Purchaser/Affiliates may become subject, under the Securities Act, the Exchange Act, or any other federal or state statutory law or regulation, or at common law or otherwise (including in settlement of any litigation, if such settlement is effected with the written consent of the Company), insofar as such losses, claims, damages, liabilities or expenses (or actions in respect thereof as contemplated below) (i) arise out of or are based upon any untrue statement or alleged untrue statement of any material fact contained in (1) the Resale Registration Statement, including the Prospectus, financial statements and schedules, and all other documents filed as a part thereof, as amended at the time of effectiveness of the Resale Registration Statement, including any information deemed to be a part thereof as of the time of effectiveness pursuant to paragraph (b) of Rule 430A, or pursuant to Rules 430B, 430C or 434, of the Rules and Regulations, or (2) the Prospectus, in the form first filed with the Commission pursuant to Rule 424(b) of the Regulations, or filed as part of the Resale Registration Statement at the time of effectiveness if no Rule 424(b) filing is required or any amendment or supplement thereto; (ii) arise out of or are based upon the omission or alleged omission to state in any of them a material fact required to be stated therein or necessary to make the statements in the Resale Registration Statement or any amendment or supplement thereto not misleading or in the Prospectus or any amendment or supplement thereto not misleading in light of the circumstances under which they were made; or (iii) arise out of or are based in whole or in part on any inaccuracy in the representations or warranties of the Company contained in this Agreement, or any failure of the Company to perform its obligations hereunder or under law, and will promptly reimburse the Purchaser and each Purchaser/Affiliate for any legal and other expenses as such expenses are reasonably incurred by the Purchaser or such Purchaser/Affiliate in connection with investigating, defending or preparing to defend, settling, compromising or paying any such loss, claim, damage, liability, expense or action; *provided, however*, that the Company will not be liable for amounts paid in settlement of any such loss, claim, damage, liability or action if such settlement is effected without the consent of the Company, which consent shall not be unreasonably withheld, and the Company will not be liable in any such case to the extent that any such loss, claim, damage, liability or expense arises out of or is based upon (A) an untrue statement or alleged untrue statement or omission or alleged omission made in the Resale Registration Statement, the Prospectus or any amendment or supplement thereto in reliance upon and in conformity with written information furnished to the Company by or on behalf of the Purchaser expressly for use therein; (B) the failure of the Purchaser to comply with the

covenants and agreements contained in Section 3.2 or Section 4.1(i) hereof respecting the sale of the Shares and the Warrants; (C) the inaccuracy of any representation or warranty made by the Purchaser herein; or (D) any statement or omission in any Prospectus that is corrected in any subsequent Prospectus that was delivered to the Purchaser prior to the pertinent sale or sales by the Purchaser.

(c) The Purchaser will severally, but not jointly with the Other Purchasers, indemnify and hold harmless the Company, each of its directors, each of its officers who signed the Resale Registration Statement and each person, if any, who controls the Company within the meaning of Section 15 of the Securities Act or Section 20 of the Exchange Act, against any losses, claims, damages, liabilities or expenses to which the Company, each of its directors, each of its officers who signed the Resale Registration Statement or controlling person may become subject, under the Securities Act, the Exchange Act, or any other federal or state statutory law or regulation, or at common law or otherwise (including in settlement of any litigation, but only if such settlement is effected with the written consent of the Purchaser) insofar as such losses, claims, damages, liabilities or expenses (or actions in respect thereof as contemplated below) arise out of or are based upon (i) any failure to comply with the covenants and agreements contained in Section 3.2 or Section 4.1(i) hereof respecting the sale of the Shares and the Warrants; (ii) the inaccuracy of any representation or warranty made by the Purchaser herein; or (iii) any untrue or alleged untrue statement of any material fact contained in the Resale Registration Statement, the Prospectus, or any amendment or supplement thereto, or arise out of or are based upon the omission or alleged omission to state therein a material fact required to be stated therein or necessary to make the statements in the Resale Registration Statement or any amendment or supplement thereto not misleading or in the Prospectus or any amendment or supplement thereto not misleading in the light of the circumstances under which they were made, in each case under this clause (iii) to the extent, but only to the extent, that such untrue statement or alleged untrue statement or omission or alleged omission was made in the Resale Registration Statement, the Prospectus, or any amendment or supplement thereto, in reliance upon and in conformity with written information furnished to the Company by or on behalf of the Purchaser expressly for use therein; and will reimburse the Company, each of its directors, each of its officers who signed the Resale Registration Statement or controlling person for any legal and other expense reasonably incurred by the Company, each of its directors, each of its officers who signed the Resale Registration Statement or controlling person in connection with investigating, defending, settling, compromising or paying any such loss, claim, damage, liability, expense or action; *provided, however*, that the Purchaser's aggregate liability under this Section 4 shall not exceed the amount of net proceeds received by the Purchaser on the sale pursuant to the Resale Registration Statement of the Shares and the Warrant Shares purchased by the Purchaser.

(d) Promptly after receipt by an indemnified party under this Section 4.2 of notice of the threat or commencement of any action, such indemnified party will, if a claim in respect thereof is to be made against an indemnifying party under this Section 4.2 promptly notify the indemnifying party in writing thereof, but the omission to notify the indemnifying party will not relieve it from any liability that it may have to any indemnified party for contribution or otherwise under the indemnity agreement contained in this Section 4.2 to the extent it is not prejudiced as a result of such failure. In case any such action is brought against any indemnified party and such indemnified party seeks or intends to seek indemnity from an indemnifying party, the indemnifying party will be entitled to participate in, and, to the extent that it may wish, jointly with all other indemnifying parties similarly notified, to assume the defense thereof with counsel reasonably satisfactory to such indemnified party; *provided, however*, if the defendants in any such action include both the indemnified party, and the indemnifying party and the indemnified party shall have reasonably concluded, based on an opinion of counsel reasonably satisfactory to the indemnifying party, that there may be a conflict of interest between the positions of the indemnifying party and the indemnified party in conducting the defense of any such action or that there may be legal defenses available to it and/or other indemnified parties that are different from or additional to those available to the indemnifying party, the indemnified party or parties shall have the right to select separate counsel to assume such legal defenses and to otherwise participate in the defense of such action on behalf of such indemnified party or parties. Upon receipt of notice from the indemnifying party to such indemnified party of its election to assume the defense of such action and approval by the indemnified party of counsel, the indemnifying party will not be

liable to such indemnified party under this Section 4.2 for any legal or other expenses subsequently incurred by such indemnified party in connection with the defense thereof unless (i) the indemnified party shall have employed such counsel in connection with the assumption of legal defenses in accordance with the proviso to the preceding sentence (it being understood, however, that the indemnifying party shall not be liable for the expenses of more than one separate counsel, reasonably satisfactory to such indemnifying party, representing all of the indemnified parties who are parties to such action) or (ii) the indemnifying party shall not have employed counsel reasonably satisfactory to the indemnified party to represent the indemnified party within a reasonable time after notice of commencement of action, in each of which cases the reasonable fees and expenses of counsel shall be at the expense of the indemnifying party. The indemnifying party shall not be liable for any settlement of any action without its written consent. In no event shall any indemnifying party be liable in respect of any amounts paid in settlement of any action unless the indemnifying party shall have approved in writing the terms of such settlement; provided that such consent shall not be unreasonably withheld. No indemnifying party shall, without the prior written consent of the indemnified party, effect any settlement of any pending or threatened proceeding in respect of which any indemnified party is or could have been a party and indemnification could have been sought hereunder by such indemnified party from all liability on claims that are the subject matter of such proceeding, unless such settlement (x) includes an unconditional release of such Indemnified Person, in form and substance reasonably satisfactory to such Indemnified Person, from all liability on claims that are the subject matter of such proceeding and (y) does not include any statement as to or any admission of fault, culpability or a failure to act by or on behalf of any Indemnified Person.

(e) If the indemnification provided for in this Section 4.2 is required by its terms but is for any reason held to be unavailable to or otherwise insufficient to hold harmless an indemnified party under paragraphs (a), (b) or (c) of this Section 4.2 in respect to any losses, claims, damages, liabilities or expenses referred to therein, then each applicable indemnifying party shall contribute to the amount paid or payable by such indemnified party as a result of any losses, claims, damages, liabilities or expenses referred to therein (i) in such proportion as is appropriate to reflect the relative benefits received by the Company and the Purchaser from the private placement of Common Stock hereunder or (ii) if the allocation provided by clause (i) above is not permitted by applicable law, in such proportion as is appropriate to reflect not only the relative benefits referred to in clause (i) above but the relative fault of the Company and the Purchaser in connection with the statements or omissions or inaccuracies in the representations and warranties in this Agreement and/or the Resale Registration Statement that resulted in such losses, claims, damages, liabilities or expenses, as well as any other relevant equitable considerations. The relative benefits received by the Company on the one hand and the Purchaser on the other shall be deemed to be in the same proportion as the amount paid by the Purchaser to the Company pursuant to this Agreement for the Shares and the Warrants purchased by the Purchaser that were sold pursuant to the Resale Registration Statement bears to the difference (the “Difference”) between the amount the Purchaser paid for the Shares and the Warrants that were sold pursuant to the Resale Registration Statement and the amount received by the Purchaser from such sale. The relative fault of the Company on the one hand and the Purchaser on the other shall be determined by reference to, among other things, whether the untrue or alleged statement of a material fact or the omission or alleged omission to state a material fact or the inaccurate or the alleged inaccurate representation and/or warranty relates to information supplied by the Company or by the Purchaser and the parties’ relative intent, knowledge, access to information and opportunity to correct or prevent such statement or omission. The amount paid or payable by a party as a result of the losses, claims, damages, liabilities and expenses referred to above shall be deemed to include, subject to the limitations set forth in paragraph (c) of this Section 4.2, any legal or other fees or expenses reasonably incurred by such party in connection with investigating or defending any action or claim. The provisions set forth in paragraph (d) of this Section 4.2 with respect to the notice of the threat or commencement of any threat or action shall apply if a claim for contribution is to be made under this paragraph (e); *provided, however*, that no additional notice shall be required with respect to any threat or action for which notice has been given under paragraph (d) for purposes of indemnification. The Company and the Purchaser agree that it would not be just and equitable if contribution pursuant to this Section 4.2 were determined solely by pro rata allocation (even if the Purchaser were treated as one entity for such purpose) or by any other method of allocation which does not take account of the

equitable considerations referred to in this paragraph. Notwithstanding the provisions of this Section 4.2, the Purchaser shall not be required to contribute any amount in excess of the amount by which the Difference exceeds the amount of any damages that the Purchaser has otherwise been required to pay by reason of such untrue or alleged untrue statement or omission or alleged omission. No person guilty of fraudulent misrepresentation (within the meaning of Section 11(f) of the Securities Act) shall be entitled to contribution from any person who was not guilty of such fraudulent misrepresentation. The Purchaser's obligation to contribute pursuant to this Section 4.2 are several and not joint with the Other Purchasers' obligation to contribute pursuant to Section 4.2 of the Agreements between the Other Purchasers and the Company.

(f) Termination of Conditions and Obligations. The restrictions imposed by Section 3.2 or Section 4.1(i) upon the transferability of the Shares and the Warrant Shares shall cease and terminate as to any particular number of the Shares and the Warrant Shares upon the earliest of (i) the passage of two years from the effective date of the Resale Registration Statement covering such Shares or Warrant Shares, as applicable, (ii) at such time as an opinion of counsel satisfactory in form and substance to the Company shall have been rendered to the effect that such conditions are not necessary in order to comply with the Securities Act, and (iii) the Applicable Rule 144 Full Liquidity Date (as defined below).

(g) Information Available. The Company, upon the reasonable request of the Purchaser, shall make available for inspection by the Purchaser, any underwriter participating in any disposition pursuant to the Resale Registration Statement and any attorney, accountant or other agent retained by the Purchaser or any such underwriter, all financial and other records, pertinent corporate documents and properties of the Company, and cause the Company's officers, employees and independent accountants to supply all information reasonably requested by the Purchaser or any such underwriter, attorney, accountant or agent in connection with the Resale Registration Statement.

