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

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

VICAL INCORPORATED
(Exact name of Registrant as specified in its charter)

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:

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

(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):

(4) Proposed maximum aggregate value of transaction:

(5) Total fee paid:

☒ 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 Vical Incorporated:

You are cordially invited to attend a special meeting of the stockholders of Vical Incorporated, a Delaware corporation, which we refer to as "we", "Vical", or the "company", which will be held at 8:00 a.m., local time, on August 30, 2019, at Cooley LLP, 4401 Eastgate Mall, San Diego, California 92121, unless postponed or adjourned to a later date. This is an important meeting that affects your investment in Vical.

On June 2, 2019, Vical and Brickell Biotech, Inc. ("Brickell") entered into an Agreement and Plan of Merger and Reorganization (the "Merger Agreement"), pursuant to which Victory Subsidiary, Inc., a wholly owned subsidiary of Vical, will merge with and into Brickell, with Brickell surviving as a wholly owned subsidiary of Vical, and Vical common stock will be issued to the former Brickell securityholders at the effective time of such merger (the "Merger"). The Merger has been unanimously approved by the boards of directors of both companies and is expected to close in the third quarter of 2019, subject to the requisite approval of Vical's stockholders as well as the satisfaction of other conditions.

Shares of Vical common stock are currently listed on the Nasdaq Capital Market under the symbol "VICL." Prior to consummation of the Merger, Vical intends to file an initial listing application with the Nasdaq Capital Market. After completion of the Merger, Vical will be renamed "Brickell Biotech, Inc." and expects to trade on the Nasdaq Capital Market under the symbol "BBI." References herein to the combined company are references to Vical following the Merger transaction.

Concurrent with the execution of the Merger Agreement, Brickell entered into a Funding Agreement (the "Funding Agreement") with NovaQuest Co-Investment Fund X, L.P. ("NovaQuest") pursuant to which NovaQuest committed to provide up to $25.0 million in near-term research and development funding to Brickell following the closing of the Merger (the "Concurrent Financing"), with $5.6 million of the commitment expected to be paid promptly following the closing of the Merger and the remaining portion of the commitment expected to be paid in quarterly payments equal to 67% of invoiced research and development expenses incurred during the subsequent four fiscal quarters.

In connection with the Concurrent Financing, immediately following the closing of the Merger, the combined company will issue warrants to NovaQuest (the "NovaQuest Warrants") to purchase shares of Vical common stock. The number of shares of Vical common stock underlying the NovaQuest Warrants will be based on 10% warrant coverage on the $25.0 million NovaQuest funding commitment and the final exchange ratio for the Merger (the "Exchange Ratio"), and the exercise price of the NovaQuest Warrants will be determined based on a 10% premium to the Brickell price per share of common stock implied in the Merger, as adjusted for the Exchange Ratio.

Immediately following the Merger, the former Brickell securityholders and NovaQuest, collectively, are expected to own, subject to adjustment, approximately 60% of the aggregate number of shares of Vical common stock, and the securityholders of Vical immediately prior to the Merger are expected to own, subject to adjustment, approximately 40% of the aggregate number of shares of Vical common stock (in each case on a fully diluted basis using the treasury stock method in instances other than with respect to the NovaQuest Warrants and certain equity issuances by Brickell following the signing of the Merger Agreement and prior to the completion of the Merger).

Immediately after the effective time of the Merger, the combined company will appoint Robert Brown as its Chief Executive Officer, Andy Sklawer as its Co-Founder, Chief Operating Officer and Secretary, Deepak Chadha as its Chief R&D Officer, R. Michael Carruthers as its Chief Financial Officer, and David McAvoy as its General Counsel. In addition, each of Dr. R. Gordon Douglas, Richard Beleson, Robert Merton, George Morrow and Thomas Shenk will resign from Vical's board of directors effective upon the effective time of the Merger, and the designees of Brickell pursuant to the Merger Agreement, Robert Brown, Reginald Hardy, George Abercrombie, Dr. William Ju and Dennison Veru, will be appointed to fill the vacancies created by the resignations of the current Vical directors listed above. The Vical designees who will remain on the board of directors are Vijay Samant and Gary Lyons.

Vical is holding a special meeting of stockholders (the "Special Meeting") for the following purposes, as more fully described in the accompanying proxy statement:

1. To consider and vote upon a proposal to approve an amendment to Vical's restated certificate of incorporation, as amended, to effect a reverse split of Vical's common stock (the "Reverse Split") at a ratio in the range of between 1-for-5 to 1-for-15, inclusive, with such ratio to be mutually agreed by Vical and Brickell and to be effected by Vical immediately prior to the effective time of the Merger;

2. To consider and vote upon a proposal to approve the consummation of a change of control of Vical resulting from the Merger and the other transactions and actions contemplated by the Merger Agreement, including the Concurrent Financing and the Reverse Split (the "Contemplated Transactions") pursuant to the rules of the Nasdaq Capital Market, as contemplated by the Merger Agreement;

3. To consider and vote upon a postponement or adjournment of the Special Meeting, if necessary, to solicit additional proxies if there are not sufficient votes in favor of Proposal Nos. 1 or 2 described above at the time of the Special Meeting; and

4. To transact any other business that may be properly brought before the meeting or any continuation, adjournment or postponement thereof.

After careful consideration, Vical's board of directors has determined that the Contemplated Transactions set forth in and contemplated by the Merger Agreement are fair to, advisable and in the best interests of Vical and its stockholders and approved and declared advisable the Contemplated Transactions and has determined to recommend that the Vical stockholders vote to approve each of the proposals set forth in this proxy statement. Accordingly, Vical's board of directors unanimously recommends that the Vical stockholders vote FOR each of the Proposal Nos. 1 and 2 described above; and FOR the authorization to postpone or adjourn the Special Meeting in order to permit the solicitation of additional proxies if there are not sufficient votes to approve Proposal Nos. 1 or 2 described above at the time of the Special Meeting.

Your vote is very important, regardless of the number of shares you own. Whether or not you expect to attend the Special 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 Special Meeting.

More information about Vical, Brickell and the proposed transactions is contained in this proxy statement. Vical urges you to read the accompanying proxy statement carefully and in its entirety. IN PARTICULAR, YOU SHOULD CAREFULLY CONSIDER THE MATTERS DISCUSSED UNDER "**RISK FACTORS**" BEGINNING ON PAGE 25.

Vical is excited about the opportunities the Merger brings to its stockholders, and thanks you for your consideration and continued support.

Sincerely,

Vijay B. Samant
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 Vical common stock to be issued in connection with the Merger or issuable in respect of Brickell options, Brickell warrants and the NovaQuest Warrants or passed upon the adequacy or accuracy of this proxy statement. Any representation to the contrary is a criminal offense.

The accompanying proxy statement is dated July 12, 2019, and is first being mailed to Vical stockholders on July 15, 2019.

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VICAL INCORPORATED
10390 Pacific Center Court
San Diego, California, 92121
(858) 646-1100

NOTICE OF SPECIAL MEETING OF STOCKHOLDERS
TO BE HELD ON AUGUST 30, 2019

Dear Stockholders of Vical Incorporated:

You are cordially invited to attend the Special Meeting (the "Special Meeting") of the stockholders of Vical Incorporated ("Vical") to be held at 8:00 a.m., local time, on August 30, 2019, at Cooley LLP, 4401 Eastgate Mall, San Diego, California 92121, for the following purposes:

1. To consider and vote upon a proposal to approve an amendment to Vical's restated certificate of incorporation, as amended, to effect a reverse split of Vical's common stock (the "Reverse Split") at a ratio in the range of between 1-for-5 to 1-for-15, inclusive, with such ratio to be mutually agreed by Vical and Brickell and to be effected by Vical immediately prior to the effective time of the Merger;
2. To consider and vote upon a proposal to approve the consummation of a change of control of Vical resulting from the Merger and the other transactions and actions contemplated by the Merger Agreement, including the Concurrent Financing and the Reverse Split (the "Contemplated Transactions") pursuant to the rules of the Nasdaq Capital Market, as contemplated by the Merger Agreement;
3. To consider and vote upon a postponement or adjournment of the Special Meeting, if necessary, to solicit additional proxies if there are not sufficient votes in favor of Proposal Nos. 1 or 2 described above at the time of the Special Meeting; and
4. To transact any other business that may be properly brought before the meeting or any continuation, adjournment or postponement thereof.

The board of directors of Vical has fixed July 2, 2019 as the record date for the determination of stockholders entitled to notice of, and to vote at, the Special Meeting and any adjournment or postponement thereof. Only holders of record of shares of Vical common stock at the close of business on the record date are entitled to notice of, and to vote at, the Special Meeting. At the close of business on the record date, Vical had 22,841,278 shares of common stock outstanding and entitled to vote.

Your vote is important. Approval of Proposal No. 1 requires the affirmative vote of the holders of a majority of the outstanding shares of Vical's common stock outstanding as of the record date for the Special Meeting. Approval of Proposal No. 2 requires the affirmative vote of a majority of the votes cast in person or by proxy at the Special Meeting. Approval of Proposal No. 3 requires the affirmative vote of a majority of the votes present in person or by proxy at the Special Meeting and entitled to vote. **We encourage you to read this proxy statement carefully. If you have any questions or need assistance voting your shares, please call our proxy solicitor, Alliance Advisors, LLC, at 1-844-670-2134.**

Even if you plan to attend the Special Meeting in person, Vical requests that you sign and return the enclosed proxy card or grant your proxy by telephone or through the Internet to ensure that your shares will be represented at the Special Meeting if you are unable to attend.

By Order of the Board of Directors of Vical Incorporated,

Vijay B. Samant
President and Chief Executive Officer
San Diego, California
July 12, 2019

THE VICAL BOARD OF DIRECTORS HAS DETERMINED AND BELIEVES THAT EACH OF THE PROPOSALS OUTLINED ABOVE IS FAIR TO AND ADVISABLE, AND IN THE BEST INTERESTS OF, VICAL AND ITS STOCKHOLDERS AND HAS APPROVED AND DECLARED ADVISABLE THE MERGER AGREEMENT AND THE CONTEMPLATED TRANSACTIONS. THE VICAL BOARD OF DIRECTORS RECOMMENDS THAT VICAL STOCKHOLDERS VOTE "FOR" EACH SUCH PROPOSAL.

REFERENCES TO ADDITIONAL INFORMATION

This proxy statement incorporates important business and financial information about Vical that is not included in or delivered with this document. You may obtain this information without charge through the Securities and Exchange Commission website (www.sec.gov) or upon your written or oral request by contacting Vical Incorporated, Investor Relations, 10390 Pacific Center Court, San Diego, California 92121-4340, or by calling (858) 646-1100.

You may also request information from Alliance Advisors, LLC, Vical's proxy solicitor, at the following address and telephone number:

Alliance Advisors, LLC
200 Broadacres Drive, 3rd Floor
Bloomfield, NJ 07003
Toll Free: 1-844-670-2134

For additional details about where you can find information about Vical, please see the section titled "*Where You Can Find More Information*" in this proxy statement.

ABOUT THIS DOCUMENT

Vical Incorporated, which we refer to herein as the "company," "Vical," "we," "our," or "us," or, following the consummation of the Merger, the "combined company," is providing these proxy materials in connection with the solicitation by our board of directors of proxies to be voted at our Special Meeting of our stockholders to be held on August 30, 2019, commencing at 8:00 a.m., local time, at Cooley LLP, 4401 Eastgate Mall, San Diego, California 92121, or at any adjournment or postponement thereof. This proxy statement and the enclosed proxy card will be mailed to each stockholder entitled to notice of, and to vote at, the Special Meeting of stockholders commencing on July 15, 2019.

You are cautioned not to rely on any information other than the information contained in or incorporated by reference into this proxy statement. No one has been authorized to provide you with information that is different from that contained in or incorporated by reference into this proxy statement. This proxy statement is dated July 12, 2019. You should not assume that the information contained in this proxy statement is accurate as of any other date, nor should you assume that the information incorporated by reference into this proxy statement is accurate as of any date other than the date of such incorporated document. The mailing of this proxy statement to our stockholders will not create any implication to the contrary.

Except where specifically noted, the following information and all other information contained in this proxy statement does not give effect to a Reverse Split described in Proposal No. 1, beginning on page 120 of this proxy statement.

This proxy statement does not constitute an offer to sell, or a solicitation of an offer to buy, any securities, or the solicitation of a proxy, in any jurisdiction in which or from any person to whom it is unlawful to make any such offer or solicitation in such jurisdiction.

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QUESTIONS AND ANSWERS ABOUT THE SPECIAL MEETING AND THE MERGER

The following section provides answers to frequently asked questions about the Merger and other matters relating to the Special Meeting. This section, however, provides only summary information. For a more complete response to these questions and for additional information, please refer to the cross-referenced sections. Vical urges its stockholders to read this document in its entirety prior to making any decision.

What is the Merger?

Vical Incorporated ("Vical"), Victory Subsidiary, Inc., a wholly owned subsidiary of Vical ("Merger Sub"), and Brickell Biotech, Inc. ("Brickell") have entered into an Agreement and Plan of Merger and Reorganization, dated as of June 2, 2019 (the "Merger Agreement"). The Merger Agreement contains the terms and conditions of the proposed merger of Vical and Brickell. Under the Merger Agreement, Merger Sub will merge with and into Brickell, with Brickell surviving as a wholly owned subsidiary of Vical (the "Merger").

Concurrent with the execution of the Merger Agreement, Brickell entered into a Funding Agreement (the "Funding Agreement") with NovaQuest Co-Investment Fund X, L.P. ("NovaQuest") pursuant to which NovaQuest committed to provide up to $25.0 million in near-term research and development funding to Brickell in connection with Brickell's sofpironium bromide product candidate following the closing of the Merger, subject to the terms and conditions of the Funding Agreement (the "Concurrent Financing"), with $5.6 million of the commitment expected to be paid promptly following the closing of the Merger and the remaining portion of the commitment expected to be paid in quarterly payments equal to 67% of invoiced research and development expenses incurred during the subsequent four fiscal quarters in connection with Brickell's sofpironium bromide product candidate.

At the effective time of the Merger, each share of Brickell capital stock outstanding immediately prior to the effective time (excluding any (i) properly dissenting shares of Brickell common stock or (ii) shares of Brickell common stock held as treasury stock or held or owned by Brickell or Merger Sub, which will be canceled without consideration) will be automatically converted solely into the right to receive a number of shares of Vical common stock calculated using an exchange ratio formula described in the Merger Agreement (the "Exchange Ratio"). The Exchange Ratio is intended to allocate to the former Brickell securityholders and NovaQuest, collectively, approximately 60% of the aggregate number of shares of Vical common stock, and to the securityholders of Vical immediately prior to the Merger, approximately 40% of the aggregate number of shares of Vical common stock (in each case on a fully diluted basis using the treasury stock method in instances other than with respect to the NovaQuest Warrants and certain equity issuances by Brickell following the signing of the Merger Agreement and prior to the completion of the Merger). The Exchange Ratio is based on a $60.0 million valuation of Brickell and a $40.0 million valuation of Vical and is subject to adjustment based on the Vical Net Cash and Brickell Net Working Capital (each as defined in the section titled "*The Merger Agreement—Conditions to the Completion of the Merger*") balances prior to the completion of the Merger.

After the completion of the Merger, Vical will change its corporate name to "Brickell Biotech, Inc." References to the combined company in this proxy statement are references to Vical following the Merger transaction. For a more complete description of the Merger and Exchange Ratio, please see the section titled "*The Merger Agreement*" in this proxy statement.

What am I voting on?

There are three matters scheduled for a vote at the Special Meeting:

1. The approval of the amendment to Vical's restated certificate of incorporation, as amended, to effect a reverse split of Vical's common stock (the "Reverse Split") at a ratio in the range of between 1-for-5 to 1-for-15, inclusive, with such ratio to be mutually agreed by Vical and Brickell and to be effected by Vical prior to the effective time of the Merger;

2. To consider and vote upon a proposal to approve the consummation of a change of control of Vical resulting from the Merger and the other transactions and actions contemplated by the Merger Agreement, including the Concurrent Financing and the Reverse Split (the "Contemplated Transactions") pursuant to the rules of the Nasdaq Capital Market ("Nasdaq"), as contemplated by the Merger Agreement;

3. The authorization of the postponement or adjournment of the Special Meeting, if necessary, to solicit additional proxies if there are not sufficient votes in favor of Proposal Nos. 1 or 2 described above at the time of the Special Meeting.

What will happen to Vical if, for any reason, the Merger does not close?

If, for any reason, the Merger does not close, the Vical board of directors may, following the termination of the Merger Agreement, elect to, among other things, divest all or a portion of Vical's business, or take the steps necessary to liquidate all of Vical's business and assets. If Vical decides to dissolve and liquidate its assets, Vical would be required to pay all of its contractual obligations, and to set aside certain reserves for potential future claims, and there can be no assurance as to the amount or the timing of such a liquidation and distribution of available cash left to distribute to stockholders after paying the obligations of Vical and setting aside funds for reserves.

Why are the two companies proposing to merge?

Vical and Brickell believe that the Merger will result in a combined company that will engage in the development and potential commercialization of dermatological therapeutics, in addition to potential monetization of Vical's VL-2397 program in the future.

Vical's board of directors considered a number of factors that supported its decision to approve the Merger Agreement. In the course of its deliberations, Vical's board of directors also considered a variety of risks and other countervailing factors related to entering into the Merger Agreement.

For a discussion of Vical's reasons for the Merger, please see the section titled "*The Merger—Reasons for the Merger.*"

Why am I receiving these materials?

You are receiving these proxy materials because you have been identified as a stockholder of Vical as of the record date, and you are entitled to vote at the Special Meeting to approve the matters described in this proxy statement. This proxy statement contains important information about the proposed Merger, Concurrent Financing, Reverse Split and the Special Meeting and you should read it carefully and in its entirety. The enclosed voting materials allow you to authorize a proxy to vote your shares of Vical common stock without attending the Special Meeting. As promptly as practicable, please complete, sign, date and mail your proxy card in the pre-addressed postage-paid envelope provided or call the toll-free telephone number listed on your proxy card or access the Internet website described in the instructions on the enclosed proxy card.

Who can vote at the Annual Meeting?

Only stockholders of record at the close of business on July 2, 2019, will be entitled to vote at the Annual Meeting. On the record date, there were 22,841,278 shares of Vical common stock outstanding and entitled to vote.

Am I a stockholder of record?

If at the close of business on July 2, 2019, your shares were registered directly in your name with Vical's transfer agent, Computershare, then you are a stockholder of record.

What is required to consummate the Merger?

To consummate the Merger, Proposal Nos. 1 and 2 must be approved at the Special Meeting, or at any permitted postponement or adjournment thereof, by the requisite holders of Vical common stock on the record date for the Special Meeting.

In addition to the requirement of obtaining such 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, we urge you to read the section titled "*The Merger Agreement—Conditions to the Completion of the Merger*" in this proxy statement.

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?

Neither Vical nor Brickell is required to make any filings or obtain any approvals or clearances from any antitrust regulatory authorities in the United States or other countries to consummate the Merger. In the United States, Vical must comply with applicable federal and state securities laws and the rules and regulations of Nasdaq in connection with the Contemplated Transactions, and the filing with the Securities and Exchange Commission (the "SEC") of this proxy statement. Prior to consummation of the Merger, Vical intends to file an initial listing application with Nasdaq (the "Nasdaq Listing Application").

What will the holders of Brickell capital stock, warrants, options and convertible notes receive in the Merger?

As a result of the Merger, Brickell stockholders will become entitled to receive shares of Vical common stock in exchange for shares of Brickell capital stock in an amount to be calculated by the application of the Exchange Ratio. Each option to purchase shares of Brickell common stock that is outstanding and unexercised immediately prior to the effective time of the Merger, whether or not vested, will be converted into an option to purchase shares of Vical common stock, based on the Exchange Ratio. Each Brickell warrant that is outstanding immediately prior to the effective time of the Merger will be assumed by Vical and converted into a warrant to purchase Vical common stock, and Vical will assume each such Brickell warrant in accordance with its terms. Brickell convertible notes will convert into Brickell capital stock prior to the consummation of the Merger and holders of Brickell convertible notes will be treated like holders of Brickell capital stock following conversion. For a more complete description of what holders of Brickell capital stock, warrants, options and convertible notes will receive in the Merger, please see the sections titled "*Market Price and Dividend Information*" and "*The Merger Agreement—Merger Consideration*" in this proxy statement.

Will holders of the Vical common shares issued in the Merger and in connection with the NovaQuest Warrants be able to sell those shares without restriction?

The shares of Vical common stock issued as consideration in the Merger and in connection with the NovaQuest Warrants will be issued in transactions exempt from registration under the Securities Act of 1933, as amended (the "Securities Act") in reliance on Section 4(a)(2) of the Securities Act, and Regulation D promulgated thereunder and may not be offered or sold by the holders of those shares absent registration or an applicable exemption from registration requirements. As a general matter, holders of such shares will not be able to transfer any of their shares until at least six months after receiving shares of Vical common stock, which is when the shares would first be eligible to be sold under Rule 144 promulgated under the Securities Act, assuming the conditions thereof are otherwise satisfied.

Certain stockholders of Brickell, including each director and executive officer of Brickell, have agreed to certain transfer restrictions on the shares of common stock to be issued to them in the Merger for a period of 180 days following the effective time of the Merger. See the section titled "*Agreements Related to the Merger—Lock-Up Agreements*" in this proxy statement for more detail.

Who will be the directors of the Combined Company following the Merger?

At and immediately after the effective time of the Merger, the board of directors of the combined company and its committees is expected to be comprised of the individuals set forth in the table below. The directors shall serve until their respective successors are duly elected or appointed and qualified or their earlier death, resignation or removal.

Name	Position
Reginald L. Hardy	Co-Founder and Chairman of the Board
George Abercrombie	Director
William Ju	Director
Dennison T. Veru	Director
Vijay B. Samant	Director
Gary A. Lyons	Director
Robert B. Brown	Chief Executive Officer and Director

Who will be the executive officers of the Combined Company immediately following the Merger?

Immediately following the Merger, the executive management team of the combined company is expected to be comprised of the following individuals:

Name	Position with the Combined Company	Current Position
Robert B. Brown	Chief Executive Officer and Director	Chief Executive Officer of Brickell
Andrew D. Sklawer	Co-Founder, Chief Operating Officer and Secretary	Chief Operating Officer and Secretary of Brickell
R. Michael Carruthers	Chief Financial Officer	Chief Financial Officer of Brickell
Deepak Chadha	Chief Research & Development Officer	Chief Research & Development Officer of Brickell
Jose Breton	Controller and Chief Accounting Officer	Controller and Chief Accounting Officer of Brickell
David McAvoy	General Counsel	General Counsel of Brickell

As a Vical stockholder, how does the Vical board of directors recommend that I vote?

After careful consideration, the Vical board of directors recommends that Vical stockholders vote:

- "FOR" Proposal No. 1 to approve Vical effecting the Reverse Split;
- "FOR" Proposal No. 2 to approve of the consummation of the change of control of Vical resulting from the Contemplated Transactions pursuant to the Nasdaq rules, as contemplated by the Merger Agreement; and
- "FOR" Proposal No. 3 to approve of postponing or adjourning the Special Meeting, if necessary, to solicit additional proxies if there are not sufficient votes in favor of Proposal Nos. 1 or 2.

What risks should I consider in deciding whether to vote in favor of the Reverse Split and consummation of the change of control of Vical?

You should carefully review the section of this proxy statement titled "*Risk Factors*," which sets forth certain risks and uncertainties related to the Merger, risks and uncertainties to which Vical, as an independent company, is subject and risks and uncertainties to which Brickell, as an independent company and the continuing company, is subject.

When do you expect the Merger to be consummated?

We anticipate that the Merger will occur as promptly as practicable after the Special Meeting to be held August 30, 2019 subject to the requisite approval of Vical's stockholders as well as the satisfaction of other closing conditions, but we cannot predict the exact timing. For a more complete description of the closing conditions under the Merger Agreement, please see the section titled "*The Merger Agreement—Conditions to the Completion of the Merger*" in this proxy statement.

If effected, how will the Reverse Split affect options, restricted stock units and warrants to acquire Vical's common stock and Vical's stock option plans?

As of the effective time of the Reverse Split, Vical will adjust and proportionately decrease the number of shares of Vical's common stock reserved for issuance upon exercise of, and adjust and proportionately increase the exercise price of, all options, restricted stock units and warrants to acquire Vical's common stock at the Reverse Split ratio approved by our board of directors. All stock options, restricted stock units and warrants to acquire shares of Vical's common stock that are outstanding immediately prior to the effective time of the Merger will remain outstanding following the effective time of the Merger. In addition, as of the effective time of the Reverse Split, Vical will adjust and proportionately decrease the total number of shares of Vical's common stock that may be the subject of future grants under Vical's stock plans at the selected Reverse Split ratio.

What do I need to do now?

Vical urges you to read this proxy statement carefully, including its Appendices, and to consider how the Merger affects you.

If you are a stockholder of record of Vical, you may provide your proxy instructions in one of two different ways. First, you can mail your signed proxy card in the enclosed return envelope. Second, you may also provide your proxy instructions via telephone or the Internet by following the instructions on your proxy card or instruction form. Please provide your proxy instructions only once, unless you are revoking a previously delivered proxy instruction, and as soon as possible so that your shares can be voted at the Special Meeting of Vical stockholders. The laws of the State of Delaware, under which Vical is incorporated, permit electronically transmitted proxies, provided that each such proxy contains or is submitted with information from which the inspector of elections can determine that the proxy was authorized by the stockholder.

The telephone and Internet voting procedures below are designed to authenticate stockholders' identities, to allow stockholders to grant a proxy to vote their shares and to confirm that stockholders' instructions have been recorded properly.

Whether you hold your shares directly as the stockholder of record or beneficially in "street name", you may vote your shares by proxy without attending the Special Meeting. Depending on how you hold your shares, you may vote your shares in one of the following ways:

Shareholders of Record: For Shares Registered in Your Name

The procedures for voting by proxy are as follows:

- To vote in person, come to the Special Meeting and Vical will give you a ballot when you arrive.
- To vote by proxy on the Internet, go to http://www.proxyvote.com to complete an electronic proxy card.
- To vote using the proxy card, simply mark, sign and date your proxy card and return it promptly in the postage-paid envelope provided.

- To vote over the telephone, dial the toll-free phone number listed on a proxy card that may be delivered under the heading "Vote by Phone" and follow the recorded instructions.

If you vote by proxy, your vote must be received by 11:59 p.m. Eastern Time on August 29, 2019, to be counted.

We provide Internet proxy voting to allow you to vote your shares online, with procedures designed to ensure the authenticity and correctness of your proxy vote instructions. However, please be aware that you must bear any costs associated with your Internet access, such as usage charges from Internet access providers and telephone companies.

Even if you plan to attend the Special Meeting in person, we recommend that you also submit your proxy card or voting instructions or vote by telephone or via the Internet by the applicable deadline so that your vote will be counted if you later cannot attend the Special Meeting.

Beneficial Shareholders: For Shares Registered in the Name of a Broker or Bank

If your Vical shares are held by your broker as your nominee, that is, in "street name," the enclosed voting instruction card is sent by the institution that holds your shares. Please follow the instructions included on that proxy card regarding how to instruct your broker to vote your Vical shares. If you are a beneficial owner and do not instruct your broker, bank, or other agent how to vote your shares, the question of whether your broker or nominee will still be able to vote your shares depends on whether the NYSE deems the particular proposal to be a "routine" matter. Brokers and nominees can use their discretion to vote "uninstructed" shares with respect to matters that are considered to be "routine," but not with respect to "non-routine" matters. Under the rules and interpretations of the NYSE, "non-routine" matters are matters that may substantially affect the rights or privileges of stockholders, such as mergers, stockholder proposals, elections of directors (even if not contested), executive compensation (including any advisory stockholder votes on executive compensation and on the frequency of stockholder votes on executive compensation), and certain corporate governance proposals, even if management-supported. Proposal No. 2 (approval of the consummation of a change of control of Vical resulting from the Contemplated Transactions pursuant to the Nasdaq rules) is a non-routine matter, and accordingly your broker or nominee may not vote your shares on such proposals without your instructions. Proposal No. 1 (approval of the Reverse Split) and Proposal No. 3 (approval of the postponement or adjournment of the Special Meeting, if necessary) are considered routine matters and accordingly your broker or nominee may vote your shares on such proposals in the absence of your instructions.

Who can vote at the Special Meeting?

If, on the record date, your shares of Vical common stock are registered directly in your name with the Vical transfer agent, you are considered to be the stockholder of record with respect to those shares, and the proxy materials and proxy card are being sent directly to you by Vical. If you are a Vical stockholder of record, you may attend the Special Meeting of Vical stockholders and vote your shares in person. Even if you plan to attend the Special Meeting in person, Vical requests that you sign and return the enclosed proxy to ensure that your shares will be represented at the Special Meeting if you are unable to attend.

If, on the record date, your shares of Vical common stock are held in a brokerage account or by another nominee, you are considered the beneficial owner of shares held in "street name," and the proxy materials are being forwarded to you by your broker or other nominee together with a voting instruction card. As the beneficial owner, you are also invited to attend the Special Meeting of Vical stockholders. Because a beneficial owner is not the stockholder of record, you may not vote these shares in person at the Special Meeting unless you obtain a proxy from the broker, trustee or nominee that holds your shares, giving you the right to vote the shares at the meeting.

How are votes counted?

Votes will be counted by the inspector of elections appointed for the meeting, who will separately count votes "For" and "Against," abstentions and, if applicable, broker non-votes.

What are "broker non-votes"?

As discussed above, when a beneficial owner of shares held in "street name" does not give instructions to the broker or nominee holding the shares as to how to vote on matters deemed by the NYSE to be "non-routine," the broker or nominee may not vote the shares. These unvoted shares are counted as "broker non-votes."

What is the quorum requirement?

A quorum of stockholders is necessary to hold a valid meeting. A quorum will be present if stockholders holding a majority of the issued and outstanding shares entitled to vote at a meeting are present at such meeting in person or represented by proxy. On the record date, there were 22,841,278 shares of Vical common stock outstanding and entitled to vote. Thus, the holders of 11,420,640 shares of Vical common stock must be present in person or represented by proxy at the Special Meeting to have a quorum.

Your shares will be counted towards the quorum if you submit a valid proxy (or one is submitted on your behalf by your broker, bank or other nominee) or if you vote in person at the Special Meeting. Abstentions and broker non-votes, if applicable, will also be counted towards the quorum requirement. If there is no quorum, the holders of a majority of shares at the meeting in person or represented by proxy may postpone or adjourn the meeting to another date.

How many votes are needed to approve each proposal?

Approval of Proposal No. 1 requires the affirmative vote of the holders of a majority of the outstanding shares of Vical's common stock outstanding as of the record date for the Special Meeting, assuming a quorum is present. Abstentions and broker non-votes will have the effect of a "NO" vote for Proposal No. 1. It is anticipated that Proposal No. 1 will be a discretionary proposal considered routine under the rules of the NYSE.

Approval of Proposal No. 2 requires the affirmative vote of a majority of the votes cast in person or by proxy at the Special Meeting, assuming a quorum is present. Abstentions and broker non-votes will be not be considered votes cast and will have no effect on the vote for Proposal No. 2. It is anticipated that Proposal No. 2 will be a non-discretionary proposal considered non-routine under the rules of the NYSE.

Approval of Proposal No. 3 requires the affirmative vote of a majority of the votes present in person or by proxy at the Special Meeting and entitled to vote. Abstentions and broker non-votes will be considered votes cast and have the effect of a "NO" vote for Proposal No. 3. It is anticipated that Proposal No. 3 will be a discretionary proposal considered routine under the rules of the NYSE.

When and where will the Special Meeting of Vical stockholders be held?

The Special Meeting of Vical stockholders will be held at 8:00 a.m., local time, on August 30, 2019 at Cooley LLP, 4401 Eastgate Mall, San Diego, California 92121. Subject to space availability, all Vical stockholders as of the record date, or their duly appointed proxies, may attend the meeting.

What if I return a proxy card or otherwise vote but do not make specific choices?

If you return a signed and dated proxy card or otherwise vote without marking voting selections, your shares will be voted, as applicable, "For" the approval of the amendment to Vical's restated certificate of incorporation,

as amended, to effect the Reverse Split at a ratio in the range of between 1-for-5 to 1-for-15, inclusive, with such ratio to be mutually agreed by Vical and Brickell and to be effected by Vical prior to the effective time of the Merger (Proposal No. 1), "For" the approval of the consummation of a change of control of Vical resulting from the Contemplated Transactions pursuant to the Nasdaq rules, as contemplated by the Merger Agreement (Proposal No. 2), and "For" the authorization to postpone or adjourn the Special Meeting to solicit additional proxies if there are not sufficient votes in favor of Proposal No. 1 and Proposal No. 2 on the date of the Special Meeting.

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

Vical stockholders of record may change their vote at any time before their proxy is voted at the Special Meeting in one of three ways. First, a stockholder of record of Vical can send a written notice to the Corporate Secretary of Vical stating that the stockholder would like to revoke its proxy. Second, a stockholder of record of Vical can submit new proxy instructions either on a new proxy card, by the telephone or via the Internet. Third, a stockholder of record of Vical can attend the Special Meeting and vote in person. Attendance alone will not revoke a proxy. If a Vical stockholder of record or a stockholder who owns Vical shares in "street name" has instructed a broker to vote its shares of Vical common stock, the stockholder must follow directions received from its broker to change those instructions.

Your most current proxy card or telephone or Internet proxy is the one that is counted.

Should Brickell's and Vical's stockholders send in their stock certificates now?

No. After the Merger is consummated, Brickell's stockholders will receive written instructions from the exchange agent for exchanging their certificates representing shares of Brickell capital stock for certificates representing shares of Vical's common stock. Each Brickell stockholder who otherwise would be entitled to receive a fractional share of Vical common stock will be entitled to receive an amount in cash, without interest, determined by multiplying such fraction by the volume-weighted average closing trading price of a share of Vical common stock on Nasdaq for the five consecutive trading days ending five trading days immediately prior to the date upon which the Merger becomes effective.

In addition, Vical's stockholders will receive written instructions, as applicable, from Vical's transfer agent, Computershare, for exchanging their certificates representing shares of Vical's common stock for new certificates giving effect to the Reverse Split, if effected. Vical's stockholders will also receive a cash payment in lieu of any fractional shares, determined by multiplying such fraction by the fair market value per share of Vical's common stock immediately prior to the effective time of the Reverse Split as determined by the Vical board of directors.

Am I entitled to appraisal or dissenters' rights?

No, Vical's stockholders are not entitled to appraisal or dissenters' rights in connection with the Merger.

Have Brickell's stockholders agreed to adopt the Merger Agreement?

Yes. On June 2, 2019, Brickell's stockholders adopted and approved the Merger Agreement and approved the Contemplated Transactions.

Who is paying for this proxy solicitation?

Vical pays the cost of soliciting proxies. In addition to these proxy materials, Vical's directors and employees, and Vical's proxy solicitor, Alliance Advisors, LLC, may also solicit proxies in person, by telephone, or by other means of communication. Directors and employees will not be paid any additional compensation for soliciting proxies. Alliance Advisors, LLC will be paid a customary fee of $10,000, plus out-of-pocket expenses if it solicits proxies, in connection with the solicitation.

Who can help answer my questions?

If you are a Vical stockholder and would like additional copies, without charge, of this proxy statement or if you have questions about the Merger and related transactions, including the procedures for voting your shares, you should contact Alliance Advisors, LLC, Vical's proxy solicitor, by telephone at the following address and phone number, or Vical, at the following address, phone number and email address:

Alliance Advisors, LLC
200 Broadacres Drive, 3rd Floor
Bloomfield, NJ 07003
Toll Free: 1-844-670-2134

Vical Incorporated
Investor Relations
10390 Pacific Center Court
San Diego, California, 92121-4340
Telephone: (858) 646-1100
Email: ir@vical.com

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 proposals being considered at the Special Meeting, you should read this entire proxy statement carefully, including the Merger Agreement attached as Appendix A and the Opinion of MTS Securities, LLC attached as Appendix B and the other annexes to which you are referred herein. You may obtain the information incorporated by reference into this proxy statement without charge by following the instructions in the section titled "Where You Can Find More Information" beginning on page 186.

The Companies

Vical Incorporated

10390 Pacific Center Court
San Diego, California, 92121
(858) 646-1100

Until recently, Vical was focused on developing its novel antifungal VL-2397, for the treatment of patients with invasive aspergillosis. VL-2397 was being evaluated in a multicenter, open label randomized Phase 2 clinical study, designed to compare the efficacy and safety of VL-2397 to standard treatment for invasive aspergillosis in acute leukemia patients and recipients of allogeneic hematopoietic cell transplant (HCT). In February 2019, Vical decided to discontinue the Phase 2 clinical trial of VL-2397.

Brickell Biotech, Inc.

5777 Central Avenue, Suite 102
Boulder, Colorado, 80301
(720) 565-4755

Brickell is a clinical-stage pharmaceutical company focused on developing innovative and differentiated prescription therapeutics for the treatment of debilitating skin diseases. Brickell's pipeline consists of potential novel therapeutics for hyperhidrosis, cutaneous T-cell lymphoma, psoriasis, and other prevalent dermatological conditions. Brickell believes that its portfolio of product candidates targets significant market opportunities where innovative therapies are needed. Brickell's executive management team and board of directors bring extensive experience in product development and global commercialization, having served in leadership roles at large global pharmaceutical companies and biotechs that have developed and/or launched successful products, including several that were first-in-class and/or achieved iconic status, such as Cialis®, Taltz®, Gemzar®, Prozac®, Cymbalta® and Juvederm®. Brickell's strategy is to leverage this experience to in-license, acquire, develop and commercialize innovative products that Brickell believes can be successful in the currently underserved dermatology global marketplace.

The Merger (see page 64)

Under the Merger Agreement, Victory Subsidiary, Inc. ("Merger Sub"), a wholly owned subsidiary of Vical, will merge with and into Brickell, with Brickell surviving as a wholly owned subsidiary of Vical, and Vical common stock will be issued to the former Brickell stockholders at the effective time of the Merger. In connection with the closing of the Merger, Vical will change its name to "Brickell Biotech, Inc." References to the combined company in this proxy statement are references to Vical following the Merger transaction.

Concurrent with the execution of the Merger Agreement, Brickell entered into a Funding Agreement (the "Funding Agreement") with NovaQuest Co-Investment Fund X, L.P. ("NovaQuest") pursuant to which

NovaQuest committed to provide up to $25.0 million in near-term research and development funding to Brickell in connection with sofpironium bromide following the closing of the Merger, subject to the terms and conditions of the Funding Agreement (the "Concurrent Financing"), with $5.6 million of the commitment expected to be paid promptly following the closing of the Merger and the remaining portion of the commitment expected to be paid in quarterly payments equal to 67% of invoiced research and development expenses incurred in connection with sofpironium bromide during the following four fiscal quarters.

In connection with the Concurrent Financing, immediately following the closing of the Merger, Vical is obligated to issue warrants to NovaQuest (the "NovaQuest Warrants"), to purchase shares of Vical common stock. The number of shares of Vical common stock underlying the NovaQuest Warrants will be based on 10% warrant coverage on the $25.0 million NovaQuest funding commitment and the Exchange Ratio, and the exercise price of the NovaQuest Warrants will be determined based on a 10% premium to the Brickell price per share of common stock implied in the Merger, as adjusted for the Exchange Ratio.

Vical and Brickell expect the Merger to be consummated in the third quarter of 2019, subject to receipt of the requisite approval of Vical's stockholders, as well as the satisfaction of other conditions. Immediately following the Merger, the former Brickell securityholders and NovaQuest, collectively, are expected to own, subject to adjustment, approximately 60% of the aggregate number of shares of Vical common stock, and the securityholders of Vical as of immediately prior to the Merger are expected to own, subject to adjustment, approximately 40% of the aggregate number of shares of Vical common stock (in each case on a fully diluted basis using the treasury stock method in instances other than with respect to the NovaQuest Warrants and certain equity issuances by Brickell following the signing of the Merger Agreement and prior to the completion of the Merger).

The shares of Vical common stock to be issued in the Merger will be offered and sold in reliance on an exemption from registration under Regulation D promulgated under Section 4(a)(2) of the Securities Act. Appropriate restrictive legends will be affixed to the shares issued in the Merger.

Reasons for the Merger (see page 74)

The Vical board of directors considered various reasons to reach its conclusion that the Merger and all related transactions set forth in and contemplated by the Merger Agreement are fair to, advisable and in the best interests of Vical and its stockholders and approve and declare advisable the Merger Agreement and the Merger and the other transactions contemplated by the Merger Agreement, including a reverse split of Vical's common stock (the "Reverse Split") and the Concurrent Financing (collectively, the "Contemplated Transactions").

Opinion of MTS Securities, LLC (see page 80)

Vical retained MTS Health Partners, L.P. ("MTS") as a financial advisor in connection with the Merger. On June 2, 2019, MTS Securities, LLC ("MTS Securities"), an affiliate of MTS, rendered its oral opinion to the Vical board of directors (which was subsequently confirmed in writing as of June 2, 2019), that, as of that date and subject to the various assumptions made, procedures followed, matters considered and qualifications and limitations set forth in such written opinion and described below, the Exchange Ratio in the Merger is fair, from a financial point of view, to the holders of Vical common stock (other than Excluded Shares (as defined in "*The Merger—Opinion of MTS Securities, LLC*")).

The full text of the written opinion of MTS Securities (the "MTS Opinion") sets forth the assumptions made, procedures followed, matters considered and qualifications and limitations on the review undertaken by MTS Securities in connection with its opinion. The MTS Opinion is attached as Appendix C to this proxy statement and is incorporated herein by reference. The summary of the MTS Opinion set forth in this proxy statement is qualified in its entirety by reference to the full text of the MTS Opinion. We urge you to read carefully the MTS Opinion, together with the summary thereof in this proxy

statement, in its entirety. MTS Securities provided its opinion for the information and assistance of the Vical board of directors in connection with its consideration of the Merger. The MTS Opinion addressed solely the fairness, from a financial point of view, of the Exchange Ratio, to the holders of Vical common stock in the Merger and does not address any other aspect or implication of the Merger. The MTS Opinion was not a recommendation to the Vical board of directors or any stockholder of Vical as to how to vote or to take any other action in connection with the Merger.

Overview of the Merger Agreement

Merger Consideration and Exchange Ratio (see page 95)

Brickell stockholders will receive shares of Vical common stock in exchange for shares of Brickell capital stock in an amount equal to the number of shares of Brickell capital stock held by such stockholder multiplied by the Exchange Ratio. No fractional shares of Vical common stock will be issued in connection with the Merger. Instead, each Brickell stockholder who otherwise would be entitled to receive a fractional share of Vical common stock (after aggregating all fractional shares of Vical common stock issuable to such holder) will be entitled to receive an amount in cash (rounded to the nearest whole cent), without interest, determined by multiplying such fraction by the volume-weighted average closing price of a share of Vical common stock on Nasdaq for the five trading days ending five trading days immediately prior to the date upon which the Merger becomes effective.

Immediately following the Merger, the former Brickell securityholders and NovaQuest, collectively, are expected to own, subject to adjustment, approximately 60% of the aggregate number of shares of Vical common stock, and the securityholders of Vical immediately prior to the Merger are expected to own, subject to adjustment, approximately 40% of the aggregate number of shares of Vical common stock (in each case on a fully diluted basis using the treasury stock method in instances other than with respect to the NovaQuest Warrants and certain equity issuances by Brickell following the signing of the Merger Agreement and prior to the completion of the Merger). The exchange ratio formula derived based upon the foregoing calculation is based on a $60.0 million valuation of Brickell and a $40.0 million valuation of Vical and is subject to adjustment based on the Vical Net Cash and Brickell Net Working Capital (each as defined in the section titled "*The Merger Agreement—Conditions to the Completion of the Merger*") balances prior to the completion of the Merger.

For a more complete description of the Exchange Ratio, please see the section titled "*The Merger Agreement—Merger Consideration and Exchange Ratio—Exchange Ratio*" beginning on page 96 of this proxy statement.

Treatment of Vical Stock Options and Warrants

As of the effective time of the Reverse Split, Vical will adjust and proportionately decrease the number of shares of Vical's common stock reserved for issuance upon exercise of, and adjust and proportionately increase the exercise price of, all options and warrants to acquire Vical's common stock at the reverse split ratio approved by Vical's board of directors. All options, restricted stock units and warrants to acquire shares of Vical's common stock that are outstanding immediately prior to the effective time of the Merger will remain outstanding following the effective time of the Merger.

Treatment of Brickell Stock Options, Warrants and Convertible Notes (see page 97)

Under the terms of the Merger Agreement, each option to purchase shares of Brickell common stock that is outstanding and unexercised immediately prior to the effective time of the Merger, whether or not vested, will be converted into an option to purchase shares of Vical common stock. Vical will assume the Brickell 2019 Equity Incentive Plan and all rights with respect to each outstanding option to purchase Brickell common stock in accordance with its terms.

Accordingly, from and after the effective time: (i) each outstanding Brickell option assumed by Vical may be exercised solely for shares of Vical common stock; (ii) the number of shares of Vical common stock subject to each outstanding option assumed by Vical will be determined by multiplying (A) the number of shares of Brickell common stock that were subject to such Brickell option, as in effect immediately prior to the effective time, by (B) the Exchange Ratio, and rounding the resulting number down to the nearest whole number of shares of Vical common stock; (iii) the per share exercise price for the Vical common stock issuable upon exercise of each outstanding Brickell option assumed by Vical will be determined by dividing (A) the per share exercise price of the Brickell common stock subject to such Brickell option, as in effect immediately prior to the effective time, by (B) the Exchange Ratio and rounding the resulting exercise price up to the nearest whole cent; and (iv) any restriction on the exercise of any Brickell option assumed by Vical will continue in full force and effect and the term, exercisability, vesting schedule and other provisions of such Brickell option will remain unchanged, subject to certain exceptions.

The combined company will file with the SEC, promptly after the effective time of the Merger, a registration statement on Form S-8, if available for use by the combined company, relating to the shares of Vical common stock issuable with respect to the Brickell options assumed by Vical in accordance with the Merger Agreement.

Each Brickell warrant that is outstanding immediately prior to the effective time of the Merger will be assumed by Vical and converted into a warrant to purchase Vical common stock, and Vical will assume each such Brickell warrant in accordance with its terms. All rights with respect to Brickell capital stock under the Brickell warrants assumed by Vical will be converted into rights with respect to Vical common stock. Accordingly, from and after the effective time: (i) each Brickell warrant assumed by Vical may be exercised solely for shares of Vical common stock; (ii) the number of shares of Vical common stock subject to each Brickell warrant assumed by Vical will be determined by multiplying (A) the number of shares of Brickell capital stock that were subject to such Brickell warrant, as in effect immediately prior to the effective time, by (B) the Exchange Ratio and rounding the resulting number down to the nearest whole number of shares of Vical common stock; and (iii) any restriction on any Brickell warrant assumed by Vical will continue in full force and effect and the term and other provisions of such Brickell warrant will remain unchanged.

Brickell convertible notes will convert into Brickell capital stock prior to the consummation of the Merger and the holders of such Brickell convertible notes will be treated like holders of Brickell capital stock following conversion.

Conditions to the Completion of the Merger (see page 98)

The obligations to consummate the Merger and the other transactions contemplated by the Merger Agreement shall be subject to receipt of the required Vical stockholder approvals and the satisfaction or waiver, on or prior to the effective time of the Merger, of the other conditions set forth in the section titled "*The Merger Agreement—Conditions to the Completion of the Merger*" below. The required Brickell stockholder approval was obtained prior to the execution of the Merger Agreement.

Non-Solicitation (see page 104)

Both Vical and Brickell are prohibited by the terms of the Merger Agreement from, directly or indirectly:

- soliciting, initiating or knowingly encouraging, inducing or facilitating the communication, making, submission or announcement of any acquisition proposal or acquisition inquiry or taking any action that could reasonably be expected to lead to an acquisition proposal or acquisition inquiry;
- furnishing any non-public information to any person in connection with or in response to an acquisition proposal or acquisition inquiry;

- engaging in discussions or negotiations with any person with respect to any acquisition proposal or acquisition inquiry;
- approving, endorsing or recommending any acquisition proposal;
- executing or entering into any letter of intent or any contract contemplating or otherwise relating to any acquisition transaction; or
- publicly proposing to do any of the foregoing.

Vical, however, may provide non-public information in response to a bona fide acquisition proposal made (and not withdrawn) if:

- after consulting with outside financial advisors and outside legal counsel, Vical's board of directors determines in good faith that such acquisition proposal constitutes, or could be reasonably likely to result in, a superior offer;
- Vical has not breached the non-solicit provisions of the Merger Agreement in any material respect;
- the Vical board of directors concludes in good faith, based upon the advice of its outside legal counsel, that the failure to take such action could be reasonably likely to be inconsistent with the fiduciary duties of the board of directors under applicable law;
- Vical receives from such person an executed confidentiality agreement containing provisions, in the aggregate, at least as favorable to Vical as those contained in the confidentiality agreement between Vical and Brickell; and
- substantially contemporaneously with furnishing any such nonpublic information to such person, Vical furnishes such nonpublic information to Brickell.

Termination and Termination Fees (see page 110)

The Merger Agreement may be terminated by either party under certain circumstances, including, among others (and as further described in the section titled "*The Merger Agreement—Termination and Termination Fees*" below):

- if the closing of the Contemplated Transactions has not occurred by November 15, 2019;
- if a governmental body has issued a final and non-appealable order having the effect of permanently prohibiting the Contemplated Transactions;
- a material uncured breach by the other party of representations or certain covenants that would result in a failure of the applicable condition to the closing of the Merger; or
- if the applicable Vical stockholder approval is not obtained at the Special Meeting.

Vical may terminate the Merger Agreement in connection with:

- a superior offer, subject to certain conditions and payment to Brickell of a termination fee of $1.0 million.

Brickell may also terminate the Merger Agreement if at any time after the date of the Merger Agreement and prior to the closing of the Merger, the Vical Net Cash balance (as defined in the section titled "*The Merger Agreement—Conditions to the Completion of the Merger*") has fallen below $30.0 million and remains below $30.0 million for more than 10 days after Vical has received notice of Brickell's intent to terminate pursuant to the termination right described in this paragraph.

Vical may also terminate the Merger Agreement, and Brickell must pay to Vical a termination fee of $1.0 million within ten business days of such termination if:

- the Funding Agreement is terminated; or
- (A) the conditions precedent to Brickell's obligation to effect the Merger (other than those conditions that by their nature are to be satisfied by actions taken at the closing of the Merger) have been satisfied, (B) Vical has irrevocably confirmed by notice to Brickell that all such conditions have been satisfied as of the date of such notice (other than those conditions that by their nature are to be satisfied by actions taken at the closing of the Merger) and that it is willing to waive any other unsatisfied conditions (other than the conditions with regard to the Funding Agreement and those conditions that by their nature are to be satisfied by actions taken at the closing of the Merger) and (C) the Merger has not been consummated within three business days after the delivery of such notice.

Brickell may also terminate the Merger Agreement if (A) Vical fails to include in this proxy statement the Vical Board of Directors Recommendation or has made a Vical Board of Directors Recommendation Change (as such terms are defined in the section titled "*The Merger Agreement—Vical Special Meeting*"), (B) the Vical board of directors or any committee thereof publicly approves, endorses or recommends an acquisition proposal, or (C) Vical enters into any letter of intent or any contract relating to an acquisition proposal (other than a permitted confidentiality agreement). If (i) Brickell terminates the Merger Agreement pursuant to one of the events described in this paragraph, (ii) an acquisition proposal is publicly announced or disclosed to Vical or its board of directors after the date of the Merger Agreement but prior to the termination of the Merger Agreement, and (iii) within nine months after the date of such termination, Vical consummates an alternative transaction in respect of such acquisition proposal, Vical must also pay to Brickell a termination fee of $1.0 million.

Support Agreements (see page 113)

In connection with the execution of the Merger Agreement, officers, directors and certain stockholders of Brickell, who collectively beneficially owned or controlled approximately 75% of the voting power of Brickell's outstanding capital stock on an as-converted to common stock basis as of June 2, 2019 entered into support agreements with Vical under which such stockholders agreed to, among other things, vote in favor of the adoption and approval of the Merger Agreement and the approval of the Merger and the other transactions contemplated by the Merger Agreement.

The support agreements will terminate at the earlier of the effective time of the Merger, the termination of the Merger Agreement in accordance with its terms, and written notice of termination by Vical to such stockholder.

Lock-Up Agreements (see page 113)

The officers, directors and certain other stockholders of Brickell also enteredinto lock-up agreements, pursuant to which such stockholders have agreed not to, except in limited circumstances, transfer or dispose of, any shares of Vical common stock received in the Merger or any securities convertible into, or exercisable or exchangeable for, shares of Vical common stock received in the Merger for a period of 180 days after the closing date of the Merger.

The Brickell stockholders who executed lock-up agreements as of June 2, 2019 collectively beneficially owned or controlled, approximately 75% of the shares of Brickell's outstanding capital stock on an as-converted to common stock basis.

Concurrent Financing; Funding Agreement (see page 113)

Concurrent with the execution of the Merger Agreement, Brickell and NovaQuest entered into the Funding Agreement pursuant to which NovaQuest committed, subject to the terms and conditions of the Funding Agreement, to provide up to $25.0 million in near-term research and development funding to Brickell in connection with Brickell's sofpironium bromide product candidate in the Concurrent Financing, with $5.6 million of the commitment expected to be paid promptly following the closing of the Merger and the remaining portion of the commitment expected to be paid in quarterly payments equal to 67% of invoiced research and development expenses in connection with Brickell's sofpironium bromide product candidate incurred during the following four fiscal quarters. Upon receipt of marketing approvals in the United States for a sofpronium bromide product, Brickell will be obligated to make certain milestone payments to NovaQuest totaling $37.5 million. Beginning in the fiscal quarter that is two years following the first commercial sale of a sofpronium bromide product, Brickell will be required to make low single digit revenue sharing payments based on annual net sales worldwide (except for Japan, China and certain other countries). Generally, if Brickell suspends or terminates its development program in respect of sofpironium bromide, Brickell will be required to pay NovaQuest $25.0 million plus interest of between 8% and 12%. However, in the event that Brickell terminates its development program for sofpromium bromide for certain reasons, including serious safety issues, a failure of the product's Phase 3 studies, or the failure of the U.S. Food and Drug Administration ("FDA") to approve the product, Brickell will not be obligated to make any payments to NovaQuest unless it subsequently resumes the development program.

Under the Funding Agreement, Brickell makes various representations and warranties and commits to comply with various covenants. NovaQuest may terminate the Funding Agreement and terminate its obligation to make payments in the event of Brickell's material uncured breach of a representation or covenant under the Funding Agreement. Brickell will also enter into a Security Agreement with NovaQuest immediately following consummation of the Merger. Under the Security Agreement, NovaQuest will be able to exercise certain rights in the event of an event of default of the Funding Agreement. NovaQuest's rights following an event of default include, among other things, foreclosing on Brickell's assets in the United States relating to Brickell's sofpironium bromide product candidate and, in certain circumstances, accelerating payment obligations under the Funding Agreement. NovaQuest also has the right to suspend its funding obligations under the Funding Agreement in the event of certain adverse developments relating to Brickell's sofpironium bromide product candidate and in the event that certain of our senior executives leave us and we do not find replacements acceptable to NovaQuest. These provisions of the Funding Agreement are discussed in greater detail in the section titled *"Risk Factors"* in this proxy statement.

In connection with the Concurrent Financing, immediately following the closing of the Merger, Vical is obligated to issue the NovaQuest Warrants to purchase shares of Vical common stock. The number of shares of Vical common stock underlying the NovaQuest Warrants will be based on 10% warrant coverage on the $25.0 million NovaQuest funding commitment and the Exchange Ratio, and the exercise price of the NovaQuest Warrants will be determined based on a 10% premium to the Brickell price per share of common stock implied in the Merger, as adjusted for the Exchange Ratio.

Executive Officers of the Combined Company Following the Merger (see page 165)

Immediately following the Merger, the executive management team of the combined company is expected to be comprised of the following individuals:

Name	Position with the Combined Company	Current Position
Robert B. Brown	Chief Executive Officer and Director	Chief Executive Officer of Brickell
Andrew D. Sklawer	Co-Founder, Chief Operating Officer and Secretary	Chief Operating Officer and Secretary of Brickell
R. Michael Carruthers	Chief Financial Officer	Chief Financial Officer of Brickell
Deepak Chadha	Chief Research & Development Officer	Chief Research & Development Officer of Brickell
Jose Breton	Controller and Chief Accounting Officer	Controller and Chief Accounting Officer of Brickell
David McAvoy	General Counsel	General Counsel of Brickell

Directors of the Combined Company Following the Merger (see page 165)

At the effective time of the Merger, the combined company is expected to initially have a seven-member board of directors, comprised of Robert Brown, Reginald Hardy, George Abercrombie, Dr. William Ju, Dennison Veru, Vijay Samant and Gary Lyons until their respective successors are duly elected or appointed and qualified or their earlier death, resignation or removal.

The aforementioned board of directors will have an audit committee, a compensation committee and a nominating and corporate governance committee, in accordance with the Nasdaq rules. Dr. R. Gordon Douglas, Richard Beleson, Robert Merton, George Morrow and Thomas Shenk are expected to resign from their positions as directors of Vical, effective upon the effective time of the Merger. Mr. Samant is also expected to resign as the Chief Executive Officer of Vical, effective at the effective time of the Merger.

Charles Stiefel, a current member of the Brickell board of directors, is expected to resign from his position as a director of Brickell, which will be renamed Brickell Subsidiary, Inc., as of the effective time of the Merger.

Interests of the Vical Directors and Executive Officers in the Merger (see page 89)

In considering the recommendation of Vical's board of directors to approve the amendment of Vical's restated certificate of incorporation to effect the Reverse Split and the change of control resulting from the Merger pursuant to the Nasdaq rules, Vical's stockholders should be aware that members of the board of directors and executive officers of Vical have interests in the Merger that may be different from, or in addition to, your interests.

As of June 26, 2019, all directors and executive officers of Vical, together with their affiliates, beneficially owned approximately 5.6% of the outstanding shares of the Vical common stock.

Certain Material U.S. Federal Income Tax Consequences of the Merger (see page 93)

Regardless of whether the Merger qualifies as a reorganization within the meaning of Section 368(a) of the Code, the Merger will not result in any taxable gain or loss for U.S. federal income tax purposes to Brickell, Vical or any Vical stockholder in his, her or its capacity as a Vical stockholder.

Risk Factors (see page 25)

Both Vical and Brickell are subject to various risks associated with their businesses and their industries. In addition, the Merger, including the possibility that the Merger may not be completed, poses a number of risks to each company and its respective stockholders, including the following risks:

- If the proposed merger with Brickell is not consummated, Vical's business could suffer materially and Vical's stock price could decline;
- Some of Vical's officers and directors have conflicts of interest that may influence them to support or approve the Merger;
- Vical's severance agreements with Vical's executive officers and certain other employees require Vical to pay severance benefits to any of those persons who are terminated under specified circumstances, including in connection with a change of control of Vical, which could harm Vical's financial condition or results;
- The Merger may be completed even though material adverse changes may result from the announcement of the Merger, industry-wide changes and other causes;
- The market price of the combined company's common stock may decline as a result of the Merger;
- Vical's stockholders may not realize a benefit from the Merger commensurate with the ownership dilution they will experience in connection with the Merger;
- During the pendency of the Merger, Vical and Brickell will be subject to contractual limitations set forth in the Merger Agreement that restrict the parties' ability to enter into business combination transactions with another party;
- Because the lack of a public market for Brickell's common stock makes it difficult to evaluate the fairness of the Merger, Brickell's stockholders may receive consideration in the Merger that is greater than or less than the fair market value of Brickell's common stock;
- The Exchange Ratio is not adjustable based on the market price of Vical common stock, so the merger consideration at the closing of the Merger may have a greater or lesser value than at the time the Merger Agreement was signed;
- The opinion received by Vical's board of directors from MTS Securities has not been, and is not expected to be, updated to reflect changes in circumstances that may have occurred since the date of the opinion;
- Certain stockholders could attempt to influence changes within Vical that could adversely affect Vical's operations, financial condition and the value of Vical's common stock;
- Vical and Brickell may become involved in securities litigation or stockholder derivative litigation in connection with the Merger, and this could divert the attention of Vical and Brickell management and harm the combined company's business, and insurance coverage may not be sufficient to cover all related costs and damages;
- The Reverse Split may not increase Vical's stock price over the long-term;
- The Reverse Split may decrease the liquidity of Vical's common stock;
- The Reverse Split may lead to a decrease in Vical's overall market capitalization; and
- If any of the events described in "*Risks Related to Brickell's Development, Commercialization and Regulatory Approval of Brickell's Investigational Drug, Sofpironium Bromide,*" "*Risks Related to Brickell's Dependence on Third Parties*," "*Risks Related to Brickell's Business,*" *"Risks Related to Brickell's Financial Operations"* or "*Risks Related to Brickell's Intellectual Property*" occur, those events could cause the potential benefits of the Merger not to be realized.

These risks and other risks are discussed in greater detail under the section titled "Risk Factors" in this proxy statement. Vical encourages you to read and consider all of these risks carefully.

Regulatory Approvals (see page 93)

In the United States, Vical must comply with applicable federal and state securities laws and the rules and regulations of Nasdaq in connection with the issuance of shares of Vical common stock and the filing of this proxy statement with the SEC. Vical does not intend to seek any regulatory approval from antitrust authorities to consummate the transactions.

Nasdaq Capital Market Listing (see page 93)

Prior to the consummation of the Merger, Vical intends to file the Nasdaq Listing Application. If such application is accepted, Vical anticipates that Vical common stock will be listed on Nasdaq following the closing of the Merger and will trade under a new name, "Brickell Biotech, Inc." and new trading symbol, "BBI."

Anticipated Accounting Treatment (see page 94)

The Merger will be treated by Vical as a reverse merger recapitalization in accordance with accounting principles generally accepted in the United States. For accounting purposes, Brickell is considered to be acquiring Vical in the Merger.

Appraisal and Dissenters' Rights (see page 94)

Vical stockholders are not entitled to appraisal rights in connection with the Merger.

SELECTED HISTORICAL AND UNAUDITED PRO FORMA COMBINED FINANCIAL DATA

The following tables present summary historical financial data for each of Vical and Brickell, unaudited pro forma combined financial data for Vical and Brickell and comparative historical and unaudited pro forma per share data for Vical and Brickell.

Selected Historical Financial Data of Vical

The following table summarizes Vical's consolidated financial data as of the dates and for each of the periods indicated. The tables below present selected financial data of Vical, prepared in accordance with U.S. generally accepted accounting principles ("GAAP"). Vical's selected statement of operations data for the years ended December 31, 2018 and 2017 and balance sheet data as of December 31, 2018 and 2017 are derived from Vical's audited financial statements included in the Vical Annual Report on Form 10-K for the year ended December 31, 2018 (the "Vical 10-K"), which is filed with the SEC and incorporated by reference herein. Vical's selected statement of operations data for the six months ended June 30, 2019 and balance sheet data as of June 30, 2019 are derived from Vical's unaudited financial statements included in Vical's Quarterly Report on Form 10-Q for the six months ended June 30, 2019 (the "Vical 10-Q2"), which is filed with the SEC and incorporated by reference herein. Vical's historical results are not necessarily indicative of the results to be expected for any other period in the future. The following selected financial data are only a summary and should be read in conjunction with "*Vical Management's Discussion and Analysis of Financial Condition and Results of Operations*" and the financial statements and notes thereto appearing in the Vical10-K, which is incorporated by reference in this proxy statement.