(h) Delay in Filing or Effectiveness of Registration Statement. If the Resale Registration Statement is not filed by the Company with the Commission on or prior to the Filing Deadline, then for each day following the Filing Deadline until but excluding the date the Resale Registration Statement is filed or, if earlier, until the date the Shares and the Warrant Shares purchased hereunder may be sold pursuant to Rule 144 under the Securities Act without any restriction as to the number of securities as of a particular date that can then be immediately sold and without the requirement to be in compliance with Rule 144(c)(1) (the "Applicable Rule 144 Full Liquidity Date"), or if the Resale Registration Statement is not declared effective by the Commission by the Effective Deadline (unless the Commission seeks to impose, or notifies the Company that the Commission is considering, a limitation in the number of shares of Common Stock that the Purchaser and the Other Purchasers may include in the Resale Registration Statement, in which case the provisions of this Section 4.2(h) shall not be applicable if the Resale Registration Statement is not declared effective by the Commission by the Effective Deadline), then for each day following the Effective Deadline until but excluding the date the Commission declares the Resale Registration Statement effective or, if earlier, until the Applicable Rule 144 Full Liquidity Date, the Company shall, for each such day, pay the Purchaser with respect to any such failure, as liquidated damages and not as a penalty, an amount per 30-day period equal to 1.0% of the purchase price paid by the Purchaser for its Securities pursuant to this Agreement; and for any such 30-day period, such payment shall be made no later than three business days following such 30-day period. If the Purchaser shall be prohibited from selling Shares or Warrant Shares under the Resale Registration Statement as a result of a Suspension of more than thirty (30) days or Suspensions on more than two (2) occasions of not more than thirty (30) days each in any 12-month period, then for each day prior to the Applicable Rule 144 Full Liquidity Date on which a Suspension is in effect that exceeds the maximum allowed period for a Suspension or Suspensions, but not including any day on which a Suspension is lifted, the Company shall pay the Purchaser, as liquidated damages and not as a penalty, an amount per 30-day period equal to 1.0% of the purchase price paid by the Purchaser for its Shares or Warrant Shares, as applicable, pursuant to this Agreement for each such 30-day period, and such payment shall be made no later than the first business day of the calendar month next succeeding the month in which such day occurs. For purposes of this Section 4.2(h), a Suspension shall be deemed lifted on the date that notice that the Suspension has been lifted is delivered to the Purchaser pursuant to Section 3.2(k) of this Agreement. Any payments made

pursuant to this Section 4.2(h), shall not constitute the Purchaser's exclusive remedy for such events; *provided, however*, that any payments made by the Purchaser pursuant to this Section 4.2(h) shall reduce the amount of any damages that the Purchaser may be entitled to as a remedy for such events. Notwithstanding the foregoing provisions, in no event shall the Company be obligated to pay any liquidated damages pursuant to this Section 4.2(h)(i), with respect to any Shares or Warrant Shares for any period of time if the Company is obligated to pay to any Other Purchaser liquidated damages pursuant to Section 4.2(h) of the Agreement executed by such Other Purchaser with respect to the exact same Shares or Warrant Shares for the same period of time or (ii) in an aggregate amount that exceeds 10% of the purchase price paid by the Purchaser for the Shares and the Warrants pursuant to this Agreement. Such payments shall be made to the Purchasers in cash.

4.3 Non-Exclusive Remedy. The respective rights of indemnification of each of the Company and the Purchaser under this Section 4 shall not be exclusive of any other remedy available to either the Company or the Purchaser under applicable law.

4.4 Future Issuances of Common Stock or Common Stock Equivalents. From the date hereof until 30 days after the effective date of the Resale Registration Statement, neither the Company nor any Subsidiary shall issue, file a registration statement with the Commission with respect to, enter into any agreement to issue or announce the issuance or proposed issuance of any shares of Common Stock or Common Stock Equivalents. Notwithstanding the foregoing, this Section 4.4 shall not apply in respect of an Exempt Issuance or securities issued pursuant to the Bridge Financing Agreements, the Merger Agreement or the Reincorporation.

ARTICLE V.

OTHER AGREEMENTS OF THE PARTIES

5.1 Integration. The Company shall not sell, offer for sale or solicit offers to buy or otherwise negotiate in respect of any security (as defined in Section 2 of the Securities Act) that would be integrated with the offer or sale of the Securities for purposes of the rules and regulations of any Trading Market such that it would require shareholder approval prior to the closing of such other transaction unless shareholder approval is obtained before the closing of such subsequent transaction.

5.2 Securities Laws Disclosure; Publicity. The Company shall (a) by 9:00 a.m. (New York City time) on the Trading Day immediately following the Closing Date, issue a press release disclosing the material terms of the transactions contemplated hereby, and (b) file a Current Report on Form 8-K, including the Transaction Documents as exhibits thereto, with the Commission within the time required by the Exchange Act. From and after the issuance of such press release, the Company represents to the Purchaser that it shall have publicly disclosed all material, non-public information delivered to the Purchaser by the Company or any of its Subsidiaries, or any of their respective officers, directors, employees or agents in connection with the transactions contemplated by the Transaction Documents. In addition, effective upon the issuance of such press release, the Company acknowledges and agrees that any and all confidentiality or similar obligations under any agreement, whether written or oral, between the Company, any of its Subsidiaries or any of their respective officers, directors, agents, employees or Affiliates on the one hand, and the Purchaser or any of its Affiliates on the other hand, in connection with the transactions contemplated by this Agreement shall terminate. The Company shall not publicly disclose the name of the Purchaser, or include the name of the Purchaser in any filing with the Commission or any regulatory agency or Trading Market, without the prior written consent of such Purchaser, except (a) as required by federal securities law in connection with the filing of final Transaction Documents with the Commission and (b) to the extent such disclosure is required by law or Trading Market regulations, in which case the Company shall provide the Purchasers with prior notice of such disclosure permitted under this clause (b).

5.3 Shareholder Rights Plan. No claim will be made or enforced by the Company or, with the consent of the Company, any other Person, that the Purchaser is an "Acquiring Person" under any control share acquisition, business combination, poison pill (including any distribution under a rights agreement) or similar anti-takeover plan or arrangement in effect or hereafter adopted by the Company, or that the Purchaser could be deemed to trigger the provisions of any such plan or arrangement, by virtue of receiving Securities under the Transaction Documents or under any other agreement between the Company and the Purchaser.

5.4 Reservation of Common Stock. As of the date hereof, the Company has reserved and the Company shall continue to reserve and keep available at all times, free of preemptive rights, a sufficient number of shares of Common Stock for the purpose of enabling the Company to issue Shares pursuant to this Agreement and Warrant Shares pursuant to any exercise of the Warrants.

5.5 Listing of Common Stock. The Company hereby agrees to use best efforts to obtain the Required Shareholder Approval concurrently with the shareholder approval of the Merger, and obtain and maintain the listing or quotation of the Common Stock on the Trading Market on which it is currently listed.

5.6 Exercise Procedures. The form of Notice of Exercise included in the Warrants set forth the totality of the procedures required of the Purchaser in order to exercise the Warrants. No additional legal opinion, other information or instructions shall be required of the Purchaser to exercise their Warrants. Without limiting the preceding sentences, no ink-original Notice of Exercise shall be required, nor shall any medallion guarantee (or other type of guarantee or notarization) of any Notice of Exercise form be required in order to exercise the Warrants. The Company shall honor exercises of the Warrants and shall deliver Warrant Shares in accordance with the terms, conditions and time periods set forth in the Transaction Documents.

5.7 Required Shareholder Approval. If the Required Shareholder Approval is not obtained after initially putting such matters to a shareholder vote, the Company shall adjourn such shareholder meeting and call an additional shareholders meeting (that meets the quorum and other corporate requirements) as soon as commercially reasonably possible. At such additional shareholders meeting, the shareholders shall vote again on the matters comprising the Required Shareholder Approval.

ARTICLE VI. MISCELLANEOUS

6.1 Termination. This Agreement may be terminated by the Purchaser, as to the Purchaser's obligations hereunder by written notice to the Company, if (i) the Required Shareholder Approval was obtained at the initial shareholder vote on such matters and the Closing has not been consummated on or before the 120th day after the date of this Agreement, *provided, however*, that in the event that the Proxy Statement for the Required Shareholder Approval is still being reviewed or commented on by the Commission, then the Company shall be entitled to extend the date for termination of this Agreement pursuant to this Section 6.1 for an additional 60 calendar days; or (ii) the Required Shareholder Approval was neither obtained at the initial shareholder vote nor the subsequent additional shareholder vote described in Section 5.8.

6.2 Fees and Expenses. Except as expressly set forth in the Transaction Documents to the contrary, each party shall pay the fees and expenses of its advisers, counsel, accountants and other experts, if any, and all other expenses incurred by such party incident to the negotiation, preparation, execution, delivery and performance of this Agreement. The Company shall pay all Transfer Agent fees (including, without limitation, any fees required for same-day processing of any instruction letter delivered by the Company and any exercise notice delivered by a Purchaser), stamp taxes and other taxes and duties levied in connection with the delivery of any Securities to the Purchaser.

6.3 Entire Agreement. The Transaction Documents, together with the exhibits and schedules thereto, the Prospectus and the Prospectus Supplement, contain the entire understanding of the parties with respect to the subject matter hereof and thereof and supersede all prior agreements and understandings, oral or written, with respect to such matters, which the parties acknowledge have been merged into such documents, exhibits and schedules.

6.4 Notices. Any and all notices or other communications or deliveries required or permitted to be provided hereunder shall be in writing and shall be deemed given and effective on the earliest of: (a) the date of transmission, if such notice or communication is delivered via facsimile at the facsimile number or email attachment as set forth on the signature pages attached hereto at or prior to 5:30 p.m. (New York City time) on a Trading Day, (b) the next Trading Day after the date of transmission, if such notice or communication is delivered via facsimile at the facsimile number or email attachment as set forth on the signature pages attached hereto on a day that is not a Trading Day or later than 5:30 p.m. (New York City time) on any

Trading Day, (c) the second (2nd) Trading Day following the date of mailing, if sent by U.S. nationally recognized overnight courier service or (d) upon actual receipt by the party to whom such notice is required to be given. The address for such notices and communications shall be as set forth on the signature pages attached hereto.

6.5 Amendments; Waivers. No provision of this Agreement may be waived, modified, supplemented or amended except in a written instrument signed by the Company and the Purchaser; *provided*, that any of the provisions of Section 4 of this Agreement may be modified, amended or waived pursuant to an instrument in writing signed by the Company and those Purchasers who purchased at least 67% in interest of the Common Stock pursuant to the Agreements. No waiver of any default with respect to any provision, condition or requirement of this Agreement shall be deemed to be a continuing waiver in the future or a waiver of any subsequent default or a waiver of any other provision, condition or requirement hereof, nor shall any delay or omission of any party to exercise any right hereunder in any manner impair the exercise of any such right.

6.6 Headings. The headings herein are for convenience only, do not constitute a part of this Agreement and shall not be deemed to limit or affect any of the provisions hereof.

6.7 Successors and Assigns. This Agreement shall be binding upon and inure to the benefit of the parties and their successors and permitted assigns. The Company may not assign this Agreement or any rights or obligations hereunder without the prior written consent of the Purchaser (other than by merger). The Purchaser may assign any or all of its rights under this Agreement to any Person to whom the Purchaser assigns or transfers any Securities, *provided* that such transferee agrees in writing to be bound, with respect to the transferred Securities, by the provisions of the Transaction Documents that apply to the "Purchaser."

6.8 Third-Party Beneficiaries. The Placement Agents and their Affiliates shall be the third party beneficiaries of the representations and warranties of the Company in Section 3.1, the representations and warranties of the Purchaser in Section 3.2 and the representations and warranties of Marker Therapeutics, Inc. in the Merger Agreement. This Agreement is intended for the benefit of the parties hereto and their respective successors and permitted assigns and is not for the benefit of, nor may any provision hereof be enforced by, any other Person, except as otherwise set forth in Section 4.2 and this Section 6.8.

6.9 Governing Law. All questions concerning the construction, validity, enforcement and interpretation of the Transaction Documents shall be governed by and construed and enforced in accordance with the internal laws of the State of New York, without regard to the principles of conflicts of law thereof. Each party agrees that all legal proceedings concerning the interpretations, enforcement and defense of the transactions contemplated by this Agreement and any other Transaction Documents (whether brought against a party hereto or its respective affiliates, directors, officers, shareholders, partners, members, employees or agents) shall be commenced exclusively in the state and federal courts sitting in the City of New York. Each party hereby irrevocably submits to the exclusive jurisdiction of the state and federal courts sitting in the City of New York, Borough of Manhattan for the adjudication of any dispute hereunder or in connection herewith or with any transaction contemplated hereby or discussed herein (including with respect to the enforcement of any of the Transaction Documents), and hereby irrevocably waives, and agrees not to assert in any suit, action or proceeding, any claim that it is not personally subject to the jurisdiction of any such court, that such suit, action or proceeding is improper or is an inconvenient venue for such proceeding. Each party hereby irrevocably waives personal service of process and consents to process being served in any such suit, action or proceeding by mailing a copy thereof via registered or certified mail or overnight delivery (with evidence of delivery) to such party at the address in effect for notices to it under this Agreement and agrees that such service shall constitute good and sufficient service of process and notice thereof. Nothing contained herein shall be deemed to limit in any way any right to serve process in any other manner permitted by law. If either party shall commence an action, suit or proceeding to enforce any provisions of the Transaction Documents, then, in addition to the obligations of the Company under Section 4.2, the prevailing party in such action, suit or proceeding shall be reimbursed by the other party for its reasonable attorneys' fees and other costs and expenses incurred with the investigation, preparation and prosecution of such action or proceeding.

6.10 Survival of Agreements; Temporary Survival of Representations and Warranties. Notwithstanding any investigation made by any party to this Agreement or by the Placement Agents, all covenants and agreements made by the Company and the Purchaser herein and in the Securities delivered pursuant hereto shall survive the execution of this Agreement, the delivery to the Purchaser of the Securities being purchased and the payment therefor. All representations and warranties, made by the Company and the Purchaser herein and in the certificates for the Securities delivered pursuant hereto shall survive the execution of this Agreement, the delivery to the Purchaser of the Securities being purchased and the payment therefor.