	For the six months ended June 30,	For the year ended December 31,	
	2019	2018	2017
Statement of Operations Data:			
Revenue	$ —	$ 1,622,000	$ 13,819,000
Loss from operations	$ (8,259,000)	$ (19,646,000)	$ (13,386,000)
Net loss	$ (7,008,000)	$ (16,254,000)	$ (12,960,000)
Net loss per share, basic and diluted	$ (0.31)	$ (0.74)	$ (1.01)
Shares used in computing net loss per share, basic and diluted	22,404,000	21,842,000	12,888,000

	Six months ended June 30,	As of December 31,	
	2019	2018	2017
Balance Sheet Data:			
Cash, cash equivalents and marketable securities	$ 41,720,000	$ 48,071,000	$ 60,499,000
Working capital	$ 41,540,000	$ 45,618,000	$ 59,400,000
Total assets	$ 42,701,000	$ 52,344,000	$ 80,494,000
Total liabilities	$ 1,159,000	$ 3,581,000	$ 16,917,000
Accumulated deficit	$ (449,072,000)	$ (442,064,000)	$ (426,738,000)
Total stockholders' equity	$ 41,542,000	$ 48,763,000	$ 63,577,000

Selected Historical Financial Data of Brickell

The following table summarizes Brickell's financial data as of the date and for each of the periods indicated. The tables below present selected financial data of Brickell prepared in accordance with GAAP. Brickell's selected statement of operations for the years ended December 31, 2018 and 2017 and balance sheet data as of December 31, 2018 and 2017 are derived from Brickell's audited financial statements appearing elsewhere in this

proxy statement. Brickell's selected statement of operations for the six months ended June 30, 2019 and balance sheet data as of June 30, 2019 are derived from Brickell's unaudited financial statements appearing elsewhere in this proxy statement. Brickell's historical results are not necessarily indicative of the results to be expected for any other period in the future. The following selected financial data should be read in conjunction with "*Management's Discussion and Analysis of Brickell's Financial Condition and Results of Operations*" and the financial statements and notes thereto appearing elsewhere in this proxy statement.

	For the six months ended June 30,	For the year ended December 31,	
	2019	2018	2017
Statement of Operations Data:			
Revenue	$ 6,065,000	$ 10,888,000	$ 7,567,000
Loss from operations	$ (7,572,000)	$ (8,451,000)	$ (9,966,000)
Net loss	$ (8,234,000)	$ (9,236,000)	$ (11,116,000)
Net income (loss) available to common holders	$ 2,122,000	$ (15,172,000)	$ (23,041,000)
Net income (loss) per share available to common stockholders, basic	$ 1.24	$ (8.92)	$ (13.60)
Net loss per share available to common stockholders, diluted	$ (1.54)	$ (8.92)	$ (13.60)
Shares used in computing net income (loss) per share, basic	1,706,000	1,700,000	1,694,000
Shares used in computing net loss per share, diluted	5,346,000	1,700,000	1,694,000

	As of June 30	As of December 31,	
	2019	2018	2017
Balance Sheet Data:			
Cash and cash equivalents	$ 2,079,000	$ 8,067,000	$ 5,399,000
Working capital (deficit)	$ (19,614,000)	$ (11,824,000)	$ (2,688,000)
Total assets	$ 3,088,000	$ 8,749,000	$ 6,687,000
Total liabilities	$ 23,967,000	$ 22,077,000	$ 14,269,000
Accumulated deficit	$ (69,333,000)	$ (71,618,000)	$ (59,936,000)
Total stockholders' deficit	$ (68,813,000)	$ (71,618,000)	$ (59,936,000)

Selected Unaudited Pro Forma Combined Financial Data of Vical and Brickell

The following selected unaudited pro forma combined financial data was prepared based on the historical financial results reported by Vical and Brickell and is intended to show how the Merger might have affected historical financial statements. The following should be read in conjunction with the section titled "*Unaudited Pro Forma Combined Financial Statements*" beginning on page 173, the Vical 10-K incorporated by reference in this proxy statement, Brickell's audited historical financial statements and the notes thereto beginning on page F-1, the sections titled "*Vical Management's Discussion and Analysis of Financial Condition and Results of Operations*" beginning on page 150 and "*Management's Discussion and Analysis of Brickell's Financial Condition and Results of Operations*" beginning on page 151 of this proxy statement, the risk factor titled "*The unaudited pro forma financial information included in this proxy statement may not be representative of the combined company's results following the Merger*" on page 29, and the other information contained in this proxy statement. The following information does not give effect to the Reverse Split of Vical's common stock described in Proposal No. 1.

The unaudited pro forma combined financial statements were prepared in accordance with the regulations of the SEC. The pro forma adjustments reflecting the completion of the Merger are based upon a reverse recapitalization in accordance with GAAP and upon the assumptions set forth in the unaudited pro forma

combined financial statements. Brickell will be treated as the accounting acquirer and Vical will be treated as the acquiree for financial reporting purposes because, among other factors, immediately upon completion of the Merger, the Brickell shareholders prior to the Merger will hold a majority of the voting interest of the combined company, the seven-member board of directors of the combined company will include five of the current members of the Brickell board of directors, and therefore, members of Brickell's current board of directors will possess five of the seven seats on the of the board of directors of the combined company and the management team will be solely comprised of members of management from Brickell.

The unaudited pro forma combined balance sheet as of June 30, 2019 is presented as if the Merger had been completed on that date. The unaudited pro forma combined statements of operations and comprehensive loss for the year ended December 31, 2018 and the six months ended June 30, 2019 combines the historical statements of operations of Vical and Brickell and gives pro forma effect to the Merger as if it had been completed on January 1, 2018.

The historical financial data has been adjusted to give pro forma effect to events that are (i) directly attributable to the Merger, (ii) factually supportable and (iii) with respect to the statements of operations, expected to have a continuing impact on the combined results. The pro forma adjustments are preliminary and based on management's estimates of the fair value of the assets acquired and liabilities assumed, include estimates for the issuance of shares of common stock in the merger resulting from the anticipated issuance of securities by Brickell prior to the closing date of the Merger, and have been prepared to illustrate the estimated effect of the acquisition and certain other adjustments.

The unaudited pro forma combined financial data is presented for illustrative purposes only and is not necessarily indicative of the financial condition or results of operations of future periods or the financial condition or results of operations that actually would have been realized had the entities been combined during the periods presented. In addition, as explained in more detail in the accompanying notes to the unaudited pro forma combined financial statements (see the section titled "*Unaudited Pro Forma Combined Financial Statements*" beginning on page 173), the preliminary acquisition-date fair value of the identifiable assets acquired and liabilities assumed, and the estimated shares of common stock outstanding reflected in the unaudited pro forma combined financial statements is subject to adjustment and may vary from the actual amounts that will be recorded upon completion of the Merger.

	Six Months Ended June 30, 2019	Year Ended December 31, 2018
Statement of Operations Data:		
Revenue	$ 6,065,000	$ 12,510,000
Loss from operations	$ (14,876,000)	$(28,097,000)
Net loss	$ (14,002,000)	$(25,734,000)
Net loss per share, basic	$ (0.24)	$ (0.44)
Net loss per share, diluted	$ (0.24)	$ (0.44)
Shares used in computing net loss per share, basic and diluted	58,650,000	58,650,000

	As of June 30, 2019
Balance Sheet Data:	
Cash, cash equivalents and marketable securities	$ 41,194,000
Working capital	21,316,000
Total assets	43,184,000
Total liabilities	22,083,000
Accumulated deficit	(70,193,000)
Total stockholders' equity	$ 21,101,000

Comparative Historical and Unaudited Pro Forma Per Share Data

The following table shows per common share data regarding basic and diluted earnings, cash dividends and book value for (a) Vical on a historical basis, (b) Brickell on a historical basis, and (c) Vical and Brickell on a pro forma combined basis.

The following pro forma information has been derived from and should be read in conjunction with Vical's and Brickell's respective unaudited consolidated financial statements for the six months ended June 30, 2019, which, in the case of Vical's financial statements, are incorporated herein by reference, and in the case of Brickell's financial statements, are included elsewhere in this proxy statement. **This information is presented for illustrative purposes only.** You should not rely on the pro forma combined amounts, as they are not necessarily indicative of the operating results or financial position that would have occurred if the Merger had been completed as of the dates indicated, nor are they necessarily indicative of the future operating results or financial position of the combined company (see risk factor titled "*The unaudited pro forma financial information included in this proxy statement may not be representative of the combined company's results following the Merger*" on page 29). The pro forma information, although helpful in illustrating the financial characteristics of the combined company under one set of assumptions, does not reflect the benefits of potential cost savings, the impact of restructuring and Merger-related costs (except Merger-related costs that are reflected in the unaudited pro forma combined balance sheet included elsewhere herein), or other factors that may result as a consequence of the Merger and, accordingly, does not attempt to predict or suggest future results. The information below should be read in conjunction with the section titled "*Unaudited Pro Forma Combined Financial Statements*."

	Vical Historical	Brickell Historical	Pro Forma Combined
For the six months ended June 30, 2019:			
Basic earnings per share	$ (0.31)	$ 1.24	$ (0.24)
Diluted earnings per share	$ (0.31)	$ (1.54)	$ (0.24)
Cash dividends per share(1)	$ —	$ —	$ —
Book value per common share as of period end, basic(2)	$ 1.85	$ (12.24)	$ 0.36
Book value per common share as of period end, diluted(2)	$ 1.85	$ (3.91)	$ 0.36

(1) Although the dividend policy of the combined company will be determined by the board of directors of the combined company following completion of the Merger, it is expected that the combined company will not declare cash dividends for the foreseeable future (see risk factor titled "*The combined company does not anticipate paying any dividends in the foreseeable future*" on page 53).

(2) Book value is calculated as total assets less total liabilities as of June 30, 2019.

MARKET PRICE AND DIVIDEND INFORMATION

Vical common stock is listed on Nasdaq under the symbol "VICL." Brickell is a private company and its common stock and preferred stock are not publicly traded.

Vical common stock

The closing price of Vical common stock on May 31, 2019, the business day immediately prior to the public announcement of the Merger on June 3, 2019, as reported on Nasdaq, was $1.15 per share. The closing price of Vical common stock on July 11, 2019, as reported on Nasdaq, was $0.78 per share.

Because the market price of Vical common stock is subject to fluctuation, the market value of the shares of Vical common stock that Brickell stockholders will be entitled to receive in the Merger may increase or decrease.

Assuming successful application for initial listing with Nasdaq, following the consummation of the Merger, Vical common stock will continue to be listed on Nasdaq and will trade under Vical's new name "Brickell Biotech, Inc." and new trading symbol "BBI."

As of July 2, 2019, the record date for the Special Meeting, Vical had 125 holders of record of its common stock.

Dividends

Vical has never declared or paid any cash dividends on its common stock and does not anticipate paying cash dividends on its common stock for the foreseeable future. Brickell has never declared or paid any cash dividends on shares of its common stock.

Brickell anticipates that the combined company will retain all of its future earnings to advance the clinical trials for its products, and does not anticipate paying any cash dividends on shares of its common stock in the foreseeable future. Any future determination to declare cash dividends on shares of the combined company's common stock will be made at the discretion of its board of directors, subject to applicable law and contractual restrictions and will depend on its financial condition, results of operations, capital requirements, general business conditions and other factors that its board of directors may deem relevant.

RISK FACTORS

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 material risks described below before deciding how to vote your shares of Vical common stock. You should also read and consider the risks associated with the business of Vical because these risks may also affect the combined company—these risks can be found in the Vical 10-K and the Vical 10-Q2, as filed with the SEC on March 1, 2019 and July 12, 2019, respectively, and incorporated by reference herein. You should also read and consider the other information in this proxy statement and the other documents incorporated by reference into this proxy statement. Please see the section titled "Where You Can Find More Information" on page 186 of this proxy statement.

Risks Related to the Merger

If the Merger with Brickell is not consummated, Vical's business could suffer materially and Vical's stock price could decline.

The consummation of the Merger with Brickell is subject to the satisfaction of a number of closing conditions, including the receipt of Vical stockholder approvals, Vical's successful application for initial listing with Nasdaq, the occurrence of the Special Meeting, the satisfaction of the Vical Net Cash condition and other closing conditions. For a more detailed discussion of the Vical Net Cash condition and other closing conditions see the section titled "*The Merger Agreement—Conditions to the Completion of the Merger.*" Vical and Brickell are targeting a closing of the Merger in the third quarter of 2019.

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

- Vical has incurred and expects to continue to incur significant expenses related to the Merger with Brickell, even if the Merger is not consummated.
- The Merger Agreement contains covenants restricting Vical's solicitation of competing acquisition proposals and the conduct of Vical'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 Brickell. Accordingly, Vical may be unable to pursue business opportunities that would otherwise be in its best interest as a standalone company.
- Vical has invested significant time and resources in the transaction process and if the Merger Agreement is terminated Vical will have limited prospects, given the fact that Vical has discontinued all activities relating to development of its clinical programs, including its ASP0113 program collaboration with Astellas, its HSV-2 vaccine program and its VL-2397 Phase 2 clinical trial.
- Vical could be obligated to pay Brickell a $1.0 million termination fee in connection with the termination of the Merger Agreement, depending on the reason for the termination.

In addition, if the Merger Agreement is terminated and Vical'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. Due to the lengthy nature of the strategic process, the further passage of time will diminish cash available. In such circumstances, Vical's board of directors may elect to, among other things, divest all or a portion of Vical's business, or take the steps necessary to liquidate all of Vical's business and assets, and in either such case, the consideration that Vical receives may be less attractive than the consideration to be received by Vical pursuant to the Merger Agreement.

Some of Vical's officers and directors have conflicts of interest that may influence them to support or approve the Merger.

Officers and directors of Vical 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 a director of the combined company, severance benefits and continued indemnification. These interests, among others, may influence the officers and directors of Vical to support or approve the Merger. For a more detailed discussion see "*The Merger—Interests of the Vical Directors and Executive Officers in the Merger*."

Vical's severance agreements with Vical's executive officers and certain other employees require Vical to pay severance benefits to any of those persons who are terminated under specified circumstances, including in connection with a change of control of Vical, which could harm Vical's financial condition or results.

Vical's executive officers and certain other employees are parties to severance agreements that contain change of control and severance provisions providing for severance and other benefits and acceleration of vesting of stock options in the event of a termination of employment under specified circumstances. Based on the terms of their respective severance agreements, Vical's executive officers will be entitled to receive an aggregate of approximately $2.3 million in severance benefits due to the terminations of their employment upon a change of control in connection with the consummation of the Merger. The payment of these severance benefits could harm Vical's financial condition and results and reduce the cash available to the combined company following 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 following June 2, 2019, the date of the Merger Agreement. 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 Vical or Brickell, to the extent they resulted from the following (unless, in some cases, they have a disproportionate effect on Vical or Brickell, as the case may be):

- changes in the general business or economic conditions affecting the industry in which Vical and Brickell, and their respective affiliates, operate;
- acts of war, armed hostilities or terrorism;
- changes in financial, banking or securities markets;
- any change in, or any compliance with or action taken for the purpose of complying with, any law or GAAP;
- the taking of any action required to be taken by the Merger Agreement;
- with respect to Vical, any change in the stock price or trading volume of Vical's common stock;
- with respect to Vical, any failure to meet analysts' financial or industry expectations or projections; and
- with respect to Vical, the announcement of the Merger Agreement or the pendency of the Merger.

If adverse changes occur but Vical and Brickell must still complete the Merger, the combined company's stock price may suffer.

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.

Vical's 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, Vical's 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 the two companies. 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.

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. Actual transaction costs may substantially exceed estimates and may have an adverse effect on the combined company's financial condition and operating results.

During the pendency of the Merger, Vical and Brickell will be subject to contractual limitations set forth in the Merger Agreement that restrict the parties' ability to enter into business combination transactions with another party.

Covenants in the Merger Agreement impede the ability of Vical or Brickell 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 Vical's common stock, a tender offer for Vical's common stock, a Merger or other business combination outside the ordinary course of business. Any such transactions could be favorable to such party's stockholders.

Because the lack of a public market for Brickell's common stock makes it difficult to evaluate the fairness of the Merger, Brickell's stockholders may receive consideration in the Merger that is greater than or less than the fair market value of Brickell's common stock.

The outstanding share capital of Brickell is privately held and is not traded in any public market. The lack of a public market makes it difficult to determine the fair market value of Brickell. It is possible that the value of Vical's common stock to be issued in connection with the Merger will be greater than the fair market value of Brickell.

Because the Merger will result in an ownership change under Section 382 of the Internal Revenue Code (the "Code") for Vical, Vical'spre-merger net operating loss carryforwards and certain other tax attributes will be subject to limitations. The net operating loss carryforwards and other tax attributes of Brickell and of the combined organization may also be subject to limitations as a result of ownership changes.

If a corporation undergoes an "ownership change" within the meaning of Section 382 of the Code ("Section 382"), the corporation's net operating loss carryforwards and certain other tax attributes arising before

the ownership change are subject to limitations on use after the ownership change. In general, an ownership change occurs if there is a cumulative change in the corporation's equity ownership by certain stockholders that exceeds fifty percentage points over a rolling three-year period. Similar rules may apply under state tax laws. The Merger will result in an ownership change for Vical and, accordingly, Vical's net operating loss carryforwards and certain other tax attributes will be subject to limitations (or disallowance) on their use after the Merger. Brickell's net operating loss carryforwards may also be subject to limitation as a result of prior shifts in equity ownership and/or the Merger. Additional ownership changes in the future could result in additional limitations on Vical's, Brickell's and the combined organization's net operating loss carryforwards. Consequently, even if the combined organization achieves profitability, it may not be able to utilize a material portion of Vical's, Brickell's or the combined organization's net operating loss carryforwards and other tax attributes, which could have a material adverse effect on cash flow and results of operations.

The Exchange Ratio is not adjustable based on the market price of Vical common stock so the merger consideration at the closing of the Merger may have a greater or lesser value than at the time the Merger Agreement was signed.

At the effective time of the Merger, outstanding shares of Brickell capital stock will be converted into shares of Vical common stock. Applying the Exchange Ratio, the former Brickell securityholders and NovaQuest, collectively, are expected to own, subject to adjustment, approximately 60% of the aggregate number of shares of Vical common stock, and the securityholders of Vical as of immediately prior to the Merger are expected to own, subject to adjustment, approximately 40% of the aggregate number of shares of Vical common stock (in each case on a fully diluted basis using the treasury stock method in instances other than with respect to the NovaQuest Warrants and certain equity issuances by Brickell following the signing of the Merger Agreement and prior to the completion of the Merger). The exchange ratio formula is based on a $60.0 million valuation of Brickell and a $40.0 million valuation of Vical and is subject to adjustment based on the Vical Net Cash and Brickell Net Working Capital balances (each as defined in the section titled "*The Merger Agreement—Conditions to the Completion of the Merger*") prior to the completion of the Merger.

Any changes in the market price of Vical common stock before the completion of the Merger will not affect the number of shares Brickell stockholders will be entitled to receive pursuant to the Merger Agreement. Therefore, if before the completion of the Merger the market price of Vical common stock declines from the market price on the date of the Merger Agreement, then Brickell securityholders could receive merger consideration with substantially lower value. Similarly, if before the completion of the Merger the market price of Vical common stock increases from the market price on the date of the Merger Agreement, then Brickell securityholders could receive merger consideration with substantially more value for their shares of Brickell capital stock than the parties had negotiated for in the establishment of the Exchange Ratio. The Merger Agreement does not include a price-based termination right. Because the Exchange Ratio does not adjust as a result of changes in the value of Vical common stock, for each one percentage point that the market value of Vical common stock rises or declines, there is a corresponding one percentage point rise or decline, respectively, in the value of the total merger consideration issued to Brickell securityholders.

The opinion received by Vical's board of directors from MTS Securities has not been, and is not expected to be, updated to reflect changes in circumstances that may have occurred since the date of the opinion.

Vical retained MTS as a financial advisor in connection with the Merger. On June 2, 2019, MTS Securities, an affiliate of MTS, delivered its opinion to the board of directors of Vical that, as of June 2, 2019, and subject to the various assumptions made, procedures followed, matters considered and qualifications and limitations set forth in such written opinion, the Exchange Ratio is fair, from a financial point of view, to the holders of Vical common stock (other than Excluded Shares (as defined in "*The Merger—Opinion of MTS Securities, LLC*"). The opinion addresses solely the fairness, from a financial point of view and as of the date of such opinion, of the Exchange Ratio to the holders of Vical common stock and does not address any other terms in the Merger Agreement, or any other agreement contemplated by the Merger Agreement or relating to the Merger or any

other aspect or implication of the Merger, including, without limitation, the form or structure of the Merger or the fairness of the Merger or the Exchange Ratio to any other securityholders or creditors or any other constituency of Vical. MTS Securities did not consider any potential legislative or regulatory changes currently being considered by the SEC, or any other governmental or regulatory bodies, or any changes in accounting methods or generally accepted accounting principles that may be adopted by the SEC or the Financial Accounting Standards Board. It should be understood that, although subsequent developments may affect the conclusion reached in the opinion, MTS Securities does not have any obligation to update, revise or reaffirm such opinion and has not done so. See the section titled "*The Merger—Opinion of MTS Securities, LLC*" and Appendix B to this proxy statement.

Vical and Brickell may become involved in securities litigation or stockholder derivative litigation in connection with the Merger, and this could divert the attention of Vical and Brickell management and harm the combined company's business, and insurance coverage may not be sufficient to cover all related costs and damages.

Securities litigation or stockholder derivative litigation frequently follows the announcement of certain significant business transactions, such as the sale of a business division or announcement of a business combination transaction. Vical and Brickell may become involved in this type of litigation in connection with the Merger, and the combined company may become involved in this type of litigation in the future. Litigation often is expensive and diverts management's attention and resources, which could adversely affect the business of Vical, Brickell and the combined company, and insurance coverage may not be sufficient to cover all related costs and damages.

If any of the events described in "Risks Related to Brickell's Development, Commercialization and Regulatory Approval of Brickell's Investigational Drug, Sofpironium Bromide," "Risks Related to Brickell's Dependence on Third Parties" "Risks Related to Brickell's Business," "Risks Related to Brickell's Financial Operations" or "Risks Related to Brickell's Intellectual Property" occur, those events could cause the potential benefits of the Merger not to be realized.

Brickell's business is expected to constitute substantially all of the business of the combined company following the Merger. As a result, the risks described below in the sections titled "*Risks Related to Brickell's Development, Commercialization and Regulatory Approval of Brickell's Investigational Drug, Sofpironium Bromide*" beginning on page 33, "*Risks Related to Brickell's Dependence on Third Parties*" beginning on page 47, "*Risks Related to Brickell's Business*" beginning on page 40, *"Risks Related to Brickell's Financial Operations"* beginning on page 50 and "*Risks Related to Brickell's Intellectual Property*" beginning on page 54 are among the most significant risks to the combined company if the Merger is completed. To the extent any of the events in the risks described in the sections referenced in the previous sentence occur, 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 unaudited pro forma financial information included in this proxy statement may not be representative of the combined company's results following the Merger.

The unaudited pro forma financial information included in this proxy statement has been presented for informational purposes only and is not necessarily indicative of the financial position or results of operations that actually would have occurred had the Merger and related transactions been completed as of the date indicated, nor is it indicative of the combined company's future operating results or financial position. The pro forma financial statements have been derived from the historical financial statements of Vical and Brickell and adjustments and assumptions have been made regarding the combined company after giving effect to the Merger. The information upon which these adjustments and assumptions have been made is preliminary, and these kinds of adjustments and assumptions are difficult to make with accuracy. Moreover, the pro forma financial statements do not reflect all costs that are expected to be incurred by the combined company in connection with

the Merger. As a result, the actual financial condition of the combined company following the Merger may not be consistent with, or evident from, these pro forma financial statements. The assumptions used in preparing the pro forma financial information may not prove to be accurate, and other factors may affect the combined company's financial condition following the Merger and related transactions.

Risks Related to the Proposed Reverse Split

The Reverse Split may not increase the combined company's stock price over the long-term.

The principal purpose of the Reverse Split is to increase the per-share market price of the combined company's common stock above the minimum bid price requirement under the Nasdaq rules so that the listing of the combined company and the shares of the combined company common stock being issued in the Merger on Nasdaq will be approved. It cannot be assured, however, that the Reverse Split will accomplish this objective for any meaningful period of time. While it is expected that the reduction in the number of outstanding shares of common stock will proportionally increase the market price of the combined company's common stock, it cannot be assured that the Reverse Split will increase the market price of its common stock by a multiple of the reverse stock split ratio mutually agreed by Brickell and Vical, or result in any permanent or sustained increase in the market price of the combined company's common stock, which is dependent upon many factors, including the combined company's business and financial performance, general market conditions, and prospects for future success. Thus, while the stock price of the combined company might meet the continued listing requirements for Nasdaq initially, it cannot be assured that it will continue to do so.

The Reverse Split may decrease the liquidity of the combined company's common stock.

Although Vical's board of directors believes that the anticipated increase in the market price of the combined company's common stock could encourage interest in its common stock and possibly promote greater liquidity for its stockholders, such liquidity could also be adversely affected by the reduced number of shares outstanding after the Reverse Split. The reduction in the number of outstanding shares may lead to reduced trading and a smaller number of market makers for the combined company's common stock.

The Reverse Split may lead to a decrease in the combined company's overall market capitalization.

Should the market price of the combined company's common stock decline after the Reverse Split, the percentage decline may be greater, due to the smaller number of shares outstanding, than it would have been prior to the Reverse Split. A reverse stock split is often viewed negatively by the market and, consequently, can lead to a decrease in the combined company's overall market capitalization. If the per share market price does not increase in proportion to the reverse stock split ratio, then the value of the combined company, as measured by its stock capitalization, will be reduced. In some cases, the per-share stock price of companies that have effected reverse stock splits subsequently declined back topre-reverse split levels, and accordingly, it cannot be assured that the total market value of the combined company's common stock will remain the same after the Reverse Split is effected, or that the Reverse Split will not have an adverse effect on the combined company's stock price due to the reduced number of shares outstanding after the Reverse Split.

Risks Related to Vical

For risks related to the business of Vical, please refer to the section titled "Item 1A. Risk Factors" set forth in the Vical 10-K, as filed with the SEC on March 1, 2019, which report is incorporated by reference herein.

Risks Related to Vical's Common Stock

The price of Vical's common stock has been and may continue to be volatile.

The stock markets in general, the markets for biotechnology stocks and, in particular, the stock price of Vical's common stock, have experienced extreme volatility. The market for Vical's common stock is

characterized by significant price volatility when compared to the shares of larger, more established companies that trade on a national securities exchange and have large public floats, and Vical expects that its share price will continue to be more volatile than the shares of such larger, more established companies for the indefinite future. The volatility in Vical's stock price is attributable to a number of factors. Vical's common stock are, compared to the shares of such larger, more established companies, infrequently and thinly traded. As a consequence of this limited liquidity, the trading of relatively small quantities of shares by Vical's stockholders may disproportionately influence the price of those shares in either direction. The price for Vical's stock could, for example, decline precipitously in the event that a large number of shares of its common stock are sold on the market without commensurate demand. Vical's common stock is also a speculative or "risky" investment due to the status of its drug development programs and Vical's lack of profits to date, and uncertainty of future market acceptance for its potential products and its ability to continue as a going concern. As a consequence of this enhanced risk, more risk-adverse investors may, under the fear of losing all or most of their investment in the event of negative news or lack of progress, be more inclined to sell their shares on the market more quickly and at greater discounts than would be the case with the stock of a larger, more established company that has a large public float and broader stockholder base. Many of these factors are beyond Vical's control and may decrease the market price of Vical's common stock, regardless of Vical's operating performance. Vical cannot make any predictions or projections as to what the prevailing market price for its common shares will be at any time, including as to whether its common stock will sustain their current market prices, or as to what effect that the sale of shares or the availability of common stock for sale at any time will have on the prevailing market price.

In the past, following periods of volatility in the market price of a particular company's securities, litigation has often been brought against that company. Any such lawsuit could consume resources and management time and attention, which could adversely affect Vical's business.

Provisions of Delaware law and Vical's current certificate of incorporation and bylaws may discourage another company from acquiring it and may prevent attempts by Vical's stockholders to replace or remove Vical's current management.

Provisions of Delaware law and Vical's current certificate of incorporation and bylaws may discourage, delay or prevent a Merger or acquisition that stockholders may consider favorable, including transactions in which you might otherwise receive a premium for your shares. In addition, these provisions may frustrate or prevent any attempts by Vical's stockholders to replace or remove Vical's current management by making it more difficult for stockholders to replace or remove Vical's board of directors. These provisions include:

- authorizing the issuance of "blank check" preferred stock without any need for action by stockholders;
- providing for a classified board of directors with staggered terms;
- requiring supermajority stockholder voting to effect certain amendments to Vical's restated certificate of incorporation and bylaws;
- eliminating the ability of stockholders to call special meetings of stockholders;
- prohibiting stockholder action by written consent; and
- establishing advance notice requirements for nominations for election to Vical's board of directors or for proposing matters that can be acted on by stockholders at stockholder meetings.

Although Vical believes these provisions collectively provide for an opportunity to receive higher bids by requiring potential acquirers to negotiate with Vical's board of directors, they would apply even if an offer may be considered beneficial by some stockholders. In addition, these provisions may frustrate or prevent any attempts by Vical's stockholders to replace or remove Vical's current management by making it difficult for stockholders to replace members of Vical's board of directors, which is responsible for appointing the members of Vical's management.

If the holders of Brickell's options, warrants and convertible notes exercise their rights to acquire stock of the combined company, the ownership of the stockholders of the combined company will be diluted.

As of the date of this proxy statement, Brickell has issued $5.9 million in convertible notes and related warrants at 50% coverage, to acquire approximately 1,177,389 shares of common stock (based on the estimated price per share of Brickell common stock implied in the Merger), and has 1,811,800 options issued and outstanding. In addition, upon closing of the Funding Agreement, Vical will issue warrants to NovaQuest (the "NovaQuest Warrants") to purchase shares of Vical common stock. The number of shares of common stock underlying the NovaQuest Warrants will be based on 10% warrant coverage on the $25.0 million NovaQuest funding commitment and the Exchange Ratio, and the exercise price of the NovaQuest Warrants will be determined based on a 10% premium to the Brickell price per share of common stock implied in the Merger, as adjusted for the Exchange Ratio. In total, Brickell intends to issue up to $12.5 million in convertible notes, and related warrants at 50% coverage, to acquire 2,493,665 shares of Brickell common stock (based on the estimated price per share of Brickell common stock implied in the Merger), as well as options to acquire up to 2,607,274 shares of Brickell common stock, prior to consummation of the Merger. If the holders of options, warrants (including NovaQuest) and convertible notes exercise their rights to acquire stock of the combined company, the percentage ownership of the combined company's stockholders existing prior to the exercise of rights will be diluted.

Risks Related to Vical Management Brickell Projections

You should be aware that uncertainties are inherent in prospective financial projections of any kind, and such uncertainties increase with the passage of time. None of Brickell or Vical or any of their respective affiliates, advisors, officers, directors, or representatives has made or makes any representation or can give any assurance to any Vical stockholders, or any other person, regarding the ultimate performance of Brickell compared to the information set forth in the section titled "Certain Vical Management Unaudited Prospective Financial Information" or that any such results will be achieved.

The inclusion of the Vical management Brickell projections in this proxy statement should not be regarded as an indication that Vical, Brickell or their respective advisors or other representatives considered or consider the projections to be necessarily predictive of actual future performance or events, and the Vical management Brickell projections set forth in the section titled "*Certain Vical Management Unaudited Prospective Financial Information*" should not be relied upon as such.