6.11 Execution. This Agreement may be executed in two or more counterparts, all of which when taken together shall be considered one and the same agreement and shall become effective when counterparts have been signed by each party and delivered to each other party, it being understood that the parties need not sign the same counterpart. In the event that any signature is delivered by facsimile transmission or by e-mail delivery of a “.pdf” format data file, such signature shall create a valid and binding obligation of the party executing (or on whose behalf such signature is executed) with the same force and effect as if such facsimile or “.pdf” signature page were an original thereof.

6.12 Severability. If any term, provision, covenant or restriction of this Agreement is held by a court of competent jurisdiction to be invalid, illegal, void or unenforceable, the remainder of the terms, provisions, covenants and restrictions set forth herein shall remain in full force and effect and shall in no way be affected, impaired or invalidated, and the parties hereto shall use their commercially reasonable efforts to find and employ an alternative means to achieve the same or substantially the same result as that contemplated by such term, provision, covenant or restriction. It is hereby stipulated and declared to be the intention of the parties that they would have executed the remaining terms, provisions, covenants and restrictions without including any of such that may be hereafter declared invalid, illegal, void or unenforceable.

6.13 Remedies. In addition to being entitled to exercise all rights provided herein or granted by law, including recovery of damages, the Purchaser and the Company will be entitled to specific performance under the Transaction Documents. The parties agree that monetary damages may not be adequate compensation for any loss incurred by reason of any breach of obligations contained in the Transaction Documents and hereby agree to waive and not to assert in any action for specific performance of any such obligation the defense that a remedy at law would be adequate.

6.14 Independent Nature of Purchasers' Obligations and Rights. The obligations of the Purchaser under any Transaction Document are several and not joint with the obligations of any other Purchaser, and no Purchaser shall be responsible in any way for the performance or non-performance of the obligations of any other Purchaser under any Transaction Document. Nothing contained herein or in any other Transaction Document, and no action taken by any Purchaser pursuant hereto or thereto, shall be deemed to constitute the Purchasers as a partnership, an association, a joint venture or any other kind of entity, or create a presumption that the Purchasers are in any way acting in concert or as a group with respect to such obligations or the transactions contemplated by the Transaction Documents. Each Purchaser shall be entitled to independently protect and enforce its rights including, without limitation, the rights arising out of this Agreement or out of the other Transaction Documents, and it shall not be necessary for any other Purchaser to be joined as an additional party in any proceeding for such purpose. Each Purchaser has been represented by its own separate legal counsel in its review and negotiation of the Transaction Documents. Mayer Brown does not represent any of the Purchasers and only represents the Placement Agents. The Company has elected to provide all Purchasers with the same terms and Transaction Documents for the convenience of the Company and not because it was required or requested to do so by any of the Purchasers. It is expressly understood and agreed that each provision contained in this Agreement and in each other Transaction Document is between the Company and a Purchaser, solely, and not between the Company and the Purchasers collectively and not between and among the Purchasers.

6.15 Liquidated Damages. The Company's obligations to pay any partial liquidated damages or other amounts owing under the Transaction Documents is a continuing obligation of the Company and shall not terminate until all unpaid partial liquidated damages and other amounts have been paid notwithstanding the fact that the instrument or security pursuant to which such partial liquidated damages or other amounts are due and payable shall have been canceled.

6.16 Saturdays, Sundays, Holidays, etc. If the last or appointed day for the taking of any action or the expiration of any right required or granted herein shall not be a Business Day, then such action may be taken or such right may be exercised on the next succeeding Business Day.

6.17 Construction. The parties agree that each of them and/or their respective counsel have reviewed and had an opportunity to revise the Transaction Documents and, therefore, the normal rule of construction to the effect that any ambiguities are to be resolved against the drafting party shall not be employed in the interpretation of the Transaction Documents or any amendments thereto. In addition, each and every reference to share prices and shares of Common Stock in any Transaction Document shall be subject to adjustment for reverse and forward stock splits, stock dividends, stock combinations and other similar transactions of the Common Stock that occur after the date of this Agreement.

6.18 **WAIVER OF JURY TRIAL.** IN ANY ACTION, SUIT, OR PROCEEDING IN ANY JURISDICTION BROUGHT BY ANY PARTY AGAINST ANY OTHER PARTY, THE PARTIES EACH KNOWINGLY AND INTENTIONALLY, TO THE GREATEST EXTENT PERMITTED BY APPLICABLE LAW, HEREBY ABSOLUTELY, UNCONDITIONALLY, IRREVOCABLY AND EXPRESSLY WAIVES FOREVER TRIAL BY JURY.

(Signature Pages Follow)

IN WITNESS WHEREOF, the parties hereto have caused this Securities Purchase Agreement to be duly executed by their respective authorized signatories as of the date first indicated above.

TAPIMMUNE INC.

Address for Notice:
5 West Forsyth Street, Suite 200
Jacksonville, FL 32202
Attn: Mr. Peter L. Hoang,
E-mail: phoang@tapimmune.com

By: _____
Name: Peter L. Hoang
Title: Chief Executive Officer, President

With a copy to (which shall not constitute notice):

Seyfarth Shaw LLP
700 Milam Street, Suite 1400
Houston, Texas 77002
Telephone No.: (713) 238-1887
Facsimile No.: (713) 225-2340
Attention: Paul Pryzant
E-Mail: ppryzant@seyfarth.com

IN WITNESS WHEREOF, the undersigned has caused this Securities Purchase Agreement to be duly executed by their respective authorized signatories as of the date first indicated above.

Name of Purchaser: _____

Jurisdiction of Purchaser's Executive Offices: _____

Signature of Authorized Signatory of Purchaser: _____

Name of Authorized Signatory: _____

Title of Authorized Signatory: _____

Email Address of Authorized Signatory: _____

Facsimile Number of Authorized Signatory: _____

Address for Notice to Purchaser:

Address for Delivery of Securities to Purchaser (if not same as address for notice):

Aggregate Purchase Price: \$ _____

Number of Shares: _____ Shares

Number of Warrants (Number of Warrant Shares): _____ Warrants (_____ Warrant Shares)

EIN Number: _____

List of Purchasers

Investor	Shares	Warrants (Warrant Shares)
[•]		
[•]		
[•]		
[•]		

EXHIBIT A
FORM OF WARRANT

INVESTOR WARRANT

THIS WARRANT AND THE SECURITIES ISSUABLE UPON THE EXERCISE HEREOF HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED. THEY MAY NOT BE SOLD, OFFERED FOR SALE, PLEDGED, HYPOTHECATED OR OTHERWISE TRANSFERRED EXCEPT PURSUANT TO AN EFFECTIVE REGISTRATION STATEMENT UNDER THE SECURITIES ACT OF 1933, AS AMENDED, OR AN OPINION OF COUNSEL SATISFACTORY TO THE COMPANY THAT REGISTRATION IS NOT REQUIRED UNDER SUCH ACT OR UNLESS SOLD IN ACCORDANCE WITH RULE 144 UNDER SUCH ACT.

WARRANT NO.: _____

NUMBER OF SHARES:

DATE OF ISSUANCE: [____], 2018

(subject to adjustment hereunder)

EXPIRATION DATE: [____], 2023

**WARRANT TO PURCHASE SHARES
OF COMMON STOCK OF**

TAPIMMUNE INC.

This Warrant is issued to _____, or its registered assigns (including any successors or assigns, the “**Warrantholder**”), which is hereby acknowledged in connection with that certain Securities Purchase Agreement, dated as of June [], 2018, by and among TapImmune Inc., a Nevada corporation (the “**Company**”) and each of the those persons and entities listed as a Purchaser on Annex A thereto (the “**Purchase Agreement**”).

1. EXERCISE OF WARRANT.

(a) Number and Exercise Price of Warrant Shares; Expiration Date. Subject to the terms and conditions set forth herein and set forth in the Purchase Agreement, the Warrantholder is entitled to purchase from the Company up to [____] shares of the Company’s Common Stock, \$0.001 par value per share (the “**Common Stock**”) (as adjusted from time to time pursuant to the provisions of this Warrant) (the “**Warrant Shares**”), at a purchase price of \$[____] per share (the “**Exercise Price**”), on or before 5:00 p.m. New York City time on the fifth anniversary of the Date of Issuance (the “**Expiration Date**”) (subject to earlier termination of this Warrant as set forth herein).

(b) Cash Exercise. While this Warrant remains outstanding and exercisable in accordance with Section 1(a) above, the Warrantholder may exercise this Warrant in accordance with Section 5 herein, by wire transfer to the Company or cashier’s check drawn on a United States bank made payable to the order of the Company.

Notwithstanding anything herein to the contrary, the Warrantholder shall not be required to physically surrender this Warrant to the Company until the Warrantholder has purchased all of the Warrant Shares available hereunder and the Warrant has been exercised in full, in which case, the Warrantholder shall surrender this Warrant to the Company for cancellation within three (3) trading days of the date the final Notice of Exercise (as defined below) is delivered to the Company. Partial exercises of this Warrant resulting in purchases of a portion of the total number of Warrant Shares available hereunder shall have the effect of lowering the outstanding number of Warrant Shares purchasable hereunder in an amount equal to the applicable number of Warrant Shares purchased. The Warrantholder and the Company shall maintain records showing the number of Warrant Shares purchased and the date of such purchases.

(c) Net Exercise. In lieu of exercising this Warrant pursuant to Section 1(b), if on the date of exercise a registration statement permitting the Warrantholder to resell the shares of Common Stock issuable upon the exercise of the Warrant is not then effective, the Warrantholder may elect to credit the Exercise Price against the Fair Market Value of the Warrant Shares (as defined below) at the time of exercise (the “**Net Exercise**”) pursuant to this Section 1(c). If the Company shall receive written

notice from the Warrantholder at the time of exercise of this Warrant that the Warrantholder elects to Net Exercise the Warrant, the Company shall deliver to such Warrantholder (without payment by the Warrantholder of any exercise price in cash) that number of Warrant Shares computed using the following formula:

$$X = \frac{Y(A - B)}{A}$$

Where

X = The number of Warrant Shares to be issued to the Warrantholder.

Y = The number of Warrant Shares purchasable under this Warrant or, if only a portion of the Warrant is being exercised, the portion of the Warrant being cancelled (at the date of such calculation).

A = The Fair Market Value of one (1) share of Common Stock on the trading date immediately preceding the date on which Warrantholder elects to exercise this Warrant.

B = The Exercise Price (as adjusted hereunder).

The “**Fair Market Value**” of one share of Common Stock shall mean (x) the last reported sale price and, if there are no sales, the last reported bid price, of the Common Stock on the business day prior to the date of exercise on the Trading Market on which the Common Stock is then listed or quoted as reported by Bloomberg Financial Markets (or a comparable reporting service of national reputation selected by the Company and reasonably acceptable to the holder if Bloomberg Financial Markets is not then reporting sales prices of the Common Stock) (collectively, “**Bloomberg**”), (y) if the foregoing does not apply, the last sales price of the Common Stock in the over-the-counter market on the pink sheets or bulletin board for such security as reported by Bloomberg, and, if there are no sales, the last reported bid price of the Common Stock as reported by Bloomberg or, (z) if fair market value cannot be calculated as of such date on either of the foregoing bases, the price determined in good faith by the Company’s Board of Directors.

“**OTC Markets**” shall mean either OTC QX or OTC QB of the OTC Markets Group, Inc.

“**Trading Market**” shall mean any of the following markets or exchanges on which the Common Stock is listed or quoted for trading on the date in question: the NYSE MKT, the NASDAQ Capital Market, the NASDAQ Global Market, the NASDAQ Global Select Market, the New York Stock Exchange or the OTC Markets (or any successors to any of the foregoing).

(d) Deemed Exercise. In the event that immediately prior to the close of business on the Expiration Date, the Fair Market Value of one share of Common Stock (as determined in accordance with Section 1(c) above) is greater than the then applicable Exercise Price, this Warrant shall be deemed to be automatically exercised on a net exercise issue basis pursuant to Section 1(c) above, and the Company shall deliver the applicable number of Warrant Shares to the Warrantholder pursuant to the provisions of Section 1(c) above and this Section 1(d).