The Vical management Brickell projections were prepared by management of Vical based, in part, on certain information furnished by Brickell. The prospective financial information was not prepared with a view toward public disclosure nor was it prepared with a view toward compliance with the guidelines established by GAAP. Neither the independent registered public accounting firm of Vical, Brickell nor any other independent accounts has audited, reviewed, compiled, examined or performed any procedures with respect to the accompanying unaudited prospective financial information for the purpose of its inclusion herein, and accordingly, neither the independent registered public accounting firm of Vical, Brickell, nor any other independent accountant expresses an opinion or provides any form of assurance with respect thereto for the purpose of this proxy statement. Due to inherent uncertainties in financial projections of any kind, stockholders are cautioned not to place undue reliance, if any, on the Vical management Brickell projections.

Vical management Brickell projections are subjective in nature and may not be realized.

The Vical management Brickell projections are inherently subjective in nature and susceptible to interpretation and, accordingly, such projections may not be achieved. The Vical management Brickell projections also reflect numerous assumptions made by management, including material assumptions regarding, among other things, timing of Phase 3 clinical trials, timing of receipt of regulatory approvals, as to which there can be no assurance, market size, commercial efforts, and numerous other matters that may not be realized and are subject to significant uncertainties and contingencies, all of which are difficult to predict and many of which are beyond the control of the preparing party. Accordingly, there can be no assurance that the assumptions made

in preparing the Vical management Brickell projections upon which the projected financial information was based will be realized. There may be differences between actual and projected results, and the differences may be material. The risk that these uncertainties and contingencies could cause the assumptions to fail to be reflective of actual results is further increased by the length of time over which these assumptions apply. The failure to achieve assumptions and projections in early periods could have a compounding effect on the projections shown for the later periods. Thus, any such failure of an assumption or projection to be reflective of actual results in an early period could have a greater effect on the projected results failing to be reflective of actual events in later periods. Brickell is a clinical stage company, without a U.S. Food and Drug Administration ("FDA") approved product, and as discussed in this proxy statement, its business is subject to numerous risks. Moreover, 15-year projections in the context of a clinical stage company are inherently unreliable given the many variables, especially in later years, that may affect results.

All of these assumptions involve variables making them difficult to predict, and some are beyond the control of Brickell and Vical. Although Vical's management believes that there was a reasonable basis for its projections and underlying assumptions, any assumptions for near-term projected cases remain uncertain, and such uncertainty increases with the length of the projected period. The projections are forward-looking statements and are subject to risks and uncertainties. See the section titled "*Cautionary Note Concerning Forward-Looking Statements*" on page 59. For a discussion of the Vical management Brickell projections, please see the section titled "*Certain Vical Management Unaudited Prospective Financial Information*" beginning on page 77.

In developing the Vical management Brickell projections provided to the Vical board, Vical management made numerous material estimates with respect to Brickell for the years ending December 31, 2019 through 2034.

The Vical management Brickell projections prepared by Vical management were based on estimates from both discussions with, and materials provided, by Brickell for the years from 2019 to 2025, which themselves were based on numerous assumptions. Additionally, such estimates were then used by Vical to extrapolate certain prospective financial results based on Vical management's assessment of comparable companies and industry metrics (except that the unadjusted projections in respect of sofpirinium bromide milestone and royalty payments were provided by Brickell's management and were based on Brickell's management's estimates for each of the calendar years ending December 31, 2019 through 2033). Vical management did not consider ranges for various financial measures but rather considered in deriving these measures, peak sales amounts, which may reduce the utility in later years of the prospective financial results.

Risks Related to Brickell

Risks Related to Brickell's Development, Commercialization and Regulatory Approval of Brickell's Investigational Drug, Sofpironium Bromide

Brickell's business depends on the successful clinical development, regulatory approval and commercialization of sofpironium bromide.

The success of Brickell's business, including its ability to finance itself and generate revenue in the future, primarily depends on the successful development, regulatory approval and commercialization of sofpironium bromide. The clinical and commercial success of sofpironium bromide depends on a number of factors, including the following:

- timely and successful completion of Phase 3 clinical trials not yet initiated, which may be significantly slower or costlier than Brickell currently anticipates and/or produce results that do not achieve the endpoints of the trials;
- whether Brickell is required by the FDA or similar foreign regulatory agencies to conduct additional clinical trials beyond those planned to support the approval and commercialization of sofpironium bromide;

- achieving and maintaining, and, where applicable, ensuring that Brickell's third-party contractors achieve and maintain, compliance with their contractual obligations and with all regulatory requirements applicable to sofpironium bromide;
- ability of third parties with whom Brickell contracts to manufacture adequate clinical trial and commercial supplies of sofpironium bromide, to remain in good standing with regulatory agencies and to develop, validate and maintain commercially viable manufacturing processes that are compliant with current good manufacturing practices ("cGMP");
- a continued acceptable safety profile during clinical development and following approval of sofpironium bromide;
- ability to obtain favorable labeling for sofpironium bromide through regulators that allows for successful commercialization, given the drug may be marketed only to the extent approved by these regulatory authorities (unlike with most other industries);
- ability to successfully commercialize sofpironium bromide in the United States and internationally, if approved for marketing, sale and distribution in such countries and territories, whether alone or in collaboration with Kaken Pharmaceutical Co. Ltd. ("Kaken") or others;
- acceptance by physicians, insurers and payors, and patients of the quality, benefits, safety and efficacy of sofpironium bromide, if approved, including relative to alternative and competing treatments;
- existence of a regulatory environment conducive to the success of sofpironium bromide;
- ability to price sofpironium bromide to recover Brickell's development costs and generate a satisfactory profit margin; and
- Brickell's ability and its partners' ability to establish and enforce intellectual property rights in and to sofpironium bromide.

If Brickell does not achieve one or more of these factors, many of which are beyond its control, in a timely manner or at all, Brickell could experience significant delays or an inability to obtain regulatory approvals or commercialize sofpironium bromide. Even if regulatory approvals are obtained, Brickell may never be able to successfully commercialize sofpironium bromide. Accordingly, Brickell cannot assure you that it will be able to generate sufficient revenue through the sale of sofpironium bromide to continue its business.

Brickell has never conducted a Phase 3 clinical trial itself and may be unable to successfully do so for sofpironium bromide.

The conduct of a Phase 3 clinical trial is a long, expensive, complicated and highly regulated process. Although Brickell's employees have conducted successful Phase 2 and Phase 3 clinical trials in the past across many therapeutic areas while employed at other companies, Brickell as a company has not conducted a Phase 3 pivotal clinical trial, and as a result may require more time and incur greater costs than it anticipates. Brickell commenced a Phase 3 long-term safety study for sofpironium bromide gel in the third quarter of 2018 and intends to initiate Phase 3 pivotal clinical trials for the registration of sofpironium bromide gel in the second half of 2019 for the U.S. market, as more fully described in "Description of Brickell's Business." Failure to commence or complete, or delays in, Brickell's planned clinical trials would prevent it from or delay Brickell in obtaining regulatory approval of and commercializing sofpironium bromide and could prevent it from or delay it in receiving development- or regulatory-based milestone payments and commercializing sofpironium bromide gel for the treatment of hyperhidrosis, which would adversely impact its financial performance, as well as put Brickell in potential breach of material contracts for the development of sofpironium bromide subjecting it to significant contract liabilities.

Clinical drug development for sofpironium bromide is very expensive, time-consuming and uncertain.

Clinical development for sofpironium bromide is very expensive, time-consuming, difficult to design and implement, and its outcome is inherently uncertain. Most product candidates that commence clinical trials are

never approved by regulatory authorities for commercialization and of those that are approved many do not cover their costs of development. In addition, Brickell, any partner with which it currently or may in the future collaborate, the FDA, an institutional review board ("IRB"), or other regulatory authorities, including state and local agencies and counterpart agencies in foreign countries, may suspend, delay, require modifications to or terminate Brickell's clinical trials at any time.

In the case of sofpironium bromide, Brickell is seeking to deliver sufficient concentrations of the active pharmaceutical ingredient ("API") absorbed from the skin surface through the skin barrier to the targeted dermal tissue to achieve the intended therapeutic effect. The topical route of administration may involve new dosage forms, which can be difficult to develop and manufacture and may raise novel regulatory issues and result in development or review delays.

Use of patient-reported outcome assessments ("PROs") in sofpironium bromide clinical trials may delay the development of sofpironium bromide gel or increase Brickell's development costs.

Due to the difficulty of objectively measuring the symptoms of hyperhidrosis, which is the primary target of treatment for sofpironium bromide, PROs will have an important role in the development and regulatory approval of sofpironium bromide. PROs involve patients' own subjective assessments of efficacy, and this subjectivity increases the uncertainty of determining and achieving clinical endpoints. Such assessments can be influenced by factors outside of Brickell's reasonable control, and can vary widely from day to day for a particular patient, and from patient to patient and site to site within a clinical trial.

Sofpironium bromide may cause undesirable side effects or have other unexpected properties that could delay or prevent its regulatory approval, limit the commercial profile of an approved label, or result in post-approval regulatory action.

Unforeseen side effects from sofpironium bromide could arise either during clinical development or, if approved, after it has been marketed. Undesirable side effects caused by sofpironium bromide could cause Brickell, any partners with which Brickell may collaborate, or regulatory authorities to interrupt, extend, modify, delay or halt clinical trials and could result in a more restrictive or narrower label or the delay or denial of regulatory approval by the FDA or comparable foreign authorities.

Results of clinical trials could reveal a high and unacceptable severity and prevalence of side effects. In such an event, trials could be suspended or terminated and the FDA or comparable foreign regulatory authorities could order us to cease further development of or deny approval of sofpironium bromide for any or all targeted indications. The drug-related side effects could affect patient recruitment or the ability of enrolled patients to complete the trial or result in product liability claims. Any of these occurrences may harm Brickell's business, financial condition, operating results and prospects.

Additionally, if Brickell or others identify undesirable side effects, or other previously unknown problems, caused by sofpironium bromide after obtaining U.S. or foreign regulatory approval, a number of potentially negative consequences could result, which could prevent Brickell or its potential partners from achieving or maintaining market acceptance of sofpironium bromide and could substantially increase the costs of commercializing sofpironium bromide.

Kaken substantially controls the development of sofpironium bromide in Japan and certain other Asian countries and may make decisions regarding product development, regulatory strategy and commercialization that may not be in Brickell's best interests. Kaken may be unable to obtain positive approval of the drug in Asian markets.

In March 2015, Brickell entered into a license agreement with Kaken. The agreement granted Kaken an exclusive Japan license and certain rights to additional Asian countries to develop and commercialize sofpironium bromide. Under the terms of the agreement, Brickell received an up-front payment and is eligible to receive future development and sales milestones and a royalty on net sales.

Kaken has final decision-making authority for the overall regulatory, development and commercialization strategy for sofpironium bromide, market access activities, pricing and reimbursement activities, promotion, distribution, packaging, sales and safety and pharmacovigilance in Japan and certain other Asian countries. In exercising its final decision-making authority in such territories, Kaken may make decisions regarding product development or regulatory strategy based on its determination of how best to preserve and extend regulatory approvals in these territories for sofpironium bromide, which may delay or prevent achieving regulatory approval for sofpironium bromide in Kaken's territories, as well as in the United States and the other territories which Brickell maintains exclusive rights. Additionally, Kaken is responsible for conducting certain nonclinical and chemistry, manufacturing and controls-related activities that also will be required for FDA approval in the United States, and as a result, Brickell is reliant on Kaken to execute successfully, in a timely and efficient manner, such activities on Brickell's behalf. To the extent Kaken experiences delays and/or difficulties in performing its development activities, this could prevent or cause substantial delays in Brickell's ability to seek approval for sofpironium bromide gel in the United States and other territories in which Brickell maintains exclusive rights. Brickell will not receive additional milestone or other payments from Kaken if Kaken is not successful in its development activities.

If Brickell or any partners with which Brickell may collaborate are unable to achieve and maintain coverage and adequate levels of reimbursement for sofpironium bromide following regulatory approval, its commercial success may be hindered severely.

If sofpironium bromide only becomes available by prescription, successful sales by Brickell or by any partners with which Brickell may collaborate depend on the availability of coverage and adequate reimbursement from third-party payors. Patients who are prescribed medicine for the treatment of their conditions generally rely on third-party payors to reimburse all or part of the costs associated with their prescription drugs. The availability of coverage and adequate reimbursement from governmental healthcare programs, such as Medicare and Medicaid in the United States, and private third-party payors is often critical to new product acceptance. Coverage decisions may depend on clinical and economic standards that disfavor new drug products when more established or lower-cost therapeutic alternatives are already available or subsequently become available, or may be affected by the budgets and demands on the various entities responsible for providing health insurance to patients who will use sofpironium bromide. If insurers and payors decide that hyperhidrosis itself is not a disease they are willing to extend coverage to, which could happen if they only think the treatment improves quality of life, then coverage and reimbursement for sofpironium bromide may be denied. In this case, patients would be forced to pay for sofpironium bromide out-of-pocket for cash, which they may not be willing to do. Even if Brickell obtains coverage for sofpironium bromide, the resulting reimbursement payment rates might not be adequate or may require co-payments that patients find unacceptably high. Patients are unlikely to use sofpironium bromide unless coverage is provided and reimbursement is adequate to cover a significant portion of the cost of sofpironium bromide.

In addition, the market for sofpironium bromide will depend significantly on access to third-party payors' drug formularies, or lists of medications for which third-party payors provide coverage and reimbursement. The industry competition to be included in such formularies often leads to downward pricing pressures on pharmaceutical companies and there may be time limitations on when a new drug may even apply for formulary inclusion. Also, third-party payors may refuse to include sofpironium bromide in their formularies or otherwise restrict patient access to sofpironium bromide when a less costly generic equivalent or other treatment alternative is available in the discretion of the formulary.

Third-party payors, whether foreign or domestic, or governmental or commercial, are developing increasingly sophisticated methods of controlling healthcare costs. In addition, in the United States, although private third-party payors tend to follow Medicare practices, no uniform or consistent policy of coverage and reimbursement for drug products exists among third-party payors. Therefore, coverage and reimbursement for drug products can differ significantly from payor to payor as well as state to state. Consequently, the coverage determination process is often a time-consuming and costly process that must be played out across many

jurisdictions and different entities and which will require Brickell to provide scientific, clinical and health economics support for the use of sofpironium bromide compared to current alternatives and do so to each payor separately, with no assurance that coverage and adequate reimbursement will be obtained and in what time frame.

Further, Brickell believes that future coverage and reimbursement likely will be subject to increased restrictions both in the United States and in international markets. Third-party coverage and reimbursement for sofpironium bromide may not be available or adequate in either the United States or international markets, which could harm Brickell's business, financial condition, operating results and prospects.

Even if sofpironium bromide obtains regulatory approval, it may fail to achieve the broad degree of physician and patient adoption and use necessary for commercial success.

The commercial success of sofpironium bromide, if approved, will depend significantly on the broad adoption and use of it by physicians and patients for approved indications, and may not be commercially successful even though the drug is shown to be safe and effective. The degree and rate of physician and patient adoption of sofpironium bromide, if approved, will depend on a number of factors, including but not limited to:

- patient demand for approved products that treat hyperhidrosis;
- the effectiveness of sofpironium bromide compared to other available hyperhidrosis therapies;
- the availability of coverage and adequate reimbursement from managed care plans and other healthcare payors for sofpironium bromide;
- the cost of treatment with sofpironium bromide in relation to alternative hyperhidrosis treatments and willingness to pay for sofpironium bromide, if approved, on the part of patients;
- overcoming physician or patient biases toward particular therapies for the treatment of hyperhidrosis and achieving acceptance by physicians, major operators of clinics and patients of sofpironium bromide as a safe, effective and economical hyperhidrosis treatment;
- patients' perception of hyperhidrosis as one for which medical treatment may be appropriate and a prescription therapy may be available;
- insurers' willingness to see hyperhidrosis as a disease worth treating;
- proper administration of sofpironium bromide;
- patient satisfaction with the results and administration of sofpironium bromide and overall treatment experience;
- limitations or contraindications, warnings, precautions or approved indications for use different than those sought by Brickell that are contained in the final FDA-approved labeling for sofpironium bromide;
- any FDA requirement to undertake a risk evaluation and mitigation strategy;
- the effectiveness of Brickell's sales, marketing, pricing, reimbursement and access, government affairs, and distribution efforts;
- adverse publicity about sofpironium bromide or favorable publicity about competitive products;
- new government regulations and programs, including price controls and/or limits or prohibitions on ways to commercialize drugs, such as increased scrutiny on direct-to-consumer advertising of pharmaceuticals; and
- potential product liability claims or other product-related litigation.

If sofpironium bromide is approved for use but fails to achieve the broad degree of physician and patient adoption necessary for commercial success, Brickell's operating results and financial condition will be adversely affected, which may delay, prevent or limit its ability to generate revenue and continue its business.

Sofpironium bromide, if approved, will face significant competition and its failure to compete effectively may prevent it from achieving significant market penetration.

The pharmaceutical industry is characterized by rapidly advancing technologies, intense competition, less effective patent terms, and a strong emphasis on developing newer, fast-to-market proprietary therapeutics. Numerous companies are engaged in the development, patenting, manufacturing and marketing of healthcare products competitive with those that Brickell is developing, including sofpironium bromide. Brickell faces competition from a number of sources, such as pharmaceutical companies, generic drug companies, biotechnology companies and academic and research institutions, many of which have greater financial resources, marketing capabilities, sales forces, manufacturing capabilities, research and development capabilities, regulatory expertise, clinical trial expertise, intellectual property portfolios, more international reach, experience in obtaining patents and regulatory approvals for product candidates and other resources than Brickell. Some of the companies that offer competing products also have a broad range of other product offerings, large direct sales forces and long-term customer relationships with Brickell's target physicians, which could inhibit Brickell's market penetration efforts. In addition, sofpironium bromide, if approved, may compete with other dermatological products, including over-the-counter treatments, for a share of some patients', or payors', discretionary budgets and for physicians' attention within their clinical practices.

Brickell anticipates that sofpironium bromide would compete with other therapies currently used for hyperhidrosis, including but not limited to:

- Self-Administered Treatments. Self-administered treatments, such as OTC and prescription topical antiperspirants, and recently approved (June 2018) Qbrexza® (glycopyrronium) 2.4% topical cloths. Oral and compounded topical anticholinergics also may be used off-label.
- Non-Surgical Office-Based Procedures. Office-based procedures have been approved by the FDA for treatment of hyperhidrosis, including intradermal injections of BOTOX®, marketed by Allergan plc., and MiraDry®, a microwave-based treatment marketed by Miramar Labs, Inc.
- Surgical Treatments. Surgical treatments include techniques for the removal of sweat glands, such as excision, curettage and liposuction. Surgical procedures, such as endoscopic thoracic sympathectomy, are also used to destroy nerves that transmit activating signals to sweat glands.

To compete successfully in this market, Brickell will have to provide an attractive alternative to these existing and other new therapies. Such competition could lead to reduced market share for sofpironium bromide and contribute to downward pressure on the pricing of sofpironium bromide, which could harm Brickell's business, financial condition, operating results and prospects. For more information about the competition Brickell faces, see "*Description of Brickell's Business—Rest of Industry.*"

Due to less stringent regulatory requirements in certain foreign countries, there are many more dermatological products and procedures available for use in those international markets than are approved for use in the United States. In certain international markets, there are also fewer limitations on the claims that Brickell's competitors can make about the effectiveness of their products and the manner in which they can market them. As a result, Brickell expects to face more competition in these markets than in the United States.

Brickell expects to face generic competition for sofpironium bromide, which could adversely affect its business, financial condition, operating results and prospects.

Upon the expiration of primary patent protection in 2031 for sofpironium bromide, and in the absence of having a pending composition of matter patent issued that would provide protection through 2040, Brickell could

lose a significant portion of sales of sofpironium bromide in a short period of time, which would adversely affect its business, financial condition, operating results and prospects. While Brickell is seeking approval of the pending patent described in the section titled " *Management's Discussion and Analysis of Brickell's Financial Condition and Results of Operations*," Brickell cannot provide any assurance as to whether it will be successful in obtaining approval of the pending patent.

Brickell has in the past relied, and expects to continue to rely, on third-party CROs and other third parties to conduct and oversee its sofpironium bromide clinical trials. If these third parties do not meet Brickell's requirements or otherwise conduct the trials as required, Brickell may not be able to satisfy its contractual obligations or obtain regulatory approval for, or commercialize, sofpironium bromide.

Brickell has in the past relied, and expects to continue to rely, on third-party contract research organizations ("CROs") to conduct and oversee its sofpironium bromide clinical trials and other aspects of product development. Brickell also relies on various medical institutions, clinical investigators and contract laboratories to conduct its trials in accordance with Brickell's clinical protocols and all applicable regulatory requirements, including the FDA's regulations and good clinical practice ("GCP") requirements, which are an international standard meant to protect the rights and health of patients and to define the roles of clinical trial sponsors, administrators and monitors, and state regulations governing the handling, storage, security and recordkeeping for drug and biologic products. These CROs and other third parties play a significant role in the conduct of these trials and the subsequent collection and analysis of data from the clinical trials. Brickell relies heavily on these parties for the execution of its clinical trials and preclinical studies, and controls only certain aspects of their activities. Brickell and its CROs and other third-party contractors are required to comply with GCP and good laboratory practice ("GLP") requirements, which are regulations and guidelines enforced by the FDA and comparable foreign regulatory authorities for sofpironium bromide. Regulatory authorities enforce these GCP and GLP requirements through periodic inspections of trial sponsors, principal investigators and trial sites. If Brickell or any of these third parties fail to comply with applicable GCP and GLP requirements, or reveal noncompliance from an audit or inspection, the clinical data generated in Brickell's clinical trials may be deemed unreliable and the FDA or other regulatory authorities may require Brickell to perform additional clinical trials before approving Brickell's or Brickell's partners' marketing applications. Brickell cannot assure that upon inspection by a given regulatory authority, such regulatory authority will determine that any of Brickell's clinical or preclinical trials comply with applicable GCP and GLP requirements. In addition, Brickell's clinical trials generally must be conducted with product produced under cGMP regulations. Brickell's failure to comply with these regulations and policies may require it to repeat clinical trials, which would delay the regulatory approval process.

If any of Brickell's CROs or clinical trial sites terminate their involvement in one of its clinical trials for any reason, it may not be able to enter into arrangements with alternative CROs or clinical trial sites, or do so on commercially reasonable terms. In addition, if Brickell's relationship with clinical trial sites is terminated, it may experience the loss of follow-up information on patients enrolled in its ongoing clinical trials unless Brickell is able to transfer the care of those patients to another qualified clinical trial site. In addition, principal investigators for Brickell's clinical trials may serve as scientific advisors or consultants to it from time to time and could receive cash or equity compensation in connection with such services. If these relationships and any related compensation result in perceived or actual conflicts of interest, the integrity of the data generated at the applicable clinical trial site may be questioned by the FDA.

Brickell currently has limited marketing capabilities and no sales organization. If Brickell is unable to establish sales and marketing capabilities on its own or through third parties, Brickell will be unable to successfully commercialize its product candidates, if approved, or generate product revenue.

Brickell currently has limited marketing capabilities and no sales organization. To commercialize Brickell's product candidates, if approved, in the United States, Canada, the European Union, Latin America and other jurisdictions it seeks to enter, Brickell must build its marketing, sales, distribution, managerial and other

non-technical capabilities or make arrangements with third parties to perform these services, and Brickell may not be successful in doing so. Although Brickell's employees have experience in the marketing, sale and distribution of pharmaceutical products, and business development activities involving external alliances, from prior employment at other companies, Brickell as a company has no prior experience in the marketing, sale and distribution of pharmaceutical products, and there are significant risks involved in building and managing a sales organization, including its ability to hire, retain and incentivize qualified individuals, generate sufficient sales leads, provide adequate training to sales and marketing personnel, and effectively manage a geographically dispersed sales and marketing team. Any failure or delay in the development of Brickell's internal sales, marketing, distribution and pricing/reimbursement/access capabilities would impact adversely the commercialization of these products.

To commercialize sofpironium bromide in Asia, Brickell also intends to leverage the commercial infrastructure of its partner Kaken, which will provide Brickell with resources and expertise in certain areas that are greater than it could initially build itself. Brickell may choose to collaborate with additional third parties that have direct sales forces and established distribution systems, either to augment its own sales force and distribution systems or in lieu of Brickell's own sales force and distribution systems. If Brickell is unable to enter into such arrangements on acceptable terms or at all, it may not be able to successfully commercialize its product candidates, especially in other countries where Brickell currently does not have a foreign legal presence. The inability to commercialize successfully Brickell's product candidates, either on its own or through collaborations with one or more third parties, would harm Brickell's business, financial condition, operating results and prospects.

Risks Related to Brickell's Business

Brickell currently has no products approved for sale, and it may never obtain regulatory approval to commercialize any of its product candidates.

The research, testing, manufacturing, safety surveillance, efficacy, quality control, recordkeeping, labeling, packaging, storage, approval, sale, marketing, distribution, import, export and reporting of safety and other post-market information related to its drug products are subject to extensive regulation by the FDA and other regulatory authorities in the United States and in foreign countries, and such regulations differ from country to country and frequently are revised.

Even after Brickell or its partners achieve U.S. regulatory approval for a product candidate, if any, Brickell or its partners will be subject to continued regulatory review and compliance obligations. For example, with respect to Brickell's product candidates, the FDA may impose significant restrictions on the approved indicated uses for which the product may be marketed or on the conditions of approval. A product candidate's approval may contain requirements for potentially costly post-approval studies and surveillance, including Phase 4 clinical trials, to monitor the safety and efficacy of the product. Brickell also will be subject to ongoing FDA obligations and continued regulatory review with respect to, among other things, the manufacturing, processing, labeling, packaging, distribution, pharmacovigilance and adverse event reporting, storage, advertising, promotion and recordkeeping for Brickell's product candidates. These requirements include submissions of safety and other post-marketing information and reports, registration, continued compliance with cGMP requirements and with the FDA's GCP requirements and GLP requirements, which are regulations and guidelines enforced by the FDA for all of Brickell's product candidates in clinical and preclinical development, and for any clinical trials that it conducts post-approval, as well as continued compliance with the FDA's laws governing commercialization of the approved product, including but not limited to the FDA's Office of Prescription Drug Promotion ("OPDP") regulation of promotional activities, fraud and abuse, product sampling, scientific speaker engagements and activities, formulary interactions as well as interactions with healthcare practitioners. To the extent that a product candidate is approved for sale in other countries, Brickell may be subject to similar or more onerous (i.e., prohibition on direct-to-consumer advertising that does not exist in the United States.) restrictions and requirements imposed by laws and government regulators in those countries.

In addition, manufacturers of drug and biologic products and their facilities are subject to continual review and periodic inspections by the FDA and other regulatory authorities for compliance with cGMP regulations. If Brickell or a regulatory agency discovers previously unknown problems with a product, such as adverse events of unanticipated severity or frequency, or problems with the manufacturing, processing, distribution or storage facility where, or processes by which, the product is made, a regulatory agency may impose restrictions on that product or Brickell, including requesting that Brickell initiate a product recall, or requiring notice to physicians or the public, withdrawal of the product from the market, or suspension of manufacturing.

If Brickell, its product candidates or the manufacturing facilities for its product candidates fail to comply with applicable regulatory requirements, a regulatory agency may:

- impose restrictions on the sale, marketing or manufacturing of the product, amend, suspend or withdraw product approvals or revoke necessary licenses;
- mandate modifications to promotional and other product-specific materials or require Brickell to provide corrective information to healthcare practitioners or in its advertising;
- require Brickell or its partners to enter into a consent decree, which can include imposition of various fines, reimbursements for inspection costs, required due dates for specific actions, penalties for noncompliance and, in extreme cases, require an independent compliance monitor to oversee Brickell's activities;
- issue warning letters, bring enforcement actions, initiate surprise inspections, issue show cause notices or untitled letters describing alleged violations, which may be publicly available;
- commence criminal investigations and prosecutions;
- impose injunctions, suspensions or revocations of necessary approvals or other licenses;
- impose other civil or criminal penalties;
- suspend any ongoing clinical trials;
- place restrictions on the kind of promotional activities that can be done;
- delay or refuse to approve pending applications or supplements to approved applications filed by Brickell or its potential partners;
- refuse to permit drugs or precursor chemicals to be imported or exported to or from the United States;
- suspend or impose restrictions on operations, including costly new manufacturing requirements; or
- seize or detain products or require Brickell or its partners to initiate a product recall.

The regulations, policies or guidance of the FDA and other applicable government agencies may change, and new or additional statutes or government regulations may be enacted, including at the state and local levels, which can differ by geography and could prevent or delay regulatory approval of Brickell's product candidates or further restrict or regulate post-approval activities. Brickell cannot predict the likelihood, nature or extent of adverse government regulations that may arise from future legislation or administrative action, either in the United States or abroad. If Brickell is not able to achieve and maintain regulatory compliance, it may not be permitted to commercialize its product candidates, which would adversely affect its ability to generate revenue and achieve or maintain profitability.

Brickell has conducted and may in the future conduct clinical trials for its product candidates outside the United States, and the FDA and applicable foreign regulatory authorities may not accept data from such trials.

Brickell has conducted and may in the future choose to conduct one or more of its clinical trials outside of the United States. Although the FDA or applicable foreign regulatory authority may accept data from clinical

trials conducted outside the United States or the applicable jurisdiction, acceptance of such study data by the FDA or applicable foreign regulatory authority may be subject to certain conditions or exclusion. Where data from foreign clinical trials are intended to serve as the basis for marketing approval in the United States, the FDA will not approve the application on the basis of foreign data alone unless such data are applicable to the U.S. population and U.S. medical practice; the studies were performed by clinical investigators of recognized competence; and the data are considered valid without the need for an on-site inspection by the FDA or, if the FDA considers such an inspection to be necessary, the FDA is able to validate the data through an on-site inspection or other appropriate means. Many foreign regulatory bodies have similar requirements. In addition, such foreign studies would be subject to the applicable local laws of the foreign jurisdictions where the studies are conducted. There can be no assurance the FDA or applicable foreign regulatory authority will accept data from trials conducted outside of the United States or the applicable home country. If the FDA or applicable foreign regulatory authority does not accept such data, it would likely result in the need for additional trials, which would be costly and time-consuming and delay aspects of Brickell's business plan.

Brickell may face product liability exposure, and if successful claims are brought against it, Brickell may incur substantial liability if its insurance coverage for those claims is inadequate.

Brickell faces an inherent risk of product liability or similar causes of action as a result of the clinical testing of its product candidates and will face an even greater risk if Brickell commercializes any products. This risk exists even if a product is approved for commercial sale by the FDA and manufactured in facilities licensed and regulated by the FDA or an applicable foreign regulatory authority and notwithstanding Brickell complying with applicable laws on promotional activity. Brickell's products and product candidates are designed to affect important bodily functions and processes. Any side effects, manufacturing defects, misuse or abuse associated with Brickell's product candidates could result in injury to a patient or potentially even death. Brickell cannot offer any assurance that it will not face product liability suits in the future, nor can it assure that its insurance coverage will be sufficient to cover its liability under any such cases.

In addition, a liability claim may be brought against Brickell even if its product candidates merely appear to have caused an injury. Product liability claims may be brought against Brickell by consumers, healthcare providers, pharmaceutical companies or others selling or otherwise coming into contact with its product candidates, among others, and under some circumstances even government agencies. If Brickell cannot successfully defend itself against product liability or similar claims, it will incur substantial liabilities, reputational harm and possibly injunctions and punitive actions. In addition, regardless of merit or eventual outcome, product liability claims may result in:

- withdrawal or delay of recruitment or decreased enrollment rates of clinical trial participants;
- termination or increased government regulation of clinical trial sites or entire trial programs;
- the inability to commercialize Brickell's product candidates;
- decreased demand for Brickell's product candidates;
- impairment of Brickell's business reputation;
- product recall or withdrawal from the market or labeling, marketing or promotional restrictions;
- substantial costs of any related litigation or similar disputes;
- distraction of management's attention and other resources from Brickell's primary business;
- significant delay in product launch;
- substantial monetary awards to patients or other claimants against Brickell that may not be covered by insurance;
- withdrawal of reimbursement or formulary inclusion; or
- loss of revenue.