(e) Warrantholder’s Exercise Limitations. The Company shall not effect any exercise of this Warrant, and a Warrantholder shall not have the right to exercise any portion of this Warrant, pursuant to Section 1, 5 or otherwise, to the extent that after giving effect to such issuance after exercise as set forth on the applicable Notice of Exercise, the Warrantholder (together with the Warrantholder’s Affiliates (as defined below), and any other persons or entity acting as a group together with the Warrantholder or any of the Warrantholder’s Affiliates (such persons and/or entities, “**Attribution Parties**”), would beneficially own in excess of the Beneficial Ownership Limitation (as defined below). For purposes of the foregoing sentence, the number of shares of Common Stock beneficially owned by the Warrantholder and its Affiliates and Attribution Parties shall include the number of shares of Common Stock issuable upon exercise of this Warrant with respect to which such determination is being made, but shall exclude the number of shares of Common Stock which would be issuable upon (i) exercise of the remaining, nonexercised portion of this Warrant beneficially owned by the Warrantholder or any of its Affiliates or Attribution Parties and (ii) exercise or conversion of

the unexercised or nonconverted portion of any other securities of the Company (including, without limitation, any other Common Stock Equivalents) subject to a limitation on conversion or exercise analogous to the limitation contained herein beneficially owned by the Warranholder or any of its Affiliates or Attribution Parties. Except as set forth in the preceding sentence, for purposes of this Section 1(e), beneficial ownership shall be calculated in accordance with Section 13(d) of the Exchange Act and the rules and regulations promulgated thereunder, it being acknowledged by the Warranholder that the Company is not representing to the Warranholder that such calculation is in compliance with Section 13(d) of the Exchange Act and the Warranholder is solely responsible for any schedules required to be filed in accordance therewith. To the extent that the limitation contained in this Section 1(e) applies, the determination of whether this Warrant is exercisable (in relation to other securities owned by the Warranholder together with any Affiliates and Attribution Parties) and of which portion of this Warrant is exercisable shall be in the sole discretion of the Warranholder, and the submission of a Notice of Exercise shall be deemed to be the Warranholder's determination of whether this Warrant is exercisable (in relation to other securities owned by the Warranholder together with any Affiliates and Attribution Parties) and of which portion of this Warrant is exercisable, in each case subject to the Beneficial Ownership Limitation, and the Company shall have no obligation to verify or confirm the accuracy of such determination and shall have no liability for exercise of the Warrant that is not in compliance with the Beneficial Ownership Limitation. In addition, a determination as to any group status as contemplated above shall be determined in accordance with Section 13(d) of the Exchange Act and the rules and regulations promulgated thereunder. For purposes of this Section 1(e), in determining the number of outstanding shares of Common Stock, a Warranholder may rely on the number of outstanding shares of Common Stock as reflected in (A) the Company's most recent periodic or annual report filed with the Securities and Exchange Commission (the "**Commission**"), as the case may be, (B) a more recent public announcement by the Company or (C) a more recent written notice by the Company or the Transfer Agent setting forth the number of shares of Common Stock outstanding. Upon the written of a Warranholder, the Company shall within two Trading Days confirm in writing to the Warranholder the number of shares of Common Stock then outstanding. In any case, the number of outstanding shares of Common Stock shall be determined after giving effect to the conversion or exercise of securities of the Company, including this Warrant, by the Warranholder or its Affiliates or Attribution Parties since the date as of which such number of outstanding shares of Common Stock was reported. The "**Beneficial Ownership Limitation**" shall be [9.99%/4.99%] of the number of shares of the Common Stock outstanding immediately after giving effect to the issuance of shares of Common Stock issuable upon exercise of this Warrant. The Warranholder, upon notice to the Company, may increase or decrease the Beneficial Ownership Limitation provisions of this Section 1(e), provided that the Beneficial Ownership Limitation in no event exceeds 9.99% of the number of shares of the Common Stock outstanding immediately after giving effect to the issuance of shares of Common Stock upon exercise of this Warrant held by the Warranholder and the provisions of this Section 1(e) shall continue to apply. Any increase in the Beneficial Ownership Limitation will not be effective until the 61st day after such notice is delivered to the Company. The provisions of this paragraph shall be construed and implemented in a manner otherwise than in strict conformity with the terms of this Section 1(e) to correct this paragraph (or any portion hereof) which may be defective or inconsistent with the intended Beneficial Ownership Limitation herein contained or to make changes or supplements necessary or desirable to properly give effect to such limitation. The limitations contained in this paragraph shall apply to a successor holder of this Warrant.

2. CERTAIN ADJUSTMENTS.

(a) Adjustment of Number of Warrant Shares and Exercise Price. The number and kind of Warrant Shares purchasable upon exercise of this Warrant and the Exercise Price shall be subject to adjustment from time to time as follows:

(1) Dividends, Subdivisions, Combinations and Other Issuances. If the Company shall at any time after the Date of Issuance but prior to the Expiration Date subdivide its shares of capital stock of the same class as the Warrant Shares, by split-up or otherwise, or combine such shares of capital stock, pay a dividend or issue additional shares of capital stock as a dividend with respect to any shares of such capital stock, the number of Warrant Shares issuable on the exercise of this

Warrant shall forthwith be proportionately increased in the case of a subdivision, dividend or stock dividend, or proportionately decreased in the case of a combination. Appropriate adjustments shall also be made to the Exercise Price payable per share, but the aggregate Exercise Price payable for the total number of Warrant Shares purchasable under this Warrant (as adjusted) shall remain the same. Any adjustment under this Section 2(a)(1), shall become effective at the close of business on the date the subdivision or combination becomes effective, or as of the record date of such dividend, or in the event that no record date is fixed, upon the making of such dividend.

(2) Reclassification, Reorganizations and Consolidation. In case of any reclassification, capital reorganization or change in the capital stock of the Company (other than as a result of a subdivision, combination or stock dividend provided for in Section 2(a)(1), above) that occurs after the Date of Issuance, then, as a condition of such reclassification, reorganization or change, lawful provision shall be made, and duly executed documents evidencing the same from the Company or its successor shall be delivered to the Warrantholder, so that the Warrantholder shall thereafter have the right at any time prior to the expiration of this Warrant to purchase, at a total price equal to that payable upon the exercise of this Warrant, the kind and amount of shares of stock and/or other securities or property (including, if applicable, cash) receivable in connection with such reclassification, reorganization or change by a holder of the same number and type of securities as were purchasable as Warrant Shares by the Warrantholders immediately prior to such reclassification, reorganization or change. In any such case appropriate provisions shall be made with respect to the rights and interest of the Warrantholder so that the provisions hereof shall thereafter be applicable with respect to any shares of stock or other securities or property deliverable upon exercise hereof, and appropriate adjustments shall be made to the Exercise Price payable hereunder, provided the aggregate Exercise Price shall remain the same (and, for the avoidance of doubt, this Warrant shall be exclusively exercisable for such shares of stock and/or other securities or property from and after the consummation of such reclassification or other change in the capital stock of the Company).

(b) Notice to Warrantholder. If, while this Warrant is outstanding, the Company (i) declares a dividend or any other distribution of cash, securities or other property in respect of its Common Stock, including, without limitation, any granting of rights or warrants to subscribe for or purchase any capital stock of the Company or any subsidiary, (ii) authorizes or approves, enters into any agreement contemplating or solicits stockholder approval for any Change of Control or (iii) authorizes the voluntary dissolution, liquidation or winding up of the affairs of the Company, then the Company shall deliver to the Warrantholder a notice of such transaction at least ten (10) business days prior to the applicable record or effective date on which a person would need to hold Common Stock in order to participate in or vote with respect to such transaction; provided, however, that the failure to deliver such notice or any defect therein shall not affect the validity of the corporate action required to be described in such notice.

(c) Calculations. All calculations under this Section 2 shall be made to the nearest cent or the nearest whole share, as the case may be. For purposes of this Section 2, the number of shares of Common Stock deemed to be issued and outstanding as of a given date shall be the sum of the number of shares of Common Stock (excluding treasury shares, if any) issued and outstanding.

(d) Treatment of Warrant upon a Change of Control.

(1) If, at any time while this Warrant is outstanding, the Company consummates a Change of Control, then a holder shall have the right thereafter to receive, upon exercise of this Warrant, the same amount and kind of securities, cash or property as it would have been entitled to receive upon the occurrence of such Change of Control if it had been, immediately prior to such Change of Control, a holder of the number of Warrant Shares then issuable upon exercise in full of this Warrant (the "**Alternate Consideration**"). The Company shall not effect any such Change of Control unless prior to or simultaneously with the consummation thereof, any successor to the Company, surviving entity or the corporation purchasing or otherwise acquiring such assets or other appropriate corporation or entity (the "**Successor Entity**") shall assume the obligation to deliver to the holder, such Alternate Consideration as, in accordance with the foregoing provisions, the holder may be entitled to purchase, and the other obligations under this Warrant.

(2) As used in this Warrant, a “**Change of Control**” shall mean (i) a merger or consolidation of the Company with another corporation (other than a merger effected exclusively for the purpose of changing the domicile of the Company), (ii) the sale, assignment, transfer, conveyance or other disposal of all or substantially all of the properties or assets or all or a majority of the outstanding voting shares of capital stock of the Company, (iii) a purchase, tender or exchange offer accepted by the holders of a majority of the outstanding voting shares of capital stock of the Company, or (iv) a “person” or “group” (as these terms are used for purposes of Section 13(d) and 14(d) of the Securities Exchange Act of 1934, as amended (the “**Exchange Act**”)) is or shall become the “beneficial owner” (as defined in Rule 13d-3 under the Exchange Act), directly or indirectly at least a majority of the voting power of the capital stock of the Company.

(3) Solely in connection with a Change of Control that is required to be and is approved by the board of directors of the Company (which is not controlled by Warrantholder and holders of other warrants issued as of the date hereof, or otherwise is approved by the disinterested members of the board of directors of the Company who do not hold any warrants issued as of the date hereof), the Company or any Successor Entity (as defined above) shall, at the Holder’s option, exercisable at any time concurrently with, or within 30 days after, the consummation of the Change of Control (or, if later, the date of the public announcement of the applicable Change of Control), purchase this Warrant from the Holder by paying to the Holder an amount of cash equal to the Black Scholes Value of the remaining unexercised portion of this Warrant on the date of the consummation of such Change of Control. Notwithstanding anything herein to the contrary, the Holder may not require the Company or any Successor Entity to repurchase the Warrants for the Black Scholes Value in connection with a Change of Control that (i) is not approved by, or is not required to be approved by, the Company’s board of directors or (ii) is not within the Company’s control. “**Black Scholes Value**” means the value of this Warrant based on the Black and Scholes Option Pricing Model obtained from the “OV” function on Bloomberg, L.P. (“**Bloomberg**”) determined as of the day of consummation of the applicable Change of Control for pricing purposes and reflecting (A) a risk-free interest rate corresponding to the U.S. Treasury rate for a period equal to the time between the date of the public announcement of the applicable Change of Control and the Termination Date, (B) an expected volatility equal to the 100 day volatility obtained from the HVT function on Bloomberg as of the Trading Day immediately following the public announcement of the applicable Fundamental Transaction, (C) the underlying price per share used in such calculation shall be the sum of the price per share being offered in cash, if any, plus the value of any non-cash consideration, if any, being offered in such Change of Control and (C) a remaining option time equal to the time between the date of the public announcement of the applicable Change of Control and the Termination Date. The payment of the Black Scholes Value will be made by wire transfer of immediately available funds (or by delivery of such other consideration, as applicable) within five Business Days of the Holder’s election (or, if later, on the effective date of the Change of Control).

3. NO FRACTIONAL SHARES; CHARGES, TAXES AND EXPENSES. No fractional Warrant Shares or scrip representing fractional shares will be issued upon exercise of this Warrant. In lieu of any fractional shares which would otherwise be issuable, the Company shall pay cash equal to the product of such fraction multiplied by the Fair Market Value of one Warrant Share. Issuance of Warrant Shares shall be made without charge to the Warrantholder for any issue or transfer tax or other incidental expense in respect of the issuance of such Warrant Shares, all of which taxes and expenses shall be paid by the Company, and such Warrant Shares shall be issued in the name of the Warrantholder or in such name or names as may be directed by the Warrantholder; provided, however, that in the event that Warrant Shares are to be issued in a name other than the name of the Warrantholder, this Warrant when surrendered for exercise shall be accompanied by the Assignment Form attached hereto duly executed by the Warrantholder and the Company may require, as a condition thereto, the payment of a sum sufficient to reimburse it for any transfer tax incidental thereto. The Company shall pay all Transfer Agent fees required for same-day processing of any Notice of Exercise and all fees to the Depository Trust Company (or another established clearing corporation performing similar functions) required for same-day electronic delivery of the Warrant Shares.

4. NO STOCKHOLDER RIGHTS. Until the exercise of this Warrant or any portion of this Warrant, the Warrantholder shall not have, nor exercise, any rights as a stockholder of the Company (including without limitation the right to notification of stockholder meetings or the right to receive any notice or other communication concerning the business and affairs of the Company) except as provided in Section 8 below.

5. MECHANICS OF EXERCISE.

(a) Delivery of Warrant Shares Upon Exercise. This Warrant may be exercised by the holder hereof, in whole or in part, by delivering to the Company (or such other office or agency of the Company as it may designate by notice in writing to the registered Warrantholder at the address of the Warrantholder appearing on the books of the Company) of a duly executed copy of the Notice of Exercise in the form attached hereto as Exhibit A (the “**Notice of Exercise**”) by facsimile or e-mail attachment and paying the Exercise Price (unless the Warrantholder has elected to Net Exercise, if applicable) then in effect with respect to the number of Warrant Shares as to which the Warrant is being exercised. No ink-original Notice of Exercise shall be required, nor any medallion guarantee (or other type of guarantee or notarization) of any Notice of Exercise shall be required. This Warrant shall be deemed to have been exercised immediately prior to the close of business on the date of the delivery to the Company of the Notice of Exercise and payment of the Exercise Price (unless the Warrantholder has elected to Net Exercise, if applicable) as provided above, and the person entitled to receive the Warrant Shares issuable upon such exercise shall be treated for all purposes as the holder of such shares of record as of the close of business on such date. Warrant Shares purchased hereunder shall be transmitted by the Company’s transfer agent to the Warrantholder by crediting the account of the holder’s prime broker with The Depository Trust Company through its Deposit or Withdrawal at Custodian system (“**DWAC**”) if the Company is then a participant in such system and either (A) there is an effective registration statement permitting the issuance of the Warrant Shares to or resale of the Warrant Shares by the holder or (B) the shares are eligible for resale by the holder without volume or manner-of-sale limitations pursuant to Rule 144, and otherwise by physical delivery to the address specified by the holder in the Notice of Exercise by the end of the day on the date that is two (2) trading days from the delivery to the Company of the Notice of Exercise and payment of the aggregate Exercise Price (unless exercised by means of a cashless exercise pursuant to Section 1(c)) (the “**Warrant Share Delivery Date**”). The Warrant Shares shall be deemed to have been issued, and the holder or any other person so designated to be named therein shall be deemed to have become a holder of record of such shares for all purposes, as of the date the Warrant has been exercised, with payment to the Company of the Exercise Price (or by Net Exercise, if applicable) and all taxes required to be paid by the holder, if any, prior to the issuance of such shares, having been paid.