Brickell has obtained product liability insurance coverage for its clinical trials. Large judgments have been awarded in class action or individual lawsuits based on drugs that had unanticipated side effects. Brickell's insurance coverage may not be sufficient to cover all of its product liability-related expenses or losses and may not cover it for any expenses or losses it may suffer. Moreover, insurance coverage is becoming increasingly expensive, restrictive and narrow, and, in the future, Brickell may not be able to maintain adequate insurance coverage at a reasonable cost, in sufficient amounts or upon adequate terms to protect it against losses due to product liability or other similar legal actions. Brickell will need to increase its product liability coverage if any of its product candidates receive regulatory approval, which will be costly, and it may be unable to obtain this increased product liability insurance on commercially reasonable terms or at all and for all geographies in which Brickell wishes to launch. A successful product liability claim or series of claims brought against Brickell, if judgments exceed its insurance coverage, could decrease its cash and harm its business, financial condition, operating results and future prospects.

Brickell's employees, independent contractors, principal investigators, other clinical trial staff, consultants, vendors, CROs and any partners with whom Brickell may collaborate may engage in misconduct or other improper activities, including noncompliance with regulatory standards and requirements.

Brickell is exposed to the risk that its employees, independent contractors, principal investigators, other clinical trial staff, consultants, vendors, CROs and any partners with which Brickell may collaborate may engage in fraudulent or other illegal activity. Misconduct by these persons could include intentional, reckless, gross or negligent misconduct or unauthorized activity that violates: laws or regulations, including those laws requiring the reporting of true, complete and accurate information to the FDA or foreign regulatory authorities; manufacturing standards; federal, state and foreign healthcare fraud and abuse laws and data privacy; anticorruption laws, antikickback and Medicare/Medicaid rules, or laws that require the true, complete and accurate reporting of financial information or data, books and records. If any such or similar actions are instituted against Brickell and Brickell is not successful in defending itself or asserting Brickell's rights, those actions could have a significant impact on Brickell's business, including the imposition of civil, criminal and administrative and punitive penalties, damages, monetary fines, possible exclusion from participation in Medicare, Medicaid and other federal healthcare programs, debarments, contractual damages, reputational harm, diminished profits and future earnings, injunctions, and curtailment or cessation of Brickell's operations, any of which could adversely affect Brickell's ability to operate Brickell's business and Brickell's operating results.

Brickell may be subject to risks related to off-label use of its product candidates.

The FDA strictly regulates the advertising and promotion of drug products, and drug products may only be marketed or promoted for their FDA approved uses, consistent with the product's approved labeling. Advertising and promotion of any product candidate that obtains approval in the United States will be heavily scrutinized by the FDA, the Department of Justice, the Office of Inspector General of the Department of Health and Human Services, state attorneys general, members of Congress and the public. Violations, including promotion of Brickell's products for unapproved or off-label uses, are subject to enforcement letters, inquiries and investigations, and civil, criminal and/or administrative sanctions by the FDA. Additionally, advertising and promotion of any product candidate that obtains approval outside of the United States will be heavily scrutinized by relevant foreign regulatory authorities.

Even if Brickell obtains regulatory approval for its product candidates, the FDA or comparable foreign regulatory authorities may require labeling changes or impose significant restrictions on a product's indicated uses or marketing, or impose ongoing requirements for potentially costly post-approval studies or post-market surveillance.

In the United States, engaging in impermissible promotion of Brickell's product candidates foroff-label uses can also subject it to false claims litigation under federal and state statutes, which can lead to civil, criminal and/or administrative penalties and fines and agreements, such as a corporate integrity agreement, that materially

restrict the manner in which Brickell promotes or distributes its product candidates. If Brickell does not lawfully promote its products once they have received regulatory approval, Brickell may become subject to such litigation and, if it is not successful in defending against such actions, those actions could have a material adverse effect on its business, financial condition and operating results and even result in having an independent compliance monitor assigned to audit Brickell's ongoing operations for a lengthy period of time.

Other than sofpironium bromide, Brickell's product candidates are at the early stages of clinical and regulatory development.

Brickell is currently evaluating the next clinical development steps forBBI-3000 and BBI-6000 as each is in an early stage of clinical (prior to Phase 3) and pre-clinical development. The regulatory approval processes of the FDA and comparable foreign authorities are lengthy, time consuming and inherently unpredictable, especially for early stage product candidates. The time required to obtain approval for early stage product candidates from the FDA and comparable foreign authorities is unpredictable but typically takes many years, involves significant costs and depends upon numerous factors, including the substantial discretion of the regulatory authorities. 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. Brickell's early stage product candidates will require substantial additional preclinical and clinical development before Brickell will be able to submit an application to the FDA, if at all. Accordingly, Brickell cannot assure you that it will be able to seek or obtain regulatory approval for any of its early stage product candidates.

Brickell's clinical trials may fail to demonstrate the safety and efficacy ofBBI-3000 or BBI-6000, or serious adverse or unacceptable side effects may be identified during their development, which could prevent or delay marketing approval and commercialization, increase Brickell's costs or necessitate the abandonment or limitation of the development of BBI-3000 or BBI-6000.

Before obtaining marketing approvals for the commercial sale ofBBI-3000 and BBI-6000, Brickell must demonstrate through lengthy, complex and expensive preclinical testing and clinical trials that BBI-3000 and BBI-6000 are both safe and effective for use in each target indication, and failures can occur at any stage of testing. Clinical trials often fail to demonstrate safety and are associated with side effects or have characteristics that are unexpected. Based on the safety profile seen in clinical testing, Brickell may need to abandon development or limit development to more narrow uses in which the side effects or other characteristics are less prevalent, less severe or more tolerable from a risk-benefit perspective. The FDA or an IRB may also require that Brickell suspend, discontinue, or limit clinical trials based on safety information. Such findings could further result in regulatory authorities failing to provide marketing authorization for BBI-3000 or BBI-6000. Many drug candidates that initially showed promise in early stage testing and which were efficacious have later been found to cause side effects that prevented further development of the drug candidate and, in extreme cases, the side effects were not seen until after the drug was marketed, causing regulators to remove the drug from the market post-approval.

Brickell may choose not to continue developing or commercializing any of its early stage product candidates at any time during development or after approval, which would reduce or eliminate its potential return on investment for those product candidates.

At any time, Brickell may decide to discontinue the development of any of its early stage product candidates for a variety of reasons, including the appearance of new technologies that make its product obsolete, competition from a competing product or changes in or failure to comply with applicable regulatory requirements. If Brickell terminates a program in which it has invested significant resources, Brickell will not receive any return on its investment and it will have missed the opportunity to have allocated those resources to potentially more productive uses.

Healthcare reform measures could hinder or prevent the commercial success of Brickell's product candidates.

The current presidential administration and certain members of the majority of the U.S. Congress have sought to repeal all or part of the Patient Protection and Affordable Care Act, as amended by the Health Care and Education Reconciliation Act (collectively, "Affordable Care Act"), and implement a replacement program. For example, the so-called "individual mandate" was repealed as part of tax reform legislation adopted in December 2017, such that the shared responsibility payment for individuals who fail to maintain minimum essential coverage under section 5000A of the Code was eliminated beginning in 2019. In addition, litigation may prevent some or all of the Affordable Care Act legislation from taking effect. For example, on December 14, 2018, the U.S. District Court for the Northern District of Texas held that the individual mandate is a critical and inseverable feature of the Affordable Care Act, and therefore, because it was repealed as part of the tax reform legislation, the remaining provisions of the Affordable Care Act are invalid as well. The impact of this ruling is stayed as it is appealed to the Fifth Circuit Court of Appeals. While the ruling will have no immediate effect, it is unclear how this decision, and subsequent appeals, if any, will impact the law. In 2019 and beyond, Brickell may face additional uncertainties as a result of likely federal and administrative efforts to repeal, substantially modify or invalidate some or all of the provisions of the Affordable Care Act. There is no assurance that the Affordable Care Act, as amended in the future, will not adversely affect Brickell's business and financial results.

Additionally, in October 2018, the U.S. President proposed to lower Medicare Part B drug prices, in addition to contemplating other measures to lower prescription drug prices. While this proposal has not yet been enacted, Brickell expects that additional state and federal healthcare reform measures will be adopted in the future, any of which could limit the amounts that federal and state governments will pay for healthcare products and services, which could result in reduced demand for its product candidates if approved or additional pricing pressures.

There are also calls to ban all direct-to-consumer advertising of pharmaceuticals, which would limit Brickell's ability to market its product candidates. The United States is in a minority of jurisdictions that allow this kind of advertising and its removal could limit the potential reach of a marketing campaign.

Brickell may also be subject to stricter healthcare laws, regulation and enforcement, and its failure to comply with those laws could adversely affect its business, operations and financial condition.

Certain federal and state healthcare laws and regulations pertaining to fraud and abuse and patients' rights are and will be applicable to Brickell's business. Brickell is subject to regulation by both the federal government and the states in which it or its partners conduct business. The healthcare laws and regulations that may affect Brickell's ability to operate include: the federal Anti-Kickback Statute; federal civil and criminal false claims laws and civil monetary penalty laws; the federal Health Insurance Portability and Accountability Act of 1996, as amended by the Health Information Technology for Economic and Clinical Health Act; the Prescription Drug Marketing Act (for sampling of drug product among other things); the federal physician sunshine requirements under the Affordable Care Act; the Foreign Corrupt Practices Act as it applies to activities outside of the United States; the new federal Right-to-Try legislation; and state law equivalents of many of the above federal laws.

Because of the breadth of these laws and the narrowness of the statutory exceptions and safe harbors available, it is possible that some of Brickell's business activities could be subject to challenge under one or more of such laws. In addition, recent healthcare reform legislation has strengthened these laws. For example, the recently enacted Affordable Care Act, among other things, amended the intent requirement of the federal Anti-Kickback Statute and certain criminal healthcare fraud statutes. A person or entity no longer needs to have actual knowledge of the statute or specific intent to violate it. In addition, the Affordable Care Act provided that the government may assert that a claim including items or services resulting from a violation of the federal Anti-Kickback Statute constitutes a false or fraudulent claim for purposes of the federal civil False Claims Act.

Achieving and sustaining compliance with these laws may prove costly. In addition, any action against Brickell for violation of these laws, even if Brickell successfully defends against it, could cause Brickell to incur

significant legal expenses and divert its management's attention from the operation of its business and result in reputational damage. If Brickell's operations are found to be in violation of any of the laws described above or any other governmental laws or regulations that apply to Brickell, it may be subject to penalties, including administrative, civil and criminal penalties, damages, including punitive damages, fines, disgorgement, the exclusion from participation in federal and state healthcare programs, individual imprisonment or the curtailment or restructuring of its operations, and injunctions, any of which could adversely affect Brickell's ability to operate its business and its financial results.

Brickell intends to in-license and acquire product candidates and may engage in other strategic transactions, which could impact its liquidity, increase its expenses and present significant distractions to its management.

Brickell's strategy is to in-license and acquire product candidates and it may engage in other strategic transactions. Additional potential transactions that Brickell may consider include a variety of different business arrangements, including spin-offs, strategic partnerships, joint ventures, restructurings, divestitures, business combinations and investments. Any such transaction may require Brickell to incur non-recurring or other charges, may increase its near- and long-term expenditures and may pose significant integration challenges or disrupt its management or business, which could adversely affect its operations and financial results. Accordingly, there can be no assurance that Brickell will undertake or successfully complete any transactions of the nature described above, and any transaction that it does complete could harm its business, financial condition, operating results and prospects. Brickell has no current plan, commitment or obligation to enter into any transaction described above, and Brickell is not engaged in discussions related to additional partnerships.

Brickell's failure successfully to in-license, acquire, develop and market additional product candidates or approved products would impair its ability to grow its business.

Brickell intends to in-license, acquire, develop and market additional products and product candidates. Because Brickell's internal research and development capabilities are limited, it may be dependent on pharmaceutical companies, academic or government scientists and other researchers to sell or license products or technology to it. The success of this strategy depends partly on Brickell's ability to identify and select promising pharmaceutical product candidates and products, negotiate licensing or acquisition agreements with their current owners, and finance these arrangements.

The process of proposing, negotiating and implementing a license or acquisition of a product candidate or approved product is lengthy and complex. Other companies, including some with substantially greater financial, marketing, sales and other resources, may compete with Brickell for the license or acquisition of product candidates and approved products. Brickell has limited resources to identify and execute the acquisition or in-licensing of third-party products, businesses and technologies and integrate them into its current infrastructure. Moreover, Brickell may devote resources to potential acquisitions or licensing opportunities that are never completed, or Brickell may fail to realize the anticipated benefits of such efforts. Brickell may not be able to acquire the rights to additional product candidates on terms that it finds acceptable or at all.

Further, any product candidate that Brickell acquires may require additional development efforts prior to commercial sale, including preclinical or clinical testing and approval by the FDA and applicable foreign regulatory authorities. All product candidates are prone to risks of failure typical of pharmaceutical product development, including the possibility that a product candidate will not be shown to be sufficiently safe and effective for approval by regulatory authorities. In addition, Brickell cannot provide assurance that any approved products that it acquires will be manufactured or sold profitably or achieve market acceptance.

Risks Related to Brickell's Dependence on Third Parties

Under the Funding Agreement, NovaQuest has the right to suspend product development payments in certain circumstances.

On June 2, 2019, Brickell and NovaQuest entered into the Funding Agreement, pursuant to which NovaQuest has agreed, following consummation of the Merger, to partially fund Brickell's expenses relating to product development activities in respect of sofpironium bromide, subject to the terms and conditions contained in the Funding Agreement. NovaQuest may suspend its payments under the Funding Agreement in certain limited circumstances, including: (i) adverse regulatory events relating to sofpironium bromide; (ii) termination of any material clinical study in respect of sofpironium bromide; (iii) an event reasonably expected to delay U.S. approval or launch of sofpironium bromide by 12 months or more; (iv) a material amendment of the study protocol for Brickell's Phase 3 clinical trials in respect of its sofpironium bromide product candidate without NovaQuest's consent; (v) if Brickell determines that sofpironium bromide is unsafe; (vi) the failure of sofpironium bromide to achieve the primary endpoints for its Phase 3 clinical trials; (vii) sofpironium bromide receiving a final non-approval letter from the FDA or European Medicines Agency; and (viii) if certain of Brickell's senior executives cease to work for Brickell and Brickell does not hire replacements reasonably acceptable to NovaQuest in a reasonable time. NovaQuest's obligation to make the payments will resume upon NovaQuest's notice to Brickell that the condition allowing NovaQuest to suspend payments has been resolved or cured. NovaQuest may terminate its obligation to pay any further payments if such condition is not resolved or cured within 12 months. If NovaQuest's payment obligations terminate in these circumstances, Brickell will remain obligated to make the milestone payments contemplated in the Funding Agreement to NovaQuest in the event Brickell nonetheless receives FDA approval for sofpironium bromide, and Brickell will remain obligated to make revenue sharing payments in the territory covered by the Funding Agreement in the event Brickell launches sofpironium bromide anywhere in that territory.

If Brickell suspends or terminates the development program for sofpironium bromide under certain circumstances, Brickell will be obligated to pay NovaQuest $25 million plus interest.

Under the Funding Agreement with NovaQuest, Brickell is not permitted to suspend or discontinue the development program in respect of sofpironium bromide except in certain circumstances. If Brickell suspends or terminates the development program following completion of Phase 3 clinical trials because the FDA requires an additional study or additional, unexpected development work, and Brickell reasonably determines that the additional study or work would take longer than 18 months to complete or cost more than an established threshold, Brickell is entitled to terminate the development program. In that case, Brickell would be obligated to pay NovaQuest plus interest from the date of the Funding Agreement until the date on which the payment is made (however, in the event that Brickell terminates its development program for sofpromium bromide for certain reasons, including serious safety issues, a failure of the product's Phase 3 studies, or the failure of the FDA to approve the product, Brickell will not be obligated to make any payments to NovaQuest). If Brickell subsequently resumes development of sofpironium bromide, Brickell will remain obligated to make the milestone payments contemplated in the Funding Agreement to NovaQuest in the event Brickell nonetheless receives FDA approval for sofpironium bromide, and Brickell will remain obligated to make revenue sharing payments in the territory covered by the Funding Agreement in the event Brickell launches a sofpironium product anywhere in that territory, with any such payment made upon termination of the program credited against the milestone payment or revenue sharing payments.

If Brickell breaches the Funding Agreement, NovaQuest may terminate the agreement and exercise rights under a related Security Agreement, including foreclosing on Brickell's assets relating to sofpironium bromide in the United States and accelerating certain payments.

Under Brickell's Funding Agreement with NovaQuest, Brickell makes various representations and warranties and commits to comply with various covenants. NovaQuest may terminate the Funding Agreement and terminate its obligation to make certain payments in the event of Brickell's material uncured breach of a

representation or covenant under the Funding Agreement. Brickell will also enter into a Security Agreement (the "Security Agreement") with NovaQuest immediately following consummation of the Merger. Under the Security Agreement, NovaQuest will be able to exercise certain rights in the event of an event of default. An event of default would occur if (i) Brickell fails to make payments due under the Funding Agreement, (ii) Brickell terminates the Funding Agreement under circumstances giving rise to a payment obligation to NovaQuest and fails to make the required payment, as described above under "*—If Brickell suspends or terminates the development program for Brickell's sofpironium bromide product candidate under certain circumstances, Brickell will be obligated to pay NovaQuest $25 million plus interest*," (iii) if Brickell fails to comply with a covenant to maintain certain minimum cash balances specified in the Funding Agreement, or (iv) the occurrence of certain insolvency events affecting Brickell or other related entities that are, or become parties to, the Security Agreement. NovaQuest's rights following an event of default include, among other things, foreclosing on Brickell's assets in the territory relating to Brickell's sofpironium bromide product candidate and, in certain circumstances, accelerating payment obligations under the Funding Agreement.

Brickell expects to rely on its collaboration with third-partyout-license partners for the successful development and commercialization of its product candidates.

Brickell expects to rely upon the efforts of third-party out-license partners for the successful development and commercialization of Brickell's current and future product candidates. The clinical and commercial success of Brickell's product candidates may depend upon maintaining successful relationships with third-party out-license partners which are subject to a number of significant risks, including the following:

- Brickell's partners' ability to execute their responsibilities in a timely, cost-efficient and compliant manner;
- reduced control over delivery and manufacturing schedules;
- price increases and product reliability;
- manufacturing deviations from internal or regulatory specifications;
- quality incidents;
- the failure of partners to perform their obligations for technical, market or other reasons;
- misappropriation of Brickell's current or future product candidates; and
- other risks in potentially meeting Brickell's current and future product commercialization schedule or satisfying the requirements of its end-users.

Brickell cannot assure you that it will be able to establish or maintain third-partyout-license partner relationships in order to successfully develop and commercialize its product candidates.

Brickell relies completely on third-party contractors to supply, manufacture and distribute clinical drug supplies for its product candidates, including certain sole-source suppliers and manufacturers; Brickell intends to rely on third parties for commercial supply, manufacturing and distribution if any of its product candidates receive regulatory approval; and Brickell expects to rely on third parties for supply, manufacturing and distribution of preclinical, clinical and commercial supplies of any future product candidates.

Brickell does not currently have, nor does it plan to acquire, the infrastructure or capability to supply, store, manufacture or distribute preclinical, clinical or commercial quantities of drug substances or products. Additionally, Brickell has not entered into a long-term commercial supply agreement to provide it with such drug substances or products. As a result, Brickell's ability to develop its product candidates is dependent, and Brickell's ability to supply its products commercially will depend, in part, on Brickell's ability to obtain the APIs and other substances and materials used in its product candidates successfully from third parties and to have finished products manufactured by third parties in accordance with regulatory requirements and in sufficient

quantities for preclinical and clinical testing and commercialization. If Brickell fails to develop and maintain supply and other technical relationships with these third parties, it may be unable to continue to develop or commercialize its products and product candidates.

Brickell does not have direct control over whether its contract suppliers and manufacturers will maintain current pricing terms, be willing to continue supplying Brickell with APIs and finished products or maintain adequate capacity and capabilities to serve its needs, including quality control, quality assurance and qualified personnel. Brickell is dependent on its contract suppliers and manufacturers for day-to-day compliance with applicable laws and cGMPs for production of both APIs and finished products. If the safety or quality of any product or product candidate or component is compromised due to a failure to adhere to applicable laws or for other reasons, Brickell may not be able to commercialize or obtain regulatory approval for the affected product or product candidate successfully, and Brickell may be held liable for injuries sustained as a result.

In order to conduct larger or late-stage clinical trials for its product candidates and supply sufficient commercial quantities of the resulting drug product and its components, if that product candidate is approved for sale, Brickell's contract manufacturers and suppliers will need to produce its drug substances and product candidates in larger quantities, more cost-effectively and, in certain cases, at higher yields than they currently achieve. If Brickell's third-party contractors are unable to scale up the manufacture of any of its product candidates successfully in sufficient quality and quantity and at commercially reasonable prices, or are shut down or put on clinical hold by government regulators, and Brickell is unable to find one or more replacement suppliers or manufacturers capable of production at a substantially equivalent cost in substantially equivalent volumes and quality, and Brickell is unable to transfer the processes successfully on a timely basis, the development of that product candidate and regulatory approval or commercial launch for any resulting products may be delayed, or there may be a shortage in supply, either of which could significantly harm its business, financial condition, operating results and prospects.

Brickell expects to continue to depend on third-party contract suppliers and manufacturers for the foreseeable future. Brickell's supply and manufacturing agreements, if any, do not guarantee that a contract supplier or manufacturer will provide services adequate for its needs. Additionally, any damage to or destruction of Brickell's third-party manufacturer's or suppliers' facilities or equipment, even by force majeure, may significantly impair its ability to have its products and product candidates manufactured on a timely basis. Brickell's reliance on contract manufacturers and suppliers further exposes it to the possibility that they, or third parties with access to their facilities, will have access to and may misappropriate Brickell's trade secrets or other proprietary information. In addition, the manufacturing facilities of certain of Brickell's suppliers may be located outside of the United States. This may give rise to difficulties in importing Brickell's products or product candidates or their components into the United States or other countries.

Manufacturing and supply of the APIs and other substances and materials used in Brickell's product candidates and finished drug products is a complex and technically challenging undertaking, and there is potential for failure at many points in the manufacturing, testing, quality control and assurance and distribution supply chain, as well as the potential for latent defects after products have been manufactured and distributed.

Manufacturing and supply of APIs, other substances and materials and finished drug products is technically challenging. Changes beyond Brickell's direct control can impact the quality, volume, price and successful delivery of its products and product candidates and can impede, delay, limit or prevent the successful development and commercialization of its products and product candidates. Mistakes and mishandling are not uncommon despite reasonable best efforts and can affect successful production and supply. Some of these risks include but are not limited to:

- failure of Brickell's manufacturers to follow cGMP or other legal requirements or mishandling of or adulterating product while in production or in preparation for transit;

- inability of Brickell's contract suppliers and manufacturers to efficiently and cost-effectively increase and maintain high yields and batch quality, consistency and stability;
- difficulty in establishing optimal drug delivery substances and techniques, production and storage methods and packaging and shipment processes;
- challenges in designing effective drug delivery substances and techniques especially in light of competitor options;
- transportation and import/export risk, particularly given the global nature of Brickell's supply chain;
- delays in analytical results or failure of analytical techniques that Brickell depends on for quality control/assurance and release of product;
- natural disasters, strikes and labor disputes, war and terrorism, financial distress, lack of raw material supply, issues with facilities and equipment or other forms of disruption to business operations of Brickell's contract manufacturers and suppliers; and
- latent defects that may become apparent after product has been released and even sold and used and that may result in recall and destruction of product.

Any of these factors could result in delays or higher costs in connection with Brickell's clinical trials, regulatory submissions, required approvals or commercialization of its products, which could harm its business, financial condition, operating results and prospects.

Risks Related to Brickell's Financial Operations

Brickell will need to raise additional financing in the future to fund Brickell's operations, which may not be available to it on favorable terms or at all.

Brickell will require substantial additional funds to conduct the costly and time-consuming clinical efficacy trials necessary to pursue regulatory approval of each potential product candidate and to continue the development of sofpironium bromide in new indications or uses. Brickell's future capital requirements will depend upon a number of factors, including: the number and timing of future product candidates in the pipeline; progress with and results from preclinical testing and clinical trials; the ability to manufacture sufficient drug supplies to complete preclinical and clinical trials; the costs involved in preparing, filing, acquiring, prosecuting, maintaining and enforcing patent and other intellectual property claims; and the time and costs involved in obtaining regulatory approvals and favorable reimbursement or formulary acceptance. Raising additional capital may be costly or difficult to obtain and could significantly dilute stockholders' ownership interests or inhibit Brickell's ability to achieve its business objectives. If Brickell raises additional funds through public or private equity offerings, the terms of these securities may include liquidation or other preferences that adversely the rights of its common stockholders. Further, to the extent that Brickell raises additional capital through the sale of common stock or securities convertible or exchangeable into common stock, your ownership interest in the combined company will be diluted. In addition, any debt financing may subject Brickell to fixed payment obligations and covenants limiting or restricting its ability to take specific actions, such as incurring additional debt, making capital expenditures or declaring dividends. If Brickell raises additional capital through marketing and distribution arrangements or other collaborations, strategic alliances or licensing arrangements with third parties, Brickell may have to relinquish certain valuable intellectual property or other rights to its product candidates, technologies, future revenue streams or research programs or grant licenses on terms that may not be favorable to it. Even if Brickell were to obtain sufficient funding, there can be no assurance that it will be available on terms acceptable to Brickell or its stockholders.

Brickell's operating results and liquidity needs could be affected negatively by global market fluctuations and economic downturn.

Brickell's operating results and liquidity could be affected negatively by global economic conditions generally, both in the United States and elsewhere around the world. The market for discretionary medical

products and procedures may be particularly vulnerable to unfavorable economic conditions. Some patients may consider sofpironium bromide as discretionary, and if full reimbursement for the product is not available, demand for the product may be tied to the discretionary, out-of-pocket cash-spending levels of Brickell's targeted patient populations. Domestic and international equity and debt markets have experienced and may continue to experience heightened volatility and turmoil based on domestic and international economic conditions and concerns. In the event these economic conditions and concerns continue or worsen and the markets continue to remain volatile, or a bear market ensues in the U.S. stock market given the current bull market is the longest on record, Brickell's operating results and liquidity could be affected adversely by those factors in many ways, including weakening demand for sofpironium bromide, making it more difficult for Brickell to raise funds if necessary, and Brickell's stock price may decline.

Brickell expects its stock price to be highly volatile.

The market price of Brickell's shares following the Merger could be subject to significant fluctuations. Market prices for securities of biotechnology and other life sciences companies historically have been particularly volatile subject even to large daily price swings. Some of the factors that may cause the market price of Brickell's shares to fluctuate include, but are not limited to:

- the ability of the combined company to obtain timely regulatory approvals for sofpironium bromide or future product candidates, and delays or failures to obtain such approvals;
- failure of sofpironium bromide, if approved, to achieve commercial success;
- issues in manufacturing sofpironium bromide or future product candidates;
- the results of current and any future clinical trials of sofpironium bromide;
- failure of other Brickell product candidates, if approved, to achieve commercial success;
- the entry into, or termination of, or breach by partners of key agreements, including key commercial partner agreements;
- the initiation of, material developments in, or conclusion of any litigation to enforce or defend any intellectual property rights or defend against the intellectual property rights of others;
- announcements of any dilutive equity financings;
- announcements by commercial partners or competitors of new commercial products, clinical progress or the lack thereof, significant contracts, commercial relationships or capital commitments;
- the introduction of technological innovations or new therapies or formulations that compete with sofpironium bromide;
- failure to elicit meaningful stock analyst coverage and downgrades of the company's stock by analysts; and
- the loss of key employees.

Moreover, the stock markets in general have experienced substantial volatility in our industry that has often been unrelated to the operating performance of individual companies or a certain industry segment. These broad market fluctuations may also adversely affect the trading price of the combined company's shares.

In the past, following periods of volatility in the market price of a company's securities, shareholders have often instituted class action securities litigation against those companies. Such litigation, if instituted, could result in substantial costs and diversion of management attention and resources, which could significantly harm the combined company's profitability and reputation. In addition, such securities litigation often has ensued after a reverse merger or other merger and acquisition activity of the type engaged in here by Brickell with Vical. Such litigation if brought could impact negatively the combined company's business.

Brickell's operating results may fluctuate significantly, which makes its future operating results difficult to predict and could cause its operating results to fall below expectations.

Brickell's operations to date have been limited primarily to researching and developing sofpironium bromide and undertaking preclinical studies and clinical trials of sofpironium bromide. Brickell has not yet obtained regulatory approvals for sofpironium bromide in any country. Consequently, any predictions you or Brickell make about its future success or viability may not be as accurate as they could be if Brickell had a longer operating history or approved products on the market. Brickell's revenue and profitability will depend on development funding and the achievement of development and clinical milestones under an agreement with Kaken, as well as any potential future collaboration and license agreements and sales of sofpironium bromide or future products, if approved. These up-front and milestone payments may vary significantly from period to period, and any such variance could cause a significant fluctuation in Brickell's operating results from one period to the next. In addition, Brickell will measure compensation cost for stock-based awards made to employees at the grant date of the award, based on the fair value of the award as determined by its board of directors and recognize the cost as an expense over the employee's requisite service period. As the variables that Brickell uses as a basis for valuing these awards change over time, including its underlying stock price and stock price volatility, the magnitude of the expense that Brickell must recognize may vary significantly. Furthermore, Brickell's operating results may fluctuate due to a variety of other factors, many of which are outside of its control and may be difficult to predict.

The former Vical stockholders may sell their shares of the combined company.

Pursuant to the Merger Agreement, the stockholders of Vical are not required to agree to restrictions on selling their stock. As such, the former Vical stockholders may sell their stock of the combined company after the Merger, which could lead to a decline in the market value of Brickell's stock and could negatively impact future issuances of the combined company's equity securities.

The combined company will incur costs and demands upon management as a result of complying with the laws and regulations affecting public companies.

The combined company will incur significant legal, accounting and other expenses that Brickell did not incur as a private company, including costs associated with public company reporting and other SEC requirements. The combined company also will incur costs associated with corporate governance requirements, including requirements under the Sarbanes-Oxley Act, as well as new rules implemented by the SEC and Nasdaq. These rules and regulations are expected to increase the combined company's legal and financial compliance costs and to make some activities more time-consuming and costly. The combined company's executive officers and other personnel will need to devote substantial time to gaining expertise regarding operations as a public company and compliance with applicable laws and regulations. These rules and regulations may also make it expensive for the combined company to operate its business.

The combined company is expected to take advantage of reduced disclosure and governance requirements applicable to smaller reporting companies, which could result in its common stock being less attractive to investors.

Following the Merger, the combined company is expected to have a public float of less than $250 million and therefore will qualify as a smaller reporting company under the rules of the SEC. As a smaller reporting company the combined company will be able to take advantage of reduced disclosure requirements, such as simplified executive compensation disclosures and reduced financial statement disclosure requirements in its SEC filings. Decreased disclosures in the combined company's SEC filings due to its status as a smaller reporting company may make it harder for investors to analyze its results of operations and financial prospects. We cannot predict if investors will find the combined company's common stock less attractive if it relies on these exemptions. If some investors find its common stock less attractive as a result, there may be a less active trading

market for its common stock and its stock price may be more volatile. The combined company may take advantage of the reporting exemptions applicable to a smaller reporting company until it is no longer a smaller reporting company, which status would end once it has a public float greater than $250 million. In that event, the combined company could still be a smaller reporting company if its annual revenues were below $100 million and it has a public float of less than $700 million.

The combined company does not anticipate paying any dividends in the foreseeable future.

The current expectation is that the combined company will retain its future earnings to fund the development and growth of the company's business. As a result, capital appreciation, if any, of the shares of the combined company will be your sole source of gain, if any, for the foreseeable future.

If Brickell fails to attract and retain management and other key personnel, it may be unable to continue to successfully develop or commercialize its product candidates or otherwise implement its business plan.

Brickell's ability to compete in the highly competitive pharmaceuticals industry depends on its ability to attract and retain highly qualified managerial, scientific, medical, legal, sales and marketing and other personnel. Brickell is highly dependent on its management and scientific personnel. The loss of the services of any of these individuals could impede, delay or prevent the successful development of Brickell's product pipeline, completion of its planned clinical trials, commercialization of its product candidates or in-licensing or acquisition of new assets and could impact negatively its ability to implement successfully its business plan. If Brickell loses the services of any of these individuals, it might not be able to find suitable replacements on a timely basis or at all, and its business could be harmed as a result. Brickell might not be able to attract or retain qualified management and other key personnel in the future due to the intense competition for qualified personnel among biotechnology, pharmaceutical and other businesses.

Brickell's ability to use its net operating loss carry-forwards to offset future taxable income may be subject to certain limitations.

As of December 31, 2018, Brickell had approximately $36.5 million of federal and $30.9 million of state operating loss carry-forwards available to offset future taxable income, which expire in varying amounts beginning in 2030 for federal and state purposes if unused. It is possible that Brickell will not generate taxable income in time to use these loss carry-forwards before their expiration. Brickell's net operating loss carryforwards may also be subject to limitation as a result of prior shifts in equity ownership and/or the Merger. In addition, Brickell may experience ownership changes in the future as a result of offerings of our stock or subsequent shifts in its stock ownership, some of which are outside of its control. In that case, the ability to use net operating loss carry-forwards to offset future taxable income will be limited following any such ownership change.

Brickell may be adversely affected by natural disasters and other catastrophic events and byman-made problems such as terrorism that could disrupt its business operations, and its business continuity and disaster recovery plans may not adequately protect it from a serious disaster.

Brickell's corporate office is located in Boulder, Colorado, near a major flood and blizzard zone. If a disaster, power outage, computer hacking, or other event occurred that prevented Brickell from using all or a significant portion of an office, that damaged critical infrastructure, such as enterprise financial systems, IT systems, manufacturing resource planning or enterprise quality systems, or that otherwise disrupted operations, it may be difficult or, in certain cases, impossible for it to continue its business for a substantial period of time. Brickell's contract manufacturer's and suppliers' facilities are located in multiple locations where other natural disasters or similar events, such as tornadoes, fires, explosions or large-scale accidents or power outages, or IT threats, could severely disrupt Brickell's operations and have a material adverse effect on its business, financial condition, operating results and prospects. In addition, acts of terrorism and other geo-political unrest could cause

disruptions in Brickell's business or the businesses of its partners, manufacturers or the economy as a whole. All of the aforementioned risks may be further increased if Brickell does not implement a disaster recovery plan or its partners' or manufacturers' disaster recovery plans prove to be inadequate. To the extent that any of the above should result in delays in the regulatory approval, manufacture, distribution or commercialization of sofpironium bromide, its business, financial condition, operating results and prospects would suffer.

Brickell's business and operations would suffer in the event of system failures, cyber-attacks or a deficiency in its cyber-security.

Despite the implementation of security measures, Brickell's internal computer systems and those of its current and future CROs and other contractors and consultants are vulnerable to damage from computer viruses, unauthorized access, natural disasters, terrorism, war and telecommunication and electrical failures. The risk of a security breach or disruption, particularly through cyber-attacks or cyber-intrusion, including by computer hackers, foreign governments, and cyber-terrorists, has generally increased as the number, intensity and sophistication of attempted attacks and intrusions from around the world have increased. While Brickell has not experienced any such material system failure, accident or security breach to date, if such an event were to occur and cause interruptions in Brickell's operations, it could result in a material disruption of its development programs and its business operations. In addition, since Brickell sponsors clinical trials, any breach that compromises patient data and identities causing a breach of privacy could generate significant reputational damage and legal liabilities and costs to recover and repair, including affecting trust in the company to recruit for future clinical trials. For example, the loss of clinical trial data from completed or future clinical trials could result in delays in Brickell'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 a loss of, or damage to, Brickell's data or applications or inappropriate disclosure of confidential or proprietary information, Brickell could incur liability and the further development and commercialization of its products and product candidates could be delayed.

Risks Related To Brickell's Intellectual Property

Brickell may not be able to obtain, maintain or enforce global patent rights or other intellectual property rights that cover sofpironium bromide and technologies that are of sufficient breadth to prevent third parties from competing against Brickell.

Brickell's success with respect to sofpironium bromide will depend, in part, on its ability to obtain and maintain patent protection in both the United States and other countries, to preserve its trade secrets and to prevent third parties from infringing on its proprietary rights. Brickell's ability to protect sofpironium bromide from unauthorized or infringing use by third parties depends in substantial part on its ability to obtain and maintain valid and enforceable patents around the world.

The patent application process, also known as patent prosecution, is expensive and time-consuming, and Brickell and its current or future licensors and licensees may not be able to prepare, file and prosecute all necessary or desirable patent applications at a reasonable cost or in a timely manner in all the countries that are desirable. It is also possible that Brickell or its current licensors, or any future licensors or licensees, will fail to identify patentable aspects of inventions made in the course of development and commercialization activities before it is too late to obtain patent protection on them. Therefore, these and any of Brickell's patents and applications may not be prosecuted and enforced in a manner consistent with the best interests of its business. Moreover, Brickell's competitors independently may develop equivalent knowledge, methods and know-how or discover workarounds to Brickell patents that would not constitute infringement. Any of these outcomes could impair Brickell's ability to enforce the exclusivity of its patents effectively, which may have an adverse impact on its business, financial condition and operating results.

Due to legal standards relating to patentability, validity, enforceability and claim scope of patents covering pharmaceutical inventions, Brickell's ability to obtain, maintain and enforce patents is uncertain and involves

complex legal and factual questions especially across countries. Accordingly, rights under any existing patents or any patents Brickell might obtain or license may not cover its product candidates or may not provide Brickell with sufficient protection for its product candidates to afford a sustainable commercial advantage against competitive products or processes, including those from branded, generic and over-the-counter pharmaceutical companies. In addition, Brickell cannot guarantee that any patents or other intellectual property rights will issue from any pending or future patent or other similar applications owned by or licensed to Brickell. Even if patents or other intellectual property rights have issued or will issue, Brickell cannot guarantee that the claims of these patents and other rights are or will be held valid or enforceable by the courts, through injunction or otherwise, or will provide Brickell with any significant protection against competitive products or otherwise be commercially valuable to Brickell in every country of commercial significance that Brickell may target.

Competitors in the field of dermatologic therapeutics have created a substantial amount of prior art, including scientific publications, posters, presentations, patents and patent applications and other public disclosures including on the Internet. Brickell's ability to obtain and maintain valid and enforceable patents depends on whether the differences between its technology and the prior art allow its technology to be patentable over the prior art. Brickell does not have outstanding issued patents covering all of the recent developments in its technology and is unsure of the patent protection that it will be successful in obtaining, if any. Even if the patents do successfully issue, third parties may design around or challenge the validity, enforceability or scope of such issued patents or any other issued patents Brickell owns or licenses, which may result in such patents being narrowed, invalidated or held unenforceable. If the breadth or strength of protection provided by the patents Brickell holds or pursues with respect to its product candidates is challenged, it could dissuade companies from collaborating with Brickell to develop or threaten its ability to commercialize or finance its product candidates.

The laws of some foreign jurisdictions do not provide intellectual property rights to the same extent or duration as in the United States, and many companies have encountered significant difficulties in acquiring, maintaining, protecting, defending and especially enforcing such rights in foreign jurisdictions. If Brickell encounters such difficulties in protecting or are otherwise precluded from effectively protecting its intellectual property in foreign jurisdictions, its business prospects could be substantially harmed, especially internationally.

Patents have a limited lifespan. In the United States, the natural expiration of a patent is generally 20 years after it is filed, with patent term extensions granted in certain instances to compensate for part of the period in which the drug was under development and could not be commercialized while under the patent. Without patent protection for sofpironium bromide, it may be open to competition from generic versions of sofpironium bromide. The issued U.S. patents relating to sofpironium bromide run through 2031, including expected extensions just described. Brickell also filed a new composition of matter patent application in the United States that would provide expected coverage through 2040, if approved.

Proprietary trade secrets and unpatented know-how are also very important to Brickell's business. Although Brickell has taken steps to protect its trade secrets and unpatented know-how by entering into confidentiality agreements with third parties, and intellectual property protection agreements with officers, directors, employees, and certain consultants and advisors, there can be no assurance that binding agreements will not be breached or enforced by courts, that Brickell would have adequate remedies for any breach, including injunctive and other equitable relief, or that its trade secrets and unpatented know-how will not otherwise become known, inadvertently disclosed by Brickell or its agents and representatives, or be independently discovered by its competitors. If trade secrets are independently discovered, Brickell would not be able to prevent their use and if Brickell and its agents or representatives inadvertently disclose trade secrets and/or unpatented know-how, Brickell may not be allowed to retrieve this and maintain the exclusivity it previously enjoyed.

Brickell may not be able to protect its intellectual property rights throughout the world.

Filing, prosecuting and defending patents on Brickell's product candidates does not guarantee exclusivity. The requirements for patentability differ in certain countries, particularly developing countries. In addition, the

laws of some foreign countries do not protect intellectual property rights to the same extent as laws in the United States, especially when it comes to granting use and other kinds of patents and what kind of enforcement rights will be allowed, especially injunctive relief in a civil infringement proceeding. Consequently, Brickell may not be able to prevent third parties from practicing its inventions in all countries outside the United States and even in launching an identical version of Brickell's product notwithstanding Brickell has a valid patent in that country. Competitors may use Brickell's technologies in jurisdictions where it has not obtained patent protection to develop their own products, or produce copy products, and, further, may export otherwise infringing products to territories where Brickell has patent protection but enforcement on infringing activities is inadequate or where Brickell has no patents. These products may compete with Brickell's products, and Brickell's 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 and other intellectual property protection, particularly those relating to pharmaceuticals, and the judicial and government systems are often corrupt, which could make it difficult for Brickell to stop the infringement of its patents or marketing of competing products in violation of its proprietary rights generally. Proceedings to enforce its patent rights in foreign jurisdictions could result in substantial costs and divert its efforts and attention from other aspects of its business, could put its global patents at risk of being invalidated or interpreted narrowly and its global patent applications at risk of not issuing, and could provoke third parties to assert claims against it. Brickell may not prevail in any lawsuits that Brickell initiates or infringement actions brought against Brickell, and the damages or other remedies awarded, if any, may not be commercially meaningful when Brickell is the plaintiff. When Brickell is the defendant it may be required to post large bonds to stay in the market while it defends itself from an infringement action.

In addition, certain countries in Europe and certain developing countries have compulsory licensing laws under which a patent owner may be compelled to grant licenses to third parties, especially if the patent owner does not enforce or use its patents over a protracted period of time. In some cases, the courts will force compulsory licenses on the patent holder even when finding the patent holder's patents are valid if the court believes it is in the best interests of the country to have widespread access to an essential product covered by the patent. In these situations the royalty the court requires to be paid by the licenseholder receiving the compulsory license is not calculated at fair market value and can be inconsequential, thereby disaffecting the patentholder's business. In these countries, Brickell may have limited remedies if its patents are infringed or if Brickell is compelled to grant a license to its patents to a third party, which could also materially diminish the value of those patents. This would limit its potential revenue opportunities. Accordingly, Brickell's efforts to enforce its intellectual property rights around the world may be inadequate to obtain a significant commercial advantage from the intellectual property that Brickell owns or licenses, especially in comparison to what it enjoys from enforcing its intellectual property rights in the Unites States. Finally, the company's ability to protect and enforce its intellectual property rights may be adversely affected by unforeseen changes in both U.S. and foreign intellectual property laws, or changes to the policies in various government agencies in these countries, including but not limited to the patent office issuing patents and the health agency issuing pharmaceutical product approvals For example, in Brazil, pharmaceutical patents require initial approval of the Brazilian health agency (ANVISA). Finally, many countries have large backlogs in patent prosecution, and in some countries in Latin America it can take years, even decades, just to get a pharmaceutical patent application reviewed notwithstanding the merits of the application.

Obtaining and maintaining Brickell's patent protection depends on compliance with various procedural, document submission, fee payment, and other requirements imposed by governmental patent agencies, and its patent protection could be reduced or eliminated for non-compliance with these requirements.

Periodic maintenance and annuity fees on any issued patent are due to be paid to the USPTO and foreign patent agencies in several stages over the lifetime of the patent. 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. While an inadvertent lapse can, in many cases, be cured by payment of a late fee or by other means in accordance with the applicable rules, 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 just for failure to know about and/or timely pay a prosecution fee. Non-compliance events that could result in abandonment or lapse of a patent or patent application include failure to respond to official actions within prescribed time limits, non-payment of fees in prescribed time periods, and failure to properly legalize and submit formal documents in the format and style the country requires. If Brickell or its licensors fail to maintain the patents and patent applications covering its product candidates for any reason, the company's competitors might be able to enter the market, which would have an adverse effect on Brickell's business.

If Brickell fails to comply with its obligations under its intellectual property license agreements, it could lose license rights that are important to its business. Additionally, these agreements may be subject to disagreement over contract interpretation, which could narrow the scope of its rights to the relevant intellectual property or technology, or increase its financial or other obligations to its licensors.

Brickell has entered into in-license arrangements with respect to certain of its product candidates. These license agreements impose various diligence, milestone, royalty, insurance and other obligations on Brickell. If Brickell fails to comply with these obligations, the respective licensors may have the right to terminate the license, in which event Brickell may not be able to develop or market the affected product candidate. The loss of such rights could materially adversely affect its business, financial condition, operating results and prospects. For more information about these license arrangements, see "*Description of Brickell's Business—Collaborations and Out-License Agreements*."

Brickell's commercial success depends on its ability to develop, manufacture, market and sell its product candidates and use its proprietary technologies without infringing the proprietary rights of third parties. Brickell cannot assure that marketing and selling such candidates and using such technologies will not infringe existing or future patents. Numerous U.S.- and foreign-issued patents and pending patent applications owned by third parties exist in the fields relating to its product candidates. As the biotechnology and pharmaceutical industries expand and more patents are issued, the risk increases that others may assert that its product candidates, technologies or methods of delivery or use infringe their patent rights. Moreover, it is not always clear to industry participants, including us, which patents and other intellectual property rights cover various drugs, biologics, drug delivery systems or their methods of use, and which of these patents may be valid and enforceable. Thus, because of the large number of patents issued and patent applications filed in Brickell's fields across many countries, there may be a risk that third parties may allege they have patent rights encompassing Brickell's product candidates, technologies or methods.

In addition, there may be issued patents of third parties that are infringed or are alleged to be infringed by Brickell's product candidates or proprietary technologies notwithstanding patents Brickell may possess. Because some patent applications in the United States may be maintained in secrecy until the patents are issued, because patent applications in the United States and many foreign jurisdictions are typically not published until 18 months after filing and because publications in the scientific literature often lag behind actual discoveries, Brickell cannot be certain that others have not filed patent applications for technology covered by its own and in-licensed issued patents or its pending applications. Brickell's competitors may have filed, and may in the future file, patent applications covering Brickell's own product candidates or technology similar to Brickell's technology. Any such patent application may have priority over Brickell's own and in-licensed patent applications or patents, which could further require Brickell to obtain rights to issued patents covering such technologies, which may mean paying significant licensing fees or the like. If another party has filed a U.S. patent application on inventions similar to those owned or in-licensed to us, Brickell or, in the case of in-licensed technology, the licensor may have to participate, in the United States, in an interference proceeding to determine priority of invention.

Brickell may be exposed to, or threatened with, future litigation by third parties having patent or other intellectual property rights alleging that its product candidates or proprietary technologies infringe such third parties' intellectual property rights, including litigation resulting from filing under Paragraph IV of the Hatch-Waxman Act or other countries' laws similar to the Hatch-Waxman Act. These lawsuits could claim that there are existing patent rights for such drug, and this type of litigation can be costly and could adversely affect its operating results and divert the attention of managerial and technical personnel, even if Brickell does not infringe such patents or the patents asserted against Brickell is ultimately established as invalid. There is a risk that a court would decide that Brickell is infringing the third party's patents and would order Brickell to stop the activities covered by the patents. In addition, there is a risk that a court will order Brickell to pay the other party significant damages for having violated the other party's patents.

Because Brickell relies on certain third-party licensors and partners and will continue to do so in the future, if one of its licensors or partners is sued for infringing a third party's intellectual property rights, Brickell's business, financial condition, operating results and prospects could suffer in the same manner as if Brickell were sued directly. In addition to facing litigation risks, Brickell has agreed to indemnify certain third-party licensors and partners against claims of infringement caused by Brickell's proprietary technologies, and Brickell has entered or may enter into cost-sharing agreements with some its licensors and partners that could require Brickell to pay some of the costs of patent litigation brought against those third parties whether or not the alleged infringement is caused by its proprietary technologies. In certain instances, these cost-sharing agreements could also require Brickell to assume greater responsibility for infringement damages than would be assumed just on the basis of its technology.

The occurrence of any of the foregoing could adversely affect Brickell's business, financial condition or operating results.

Brickell may be subject to claims that its officers, directors, employees, consultants or independent contractors have wrongfully used or disclosed to Brickell alleged trade secrets of their former employers or their former or current customers.

As is common in the biotechnology and pharmaceutical industries, certain of Brickell's employees were formerly employed by other biotechnology or pharmaceutical companies, including its competitors or potential competitors. Moreover, Brickell engages the services of consultants to assist Brickell in the development of Brickell's products and product candidates, many of whom were previously employed at, or may have previously been or are currently providing consulting services to, other biotechnology or pharmaceutical companies, including its competitors or potential competitors. Brickell may be subject to claims that these employees and consultants or Brickell has inadvertently or otherwise used or disclosed trade secrets or other proprietary information of their former employers or their former or current customers. Although Brickell has no knowledge of any such claims being alleged to date, if such claims were to arise, litigation may be necessary to defend against any such claims. Even if Brickell is successful in defending against any such claims, any such litigation could be protracted, expensive, a distraction to its management team, not viewed favorably by investors and other third parties, and may potentially result in an unfavorable outcome.

CAUTIONARY NOTE CONCERNING FORWARD-LOOKING STATEMENTS

This proxy statement contains statements which, to the extent they are not statements of historical or present fact, constitute "forward-looking statements" under the securities laws. These forward-looking statements are intended to provide management's current expectations or plans for future operating and financial performance of the combined company following the Merger, based on assumptions currently believed to be valid. Forward-looking statements can be identified by the use of words such as "believe," "expect," "expectations," "plans," "strategy," "prospects," "estimate," "project," "target," "anticipate," "will," "may," "should," "see," "guidance," "confident" and other words of similar meaning in connection with a discussion of future operating or financial performance. All forward-looking statements involve risks, uncertainties and other factors that may cause actual results to differ materially from those expressed or implied in the forward-looking statements. Risks, uncertainties and other factors that could cause actual results to differ from these forward-looking statements include, but are not limited to, risks and uncertainties detailed in the section titled "*Risk Factors*" beginning on page 25. The statements made in this proxy statement regarding the following subject matters are forward-looking by their nature:

- expectations regarding the successful development, regulatory approval and commercialization of sofpironium bromide and Brickell's early stage product candidates;
- expectations regarding the results and timing of results of clinical trials for sofpironium bromide and Brickell's other product candidates;
- expectations regarding the potential market size, opportunity and growth potential for sofpironium bromide and Brickell's early stage product candidates;
- expectations regarding the degree of physician and patient adoption and use of sofpironium bromide following approval, if received;
- Brickell's relationship with, and expectations of, its product development partners;
- expectations regarding the safety and efficacy of Brickell's early stage product candidates;
- the combined company's expected cash position and ability to obtain financing in the future on satisfactory terms or at all;
- estimates of the combined company's expenses and capital requirements;
- the timing or likelihood of regulatory filings and approvals;
- the implementation of the combined company's business model, strategic plans for its business, product candidates and technology;
- the scope of protection the combined company is able to establish and maintain for intellectual property rights covering its product candidates and technology;
- the combined company's financial performance;
- developments relating to the combined company's competitors;
- the timing, approval and completion of the Merger and the final exchange ratio;
- ability to satisfy the closing conditions of the Merger Agreement and the Funding Agreement;
- the ability of the combined company to satisfy the funding requirements under the Funding Agreement;
- litigation relating to the Merger; and
- realization of the anticipated benefits of the Merger.

The preceding list is not intended to be an exhaustive list of all forward-looking statements in this proxy statement. You should read this proxy statement with the understanding that actual future results, levels of activity, performance and achievements may be materially different from what is currently expected. We qualify all of the forward-looking statements by these cautionary statements.

There can be no assurance that the Merger or any other Contemplated Transaction described in this proxy statement will in fact be completed in the manner described or at all. Any forward-looking statement speaks only as of the date on which it is made, and Vical, Brickell and the combined company assume no obligation to update or revise such statement, whether as a result of new information, future events or otherwise, except as required by applicable law. Readers are cautioned not to place undue reliance on any of these forward-looking statements.

THE SPECIAL MEETING OF VICAL STOCKHOLDERS

Date, Time and Place

The Special Meeting of Vical stockholders will be held on August 30, 2019, commencing at 8:00 a.m. local time, at Cooley LLP, 4401 Eastgate Mall, San Diego, California 92121. Vical is sending this proxy statement to its stockholders in connection with the solicitation of proxies by Vical's board of directors for use at the Special Meeting and any adjournments or postponements of the Special Meeting. This proxy statement is first being furnished to stockholders of Vical on or about July 15, 2019.

Purposes of the Special Meeting

The purposes of the Special Meeting are:

1. To consider and vote upon a proposal to approve an amendment to Vical's restated certificate of incorporation, as amended, to effect a reverse split of Vical's common stock (the "Reverse Split") at a ratio in the range of 1-for-5 to 1-for-15, inclusive, with such ratio to be mutually agreed to by Vical and Brickell and to be effected by Vical prior to the effective time of the Merger;
2. To consider and vote upon a proposal to approve the consummation of a change of control of Vical resulting from the Contemplated Transactions pursuant to the Nasdaq rules, as contemplated by the Merger Agreement (a copy of which is attached as Appendix A to this proxy statement); and
3. To consider and vote upon a postponement or adjournment of the Special Meeting, if necessary, to solicit additional proxies if there are not sufficient votes in favor of Proposal Nos. 1 or 2 described above at the time of the Special Meeting.

Recommendation of the Vical Board of Directors

- The Vical board of directors has determined and believes that it is advisable to, and in the best interests of, Vical and its stockholders to approve the amendment to Vical's restated certificate of incorporation, as amended, to effect the Reverse Split, as described in this proxy statement. Vical's board of directors recommends that Vical stockholders vote "FOR" Proposal No. 1 to approve Vical effecting the Reverse Split.
- The Vical board of directors has determined and believes that it is fair to, advisable and in the best interests of, Vical and its stockholders to approve the consummation of a change of control of Vical resulting from the Contemplated Transactions pursuant to the Nasdaq rules, as contemplated by the Merger Agreement. Vical's board of directors recommends that Vical stockholders vote "FOR" Proposal No. 2 to approve of the consummation of the change of control of Vical resulting from the Contemplated Transactions pursuant to the Nasdaq rules, as contemplated by the Merger Agreement.
- The Vical board of directors has determined and believes that it is advisable to, and in the best interests of, Vical and its stockholders to approve postponing or adjourning the Special Meeting, if necessary, to solicit additional proxies if there are not sufficient votes in favor of Proposal Nos. 1 or 2. Vical's board of directors recommends that Vical stockholders vote "FOR" Proposal No. 3 to approve of postponing or adjourning the Special Meeting, if necessary, to solicit additional proxies if there are not sufficient votes in favor of Proposal Nos. 1 or 2.

Record Date and Voting Power

Only holders of record of Vical common stock at the close of business on the record date, July 2, 2019, are entitled to notice of, and to vote at, the Special Meeting. There were 125 holders of record of Vical common stock at the close of business on the record date. At the close of business on the record date, 22,841,278 shares of Vical common stock were issued and outstanding. Each share of Vical common stock entitles the holder thereof

to one vote on each matter submitted for stockholder approval. See the section titled "*Principal Stockholders of Vical*" in this proxy statement for information regarding persons known to the management of Vical to be the beneficial owners of more than 5% of the outstanding shares of Vical common stock.

Voting and Revocation of Proxies

The proxy accompanying this proxy statement is being solicited on behalf of the board of directors of Vical for use at the Special Meeting.

If you are a stockholder of record of Vical as of the record date referred to above, you may vote in person at the Special Meeting or vote by proxy using the enclosed proxy card, over the telephone or via the Internet. Whether or not you plan to attend the Special Meeting, Vical urges you to vote by proxy to ensure your vote is counted. You may still attend the Special Meeting and vote in person if you have already voted by proxy. As a stockholder of record:

- to vote in person, come to the Special Meeting and Vical will give you a ballot when you arrive.
- to vote using the proxy card, simply mark, sign and date your proxy card and return it promptly in the postage-paid envelope provided.
- to vote on the Internet, go to the website listed on your proxy card or voting instruction form to complete an electronic proxy card. You will be asked to provide the company number and control number from the enclosed proxy card.
- to vote over the telephone, dial the toll-free phone number listed on a proxy card that may be delivered under the heading "Vote by Phone" and follow the recorded instructions.

If you vote by proxy, your vote must be received by 11:59 p.m. Eastern Time on August 29, 2019 to be counted.

If you are a beneficial owner and do not instruct your broker, bank, or other agent how to vote your shares, the question of whether your broker or nominee will still be able to vote your shares depends on whether the NYSE deems the particular proposal to be a "routine" matter. Brokers and nominees can use their discretion to vote "uninstructed" shares with respect to matters that are considered to be "routine," but not with respect to "non-routine" matters. Proposal No. 2 (approval of the consummation of a change of control of Vical resulting from the Contemplated Transactions pursuant to the Nasdaq rules) is a non-routine matter, and accordingly your broker or nominee may not vote your shares on such proposals without your instructions. Proposal No. 1 (approval of the Reverse Split) and Proposal No. 3 (approval of the adjournment of the Special Meeting, if necessary) are considered routine matters and accordingly your broker or nominee may vote your shares on such proposals in the absence of your instructions.

All properly executed proxies that are not revoked will be voted at the Special Meeting and at any adjournments or postponements of the Special Meeting in accordance with the instructions contained in the proxy. If a holder of Vical common stock executes and returns a proxy and does not specify otherwise, the shares represented by that proxy will be voted "FOR" Proposal No. 1 to approve the amendment to the restated certificate of incorporation, as amended, of Vical to effect the Reverse Split; FOR" Proposal No. 2 to approve the consummation of a change of control of Vical resulting from the Merger pursuant to the Nasdaq rules, as contemplated by the Merger Agreement; and "FOR" Proposal No. 3 to postpone or adjourn the Special Meeting, if necessary, to solicit additional proxies if there are not sufficient votes in favor of Proposal Nos. 1 or 2 in accordance with the recommendation of the Vical board of directors.

Vical stockholders of record may change their vote at any time before their proxy is voted at the Special Meeting in one of three ways. First, a stockholder of record of Vical can send a written notice to the Corporate Secretary of Vical stating that the stockholder would like to revoke its proxy. Second, a stockholder of record of Vical can submit new proxy instructions either on a new proxy card or via the Internet. Third, a stockholder of

record of Vical can attend the Special Meeting and vote in person. Attendance alone will not revoke a proxy. If a Vical stockholder of record or a stockholder who owns Vical shares in "street name" has instructed a broker to vote its shares of Vical common stock, the stockholder must follow directions received from its broker to change those instructions.

Required Vote

Approval of Proposal No. 1 requires the affirmative vote of the holders of a majority of the outstanding shares of Vical's common stock outstanding as of the record date for the Special Meeting, assuming a quorum is present. Abstentions and broker non-votes will have the effect of a "NO" vote for Proposal No. 1. It is anticipated that Proposal No. 1 will be a discretionary proposal considered routine under the rules of the NYSE.

Approval of Proposal No. 2 requires the affirmative vote of a majority of the votes cast in person or by proxy at the Special Meeting, assuming a quorum is present. Abstentions and broker non-votes will be not be considered votes cast and will have no effect on the vote for Proposal No. 2. It is anticipated that Proposal No. 2 will be a non-discretionary proposal considered non-routine under the rules of the NYSE.

Approval of Proposal No. 3 requires the affirmative vote of a majority of the votes present in person or by proxy at the Special Meeting and entitled to vote. Abstentions and broker non-votes will be considered votes cast and have the effect of a "NO" vote for Proposal No. 3. It is anticipated that Proposal No. 3 will be a discretionary proposal considered routine under the rules of the NYSE.

Solicitation of Proxies

In addition to solicitation by mail, the directors, officers, employees and agents of Vical may solicit proxies from Vical stockholders by personal interview, telephone, telegram or otherwise. Alliance Advisors has been engaged to assist Vical with its stockholder engagement process, and Vical may pay Alliance Advisors a customary fee of $10,000, plus reasonable out-of-pocket expenses, in connection with the solicitation. Vical will reimburse these brokers, custodians, nominees and fiduciaries for the reasonable out-of-pocket expenses they incur in connection with the forwarding of solicitation materials.

Other Matters

As of the date of this proxy statement, Vical's board of directors does not know of any business to be presented at the Special Meeting other than as set forth in the notice accompanying this proxy statement. If any other matters should properly come before the Special Meeting, it is intended that the shares represented by proxies will be voted with respect to such matters in accordance with the judgment of the persons voting the proxies.

THE MERGER

This section and the section titled "The Merger Agreement" in this proxy statement describe the material aspects of the Merger, including the Merger Agreement. While Vical and Brickell believe 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 for a more complete understanding of the Merger and the Merger Agreement, including the Merger Agreement attached as Appendix A, the opinion of MTS Securities attached as Appendix B, and the other documents to which you are referred herein. See the section titled "Where You Can Find More Information" in this proxy statement.

Background of the Merger

Vical's board of directors and management regularly review Vical's operating and strategic plans, both near-term and long-term, as well as potential strategic options in an effort to enhance stockholder value. These reviews and discussions focus, among other things, on the opportunities and risks associated with Vical's business and financial condition and strategic relationships and other strategic options.

On January 22, 2018, we and Astellas Pharma, Inc. ("Astellas") announced that ASP0113, an investigational DNA vaccine being developed for cytomegalovirus-seropositive hematopoietic stem cell transplant recipients, did not meet its primary and secondary endpoints in the Phase 3 HELIOS clinical trial.

On January 30, 2018, we announced that we were undertaking a restructuring in order to conserve capital and focus our efforts on VL-2397, our antifungal drug product candidate that was then entering a pivotal Phase 2 clinical trial, and on completing the Phase 2 study of our bivalent vaccine candidate for herpes simplex virus type 2 ("HSV-2"). The restructuring included a reduction in staff of 54% and the termination of all activities related to the ASP0113 program licensed to Astellas.

On February 20, 2018, we announced the initiation of a Phase 2 trial of the VL-2397 novel antifungal compound.

On March 9, 2018, our board of directors held a regular in-person meeting, with representatives of management and Cooley LLP ("Cooley"), outside counsel to Vical, also attending. At this meeting, and in anticipation of the strategic options to be considered following the results of the HSV-2 Phase 2 clinical trial, representatives of MTS were invited to make a presentation on Vical's strategic alternatives, including a reverse merger, strategic merger, out-licensing of Vical's assets and remaining as an independent company. MTS was asked to participate in the meeting based upon its experience and our management and board's prior familiarity with them, which included past, informal advice on potential product and other opportunities.

On June 11, 2018, we announced that the Phase 2 study of our bivalent vaccine candidate for HSV-2 did not meet its primary endpoint of annualized lesion recurrence rate calculated based on those genital recurrences that were both clinically and virologically confirmed during a minimum of nine months of surveillance, and that as a result, we were terminating the HSV-2 program.