(b) Rescission Rights. If the Company fails to cause the transfer agent to transmit to the Warrantholder the Warrant Shares pursuant to Section 5(a) by the Warrant Share Delivery Date, then the Warrantholder will have the right to rescind such exercise.

6. CERTIFICATE OF ADJUSTMENT. Whenever the Exercise Price or number or type of securities issuable upon exercise of this Warrant is adjusted, as herein provided, the Company shall, at its expense, promptly deliver to the Warrantholder a certificate of an officer of the Company setting forth the nature of such adjustment and showing in detail the facts upon which such adjustment is based.

7. COMPLIANCE WITH SECURITIES LAWS.

(a) The Warrantholder understands that this Warrant and the Warrant Shares are characterized as “restricted securities” under the federal securities laws inasmuch as they are being acquired from the Company in a transaction not involving a public offering and that under such laws and applicable regulations this Warrant and the Warrant Shares may be resold without registration under the Securities Act only in certain limited circumstances. In this connection, the Warrantholder represents that it is familiar with Rule 144 under the Securities Act, as presently in effect, and understands the resale limitations imposed thereby and by the Securities Act.

(b) Prior and as a condition to the sale or transfer of the Warrant Shares issuable upon exercise of this Warrant, the Warrantholder shall furnish to the Company such certificates, representations, agreements and other information, as the Company or the Company’s transfer agent reasonably may

require to confirm that such sale or transfer is being made pursuant to an exemption from, or in a transaction not subject to, the registration requirements of the Securities Act, unless such Warrant Shares are being sold or transferred pursuant to an effective registration statement.

(c) The Warrantholder acknowledges that the Company may place a restrictive legend on the Warrant Shares issuable upon exercise of this Warrant in order to comply with applicable securities laws, in substantially the following form and substance, unless such Warrant Shares are otherwise freely tradable under Rule 144 of the Securities Act:

“THE SECURITIES EVIDENCED BY THIS CERTIFICATE HAVE NOT BEEN REGISTERED UNDER THE U.S. SECURITIES ACT OF 1933, AS AMENDED (THE “SECURITIES ACT”), OR ANY OTHER APPLICABLE SECURITIES LAWS AND HAVE BEEN ISSUED IN RELIANCE UPON AN EXEMPTION FROM THE REGISTRATION REQUIREMENTS OF THE SECURITIES ACT AND SUCH OTHER SECURITIES LAWS. NEITHER THIS SECURITY NOR ANY INTEREST OR PARTICIPATION HEREIN MAY BE REOFFERED, SOLD, ASSIGNED, TRANSFERRED, PLEDGED, ENCUMBERED, HYPOTHECATED OR OTHERWISE DISPOSED OF, EXCEPT PURSUANT TO AN EFFECTIVE REGISTRATION STATEMENT UNDER THE SECURITIES ACT OR PURSUANT TO A TRANSACTION WHICH IS EXEMPT FROM, OR NOT SUBJECT TO, SUCH REGISTRATION, IN EACH CASE IN ACCORDANCE WITH ALL APPLICABLE SECURITIES LAWS, AND IN THE CASE OF A TRANSACTION EXEMPT FROM, OR NOT SUBJECT TO, SUCH REGISTRATION, UNLESS THE COMPANY HAS RECEIVED AN OPINION OF COUNSEL REASONABLY SATISFACTORY TO IT THAT SUCH TRANSACTION DOES NOT REQUIRE REGISTRATION UNDER THE SECURITIES ACT AND SUCH OTHER APPLICABLE LAWS.”

8. REPLACEMENT OF WARRANTS. On receipt of evidence reasonably satisfactory to the Company of the loss, theft, destruction or mutilation of this Warrant and, in the case of any such loss, theft or destruction of this Warrant, on delivery of an indemnity agreement reasonably satisfactory in form and amount to the Company (but not the posting of any surety or other bond) or, in the case of any such mutilation, on surrender and cancellation of such Warrant, the Company at its expense will execute and deliver, in lieu thereof, a new Warrant of like tenor.

9. NO IMPAIRMENT. Except to the extent as may be waived by the Warrantholder, the Company will not, by amendment of its charter or through a Change of Control, dissolution, sale of assets or any other voluntary action, avoid or seek to avoid the observance or performance of any of the terms of this Warrant, but will at all times in good faith assist in the carrying out of all such terms and in the taking of all such action as may be necessary or appropriate in order to protect the rights of the Warrantholder against impairment.

10. TRADING DAYS. If the last or appointed day for the taking of any action or the expiration of any right required or granted herein shall be other than a day on which the Common Stock is traded on the Trading Market, then such action may be taken or such right may be exercised on the next succeeding day on which the Common Stock is so traded.

11. TRANSFERS; EXCHANGES.

(a) Subject to compliance with applicable federal and state securities laws and Section 7 hereof, this Warrant may be transferred by the Warrantholder to any Affiliate (as defined below) with respect to any or all of the Warrant Shares purchasable hereunder (a “**Permitted Transfer**”). For a transfer of this Warrant as an entirety by the Warrantholder, upon surrender of this Warrant to the Company, together with the Notice of Assignment in the form attached hereto as Exhibit B duly completed and executed on behalf of the Warrantholder, the Company shall issue a new Warrant of the same denomination to the assignee. For a transfer of this Warrant with respect to a portion of the Warrant Shares purchasable hereunder, upon surrender of this Warrant to the Company, together with the Notice of Assignment in the form attached hereto as Exhibit B duly completed and executed on behalf of the Warrantholder, the Company shall issue a new Warrant to the assignee, in such denomination as shall be requested by the Warrantholder, and shall issue to the Warrantholder a new Warrant covering

the number of shares in respect of which this Warrant shall not have been transferred. The term “**Affiliate**” as used herein means, with respect to any person, any other person that, directly or indirectly through one or more intermediaries, controls, is controlled by or is under common control with such person, and any officers, employees or partners of the Warrantholder.

(b) Upon any Permitted Transfer, this Warrant is exchangeable, without expense, at the option of the Warrantholder, upon presentation and surrender hereof to the Company for other warrants of different denominations entitling the holder thereof to purchase in the aggregate the same number of shares of Common Stock purchasable hereunder. This Warrant may be divided or combined with other warrants that carry the same rights upon presentation hereof at the principal office of the Company together with a written notice specifying the denominations in which new warrants are to be issued to the Warrantholder and signed by the Warrantholder hereof. The term “**Warrants**” as used herein includes any warrants into which this Warrant may be divided or exchanged.

12. **AUTHORIZED SHARES.** The Company covenants that, during the period the Warrant is outstanding, it will reserve from its authorized and unissued Common Stock a sufficient number of shares to provide for the issuance of the Warrant Shares upon the exercise of any purchase rights under this Warrant. The Company further covenants that its issuance of this Warrant shall constitute full authority to its officers who are charged with the duty of issuing the necessary Warrant Shares upon the exercise of the purchase rights under this Warrant. The Company will take all such reasonable action as may be necessary to assure that such Warrant Shares may be issued as provided herein without violation of any applicable law or regulation, or of any requirements of the Trading Market upon which the Common Stock may be quoted or listed. The Company covenants that all Warrant Shares which may be issued upon the exercise of the purchase rights represented by this Warrant will, upon exercise of the purchase rights represented by this Warrant and payment for such Warrant Shares in accordance herewith, be duly authorized, validly issued, fully paid and nonassessable and free from all taxes, liens and charges created by the Company in respect of the issue thereof (other than taxes in respect of any transfer occurring contemporaneously with such issue).

13. **MISCELLANEOUS.**

(a) This Agreement shall be governed by and construed in accordance with the laws of the United States of America and the State of New York, both substantive and remedial, without regard to New York conflicts of law principles. Any judicial proceeding brought under this Agreement or any dispute arising out of this Agreement or any matter related hereto shall be brought in the courts of the State of New York, New York County, or in the United States District Court for the Southern District of New York.

(b) All notices, requests, consents and other communications hereunder shall be in writing, shall be sent by confirmed facsimile or electronic mail, or mailed by first-class registered or certified airmail, or nationally recognized overnight express courier, postage prepaid, and shall be deemed given when so sent in the case of facsimile or electronic mail transmission, or when so received in the case of mail or courier, and addressed as follows: (a) if to the Company, at TapImmune Inc., 5 W. Forsyth Street, Suite 200, Jacksonville, FL 32202 Attn: Mr. Peter L. Hoang, e-mail: phoang@tapimmune.com; with a copy to (which shall not constitute notice) Shumaker, Loop & Kendrick, LLP, 101 East Kennedy Blvd., Ste 2800, Tampa, FL 33602, Attn: Mark A. Catchur, Esq., e-Mail: mcatchur@slk-law.com, and (b) if to the Warrantholder, at such address or addresses (including copies to counsel) as may have been furnished by the Warrantholder to the Company in writing. To the extent that any notice provided in this Warrant constitutes, or contains, material, non-public information regarding the Company or any of the Subsidiaries, the Company shall simultaneously file such notice with the Commission pursuant to a Current Report on Form 8-K.

(c) The invalidity or unenforceability of any provision hereof shall in no way affect the validity or enforceability of any other provisions.

[Signature Page Follows]

IN WITNESS WHEREOF, this Common Stock Purchase Warrant is issued effective as of the date first set forth above.

TAPIMMUNE INC.

By: _____

Name: Peter L. Hoang

Title: Chief Executive Officer, President

[Signature Page to Warrant 2018 PIPE]

EXHIBIT A

NOTICE OF EXERCISE
(To be signed only upon exercise of Warrant)

To: TapImmune Inc.

The undersigned, the Warrantholder of the attached Warrant, hereby irrevocably elects to exercise the purchase right represented by such Warrant for, and to purchase thereunder, _____ (_____) shares of Common Stock of TapImmune Inc. and (choose one)

_____ herewith makes payment of _____ Dollars (\$_____) thereof

or

_____ elects to Net Exercise the Warrant pursuant to Section 1(c) thereof.

The undersigned requests that the certificates or book entry position evidencing the shares to be acquired pursuant to such exercise be issued in the name of, and delivered to _____, whose address is _____.

By its signature below the undersigned hereby represents and warrants that it is an "accredited investor" as defined in Rule 501(a) of Regulation D promulgated under the Securities Act of 1933, as amended, and agrees to be bound by the terms and conditions of the attached Warrant as of the date hereof, including Section 7 thereof.

DATED: _____

(Signature must conform in all respects to name of the Warrantholder as specified on the face of the Warrant)

[_____]
Address: _____

EXHIBIT B

NOTICE OF ASSIGNMENT FORM

FOR VALUE RECEIVED, [] (the "Assignor") hereby sells, assigns and transfers all of the rights of the undersigned Assignor under the attached Warrant with respect to the number of shares of common stock of TapImmune Inc. (the "Company") covered thereby set forth below, to the following "Assignee" and, in connection with such transfer, represents and warrants to the Company that the transfer is in compliance with Section 7 of the Warrant and applicable federal and state securities laws:

NAME OF ASSIGNEE

ADDRESS/FAX NUMBER

Number of shares: _____

Dated: _____ Signature: _____

Witness: _____

ASSIGNEE ACKNOWLEDGMENT

The undersigned Assignee acknowledges that it has reviewed the attached Warrant and by its signature below it hereby represents and warrants that it is an "accredited investor" as defined in Rule 501(a) of Regulation D promulgated under the Securities Act of 1933, as amended, and agrees to be bound by the terms and conditions of the Warrant as of the date hereof, including Section 7 thereof.

Signature: _____

By: _____

Its: _____

Address:

INVESTOR WARRANT

THIS WARRANT AND THE SECURITIES ISSUABLE UPON THE EXERCISE HEREOF HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED. THEY MAY NOT BE SOLD, OFFERED FOR SALE, PLEDGED, HYPOTHECATED OR OTHERWISE TRANSFERRED EXCEPT PURSUANT TO AN EFFECTIVE REGISTRATION STATEMENT UNDER THE SECURITIES ACT OF 1933, AS AMENDED, OR AN OPINION OF COUNSEL SATISFACTORY TO THE COMPANY THAT REGISTRATION IS NOT REQUIRED UNDER SUCH ACT OR UNLESS SOLD IN ACCORDANCE WITH RULE 144 UNDER SUCH ACT.

WARRANT NO.: _____

NUMBER OF SHARES:

DATE OF ISSUANCE: [_____] , 2018

(subject to adjustment hereunder)

EXPIRATION DATE: [_____] , 2023

WARRANT TO PURCHASE SHARES
OF COMMON STOCK OF

TAPIMMUNE INC.

This Warrant is issued to _____, or its registered assigns (including any successors or assigns, the “**Warrantholder**”), which is hereby acknowledged in connection with that certain Securities Purchase Agreement, dated as of June [___], 2018, by and among TapImmune Inc., a Nevada corporation (the “**Company**”) and each of the those persons and entities listed as a Purchaser on Annex A thereto (the “**Purchase Agreement**”).

1. EXERCISE OF WARRANT.

(a) Number and Exercise Price of Warrant Shares; Expiration Date. Subject to the terms and conditions set forth herein and set forth in the Purchase Agreement, the Warrantholder is entitled to purchase from the Company up to [_____] shares of the Company’s Common Stock, \$0.001 par value per share (the “**Common Stock**”) (as adjusted from time to time pursuant to the provisions of this Warrant) (the “**Warrant Shares**”), at a purchase price of \$[_____] per share (the “**Exercise Price**”), on or before 5:00 p.m. New York City time on the fifth anniversary of the Date of Issuance (the “**Expiration Date**”) (subject to earlier termination of this Warrant as set forth herein).

(b) Method of Exercise. While this Warrant remains outstanding and exercisable in accordance with Section 1(a) above, the Warrantholder may exercise this Warrant in accordance with Section 5 herein, by either:

(1) wire transfer to the Company or cashier’s check drawn on a United States bank made payable to the order of the Company, or

(2) exercising of the right to credit the Exercise Price against the Fair Market Value of the Warrant Shares (as defined below) at the time of exercise (the “**Net Exercise**”) pursuant to Section 1(c).

Notwithstanding anything herein to the contrary, the Warrantholder shall not be required to physically surrender this Warrant to the Company until the Warrantholder has purchased all of the Warrant Shares available hereunder and the Warrant has been exercised in full, in which case, the Warrantholder shall surrender this Warrant to the Company for cancellation within three (3) trading days of the date the final Notice of Exercise (as defined below) is delivered to the Company. Partial exercises of this Warrant resulting in purchases of a portion of the total number of Warrant Shares available hereunder shall have the effect of lowering the outstanding number of Warrant Shares purchasable hereunder in an amount equal to the applicable number of Warrant Shares purchased. The Warrantholder and the Company shall maintain records showing the number of Warrant Shares purchased and the date of such purchases.

(c) Net Exercise. If the Company shall receive written notice from the Warrantholder at the time of exercise of this Warrant that the Warrantholder elects to Net Exercise the Warrant, the Company shall deliver to such Warrantholder (without payment by the Warrantholder of any exercise price in cash) that number of Warrant Shares computed using the following formula:

$$X = \frac{Y(A - B)}{A}$$

Where

X = The number of Warrant Shares to be issued to the Warrantholder.

Y = The number of Warrant Shares purchasable under this Warrant or, if only a portion of the Warrant is being exercised, the portion of the Warrant being cancelled (at the date of such calculation).

A = The Fair Market Value of one (1) share of Common Stock on the trading date immediately preceding the date on which Warrantholder elects to exercise this Warrant.

B = The Exercise Price (as adjusted hereunder).

The “**Fair Market Value**” of one share of Common Stock shall mean (x) the last reported sale price and, if there are no sales, the last reported bid price, of the Common Stock on the business day prior to the date of exercise on the Trading Market on which the Common Stock is then listed or quoted as reported by Bloomberg Financial Markets (or a comparable reporting service of national reputation selected by the Company and reasonably acceptable to the holder if Bloomberg Financial Markets is not then reporting sales prices of the Common Stock) (collectively, “**Bloomberg**”), (y) if the foregoing does not apply, the last sales price of the Common Stock in the over-the-counter market on the pink sheets or bulletin board for such security as reported by Bloomberg, and, if there are no sales, the last reported bid price of the Common Stock as reported by Bloomberg or, (z) if fair market value cannot be calculated as of such date on either of the foregoing bases, the price determined in good faith by the Company’s Board of Directors.

“**OTC Markets**” shall mean either OTC QX or OTC QB of the OTC Markets Group, Inc.

“**Trading Market**” shall mean any of the following markets or exchanges on which the Common Stock is listed or quoted for trading on the date in question: the NYSE MKT, the NASDAQ Capital Market, the NASDAQ Global Market, the NASDAQ Global Select Market, the New York Stock Exchange or the OTC Markets (or any successors to any of the foregoing).

(d) Deemed Exercise. In the event that immediately prior to the close of business on the Expiration Date, the Fair Market Value of one share of Common Stock (as determined in accordance with Section 1(c) above) is greater than the then applicable Exercise Price, this Warrant shall be deemed to be automatically exercised on a net exercise issue basis pursuant to Section 1(c) above, and the Company shall deliver the applicable number of Warrant Shares to the Warrantholder pursuant to the provisions of Section 1(c) above and this Section 1(d).

2. CERTAIN ADJUSTMENTS.

(a) Adjustment of Number of Warrant Shares and Exercise Price. The number and kind of Warrant Shares purchasable upon exercise of this Warrant and the Exercise Price shall be subject to adjustment from time to time as follows:

(1) Dividends, Subdivisions, Combinations and Other Issuances. If the Company shall at any time after the Date of Issuance but prior to the Expiration Date subdivide its shares of capital stock of the same class as the Warrant Shares, by split-up or otherwise, or combine such shares of capital stock, pay a dividend or issue additional shares of capital stock as a dividend with respect to any shares of such capital stock, the number of Warrant Shares issuable on the exercise of this Warrant shall forthwith be proportionately increased in the case of a subdivision, dividend or stock dividend, or proportionately decreased in the case of a combination. Appropriate adjustments shall also be made to the Exercise Price payable per share, but the aggregate Exercise

Price payable for the total number of Warrant Shares purchasable under this Warrant (as adjusted) shall remain the same. Any adjustment under this Section 2(a)(1), shall become effective at the close of business on the date the subdivision or combination becomes effective, or as of the record date of such dividend, or in the event that no record date is fixed, upon the making of such dividend.

(2) Reclassification, Reorganizations and Consolidation. In case of any reclassification, capital reorganization or change in the capital stock of the Company (other than as a result of a subdivision, combination or stock dividend provided for in Section 2(a)(1) above) that occurs after the Date of Issuance, then, as a condition of such reclassification, reorganization or change, lawful provision shall be made, and duly executed documents evidencing the same from the Company or its successor shall be delivered to the Warrantholder, so that the Warrantholder shall thereafter have the right at any time prior to the expiration of this Warrant to purchase, at a total price equal to that payable upon the exercise of this Warrant, the kind and amount of shares of stock and/or other securities or property (including, if applicable, cash) receivable in connection with such reclassification, reorganization or change by a holder of the same number and type of securities as were purchasable as Warrant Shares by the Warrantholders immediately prior to such reclassification, reorganization or change. In any such case appropriate provisions shall be made with respect to the rights and interest of the Warrantholder so that the provisions hereof shall thereafter be applicable with respect to any shares of stock or other securities or property deliverable upon exercise hereof, and appropriate adjustments shall be made to the Exercise Price payable hereunder, provided the aggregate Exercise Price shall remain the same (and, for the avoidance of doubt, this Warrant shall be exclusively exercisable for such shares of stock and/or other securities or property from and after the consummation of such reclassification or other change in the capital stock of the Company).

(b) Notice to Warrantholder. If, while this Warrant is outstanding, the Company (i) declares a dividend or any other distribution of cash, securities or other property in respect of its Common Stock, including, without limitation, any granting of rights or warrants to subscribe for or purchase any capital stock of the Company or any subsidiary, (ii) authorizes or approves, enters into any agreement contemplating or solicits stockholder approval for any Change of Control or (iii) authorizes the voluntary dissolution, liquidation or winding up of the affairs of the Company, then the Company shall deliver to the Warrantholder a notice of such transaction at least ten (10) business days prior to the applicable record or effective date on which a person would need to hold Common Stock in order to participate in or vote with respect to such transaction; provided, however, that the failure to deliver such notice or any defect therein shall not affect the validity of the corporate action required to be described in such notice.

(c) Calculations. All calculations under this Section 2 shall be made to the nearest cent or the nearest whole share, as the case may be. For purposes of this Section 2, the number of shares of Common Stock deemed to be issued and outstanding as of a given date shall be the sum of the number of shares of Common Stock (excluding treasury shares, if any) issued and outstanding.

(d) Treatment of Warrant upon a Change of Control.

(1) If, at any time while this Warrant is outstanding, the Company consummates a Change of Control, then a holder shall have the right thereafter to receive, upon exercise of this Warrant, the same amount and kind of securities, cash or property as it would have been entitled to receive upon the occurrence of such Change of Control if it had been, immediately prior to such Change of Control, a holder of the number of Warrant Shares then issuable upon exercise in full of this Warrant (the “**Alternate Consideration**”). The Company shall not effect any such Change of Control unless prior to or simultaneously with the consummation thereof, any successor to the Company, surviving entity or the corporation purchasing or otherwise acquiring such assets or other appropriate corporation or entity (the “**Successor Entity**”) shall assume the obligation to deliver to the holder, such Alternate Consideration as, in accordance with the foregoing provisions, the holder may be entitled to purchase, and the other obligations under this Warrant.

(2) As used in this Warrant, a “**Change of Control**” shall mean (i) a merger or consolidation of the Company with another corporation (other than a merger effected exclusively for the

purpose of changing the domicile of the Company), (ii) the sale, assignment, transfer, conveyance or other disposal of all or substantially all of the properties or assets or all or a majority of the outstanding voting shares of capital stock of the Company, (iii) a purchase, tender or exchange offer accepted by the holders of a majority of the outstanding voting shares of capital stock of the Company, or (iv) a “person” or “group” (as these terms are used for purposes of Section 13(d) and 14(d) of the Securities Exchange Act of 1934, as amended (the “**Exchange Act**”)) is or shall become the “beneficial owner” (as defined in Rule 13d-3 under the Exchange Act), directly or indirectly at least a majority of the voting power of the capital stock of the Company.

(3) Solely in connection with a Change of Control that is required to be and is approved by the board of directors of the Company (which is not controlled by Warrantholder and holders of other warrants issued as of the date hereof, or otherwise is approved by the disinterested members of the board of directors of the Company who do not hold any warrants issued as of the date hereof), the Company or any Successor Entity (as defined above) shall, at the Holder’s option, exercisable at any time concurrently with, or within 30 days after, the consummation of the Change of Control (or, if later, the date of the public announcement of the applicable Change of Control), purchase this Warrant from the Holder by paying to the Holder an amount of cash equal to the Black Scholes Value of the remaining unexercised portion of this Warrant on the date of the consummation of such Change of Control. Notwithstanding anything herein to the contrary, the Holder may not require the Company or any Successor Entity to repurchase the Warrants for the Black Scholes Value in connection with a Change of Control that (i) is not approved by, or is not required to be approved by, the Company’s board of directors or (ii) is not within the Company’s control. “**Black Scholes Value**” means the value of this Warrant based on the Black and Scholes Option Pricing Model obtained from the “OV” function on Bloomberg, L.P. (“**Bloomberg**”) determined as of the day of consummation of the applicable Change of Control for pricing purposes and reflecting (A) a risk-free interest rate corresponding to the U.S. Treasury rate for a period equal to the time between the date of the public announcement of the applicable Change of Control and the Termination Date, (B) an expected volatility equal to the 100 day volatility obtained from the HVT function on Bloomberg as of the Trading Day immediately following the public announcement of the applicable Fundamental Transaction, (C) the underlying price per share used in such calculation shall be the sum of the price per share being offered in cash, if any, plus the value of any non-cash consideration, if any, being offered in such Change of Control and (C) a remaining option time equal to the time between the date of the public announcement of the applicable Change of Control and the Termination Date. The payment of the Black Scholes Value will be made by wire transfer of immediately available funds (or by delivery of such other consideration, as applicable) within five Business Days of the Holder’s election (or, if later, on the effective date of the Change of Control).

3. NO FRACTIONAL SHARES; CHARGES, TAXES AND EXPENSES. No fractional Warrant Shares or scrip representing fractional shares will be issued upon exercise of this Warrant. In lieu of any fractional shares which would otherwise be issuable, the Company shall pay cash equal to the product of such fraction multiplied by the Fair Market Value of one Warrant Share. Issuance of Warrant Shares shall be made without charge to the Warrantholder for any issue or transfer tax or other incidental expense in respect of the issuance of such Warrant Shares, all of which taxes and expenses shall be paid by the Company, and such Warrant Shares shall be issued in the name of the Warrantholder or in such name or names as may be directed by the Warrantholder; provided, however, that in the event that Warrant Shares are to be issued in a name other than the name of the Warrantholder, this Warrant when surrendered for exercise shall be accompanied by the Assignment Form attached hereto duly executed by the Warrantholder and the Company may require, as a condition thereto, the payment of a sum sufficient to reimburse it for any transfer tax incidental thereto. The Company shall pay all Transfer Agent fees required for same-day processing of any Notice of Exercise and all fees to the Depository Trust Company (or another established clearing corporation performing similar functions) required for same-day electronic delivery of the Warrant Shares.