On June 18, 2018, our board held a regular in-person meeting, with representatives of management and Cooley attending, at which it considered potential strategic options, including a reverse merger, strategic merger and remaining as an independent company. At this meeting, our board approved the formation of a strategy committee comprised of Richard M. Beleson, Gary A. Lyons and George J. Morrow to assist Vical management in the strategic review. Our board also authorized Vical management to finalize and execute an engagement letter with MTS to act as a financial advisor in connection with the strategic review process. MTS was selected based upon our management and board's familiarity with them, and, among other things, its knowledge and experience as a transaction advisor for mergers and acquisitions in the biopharmaceutical industry.

On July 16, 2018, we entered into an engagement letter with MTS.

On July 19, 2018, we issued a press release announcing that our board planned to explore a range of strategic options to enhance stockholder value, and that it had retained MTS as its financial advisor to assist in the strategic review process.

Following the initiation of the strategic review, from a universe of approximately 500 companies, Vical management and MTS developed a list of more than 50 life sciences companies that were targeted for proactive outreach. Vical management and MTS focused on candidates with certain characteristics, including therapeutic area, caliber of management, science, differentiated drug pipelines and meaningful catalysts to achieve value appreciation within 12 to 24 months using Vical's cash contribution, in addition to the counterparty's own cash, without requiring further significant post-transaction dilution to Vical's stockholders. While not a requirement, we also gave preference in our assessment to any counterparty that planned to continue development of our VL-2397 program following the transaction (the foregoing two sentences, the "Determination Criteria"). The list was reviewed and approved by the strategy committee.

Following the July 19, 2018 press release through August 2018, MTS and Vical management began reaching out to potential counterparties. Of the more than 70 private and public companies contacted in 2018 by MTS and Vical management during this outreach process (including in response to inbound inquiries), 14 companies were selected to receive process letters, including Company A and Company B, private companies, and Company D, a public company, based on the Determination Criteria, with process letters being sent starting on August 21, 2018. The majority of process letters set a deadline of September 14, 2018 for the submission of proposals, though some parties who expressed interest later in the process received process letters with later submission deadlines. Of these 14 companies, six declined to submit a proposal. The remaining eight companies, plus two companies that did not receive process letters—Company C (a public company) and one other public company—submitted proposals. Of these 10 companies, nine executed confidentiality agreements and all 10 submitted formal proposals, which were then narrowed down to three companies following deliberation based on the Determination Criteria, and further due diligence, including scientific due diligence. All of the confidentiality agreements executed in this phase of the process, including those with Company A, Company B, Company C and Company D, included a standstill provision that did not have a fall-away provision but permitted the counterparty to privately and confidentially approach our management during the standstill period.

On August 7, 2018, representatives of MTS reached out to Company D, a public company identified by MTS as a target for outreach, to provide an overview of the process. On August 16, 2018, we entered into a confidentiality agreement with Company D. On August 22, 2018, MTS sent Company D a process letter, following which representatives of Company D and Vical held an initial update call on September 12, 2018 and Company D was granted access to the Vical dataroom on September 14, 2018. On September 27, 2018, a representative of Company D sent an email communication to MTS indicating that they would not be submitting an offer for Vical because they were not interested in the VL-2397 program.

On August 9, 2018, we entered into a confidentiality agreement (which contained a standstill) with Company B, a private company interested in a reverse merger transaction with which Vical management had, prior to launching the strategic review process, discussed potential complementarity between the two companies.

On that same day, Company A, a private company interested in a reverse merger transaction with which Vical management had had preliminary discussions, sent MTS a preliminary, non-binding indication of interest that reflected a 60% and 40% ownership split for Company A and Vical stockholders in the post-closing company, assuming a Vical net cash balance of $40 million.

On August 15, 2018, we entered into a confidentiality agreement (which contained a standstill) with Company A.

From August 16, 2018 through March 25, 2019, the strategy committee met frequently with Vical management to discuss the status of the strategic review process.

On August 22, 2018, we granted Company B access to our dataroom.

On August 29, 2018, we granted Company A access to our dataroom.

On September 10, 2018, Company A submitted an updated preliminarynon-binding indication of interest for a reverse merger transaction with Vical, which was consistent with its August 9, 2018 offer, including with respect to the equity split, but updated the projected Company A net cash balance.

On September 11, 2018, our board held a regularin-person meeting, with representatives of management, MTS and Cooley attending, to review the status of the strategic process, the proposal made by Company A and the potential counterparties remaining in the process, including Company A and Company B. At the meeting, a representative of Cooley reviewed the fiduciary duties of the board in the context of a strategic process.

On September 14, 2018, Company B submitted a non-binding offer for a reverse merger transaction with Vical. The proposal reflected a 62.5% and 37.5% ownership split for Company B and Vical stockholders in the post-closing company (using the treasury stock method ("TSM")), subject to a net cash adjustment.

On October 24, 2018, MTS provided Vical's written response to Company B's initial proposal, which, among other things, countered with a 55% and 45% ownership split for Company B and Vical stockholders in the post-closing company (using TSM), without any exchange ratio adjustment for net cash (but subject to delivery of a minimum cash balance of approximately $40 million, depending on the timing of closing), as well as the issuance of a contingent value right ("CVR") to Vical's stockholders with respect to a pipeline product.

On October 25, 2018, MTS provided Vical's written response to Company A's initial proposal, which, among other things, countered with a 55% and 45% ownership split for Company A and Vical stockholders in the post-closing company (using TSM), subject to minimum Vical closing net cash balance at closing estimated to be $40 million, as well as either the issuance of a CVR or an upward adjustment in the equity split for Vical stockholders for any upfront or milestone payments with respect to any Vical partnering transactions with respect to a pipeline product.

On October 30, 2018, our board met in person with representatives of Company A and Company B to discuss each party's business and proposal. Later that same day, with representatives of Cooley attending, the board discussed the status of negotiations with Company A and Company B. Management presented an overview of each potential counterparty's business and an initial scientific due diligence assessment, as well an analysis of a scenario where Vical completed its Phase 2 clinical trial of VL-2397 as a standalone company.

On October 30, 2018, we also entered into a confidentiality agreement (which contained a standstill) with Company C, a public company that was introduced to Vical by a representative of a Vical stockholder who was also a representative of a significant stockholder of Company C.

On October 30, 2018, we also received a counter-proposal from Company A, which, among other things, accepted Vical's proposed ownership split, accepted Vical's proposal on Vical net cash and a CVR or equity split adjustment to Vical stockholders for milestone and upfront payments to the extent that partnering transactions with respect to a pipeline product are entered into prior to closing.

In October and November 2018, our management conducted a due diligence review of Company A, Company B and Company C.

On November 1, 2018, Company C submitted a preliminary non-binding proposal to acquire Vical in a stock-for-stock transaction at a purchase price of $1.60 per share or $46.48 million, plus a CVR of $0.20 per share. At the direction of the strategy committee, a representative of Vical management contacted the Vical

stockholder with a relationship with Company C, who in turn asked Company C to improve its proposal. On November 9, 2018, Company C updated its proposal to increase the purchase price to $1.80 per share, or $52.52 million, plus a CVR of $0.30 per share.

On November 7, 2018, Company B sent a counter-proposal to Vical which, among other things, reflected a 56.8% and 43.2% ownership split for Company B and Vical stockholders in the post-closing company (using TSM) and accepted Vical's proposal that there be no exchange ratio adjustment for net cash (but subject to delivery of a minimum cash balance of $40 million (assuming no accrual of patients in the VL-2397 Phase 2 clinical trial)) and the issuance of a CVR to Vical stockholders.

On November 8, 2018, Company A sent a further revised counter-proposal to Vical, which proposed a 50% and 50% ownership split for Company A and Vical stockholders in the post-closing company (using TSM).

On November 28, 2018, our board held a special telephonic meeting, with representatives of management, MTS and Cooley attending, to discuss the strategic review process and Vical's strategic options, including the status of discussions with Company A, Company B and Company C, as well as a potential liquidation scenario. Management provided a report on its assessment of the results of scientific due diligence on the companies remaining in the process. Management recommended that Vical not continue discussions with Company A because of issues identified in scientific due diligence, which in the board's judgment did not justify its valuation, and concerns regarding the Company A management team. Vical management also recommended prioritizing the opportunity with Company C over Company B because of the strength of Company C's pipeline, possibility of liquidity provided by Company C stock, and management's assessment of the strengths of each company's management team. The board considered certain risks associated with the stock-for-stock transaction proposed by Company C and directed MTS to continue discussions with Company C and develop a proposal for an exchange ratio collar. In addition, it directed MTS and Vical management to continue due diligence and discussions with Company B as a second option.

On December 4, 2018, MTS delivered Vical's counter-proposal to Company C that reflected, among other things, a floating exchange ratio subject to a collar for a minimum and maximum Vical stockholder pro forma ownership of the combined company of 20% and 30%.

On December 4, 2018, Company C delivered its response to the Vical counter-proposal, which reflected a Vical stockholder ownership floor of 15% of the post-closing company, and a Vical net working capital purchase price adjustment based on a $40 million target. That same day, we granted Company C access to our dataroom. On December 5, 2018, representatives of MTS and Vical had a conference call with representatives of Company C to discuss how the Vical net working capital calculation and collar would be determined.

On December 6, 2018, Vical's strategy committee met to discuss the revised terms proposed by Company C and the general status of discussions.

On December 8, 2018, representatives of Company C contacted representatives of MTS to inform them that because of, among other reasons, valuation concerns, volatility of their stock price and concerns about the adequacy of the parties' net cash, it was not going to move forward with a potential transaction. In light of that development, Vical's strategy committee directed management to continue to move forward with detailed due diligence and negotiations with Company B.

Our board held a regular in-person meeting on December 13, 2018, with representatives of management, Cooley and MTS attending, where members of management and representatives of MTS provided an update on negotiations with Company B and Company C, as well as ongoing due diligence efforts with respect to Company B. At this meeting, management discussed an analysis of a potential liquidation of Vical that had previously been provided to our board, including the potential timeline for liquidation and an estimate, subject to various assumptions, of the per share amount that would be distributable to Vical stockholders in this scenario.

Following consideration of Vical's alternatives, including concerns relating to the adequacy of Company B's data raised in due diligence, as well as with Company B's management, the board provided management with guidance regarding further discussions with Company B. At the meeting, a representative of Cooley reviewed the fiduciary duties of the board in the context of a strategic process.

On December 14, 2018, representatives of MTS sent a draft merger agreement to Company B and identified specific issues, from the Vical board, to be resolved prior to finalizing a transaction including the need to address concerns about Company B's management team.

On January 17, 2019, a representative of the investment bank that had been engaged by Company B contacted MTS to inform them that they were withdrawing from the process because of, among other reasons, concerns about the adequacy of Vical's net cash levels.

On January 28, 2019, representatives of Brickell communicated with MTS to inquire about the status of the process. From January28-31, 2019, there was a series of communications to provide MTS and Vical with information on Brickell new management hires and Brickell's current financing process with various parties.

On January 29, 2019, our board held a special telephonic meeting, with representatives of management, Cooley and MTS attending, where members of management and representatives of MTS provided an update on the strategic process and Vical's strategic options, including liquidation of the company, as previously presented to the board. In addition, the board discussed the status of the VL-2397 Phase 2 clinical trial, including patient accrual rates, and Vical's cash burn and cash position. The board directed management to explore a potential sub-license or other transaction related to the disposition of the VL-2397 program and to otherwise prepare to cease further development ofVL-2397 in light of the low patient accrual rates in the study.

Following the January 29, 2019 board meeting, MTS continued reaching out to potential counterparties for a second round of the strategic review process. Of the 39 private and public companies that were targets of outreach during the second phase of the process (including in response to inbound inquiries), and based on the Determination Criteria (other than the counterparties' willingness to continue the VL-2397 program), Vical management selected 10 companies, including Brickell and Company D, to receive process letters starting on February 11, 2019. The majority of the process letters set a deadline of February 25, 2019 for submission of a proposal, though some parties who expressed interest later received process letters with later submission deadlines. Nine of the 10 companies that received process letters submitted a formal proposal, along with one additional company that made an inbound inquiry and did not receive a process letter. Of those remaining 10 companies that submitted formal proposals, nine executed confidentiality agreements. All of the confidentiality agreements executed with parties active in this phase of the process, including by Company D and Brickell, included a standstill provision but permitted the counterparty to privately and confidentially approach our management during the standstill period. Three of the nine confidentiality agreements with parties other than Company D and Brickell had fall-away provisions.

On February 1, 2019, representatives of MTS and Brickell had a call to discuss strategic process overview and timing.

On February 4, 2019, Vical entered into a confidentiality agreement (which contained a standstill and was dated to be effective as of January 31, 2019) with Brickell and granted Brickell dataroom access. On February 5, 2019, Vical received access to Brickell's dataroom.

On February 11, 2019, Brickell made a management presentation to Vical. That same day, MTS sent a process letter to Brickell.

On February 12, 2019, representatives of MTS and Brickell held a call to discuss timing, key issues and key considerations for a proposal.

On February 18, 2019, the Vical board held a special telephonic meeting, with representatives of management, MTS and Cooley attending. At this meeting MTS provided an update on the strategic review process, including the current opportunities, the status of discussions with potential counterparties and strategies for soliciting additional proposals. Our board discussed the relative merits of the opportunities under consideration with Brickell and three other private companies, which management presented to the board as its highest priority opportunities based on the Determination Criteria (other than the counterparties' willingness to continue the VL-2397 program), as well as opportunities with two public companies and one other private company. The board also discussed a potential liquidation of the company, as previously presented to the board. The board directed Vical management to continue pursuing potential transactions that would generate maximum value for the company's stockholders and to present such proposals at the next scheduled board meeting. The board also directed management to discontinue clinical development of VL-2397, because of low patient accrual rates in the study, and to implement further cost reduction measures.

On February 19, 2019, we announced that we had decided to discontinue our Phase 2 clinical trial of VL-2397 because of low patient accrual rates in the study and in order to conserve our cash resources while we pursued the strategic alternative review process.

Both prior to and following the termination of the VL-2397 program, our management pursued a number of potential out-licensing transactions with respect to the VL-2397 assets but none of the potential counterparties expressed any meaningful interest in the asset.

On February 21, 2019, representatives of Company D contacted MTS to inquire about the status of the strategic review process. Representatives of MTS had an update call with Company D on February 22, 2019.

On February 25, 2019, Brickell submitted a preliminary non-binding indication of interest concerning a reverse merger transaction with Vical. The proposal reflected a 60% and 40% ownership split for Brickell and Vical stockholders in the post-closing company based on a $100 million pro forma valuation, a seven-member post-closing board of directors (with two Vical directors) and a minimum Vical net cash balance of $35 million at closing, and it also summarized the terms of a proposed concurrent financing with an affiliate of NovaQuest Capital Management ("NovaQuest") for $25 million of non-dilutive at-risk product financing and $5 million in equity. Brickell's belief was that the funding from NovaQuest, along with Vical net cash, would provide sufficient financial resources, through the fourth quarter of 2020 to allow the combined company to focus on the development and potential commercialization of its sofpironium bromide program for the treatment of axillary hyperhidrosis.

On March 4, 2019, the Vical strategy committee discussed the Brickell proposal with representatives of MTS. Following this discussion, MTS contacted Brickell to indicate that Brickell was going to advance in the process and to counter with a 56.4% and 43.6% ownership split for Brickell and Vical stockholders in the post-closing company (on a TSM basis).

On March 5, 2019, MTS sent an illustrative pro forma capitalization table to Brickell and the parties followed up with a call to discuss the proposed valuation splits.

On March 6, 2019, Brickell sent MTS its executed term sheet with NovaQuest to address the Vical management teams' need for a high level of certainty with respect to Brickell's post-transaction financial resources, which was consistent with the terms summarized in Brickell's indication of interest, as well as the pivotal Phase 3 results for sofpironium bromide reported by Brickell's development partner, Kaken, in Japan. In that same communication, Brickell rejected the ownership split that Vical had previously proposed and reacted to its previously proposed equity split.

On March 7, 2019, Company D submitted a written non-binding proposal to acquire Vical for Company D publicly traded shares valued at approximately $35 million. Following receipt of the proposal, representatives of

MTS and Company D discussed the methodology used to determine the valuation of the Company D share consideration.

On March 8, 2019, our board held a regular in-person meeting, with representatives of management and MTS attending, to review the 10 proposals submitted in response to the second outreach effort. At the meeting, management presented its assessment of the potential opportunities, classifying proposals by Company D, Brickell, two other public companies and three other private companies as prioritized opportunities based on the Determination Criteria (other than the counterparties' willingness to continue the VL-2397 program). Management also presented its analysis of the prioritized opportunities based on factors including deal quality, cash at closing, management team quality, science and data quality, regulatory path and market potential. Based on these criteria, management recommended continuing the process with Company D, Brickell and one other public company. After further discussion of the opportunities in light of the Determination Criteria, the board directed management to continue discussions with Company D and Brickell and to disengage the other companies identified as prioritized opportunities.

Following the board meeting, representatives of MTS contacted Company D to propose a purchase price of the greater of $35 million of Company D shares or a number of Company D shares representing a specified minimum percentage of the post-closing company. Representatives of MTS also held a call with Brickell to convey that Brickell was a finalist subject to several key conditions, including entering into a definitive agreement for a concurrent financing with NovaQuest (the "Concurrent Financing") at signing on terms reasonably satisfactory to Vical.

On March 12, 2019, representatives of Brickell met with our board of directors to present an overview of the company, respond to questions and discuss the current proposal.

On March 16, 2019, MTS sent a draft form of merger agreement to Brickell. The draft did not include an exchange ratio adjustment for net cash, but did include a closing condition for minimum Vical net cash in an amount to be determined.

On March 18, 2019, representatives of Company D held a call with our board to present an overview of the company, respond to questions and discuss the current proposal. That same day Vical re-opened its dataroom to Company D.

On March 19, 2019, representatives of Brickell held a call with our management team to discuss financial due diligence matters.

On March 20, 2019, Company D sent MTS a counter-proposal that increased the Vical valuation to $40 million, payable in Company D stock, and proposed a collar of plus or minus 25% of the price per share as of the signing date.

On March 25, 2019, representatives of Brickell circulated a revised draft of the merger agreement to MTS. The draft proposed an exchange ratio adjustment for each party's net cash and a minimum Vical net cash closing condition (and corresponding Brickell termination right) of $30 million.

On March 27, 2019, Cooley and Mayer Brown LLP ("Mayer Brown"), outside counsel to Brickell, held a call to discuss Cooley's initial questions on the revised draft of the merger agreement. That same day, members of Vical management met with representatives of Brickell to discuss the status of the transaction and Vical's pending due diligence inquiries.

On March 29, 2019, Company D sent MTS a further updated proposal, which provided for a purchase price of $40 million above a certain share price and $35 million below a certain share price, with each party having termination right if the share price fell below a certain threshold.

On April 2, 2019, Company D held a due diligence call and MTS submitted a request for additional financial information. Following discussion of the share price threshold at which the parties would have the right to terminate, Company D followed up with MTS to propose a revised threshold for a termination right if the share price fell below a certain threshold. That same day, representatives of Vical, MTS and Brickell held a call to discuss Brickell's cash flow and balance sheet.

On April 3, 2019, Cooley circulated a revised draft of the merger agreement to Mayer Brown. The draft noted Vical's expectation that the Concurrent Financing would be committed at signing and proposed an exchange ratio adjustment and mutual closing conditions based on minimum levels of net cash.

On April 4, 2019, representatives of MTS, Vical and NovaQuest held a call to discuss the terms of the proposed Concurrent Financing and respond to due diligence questions.

On April 8, 2019, MTS sent a counter-proposal to Company D, which added a 10% ownership floor for Vical stockholders in the post-closing company and proposed that there should be a linear increase in Vical stockholder implied equity value in the case of a Company D closing share price drop relative to the reference share price at signing. Company D rejected the proposed ownership floor but accepted the linear equity value gradient proposal.

On April 9, 2019, Mayer Brown circulated a revised draft of the merger agreement to Cooley and conveyed Brickell's request to enter into exclusivity with Vical in order to finalize the transaction documents.

On April 10, 2019, MTS sent a form of merger agreement to Company D.

On April 11, 2019, Company D sent a draft exclusivity letter to MTS.

On April 15, 2019, our board held a special telephonic meeting, with representatives of management, MTS and Cooley attending, to review the status of discussions with Brickell and Company D and update the board on the terms proposed by each party. Management reviewed preliminary due diligence results and the strengths and weaknesses of Brickell and Company D. The board discussed an upcoming regulatory milestone of Company D and management's recommended approach to moving forward with the strategic process depending on this regulatory outcome. It also discussed the anticipated timing for finalizing the Concurrent Financing for Brickell relative to the timing of certain regulatory matters with respect to Company D. Following discussion, our board directed management to defer the decision on whether to enter into exclusivity with either counterparty until further clarity was gained regarding the regulatory matters.

On April 17, 2019, Company D sent an updated exclusivity letter and a draft form of merger agreement to MTS.

On April 26, 2019, representatives of MTS, Vical management and Company D held a call to clarify certain terms in the merger agreement, including termination rights associated with Company D's stock price and Vical stockholder ownership thresholds in the post-closing company. That same day MTS sent a revised draft of the exclusivity letter to Company D and a markup of Company D's indication of interest.

On May 1, 2019, representatives of Vical, Company D and MTS held a call to discuss certain regulatory developments at Company D.

On May 3, 2019, our board of directors held a special telephonic meeting, with representatives of management, Cooley and MTS attending, to review the impact of certain negative regulatory developments at Company D on the strategic review process. Management reviewed the status of negotiations with Brickell, including updates on transaction terms, the status of Brickell's Concurrent Financing and key items to be completed in order to finalize a transaction. The board discussed Vical's options, including moving forward with

Brickell or liquidating the company, as previously presented to the board. In view of the negative regulatory outcome and resulting decline in Company D's stock price, the board directed management to end discussions with Company D and enter into a 15-day exclusivity period with Brickell. The board also discussed the other companies that were still in the process and determined that they were not viable candidates based upon the Determination Criteria. That same day, representatives of MTS sent Brickell a draft exclusivity agreement.

On May 6, 2019, we executed an exclusivity agreement with Brickell, which provided for an exclusivity period through the end of May 22, 2019.

On May 7, 2019, MTS sent Brickell an updated pro forma capitalization table. That same day representatives of Cooley, Mayer Brown, Brickell and Vical held a call to discuss the treatment of various Brickell securities in calculating the Exchange Ratio.

On May 9, 2019, Cooley circulated a revised draft of the merger agreement to Mayer Brown.

On May 10, 2019, Brickell sent MTS the then-current draft of the Funding Agreement with respect to the Concurrent Financing, together with a summary of transaction terms, which added the issuance of the NovaQuest Warrants and removed the $5 million of preferred equity financing that was included in the NovaQuest initial term sheet.

On May 13, 2019, Brickell sent MTS a draft of the form of NovaQuest Warrants.

On May 14, 2019, representatives of Vical, MTS and Brickell had a call to discuss the terms of the Funding Agreement and NovaQuest Warrants.

On May 15, 2019, Mayer Brown sent a revised draft of the merger agreement to Cooley, which, among other things, proposed a closing condition for minimum Brickell net working capital and proposed a termination fee in certain circumstances of $1.5 million. That same day Mayer Brown and Cooley held a call to discuss treatment of Brickell equity awards in the transaction.

On May 19, 2019, representatives of Brickell circulated a revised draft of the Funding Agreement to Vical and Cooley. That same day, Cooley sent a revised draft of the merger agreement to Mayer Brown, which proposed a closing condition for a higher minimum Brickell net working capital. The draft also added Vical termination rights and a $1 million reverse termination fee payable to Vical in the event that the Concurrent Financing failed to close. The exchange ratio calculation was modified in the draft to include the recently proposed NovaQuest Warrants in the fully-diluted Brickell outstanding share count despite being proposed to be issued by Vical following the transaction.

On May 20, 2019, Mayer Brown sent a revised draft of the merger agreement to Cooley. Representatives of Cooley, Mayer Brown, Vical and Brickell held a call to discuss feedback on the draft Funding Agreement and NovaQuest Warrants. Later that day, Cooley circulated a revised draft of the merger agreement to Mayer Brown.

Between May 21, 2019 and June 2, 2019, Cooley and Mayer Brown exchanged drafts of the merger agreement, disclosure schedules to the merger agreement, support agreement, lock-up agreement and the Funding Agreement, and participated in calls to discuss the terms thereof. Among other provisions, the parties negotiated the inputs to the calculation of the Exchange Ratio (including the treatment of securities issued in the pre-closing period and the NovaQuest Warrants), the definition of Vical net cash, Brickell net working capital as well as the terms (including with respect to deal certainty) of the Funding Agreement. Brickell, based on further review of its commitments and in light of agreed upon changes to the definition of net working capital, which expanded the definition of included liabilities, requested a further reduction in the net working capital number for the purposes of the closing condition, and the parties ultimately agreed upon a net working capital closing condition.

On June 2, 2019, at a special telephonic meeting with representatives of management, Cooley and MTS attending, our board in consultation with our management and representatives of MTS and Cooley reviewed the strategic process and Brickell's proposal. At the meeting, representatives of MTS confirmed that MTS had not had any prior relationship with, or provided any services, to Brickell during the last two years. At this meeting, representatives of MTS also reviewed its financial analyses of the relative valuation of Vical and Brickell in the merger. Following discussion, MTS Securities provided an oral opinion (which was subsequently confirmed in writing as of June 2, 2019), as of the date of the MTS Opinion and subject to the various assumptions and limitations set forth therein the Exchange Ratio was fair, from a financial point of view, to the holders of Vical common stock. Also, at this meeting, representatives of MTS reviewed changes in the proposed terms of the merger agreement from those discussed at the May 3, 2019 board meeting, including the treatment of options and other Brickell securities issued during the pre-closing period in the Exchange Ratio, the terms of the Funding Agreement with NovaQuest and the closing condition for Brickell's minimum level of net working capital at closing. Cooley reviewed the fiduciary duties of the board in the context of a strategic process and the merger agreement terms, including determination of the Exchange Ratio, conditions to closing, termination rights and fees associated with terminations under certain circumstances, and our limited right to continue negotiations with other interested parties. Our board engaged in extensive discussions relating to Brickell and the terms of the proposed transaction.

Following consideration of the Merger Agreement and the Contemplated Transactions, including consideration of the factors described below in the section titled "*The Merger—Reasons for the Merger*," our board unanimously (a) determined that the Contemplated Transactions were fair to, advisable and in the best interests of Vical and its stockholders; (b) approved and declared advisable the merger agreement and the Contemplated Transactions, including the issuance of shares of Vical's common stock to the shareholders of Brickell pursuant to the terms of the Merger Agreement; and (c) determined to recommend, upon the terms and subject to the conditions set forth in the Merger Agreement, that the stockholders of Vical vote to approve the Closing Stockholders Matters. Our board of directors also agreed to determine the final Vical board members and reverse stock split ratio at a later date.

Later that evening, representatives of Brickell, Vical and Merger Sub executed the definitive Merger Agreement. Concurrently with the execution of the Merger Agreement, each of the directors and executive officers of Brickell holding Brickell capital stock, as well as Brickell stockholders representing approximately 75% of Brickell's outstanding common stock (on an as converted basis) as of such date entered into the support agreement and the lock-up agreement. That same day, Brickell entered into the Funding Agreement with NovaQuest.

Execution of the Merger Agreement was publicly announced before the open of markets on June 3, 2019.

On June 24, 2019, the Vical board received a written unsolicited offer from an investment firm and minority stockholder of Vical. The offer included a proposal to form a transaction vehicle to purchase, for cash, 100% of the Vical shares not owned by the bidder at a price of $1 per share. There were few details provided by the bidder, other than the indicated price and a proposal to enter into discussions. The offer did not include an actual funding (or other) commitment or a proposed definitive agreement.

On June 24, 2019, Vical provided Brickell with oral and written notice of the unsolicited offer as required pursuant to the Merger Agreement.

On June 27, 2019, at a special telephonic meeting with representatives of management, Cooley and MTS attending, Vical's board reviewed and discussed the unsolicited offer. After carefully considering the offer, the Vical board rejected it based on several factors. First, the offer of $1.00 per share was significantly less than the $1.26 per share liquidation value of Vical assuming a liquidation date of July 31, 2019, which in turn was below the range of implied per share values to Vical stockholders in the pro forma combined company with Brickell, as more fully described below under the caption "*The Merger—Opinion of MTS Securities, LLC*". Second, and of particular note, the board found that the offer was subject to substantial uncertainty, was inadequate and was not

a Superior Offer (as defined in the section titled "*The Merger Agreement—Non-Solicitation*") when compared to the potential long term value for Vical stockholders associated with the proposed merger with Brickell. Given these factors, the board determined that the proposal did not constitute and could not be reasonably likely to result in a Superior Offer (as defined in the section titled "*The Merger Agreement—Non-Solicitation*"). Accordingly, and consistent with its obligations under the Merger Agreement, Vical declined the request to enter into discussions with the bidder, and Vical communicated this decision to the bidder. The board continues to unanimously recommend that Vical stockholders vote to approve each of the proposals set forth in this proxy statement.

Reasons for the Merger

Following the Merger, the combined company will be a late clinical-stage company focused on the development and commercialization of differentiated therapeutics for the treatment of skin diseases. In concluding that the Merger is in the best interests of the Vical stockholders, Vical's board of directors considered and viewed the following factors as supporting its decision to reach its conclusion (i) that the Merger and all related transactions set forth in and contemplated by the Merger Agreement are fair to, advisable and in the best interests of Vical and its stockholders and (ii) to approve and declare advisable the Merger Agreement and the Contemplated Transactions, and to recommend, upon the terms and subject to the conditions set forth in the Merger Agreement, that the stockholders of Vical vote to approve the Closing Stockholder Matters (as defined in the section titled "*The Merger Agreement—Vical Special Meeting*"):

- The Vical board of directors and its financial advisors have undertaken a comprehensive and thorough process of reviewing and analyzing the potential merger transaction as well as reaching out to partnering candidates for a variety of strategic transactions, since mid-2018, to identify the opportunity that would, in the Vical board of directors' opinion, create the most value for Vical's stockholders.
- The Vical board of directors believes that, as a result of arm's length negotiations with Brickell, Vical and its representatives negotiated the most favorable exchange ratio for Vical that Brickell was willing to agree to, and that the terms of the Merger Agreement include the most favorable terms to Vical in the aggregate to which Brickell was willing to agree.
- The Vical board of directors believes, after a thorough review of strategic alternatives and Vical's discussions with its financial advisors, legal counsel and third party experts in the field of dermatology, as well as Vical management's discussions with Brickell's senior management, that, compared to the Merger, no alternatives or other strategic options that may have been available to Vical, including remaining a standalone public company, were reasonably likely to create greater value for Vical's stockholders.
- The Vical board of directors believes, based in part on the judgment, advice and analysis of Vical's management with respect to the potential strategic, financial and operational benefits of the Merger (which judgment, advice and analysis was informed in part by the business, scientific, technical, financial, accounting and legal due diligence investigation performed with respect to Brickell), that the combined company's focus on development of dermatological therapeutics represents a sizeable market opportunity, may provide new medical benefits for many different patient populations, and may lead to partnering opportunities with third parties that previously were not available to Vical.
- The Vical board of directors believes that the Merger would provide the existing Vical stockholders opportunities as a result of the Merger to participate in the value of Brickell's current product candidate portfolio and in the prospective growth of the combined company given Brickell's potential to commercialize its pipeline as supported by promising Phase 2 and Phase 3 (in one Japanese study completed by Brickell's partner Kaken) clinical trial results for sofpironium bromide and a potential sizeable market opportunity in hyperhidrosis.
- The Vical board of directors believes that the market for hyperhidrosis offers Brickell a sizeable commercial opportunity in addition to potential monetization of Vical's VL-2397 program in the future.