4. **NO STOCKHOLDER RIGHTS.** Until the exercise of this Warrant or any portion of this Warrant, the Warrantholder shall not have, nor exercise, any rights as a stockholder of the Company (including without limitation the right to notification of stockholder meetings or the right to receive any notice or other communication concerning the business and affairs of the Company) except as provided in Section 8 below.

5. **MECHANICS OF EXERCISE.**

(a) **Delivery of Warrant Shares Upon Exercise.** This Warrant may be exercised by the holder hereof, in whole or in part, by delivering to the Company (or such other office or agency of the Company as it may designate by notice in writing to the registered Warrantholder at the address of the Warrantholder appearing on the books of the Company) of a duly executed copy of the Notice of Exercise in the form attached hereto as Exhibit A (the “**Notice of Exercise**”) by facsimile or e-mail attachment and paying the Exercise Price (unless the Warrantholder has elected to Net Exercise) then in effect with respect to the number of Warrant Shares as to which the Warrant is being exercised. No ink-original Notice of Exercise shall be required, nor any medallion guarantee (or other type of guarantee or notarization) of any Notice of Exercise shall be required. This Warrant shall be deemed to have been exercised immediately prior to the close of business on the date of the delivery to the Company of the Notice of Exercise and payment of the Exercise Price (unless the Warrantholder has elected to Net Exercise) as provided above, and the person entitled to receive the Warrant Shares issuable upon such exercise shall be treated for all purposes as the holder of such shares of record as of the close of business on such date. Warrant Shares purchased hereunder shall be transmitted by the Company’s transfer agent to the Warrantholder by crediting the account of the holder’s prime broker with The Depository Trust Company through its Deposit or Withdrawal at Custodian system (“**DWAC**”) if the Company is then a participant in such system and either (A) there is an effective registration statement permitting the issuance of the Warrant Shares to or resale of the Warrant Shares by the holder or (B) the shares are eligible for resale by the holder without volume or manner-of-sale limitations pursuant to Rule 144, and otherwise by physical delivery to the address specified by the holder in the Notice of Exercise by the end of the day on the date that is two (2) trading days from the delivery to the Company of the Notice of Exercise and payment of the aggregate Exercise Price (unless exercised by means of a cashless exercise pursuant to Section 1(c)) (the “**Warrant Share Delivery Date**”). The Warrant Shares shall be deemed to have been issued, and the holder or any other person so designated to be named therein shall be deemed to have become a holder of record of such shares for all purposes, as of the date the Warrant has been exercised, with payment to the Company of the Exercise Price (or by Net Exercise) and all taxes required to be paid by the holder, if any, prior to the issuance of such shares, having been paid.

(b) **Rescission Rights.** If the Company fails to cause the transfer agent to transmit to the Warrantholder the Warrant Shares pursuant to Section 5(a) by the Warrant Share Delivery Date, then the Warrantholder will have the right to rescind such exercise.

6. **CERTIFICATE OF ADJUSTMENT.** Whenever the Exercise Price or number or type of securities issuable upon exercise of this Warrant is adjusted, as herein provided, the Company shall, at its expense, promptly deliver to the Warrantholder a certificate of an officer of the Company setting forth the nature of such adjustment and showing in detail the facts upon which such adjustment is based.

7. **COMPLIANCE WITH SECURITIES LAWS.**

(a) The Warrantholder understands that this Warrant and the Warrant Shares are characterized as “restricted securities” under the federal securities laws inasmuch as they are being acquired from the Company in a transaction not involving a public offering and that under such laws and applicable regulations this Warrant and the Warrant Shares may be resold without registration under the Securities Act only in certain limited circumstances. In this connection, the Warrantholder represents that it is familiar with Rule 144 under the Securities Act, as presently in effect, and understands the resale limitations imposed thereby and by the Securities Act.

(b) Prior and as a condition to the sale or transfer of the Warrant Shares issuable upon exercise of this Warrant, the Warrantholder shall furnish to the Company such certificates, representations, agreements and other information, as the Company or the Company’s transfer agent reasonably may

require to confirm that such sale or transfer is being made pursuant to an exemption from, or in a transaction not subject to, the registration requirements of the Securities Act, unless such Warrant Shares are being sold or transferred pursuant to an effective registration statement.

(c) The Warrantholder acknowledges that the Company may place a restrictive legend on the Warrant Shares issuable upon exercise of this Warrant in order to comply with applicable securities laws, in substantially the following form and substance, unless such Warrant Shares are otherwise freely tradable under Rule 144 of the Securities Act:

“THE SECURITIES EVIDENCED BY THIS CERTIFICATE HAVE NOT BEEN REGISTERED UNDER THE U.S. SECURITIES ACT OF 1933, AS AMENDED (THE “SECURITIES ACT”), OR ANY OTHER APPLICABLE SECURITIES LAWS AND HAVE BEEN ISSUED IN RELIANCE UPON AN EXEMPTION FROM THE REGISTRATION REQUIREMENTS OF THE SECURITIES ACT AND SUCH OTHER SECURITIES LAWS. NEITHER THIS SECURITY NOR ANY INTEREST OR PARTICIPATION HEREIN MAY BE REOFFERED, SOLD, ASSIGNED, TRANSFERRED, PLEDGED, ENCUMBERED, HYPOTHECATED OR OTHERWISE DISPOSED OF, EXCEPT PURSUANT TO AN EFFECTIVE REGISTRATION STATEMENT UNDER THE SECURITIES ACT OR PURSUANT TO A TRANSACTION WHICH IS EXEMPT FROM, OR NOT SUBJECT TO, SUCH REGISTRATION, IN EACH CASE IN ACCORDANCE WITH ALL APPLICABLE SECURITIES LAWS, AND IN THE CASE OF A TRANSACTION EXEMPT FROM, OR NOT SUBJECT TO, SUCH REGISTRATION, UNLESS THE COMPANY HAS RECEIVED AN OPINION OF COUNSEL REASONABLY SATISFACTORY TO IT THAT SUCH TRANSACTION DOES NOT REQUIRE REGISTRATION UNDER THE SECURITIES ACT AND SUCH OTHER APPLICABLE LAWS.”

8. **REPLACEMENT OF WARRANTS.** On receipt of evidence reasonably satisfactory to the Company of the loss, theft, destruction or mutilation of this Warrant and, in the case of any such loss, theft or destruction of this Warrant, on delivery of an indemnity agreement reasonably satisfactory in form and amount to the Company (but not the posting of any surety or other bond) or, in the case of any such mutilation, on surrender and cancellation of such Warrant, the Company at its expense will execute and deliver, in lieu thereof, a new Warrant of like tenor.

9. **NO IMPAIRMENT.** Except to the extent as may be waived by the Warrantholder, the Company will not, by amendment of its charter or through a Change of Control, dissolution, sale of assets or any other voluntary action, avoid or seek to avoid the observance or performance of any of the terms of this Warrant, but will at all times in good faith assist in the carrying out of all such terms and in the taking of all such action as may be necessary or appropriate in order to protect the rights of the Warrantholder against impairment.

10. **TRADING DAYS.** If the last or appointed day for the taking of any action or the expiration of any right required or granted herein shall be other than a day on which the Common Stock is traded on the Trading Market, then such action may be taken or such right may be exercised on the next succeeding day on which the Common Stock is so traded.

11. **TRANSFERS; EXCHANGES.**

(a) Subject to compliance with applicable federal and state securities laws and Section 7 hereof, this Warrant may be transferred by the Warrantholder to any Affiliate (as defined below) with respect to any or all of the Warrant Shares purchasable hereunder (a “**Permitted Transfer**”). For a transfer of this Warrant as an entirety by the Warrantholder, upon surrender of this Warrant to the Company, together with the Notice of Assignment in the form attached hereto as Exhibit B duly completed and executed on behalf of the Warrantholder, the Company shall issue a new Warrant of the same denomination to the assignee. For a transfer of this Warrant with respect to a portion of the Warrant Shares purchasable hereunder, upon surrender of this Warrant to the Company, together with the Notice of Assignment in the form attached hereto as Exhibit B duly completed and executed on behalf of the Warrantholder, the Company shall issue a new Warrant to the assignee, in such denomination as shall be requested by the Warrantholder, and shall issue to the Warrantholder a new Warrant covering

the number of shares in respect of which this Warrant shall not have been transferred. The term “**Affiliate**” as used herein means, with respect to any person, any other person that, directly or indirectly through one or more intermediaries, controls, is controlled by or is under common control with such person, and any officers, employees or partners of the Warrantholder.

(b) Upon any Permitted Transfer, this Warrant is exchangeable, without expense, at the option of the Warrantholder, upon presentation and surrender hereof to the Company for other warrants of different denominations entitling the holder thereof to purchase in the aggregate the same number of shares of Common Stock purchasable hereunder. This Warrant may be divided or combined with other warrants that carry the same rights upon presentation hereof at the principal office of the Company together with a written notice specifying the denominations in which new warrants are to be issued to the Warrantholder and signed by the Warrantholder hereof. The term “**Warrants**” as used herein includes any warrants into which this Warrant may be divided or exchanged.

12. **AUTHORIZED SHARES.** The Company covenants that, during the period the Warrant is outstanding, it will reserve from its authorized and unissued Common Stock a sufficient number of shares to provide for the issuance of the Warrant Shares upon the exercise of any purchase rights under this Warrant. The Company further covenants that its issuance of this Warrant shall constitute full authority to its officers who are charged with the duty of issuing the necessary Warrant Shares upon the exercise of the purchase rights under this Warrant. The Company will take all such reasonable action as may be necessary to assure that such Warrant Shares may be issued as provided herein without violation of any applicable law or regulation, or of any requirements of the Trading Market upon which the Common Stock may be quoted or listed. The Company covenants that all Warrant Shares which may be issued upon the exercise of the purchase rights represented by this Warrant will, upon exercise of the purchase rights represented by this Warrant and payment for such Warrant Shares in accordance herewith, be duly authorized, validly issued, fully paid and nonassessable and free from all taxes, liens and charges created by the Company in respect of the issue thereof (other than taxes in respect of any transfer occurring contemporaneously with such issue).

13. **MISCELLANEOUS.**

(a) This Agreement shall be governed by and construed in accordance with the laws of the United States of America and the State of New York, both substantive and remedial, without regard to New York conflicts of law principles. Any judicial proceeding brought under this Agreement or any dispute arising out of this Agreement or any matter related hereto shall be brought in the courts of the State of New York, New York County, or in the United States District Court for the Southern District of New York.

(b) All notices, requests, consents and other communications hereunder shall be in writing, shall be sent by confirmed facsimile or electronic mail, or mailed by first-class registered or certified airmail, or nationally recognized overnight express courier, postage prepaid, and shall be deemed given when so sent in the case of facsimile or electronic mail transmission, or when so received in the case of mail or courier, and addressed as follows: (a) if to the Company, at TapImmune Inc., 5 W. Forsyth Street, Suite 200, Jacksonville, FL 32202 Attn: Mr. Peter L. Hoang, e-mail: phoang@tapimmune.com; with a copy to (which shall not constitute notice) Shumaker, Loop & Kendrick, LLP, 101 East Kennedy Blvd., Ste 2800, Tampa, FL 33602, Attn: Mark A. Catchur, Esq., e-Mail: mcatchur@slk-law.com, and (b) if to the Warrantholder, at such address or addresses (including copies to counsel) as may have been furnished by the Warrantholder to the Company in writing. To the extent that any notice provided in this Warrant constitutes, or contains, material, non-public information regarding the Company or any of the Subsidiaries, the Company shall simultaneously file such notice with the Commission pursuant to a Current Report on Form 8-K.

(c) The invalidity or unenforceability of any provision hereof shall in no way affect the validity or enforceability of any other provisions.

[Signature Page Follows]

IN WITNESS WHEREOF, this Common Stock Purchase Warrant is issued effective as of the date first set forth above.

TAPIMMUNE INC.

By: _____

Name: Peter L. Hoang

Title: Chief Executive Officer, President

[Signature Page to Warrant 2018 PIPE]

EXHIBIT A

NOTICE OF EXERCISE
(To be signed only upon exercise of Warrant)

To: TapImmune Inc.

The undersigned, the Warrantholder of the attached Warrant, hereby irrevocably elects to exercise the purchase right represented by such Warrant for, and to purchase thereunder, _____ (_____) shares of Common Stock of TapImmune Inc. and (choose one)

_____ herewith makes payment of _____ Dollars (\$_____) thereof

or

_____ elects to Net Exercise the Warrant pursuant to Section 1(b)(2) thereof.

The undersigned requests that the certificates or book entry position evidencing the shares to be acquired pursuant to such exercise be issued in the name of, and delivered to _____, whose address is _____.

By its signature below the undersigned hereby represents and warrants that it is an "accredited investor" as defined in Rule 501(a) of Regulation D promulgated under the Securities Act of 1933, as amended, and agrees to be bound by the terms and conditions of the attached Warrant as of the date hereof, including Section 7 thereof.

DATED: _____

(Signature must conform in all respects to name of the Warrantholder as specified on the face of the Warrant)

Address: _____

EXHIBIT B

NOTICE OF ASSIGNMENT FORM

FOR VALUE RECEIVED, [] (the "Assignor") hereby sells, assigns and transfers all of the rights of the undersigned Assignor under the attached Warrant with respect to the number of shares of common stock of TapImmune Inc. (the "Company") covered thereby set forth below, to the following "Assignee" and, in connection with such transfer, represents and warrants to the Company that the transfer is in compliance with Section 7 of the Warrant and applicable federal and state securities laws:

NAME OF ASSIGNEE

ADDRESS/FAX NUMBER

Number of shares:

Dated: _____ Signature: _____

Witness: _____

ASSIGNEE ACKNOWLEDGMENT

The undersigned Assignee acknowledges that it has reviewed the attached Warrant and by its signature below it hereby represents and warrants that it is an "accredited investor" as defined in Rule 501(a) of Regulation D promulgated under the Securities Act of 1933, as amended, and agrees to be bound by the terms and conditions of the Warrant as of the date hereof, including Section 7 thereof.

Signature: _____

By: _____

Its: _____

Address:

APPENDIX I

SUMMARY INSTRUCTION SHEET FOR PURCHASER

(to be read in conjunction with the entire Securities Purchase Agreement which follows)

- A Complete the following items on **BOTH** Agreements (Sign two originals):
1. Signature Page:
 - (i) Name of Purchaser
 - (ii) If an Institution, Name of Individual representing Purchaser
 - (iii) If an Institution, Title of Individual representing Purchaser
 - (iv) Signature of Individual/Individual representing Purchaser
 2. Appendix I — Stock Certificate Questionnaire/Resale Registration Statement Questionnaire:

Provide the information requested by the Stock Certificate Questionnaire and the Resale Registration Statement Questionnaire.
 3. Return **BOTH** properly completed and signed Purchase Agreements including the properly completed Appendix I to (initially by email with original by overnight delivery):

Piper Jaffray & Co.
[•]
Attention: [•]
E-mail: [•]
- B. Instructions regarding the transfer of funds for the purchase of Shares will be sent by email to the Purchaser by the Placement Agents at a later date.
- C. Upon the resale of the [Shares]/[Warrant Shares] by the Purchasers after the Registration Statement covering the [Shares]/[Warrant Shares] is effective, as described in the Securities Purchase Agreement, the Purchaser must deliver a current prospectus of the Company to the buyer (prospectuses must be obtained from the Company at the Purchaser's request).

TAPIMMUNE INC.

STOCK CERTIFICATE QUESTIONNAIRE

Pursuant to Section 2 of the Securities Purchase Agreement, please provide us with the following information:

1. The exact name that your [Shares]/[Warrant Shares] are to be registered in (this is the name that will appear on your stock certificate(s)). You may use a nominee name if appropriate:
2. The relationship between the Purchaser of the [Shares]/[Warrant Shares] and the Registered Holder listed in response to item 1 above:
3. The mailing address of the Registered Holder listed in response to item 1 above:
4. The Tax Identification Number of the Registered Holder listed in response to item 1 above:

COMPANY

RESALE REGISTRATION STATEMENT QUESTIONNAIRE

In connection with the preparation of the Registration Statement, please provide us with the following information:

SECTION 1. Pursuant to the “Selling Stockholder” section of the Registration Statement, please state [your]/[your organization’s] name exactly as it should appear in the Registration Statement:

SECTION 2. Please provide the number of shares that [you]/[your organization] will own immediately after Closing, including those [Shares]/[Warrant Shares] purchased by your organization pursuant to this Securities Purchase Agreement and those shares purchased by [you]/[your organization] through other transactions and provide the number of shares that [you]/[your organization] has the right to acquire within 60 days of Closing:

SECTION 3. [Have you]/[Has your organization] had any position, office or other material relationship within the past three years with the Company or its affiliates?

Yes No

If “yes,” please indicate the nature of any such relationships below:

SECTION 4. (a) Are you (i) a FINRA Member (see definition), (ii) a Controlling (see definition) shareholder of a FINRA Member, (iii) a Person Associated with a Member of the FINRA (see definition), or (iv) an Underwriter or a Related Person (see definition below) with respect to the proposed offering; (b) do you own any shares or other securities of any FINRA Member not purchased in the open market; or (c) have you made any outstanding subordinated loans to any FINRA Member?

Answer: Yes No If “yes,” please describe below

FINRA Member. The term “FINRA Member” means either any broker or dealer admitted to membership in the Financial Industry Regulatory Authority (formerly, the National Association of Securities Dealers, Inc., “FINRA”). (FINRA Manual, By-laws of FINRA Regulation, Inc. Article I, Definitions)

Control. The term “control” (including the terms “controlling,” “controlled by” and “under common control with”) means the possession, direct or indirect, of the power, either individually or with others, to direct or cause the direction of the management and policies of a person, whether through the ownership of voting securities, by contract, or otherwise. (Rule 405 under the Securities Act of 1933, as amended)

Person Associated with a member of the FINRA. The term “person associated with a member of the FINRA” means every sole proprietor, partner, officer, director, branch manager or executive representative of any FINRA Member, or any natural person occupying a similar status or performing similar functions, or any natural person engaged in the investment banking or securities business who is directly or indirectly controlling or controlled by a FINRA Member, whether or not such person is registered or exempt from registration with the FINRA pursuant to its bylaws. (FINRA Manual, By-laws of FINRA Regulation, Inc. Article I, Definitions)

Underwriter or a Related Person. The term “underwriter or a related person” means, with respect to a proposed offering, underwriters, underwriters’ counsel, financial consultants and advisors, finders, members of the selling or distribution group, and any and all other persons associated with or related to any of such persons. (FINRA Interpretation)

TAPIMMUNE INC.

**PROXY FOR 2018 ANNUAL MEETING OF STOCKHOLDERS
TO BE HELD AT THE HYATT REGENCY JACKSONVILLE RIVERFRONT
ON OCTOBER 16, 2018 AT 9:00 A.M. LOCAL TIME**

A. PROPOSALS - THE BOARD RECOMMENDS A VOTE FOR THE PROPOSALS 1-5, AND 7-9, AND ALL THE NOMINEES LISTED.

1. To approve the issuance of TapImmune common stock, warrants to purchase TapImmune common stock and the issuance of shares of TapImmune common stock issuable upon exercise of warrants to purchase TapImmune common stock, in each case, pursuant to the merger agreement.

FOR **AGAINST** **ABSTAIN**

 2. To approve the issuance of TapImmune common stock, warrants to purchase TapImmune common stock and the issuance of shares of TapImmune common stock issuable upon exercise of warrants to purchase TapImmune common stock, in each case, pursuant to the private placement transaction.

FOR **AGAINST** **ABSTAIN**

 3. To approve two separate proposals to amend TapImmune's articles of incorporation to:
 - a. increase the number of authorized shares of TapImmune common stock from 41,666,667 to 150,000,000, the approval of which is necessary to enable TapImmune to issue the required number of shares of TapImmune common stock, and shares of TapImmune common stock issuable upon exercise of warrants, in each case, to Marker stockholders in connection with the merger and to the investors in the private placement transaction, and

FOR **AGAINST** **ABSTAIN**
 - b. change the name of TapImmune to "Marker Therapeutics, Inc."

FOR **AGAINST** **ABSTAIN**

 4. To approve the reincorporation of TapImmune from a Nevada corporation to a Delaware corporation.

FOR **AGAINST** **ABSTAIN**

 5. To approve an increase in the number of authorized shares of TapImmune common stock reserved for issuance under the 2014 Omnibus Stock Ownership Plan by 6,616,666 shares from 1,383,334 to 8,000,000 shares upon completion of the merger.

FOR **AGAINST** **ABSTAIN**

 6. To elect seven persons as directors of TapImmune to serve until the 2019 Annual Meeting of Stockholders of the Company and until their successors are elected and qualified:

Nominees:	01 - Peter L. Hoang	02 - Dr. Glynn Wilson	03 - Sherry Grisewood
	04 - Mark Reddish	05 - David Laskow-Pooley	
	06 - Joshua Silverman	07 - Frederick Wasserman	

Mark here to vote FOR all nominees **Mark here to WITHHOLD vote from all nominees** **For All EXCEPT - To withhold authority to vote for any nominee(s), write the name(s) of such nominee(s) below.**

 7. To approve on a non-binding advisory basis TapImmune's 2017 executive compensation.

FOR **AGAINST** **ABSTAIN**

 8. To ratify the appointment of Marcum LLP as TapImmune's independent registered public accounting firm for the fiscal year ending December 31, 2018.

FOR **AGAINST** **ABSTAIN**

 9. To consider and vote on a proposal to adjourn the 2018 Annual Meeting, if necessary, if a quorum is present, to solicit additional proxies, in the event that there are not sufficient votes at the time of the 2018 Annual Meeting to approve Proposals 1, 2, 3a, 3b, 4 or 5 above.

FOR **AGAINST** **ABSTAIN**
-

PROXY - TAPIMMUNE INC.**5 W. FORSYTH STREET, SUITE 200, JACKSONVILLE, FL 32202****THIS PROXY IS SOLICITED ON BEHALF OF THE BOARD OF DIRECTORS OF TAPIMMUNE INC.**

The undersigned stockholder of TapImmune Inc. ("TapImmune") hereby appoints Peter L. Hoang and Michael J. Loiacono as proxies, each with full power of substitution, to represent and vote as designated on the reverse side, all the shares of Common Stock of TapImmune Inc. held of record by the undersigned on August 21, 2018, at the Annual Meeting of Stockholders to be held at 9:00 a.m. local time on October 16, 2018, or any adjournment or postponement thereof.

This Proxy, when properly executed, will be voted in the manner directed herein by the undersigned stockholder. If no direction is made, this Proxy will be voted **"FOR"** the approval of the issuance of TapImmune common stock, warrants to purchase TapImmune common stock and the issuance of shares of TapImmune common stock issuable upon exercise of warrants to purchase TapImmune common stock, in each case, pursuant to the merger agreement, **"FOR"** the approval of the issuance of TapImmune common stock, warrants to purchase TapImmune common stock and the issuance of shares of TapImmune common stock issuable upon exercise of warrants to purchase TapImmune common stock, in each case, pursuant to the private placement transaction, **"FOR"** the amendment to TapImmune's articles of incorporation to increase the number of authorized shares of TapImmune common stock from 41,666,667 to 150,000,000, **"FOR"** the amendment to TapImmune's articles of incorporation to change the name of TapImmune to "Marker Therapeutics, Inc.," **"FOR"** the reincorporation of TapImmune from a Nevada corporation to a Delaware corporation, **"FOR"** an increase in the number of authorized shares of TapImmune common stock reserved for issuance under the TapImmune Plan by 6,616,666 shares from 1,383,334 to 8,000,000 shares upon completion of the merger, **"FOR"** the election of seven nominees for election to the board of directors of TapImmune, **"FOR"** TapImmune's 2017 executive compensation, **"FOR"** the ratification of the appointment of Marcum LLP as TapImmune's independent registered public accounting firm for the fiscal year ending December 31, 2018, and **"FOR"** the adjournment of the 2018 Annual Meeting, if necessary, to solicit additional proxies if there are not sufficient votes to approve Proposals 1, 2, 3a, 3b, 4 or 5, and in the discretion of the proxies named herein on any other matter as may properly come before the meeting..

The undersigned acknowledges receipt from TapImmune Inc. before the execution of this proxy of a Notice of Annual Meeting, a Proxy Statement for the Annual Meeting of Stockholders and the annexes attached thereto, including the Annual Report on Form 10-K for the year ended December 31, 2017.

TAPIMMUNE'S BOARD OF DIRECTORS HAS DETERMINED AND BELIEVES THAT EACH OF THE PROPOSALS OUTLINED ABOVE IS ADVISABLE, FAIR AND IN THE BEST INTERESTS OF TAPIMMUNE AND ITS STOCKHOLDERS AND HAS UNANIMOUSLY APPROVED EACH SUCH PROPOSAL. TAPIMMUNE'S BOARD OF DIRECTORS UNANIMOUSLY RECOMMENDS THAT TAPIMMUNE STOCKHOLDERS VOTE "FOR" EACH SUCH PROPOSAL.

TO VOTE ONLINE: www.proxyandprinting.com click on Vote Your Proxy

TO VOTE BY EMAIL: akotlova@islandstocktransfer.com

TO VOTE BY FAX: Please fax this proxy card to 1.727.289.0069

TO VOTE BY MAIL: Please sign, date and mail to
Anna Kotlova
15500 Roosevelt Blvd, Suite 301
Clearwater, FL 33760

B. Authorized Signatures – This section must be completed for your vote to be counted. — Date and Sign Below.

IMPORTANT: Please date this Proxy and sign exactly as your name or names appear hereon. If shares are held jointly, both owners must sign. Executors, administrators, trustees, guardians and others signing in a representative capacity should give their full titles.

Signature of Stockholder

Signature of Joint Stockholder

Dated (mm/dd/yyyy): ____ / ____ / ____