- The Vical board of directors also reviewed, with Vical's management and Brickell's management, the current clinical plans of Brickell and believes, assuming the successful consummation of the Concurrent Financing, the combined company would have sufficient financial resources through the fourth quarter of 2020 to allow the management team to focus on the development and potential commercialization of the sofpironium bromide program for the treatment of axillary hyperhidrosis.
- The Vical board of directors also considered that the combined company will be led by an experienced senior management team with a record of success in product commercialization and marketing and a board of directors with representation from both the current board of directors of Vical and of Brickell.
- The Vical board of directors considered the financial analysis of MTS Securities, including the MTS Opinion, to Vical's board of directors as to the fairness to Vical, from a financial point of view and as of the date of the MTS Opinion, of the aggregate number of shares of Vical common stock to be issued, or reserved for issuance, pursuant to the Contemplated Transactions, as more fully described below under the caption "*The Merger—Opinion of MTS Securities, LLC*"
- The Vical board of directors considered MTS Securities' analysis comparing the ranges of implied per share equity values to Vical stockholders in the pro forma combined company to the liquidation value of Vical, and the assessment that the per share liquidation value of Vical was below the range of implied per share values to Vical stockholders in the pro forma combined company, as more fully described below under the caption "*The Merger—Opinion of MTS Securities, LLC*"

The Vical board of directors also reviewed the recent financial condition and results of operations of Vical, including:

- Vical's lack of success in developing Vical's product candidates;
- Vical's revenues over recent years has been largely dependent on manufacturing and research services performed under license agreements with third parties, which have been terminated, and Vical's management team does not expect to receive any further payments under such license agreements;
- the fact that Vical has discontinued all activities relating to development of its clinical programs, including its ASP0113 program collaboration with Astellas, its HSV-2 vaccine program and its VL-2397 Phase 2 clinical trial;
- the risks associated with continuing to operate Vical on a standalone basis, including cash-burn;
- the historic volatility of Vical's common stock;
- the consequences of current market conditions, the depressed stock price of Vical, continuing net operating losses, and the likelihood that the resulting circumstances for Vical, on a standalone basis, would not change for the benefit of the Vical stockholders in the foreseeable future;
- the results of substantial efforts made over a significant period of time by Vical's senior management and financial advisors to solicit strategic alternatives for Vical to the Merger, including the discussions that Vical management and the Vical board of directors had since mid-2018 with other potential transaction candidates; and
- Vical's potential inability to maintain its Nasdaq listing without completing the Merger.

The Vical board of directors also reviewed the terms of the Merger and associated transactions, including:

- the Exchange Ratio, which establishes the number of shares of Vical common stock to be issued in the Merger, is fixed based on the relative valuations of the companies (subject to adjustment based on the Vical Net Cash and Brickell Net Working Capital (each as defined in the section titled "*The Merger Agreement—Conditions to the Completion of the Merger*")), and thus the relative percentage ownership of Vical stockholders and Brickell stockholders immediately following the completion of the Merger is similarly fixed;

- the limited number and nature of the conditions to Brickell's obligation to consummate the Merger and the limited risk ofnon-satisfaction of such conditions as well as the likelihood that the Merger will be consummated on a timely basis;
- the rights of, and limitations on, Vical under the Merger Agreement to consider certain unsolicited acquisition proposals under certain circumstances should Vical receive a superior offer;
- the reasonableness of the potential termination fee of $1.0 million, which could become payable by either Vical or Brickell if the Merger Agreement is terminated in certain circumstances;
- the execution of the Funding Agreement by Brickell and NovaQuest, pursuant to which NovaQuest committed to invest up to $25.0 million in research and development funding, with $5.6 million of the commitment expected to be paid promptly following the closing of the Merger and the remaining portion of the commitment expected to be paid in quarterly payments equal to of 67% of the forecasted research and development expenses to be incurred during each of the following four, or more, fiscal quarters; 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, Vical's board of directors also considered a variety of risks and other countervailing factors related to entering into the Merger, including:

- the termination fee of $1.0 million payable to Brickell upon the occurrence of certain events and the potential effect of such termination fee in deterring other potential acquirers from proposing an alternative transaction that may be more advantageous to Vical's stockholders;
- the $25.0 million (plus interest) fee payable by Brickell to NovaQuest if the Funding Agreement is terminated in certain circumstances;
- the substantial expenses to be incurred in connection with the Merger, including the costs associated with any related litigation;
- the increased volatility, at least in the short term, of the trading price of the Vical 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 on the delay or failure to complete the Merger on the reputation of Vical;
- the risk that Brickell is unable to meet its closing condition to deliver a net working capital balance of at least -$11.5 million;
- the risk that Vical is unable to meet its closing condition to deliver a net cash balance of at least $30 million;
- the risk to Vical's business, operations and financial results in the event that the Merger is not consummated, including the diminution of Vical's cash and its likely inability to raise additional capital through the public or private sale of equity securities;
- the strategic direction of the combined company following the completion of the Merger, which will be determined by the board of directors, the majority of the members which will initially be members of the current Brickell board of directors;
- the risk that Brickell experiences delays or an inability to obtain FDA or foreign regulatory approval of sofpironium bromide;
- the risk that the combined company is unsuccessful in developing and commercializing the combined company's proposed product candidates or that future research and development activities may indicate that such product candidates are unsafe or ineffective;

- the risk that the combined company may never generate sufficient product revenue to become profitable;
- the fact that the combined company may be unable to raise capital sufficient to fund its business activities and is otherwise unable to meet its ongoing financial obligations; and
- various other risks associated with the combined company and the Merger, including those described in the section titled "*Risk Factors*" in this proxy statement.

The foregoing information and factors considered by the Vical board of directors are not intended to be exhaustive but are believed to include all of the material factors considered by Vical's board of directors. In view of the wide variety of factors considered in connection with its evaluation of the Merger and the complexity of these matters, the Vical board of directors did not find it useful, and did not attempt, to quantify, rank or otherwise assign relative weights to these factors. In considering the factors described above, individual members of Vical's board of directors may have given different weight to different factors. Vical's board of directors conducted an overall analysis of the factors described above, including thorough discussions with, and questioning of, the Vical management team and the legal and financial advisors of Vical, and considered the factors overall to be favorable to, and to support, its determination.

Certain Vical Management Unaudited Prospective Financial Information

As a matter of course, Vical does not publicly disclose long-term projections of future financial results due to the inherent unpredictability and subjectivity of underlying assumptions and estimates. However, in connection with its evaluation of the Merger, the Vical board of directors considered certain unaudited, non-public financial projections with respect to Brickell as developed by Vical management, based on discussions with, and materials provided by, Brickell to Vical management on March 11, 2019 and March 14, 2019, industry metrics, product launches of products deemed similar to sofpironium bromide, and Vical management's judgment, for each of the calendar years ending December 31, 2019 through 2034, which we refer to as the Vical management Brickell projections. The Vical management Brickell projections were provided to Vical's financial advisor. A summary of the Vical management Brickell projections is set forth below.

The inclusion of the Vical management Brickell projections should not be deemed an admission or representation by Vical, its financial advisor or any of their respective officers, directors, affiliates, advisors, or other representatives with respect to such projections. The Vical management Brickell projections are not included to influence your views on the Merger but solely to provide stockholders access to certain non-public information prepared by Vical management that was provided to the Vical board of directors in connection with its evaluation of the Merger and to Vical's financial advisor to assist with its financial analyses as described in the section titled "*The Merger—Opinion of MTS Securities, LLC*" The information from the Vical management Brickell projections should be evaluated, if at all, in conjunction with the historical financial statements and other information regarding Vical and Brickell in this proxy statement.

The unaudited prospective financial information was not prepared with a view toward public disclosure, nor was it prepared with a view toward compliance with published guidelines of the SEC, the guidelines established by the American Institute of Certified Public Accountants for preparation and presentation of prospective financial information, or GAAP. Neither the independent registered public accounting firm of Vical, Brickell nor any other independent accountant has audited, reviewed, compiled, examined or performed any procedures with respect to the accompanying unaudited prospective financial information for the purpose of its inclusion herein, and accordingly, neither the independent registered public accounting firm of Vical, Brickell, nor any other independent accountant expresses an opinion or provides any form of assurance with respect thereto for the purpose of this proxy statement. The report of the independent registered public accounting firm of Vical contained in the Vical 10-K is incorporated by reference into this proxy statement.

The Vical management Brickell projections are prepared solely for internal use and in connection with Vical's financial advisor's work and are subjective in many respects. As a result, these Vical management Brickell projections are susceptible to multiple interpretations and periodic revisions based on actual experience and business developments. Although Vical believes its assumptions about Brickell to be reasonable, all financial projections are inherently uncertain, and Vical expects that differences will exist between actual and projected results. Although presented with numerical specificity, the Vical management Brickell projections reflect numerous variables, estimates, and assumptions made by Vical's management at the time they were prepared, and also reflect general business, economic, market, and financial conditions and other matters, all of which are difficult to predict and many of which are beyond Vical's control. In addition, the Vical management Brickell projections cover multiple years, and this information by its nature becomes subject to greater uncertainty with each successive year. Accordingly, there can be no assurance that the estimates and assumptions made in preparing the Vical management Brickell projections will prove accurate or that any of the Vical management Brickell projections will be realized.

The Vical management Brickell projections included certain assumptions relating to, among others things, Vical's expectations, which may not prove to be accurate, based on information provided by Brickell relating to the axillary hyperhidrosis market in the United States and Japan and projected sofpironium bromide market share; expectations relating the timing of product launch, revenues and cost of goods sold; and expectations relating to operating expenses, working capital and capital expenditures. Vical derived net revenue for the United States based on: (i) the estimated market for axillary hyperhidrosis, which estimate were provided by Brickell through 2025 and extrapolated by Vical from 2026 to 2034, (ii) the estimated market share for sofpironium bromide, which was estimated by Vical by implying a peak market share for sofpironium bromide based on projections provided by Brickell and applying industry estimates and Vical management's judgment for the launch curve to reach that peak market share, (iii) gross pricing assumptions, based on information provided by Brickell, adjusted for an estimated product launch in 2022 (as to which there can be no assurance), and (iv) gross-to-net sales assumptions, based on information provided by Brickell and adjusted by Vical from a conservative perspective. Vical estimated research and development expenditures prior to commercial launch based on projections provided by Brickell, adjusted for Vical's expectations of timing for trial initiation and completion. Vical projected sales and marketing expenditures using on an estimated sales force size, based on information from Brickell management, and product launches of products deemed similar to sofpironium bromide, and applying industry estimates and Vical management's judgment for sales representative costs and marketing expenditures. Vical projected general and administrative costs, assuming a substantial increase in expense leading up to commercial launch and then steady-state growth thereafter. Additionally, as appropriate, Vical incorporated the terms of existing licensing agreements and the Concurrent Financing. Working capital was projected based on industry metrics and Vical management's judgment, adjusted as appropriate for the timing impacts of existing licensing agreements and the Concurrent Financing. Vical derived net revenue for Japan based upon a 90% cumulative probability of success with respect to the sofpironium bromide milestone and royalty payments in Japan that were provided by Brickell management for each of the calendar years ending December 31, 2019 through 2033 and extrapolated by Vical management for the calendar year ending December 31, 2034.

The Vical management Brickell projections are subject to many risks and uncertainties and you are urged to review the section titled "*Risk Factors*" beginning on page 25 of this proxy statement for a description of risk factors relating to the merger and Brickell's business. You should also read the section titled "*Cautionary Note Regarding Forward-Looking Statements*" beginning on page 59 of this proxy statement for additional information regarding the risks inherent in forward-looking information such as the Vical management Brickell projections. Vical management Brickell projections that were derived or extrapolated from projections provided by Brickell's management were not reviewed or passed upon by Brickell management, its board of directors or its advisors.

The inclusion of the Vical management Brickell projections herein should not be regarded as an indication that Vical, its financial advisor or any of their respective affiliates or representatives considered or consider the

Vical management Brickell projections to be necessarily indicative of actual future events, and the Vical management Brickell projections should not be relied upon as such. The Vical management Brickell projections do not take into account any circumstances or events occurring after the date they were prepared. Vical does not intend to, and disclaims any obligation to, update, correct, or otherwise revise the Vical management Brickell projections to reflect circumstances existing or arising after the date the Vical management Brickell projections were generated or to reflect the occurrence of future events, even in the event that any or all of the assumptions or other information underlying the Vical management Brickell projections are shown to be in error. Furthermore, the Vical management Brickell projections do not take into account the effect of any failure of the merger to be consummated and should not be viewed as accurate or continuing in that context.

The Vical management Brickell projections set forth below include Vical management calculated Brickell unlevered free cash flow, which is a non-GAAP measure. Due to the forward-looking nature of the Vical management Brickell projections, specific quantifications of the amounts that would be required to reconcile such projections to GAAP measures are not available. Vical believes that there is a degree of volatility with respect to certain GAAP measures, and certain adjustments made to arrive at the relevant non-GAAP measures, which preclude Vical from providing accurate forecasted non-GAAP reconciliations. The statements set forth in this and the foregoing five paragraphs are referred to as "financial projection statements".

In light of the foregoing factors and the uncertainties inherent in financial projections, stockholders are cautioned not to place undue reliance, if any, on the Vical management Brickell projections.

The following table, which is subject to the financial projection statements above, presents a selected summary of the unadjusted Vical management Brickell projections that were made available to the Vical board of directors and Vical's financial advisor. As described above, the revenues and expenses in the following projections have been adjusted for an assumption of a cumulative probability of success for sofpironium bromide of 90% in Japan (as to which there can be no assurance).

	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
	(in millions)															
Sofpironium Bromide Total Revenue(1)	—	—	$ 1	$ 26	$ 96	$163	$245	$347	$414	$536	$554	$619	$636	$653	$671	$689
Gross Profit(2)	—	—	0	18	71	122	187	269	326	423	438	490	503	517	531	545
Operating Income (Loss)(3)	(16)	(31)	(80)	(78)	(70)	3	63	140	192	284	304	360	377	394	412	429
Net Income (Loss)(4)	($ 16)	($ 31)	($ 80)	($ 78)	($ 70)	$ 3	$ 59	$132	$168	$210	$225	$266	$279	$293	$305	$317

(1) The estimated licensing revenues accounted for less than 20% of total revenue in 2022, less than 40% of total revenue in 2023, less than 10% of total revenue annually for the years 2024 to 2026 and less than 5% of total revenue annually for the years 2027 to 2034.
(2) Equal to total revenue less cost of goods sold, less royalties and licensing fees payable by Brickell.
(3) Equal to gross profit less research and development expense (giving effect to the Concurrent Financing), sales and marketing expense, general and administrative expense and depreciation and amortization expense.
(4) Equal to operating income less taxes.

The following table, which is subject to the financial projection statements above, presents a selected summary of the adjusted Vical management Brickell projections that were made available to the Vical board of directors and Vical's financial advisor. The revenues and expenses in the following projections have been adjusted for an assumption of a cumulative probability of success for sofpironium bromide of 70% in the United States (as to which there can be no assurance) and, as described above, 90% in Japan (as to which there can be no assurance).

	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
	(in millions)															
Sofpironium Bromide Total Revenue[1]	—	—	$ 1	$ 19	$ 76	$ 119	$177	$248	$295	$381	$394	$439	$451	$463	$475	$488
Gross Profit[2]	—	—	1	13	55	87	133	191	231	299	309	346	355	365	375	385
Operating Income (Loss)[3]	(16)	(31)	(60)	(54)	(43)	4	46	100	137	202	216	255	267	279	291	303
Net Income (Loss)[4]	($ 16)	($ 31)	($ 60)	($ 54)	($ 43)	$ 4	$ 44	$ 95	$121	$149	$159	$188	$197	$206	$215	$224
Less: Capital Expenditures	—	—	(1)	(1)	(1)	—	—	—	—	—	—	—	—	—	—	—
Plus: Depreciation and Amortization	—	—	1	1	1	—	—	—	—	—	—	—	—	—	—	—
Less: Change in Net Working Capital	—	(8)	2	(4)	(6)	(11)	(10)	(10)	(11)	(10)	(5)	(6)	(2)	(3)	(3)	74
Unlevered Free Cash Flow	($ 16)	($ 39)	($ 58)	($ 58)	($ 49)	($ 7)	$ 33	$ 85	$110	$139	$155	$182	$195	$204	$213	$299

(1) The estimated licensing revenues accounted for less than 20% of total revenue in 2022, less than 40% of total revenue in 2023, less than 15% of total revenue in 2024, less than 10% of total revenue annually for the years 2025 to 2027 and less than 5% of total revenue annually for the years 2028 to 2034.
(2) Equal to total revenue less cost of goods sold, less royalties and licensing fees payable by Brickell.
(3) Equal to gross profit less research and development expense (giving effect to the Concurrent Financing), less sales and marketing expense, less general and administrative expense and less depreciation and amortization expense.
(4) Equal to operating income less taxes.

Opinion of MTS Securities, LLC

Vical retained MTS as a financial advisor in connection with the Merger. On June 2, 2019, MTS Securities rendered its oral opinion to the Vical board of directors (which was subsequently confirmed in writing as of June 2, 2019), that, as of that date and subject to the various assumptions made, procedures followed, matters considered and qualifications and limitations set forth in such written opinion and described below, the Exchange Ratio in the Merger is fair, from a financial point of view, to the holders of Vical common stock (other than Excluded Shares). References to "Excluded Shares" in this section and for the purposes of the written opinion of MTS Securities refer to (i) shares of Vical capital stock that are held in treasury or by Brickell or Merger Sub immediately prior to the effective time of the Merger and (ii) any shares of Vical common stock held by a holder who is entitled to and properly demands appraisal rights in accordance with Section 262 of the Delaware General Corporation Law (the "DGCL").

The full text of the written opinion of MTS Securities, which we refer to as the "MTS Opinion," sets forth the assumptions made, procedures followed, matters considered and qualifications and limitations on the review undertaken by MTS Securities in connection with its opinion. The MTS Opinion is attached as Appendix B to this proxy statement and is incorporated herein by reference. The summary of the MTS Opinion set forth in this proxy statement is qualified in its entirety by reference to the full text of the MTS Opinion. We urge you to read carefully the MTS Opinion, together with the summary thereof in this proxy statement, in its entirety.

MTS Securities provided its opinion for the information and assistance of the Vical board of directors in connection with its consideration of the Merger. The MTS Opinion addressed solely the fairness, from a financial point of view, of the Exchange Ratio, to the holders of Vical common stock in the Merger and does not address any other aspect or implication of the Merger. The MTS Opinion was not a recommendation to the Vical board of directors or any stockholder of Vical as to how to vote or to take any other action in connection with the Merger.

In the course of performing its review and analyses for rendering the opinion described above, MTS Securities:

(i) reviewed the financial terms of a draft copy of the Merger Agreement as of May 31, 2019, which was the most recent draft available to MTS Securities prior to the time it rendered its oral opinion (the "Draft Merger Agreement");

(ii) reviewed certain publicly available business and financial information concerning Vical and Brickell and the industries in which Vical and Brickell each operate;

(iii) reviewed certain internal financial analyses and forecasts prepared by and provided to us by the management of Vical relating to Vical's and Brickell's business (the "Projections"), and utilized per instruction of Vical;

(iv) conducted discussions with members of senior management and representatives of each of Vical and Brickell concerning the matters described in clauses (ii) and (iii) above;

(v) reviewed and analyzed the reported prices and trading history of shares of Vical common stock;

(vi) reviewed and analyzed, based on the Projections, the projected cash flows to be generated by Brickell to determine the present value of Brickell's discounted cash flows;

(vii) compared certain publicly available financial and other information of certain publicly traded companies that MTS Securities deemed relevant;

(viii) reviewed and analyzed certain financial terms of completed initial public offerings for certain companies that MTS Securities deemed relevant; and

(ix) performed such other financial studies, analyses and investigations and considered such other information as MTS Securities deemed appropriate for the purposes of its opinion.

In arriving at its opinion, MTS Securities assumed and relied upon, without assuming liability or responsibility for independent verification, the accuracy and completeness of all of the financial, legal, regulatory, tax, accounting and other information that was publicly available or was provided to, discussed with or reviewed by MTS Securities and upon the assurances of the management of Vical and Brickell, respectively, that they were not aware of any material relevant developments or matters related to Vical or Brickell or that may affect the Merger that were omitted or that remained undisclosed to MTS Securities. The MTS Opinion does not address any legal, regulatory, tax, accounting or financial reporting matters, as to which MTS Securities understood that Vical had obtained such advice as it deemed necessary from other advisors, and MTS Securities relied, with the consent of the Vical board of directors, on any assessments made by such other advisors to Vical with respect to such matters. Without limiting the generality of the foregoing, with respect to the Projections, MTS Securities assumed, with the consent of the Vical board of directors, and based upon discussions with Vical's management, that the Projections were reasonably prepared in good faith and that the Projections reflected the best currently available estimates and judgments of the management of Vical of the future results of operations and financial performance of Brickell. MTS Securities expressed no view as to the Projections or the assumptions on which they were based and MTS Securities assumes no responsibility for the accuracy or completeness thereof.

In arriving at its opinion, MTS Securities made no analysis of, and expressed no opinion as to, the adequacy of the reserves of Vical or Brickell. In addition, MTS Securities did not make any independent evaluations or

appraisals of the assets or liabilities of Vical or Brickell or any of their respective subsidiaries, and was not furnished with any such evaluations or appraisals, nor did MTS Securities evaluate the solvency of Vical, Brickell or any other entity under any state or federal law relating to bankruptcy, insolvency or similar matters. MTS Securities assumed that there was no material change in the assets, financial condition, business or prospects of Vical or Brickell since the date of the most recent relevant financial information made available to MTS Securities. Without limiting the generality of the foregoing, MTS Securities undertook no independent analysis of any pending or threatened litigation, regulatory action, possible unasserted claims or other contingent liabilities to which Vical, Brickell or any of their respective affiliates is a party or may be subject, and, at the direction of Vical's management and with the Vical board of directors' consent, MTS Securities' opinion made no assumption concerning, and therefore did not consider, the possible assertion of claims, outcomes or damages arising out of any such matters. MTS Securities also assumed that neither Vical nor Brickell is party to any material pending transaction that was not disclosed to MTS Securities, including, without limitation, any financing, recapitalization, acquisition or merger, divestiture or spin-off, other than the Merger, the Concurrent Financing, and transactions contemplated by the Note Purchase Agreement (as defined in the section titled "*The Merger Agreement—Merger Consideration and Exchange Ratio—Exchange Ratio*"). In addition, MTS Securities did not conduct, nor did it assume any obligation to conduct, any physical inspection of the properties or facilities of Vical or Brickell. MTS Securities assumed, at Vical's direction and with the Vical board of directors' consent, that the only material asset of Vical is the Vical Net Cash (as defined in the section titled "*The Merger Agreement—Conditions to the Completion of the Merger*"), that no other assets of Vical, including, without limitation, any net operating losses of Vical, have any material value and that Vical does not, and does not intend to, engage in any activity that may result in the generation of any revenue. MTS Securities was also instructed by Vical, and assumed, at Vical's direction and with the Vical board of directors' consent, that (i) (a) Vical Net Cash at the closing of the Merger is expected to be $34.7 million but in no case less than $30 million, (b) if Vical Net Cash is between $34.2 million and $35.2 million at the closing of the Merger, then no adjustment will be made, and (c) outside of such range, Vical's valuation will be adjusted on a dollar-for-dollar basis; and (ii) (a) the Company Net Working Capital (as defined in the section titled "*The Merger Agreement—Conditions to the Completion of the Merger*") is expected to be between–$9.2 million and–$10.2 million, and (b) outside of such range, Brickell's valuation will be adjusted on a dollar-for-dollar basis.

MTS Securities assumed that the representations and warranties of each party contained in the Merger Agreement and in all other related documents and instruments that are referred to therein are and will be true and correct as of the date or the dates made or deemed made, that each party thereto will fully and timely perform all of the covenants and agreements required to be performed by it under the Merger Agreement and any other agreement contemplated thereby and that the transactions contemplated by the Merger Agreement, including, without limitation, the Merger, will be consummated in accordance with the terms of the Merger Agreement without waiver, modification or amendment of any term, condition or agreement. MTS Securities assumed that the final form of the Merger Agreement will be in all material respects identical to the Draft Merger Agreement. MTS Securities, with the Vical board of directors' consent, further assumed that any adjustment to the Exchange Ratio pursuant to the terms of the Merger Agreement will not result in any adjustment to the Exchange Ratio that is material to MTS Securities' analysis. MTS Securities also assumed that any governmental, regulatory and other consents and approvals contemplated in connection with the Merger will be obtained and that, in the course of obtaining any of those consents and approvals, no restrictions will be imposed or waivers made that would have an adverse effect on Vical, Brickell or the contemplated benefits of the Merger.

The MTS Opinion is necessarily based on economic, market, financial and other conditions as they exist, and on the information made available to MTS Securities as of the date of such opinion. MTS Securities did not consider any potential legislative or regulatory changes currently being considered by the United States Congress, the SEC, or any other governmental or regulatory bodies, or any changes in accounting methods or generally accepted accounting principles that may be adopted by the SEC or the Financial Accounting Standards Board. It should be understood that, although subsequent developments may affect the conclusion reached in the MTS Opinion, MTS Securities does not have any obligation to update, revise or reaffirm the MTS Opinion.

The MTS Opinion addresses solely the fairness, from a financial point of view and as of the date of such opinion, of the Exchange Ratio to the holders of Vical common stock and does not address any other terms in the Merger Agreement, or any other agreement contemplated by the Merger Agreement or relating to the Merger or any other aspect or implication of the Merger, including, without limitation, the form or structure of the Merger or the fairness of the Merger or the Exchange Ratio to any other securityholders or creditors or any other constituency of Vical. The MTS Opinion does not address Vical's underlying business decision to proceed with the Merger or the relative merits of the Merger compared to other alternatives available to Vical. MTS Securities expressed no opinion as to the prices or ranges of prices at which shares of securities of any person, including Vical or Brickell, will trade at any time, including following the announcement or consummation of the Merger. MTS Securities was not requested to opine as to, and the MTS Opinion did not in any manner address, the amount or nature of compensation to any of the officers, directors or employees of any party to the Merger, or any class of such persons, relative to the compensation to be paid to the holders of Vical common stock in connection with the Merger or with respect to the fairness of any such compensation.

In accordance with customary investment banking practice, MTS Securities employed generally accepted valuation methods in reaching its opinion. The MTS Opinion was reviewed and approved by a fairness committee of MTS Securities.

Summary of Financial Analysis

MTS Securities performed a variety of financial analyses for purposes of rendering its opinion. The preparation of a fairness opinion is a complex process and is not susceptible to partial analysis or summary description. In arriving at its opinion, MTS Securities considered the results of all of its analyses as a whole and did not attribute any particular weight to any analysis or factor considered. 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 conclusions MTS Securities reached were based on all the analyses and factors presented, taken as a whole, and also on application of MTS Securities' own experience and judgment. Such conclusions may involve significant elements of subjective judgment and qualitative analysis. MTS Securities therefore gave no opinion as to the value or merit standing alone of any one or more parts of the analyses. Furthermore, MTS Securities believes that the summary provided and the analyses described below must be considered as a whole and that selecting any portion of the analyses, without considering all of them, would create an incomplete view of the process underlying MTS Securities' analysis and opinion. As a result, the ranges of valuations resulting from any particular analysis or combination of analyses described below should not be taken to be the view of MTS Securities with respect to the actual value of Vical, Vical common stock, Brickell or Brickell common stock.

Some of the summaries of the financial analyses include information presented in tabular format. The tables must be read together with the full text of the corresponding summaries and are alone not a complete description of the financial analyses performed by MTS Securities. Considering the data in the tables below without considering the corresponding full narrative descriptions of the financial analyses, including the methodologies and assumptions underlying such analyses, could create a misleading or incomplete view of the financial analyses performed by MTS Securities.

In performing its analyses, MTS Securities made numerous assumptions with respect to industry performance, general business, regulatory and economic conditions and other matters, all of which are beyond MTS Securities' control and many of which are beyond the control of Vical and/or Brickell. Any estimates used by MTS Securities in its analysis are not necessarily indicative of future results or actual values, which may be significantly more or less favorable than those suggested by such estimates.

MTS Securities performed stand-alone valuation analyses of both Vical and Brickell using a variety of valuation methodologies, as described below. MTS Securities then performed a relative valuation analysis in order to compare the Exchange Ratio to the range of exchange ratios implied based on the respective stand-alone

valuation ranges. Except as otherwise noted, the following quantitative information, to the extent that it is based on market data, is based on market data as it existed on or before May 31, 2019 and is not necessarily indicative of current market conditions.

Vical Valuation Analysis

Liquidation Analysis

As noted above, at the direction of Vical's management and with the Vical board of directors' consent, MTS Securities assumed that the only material asset of Vical was its cash and that Vical does not currently, and does not intend in the future to, conduct any activity that may result in the generation of revenue. Accordingly, MTS Securities considered an appropriate measure of the implied equity value of Vical common stock to be the amount of cash available for distribution to Vical stockholders in an orderly liquidation of Vical. Based on information provided by Vical's management (net cash of $43.0 million as of April 30, 2019; estimated employee-related wind-down costs of $3.6 million; estimated non-employee related wind-down costs of $1.0 million; estimated liquidation costs of $1.8 million; fully diluted shares outstanding using the treasury stock method of 29.0 million, which includes 6.2 million of prefunded warrants with an exercise price of $0.01; and an estimated liquidation date of July 31, 2019) MTS Securities calculated the per share equity value of Vical to be $1.26, as of July 31, 2019. The analysis assumed cash distributions net of known liabilities and, to be conservative, without retaining any funds in reserve for unknown or contingent liabilities.

MTS Securities compared this per share equity liquidation value to the implied merger valuation of $1.36 per share.

Historical Stock Price Performance

MTS Securities reviewed the share price trading history of Vical common stock for the period beginning on June 11, 2018, the day Vical announced that its Phase 2 HSV2 clinical trial failed to meet its primary endpoint, and ending on May 31, 2019. During this period, shares of Vical common stock traded as low as $0.85 per share and as high as $1.47 per share, compared to the closing price of Vical common stock on May 31, 2019 of $1.15 per share. In addition, MTS Securities reviewed the volume weighted average trading price over the five trading day, 10 trading day, 30 trading day, 60 trading day, six month and 12 month periods ending on May 31, 2019. These volume weighted average prices ("VWAP") are set forth in the table below:

Trading Period	VWAP
5 Trading Day	$ 1.14
10 Trading Day	$ 1.14
30 Trading Day	$ 1.14
60 Trading Day	$ 1.16
6 Months	$ 1.04
12 Months	$ 1.13

MTS Securities noted that the share price trading history and volume weighted average trading prices were provided to the Vical board of directors for informational purposes only and were not relied upon by MTS Securities for valuation purposes.

Brickell Valuation Analysis

MTS Securities analyzed the valuation of Brickell using three different methodologies: a discounted cash flow analysis, a public trading comparable companies analysis and an analysis of initial public offerings of companies MTS Securities deemed relevant. The results of each of these analyses are summarized below.

Discounted Cash Flow Analysis

MTS Securities reviewed and analyzed the unlevered free cash flows (defined as probability of success adjusted operating income less income tax expense, less capital expenditures, plus depreciation and amortization, less changes in working capital; for detailed projections, please see the section titled "*Certain Vical Management Unaudited Prospective Financial Information*") that Vical's management expects Brickell will generate during the period beginning on August 15, 2019 and ending on December 31, 2034. To be conservative, the analysis did not include Brickell's estimated NOL balance at transaction closing and did not include a terminal value, either of which would have resulted in a higher value for Brickell than that implied by the analysis. The unlevered free cash flows (excluding NOLs) were then discounted to present values using a range of discount rates, reflecting calculated estimates of Brickell's weighted average cost of capital ("WACC"), based upon MTS Securities' analysis of the cost of capital for both of Brickell's comparable company universes, as described in more detail under "*The Merger—Opinion of MTS Securities, LLC—Brickell Valuation Analysis—Public Trading Comparable Companies Analysis*" below.

At the direction of Vical, MTS Securities conducted certain sensitivity analyses for purposes of its discounted cash flow analysis using ranges of: (i) revenue achievement factors of 75% to 125%, as provided by Vical's management; (ii) U.S. probabilities of success of 60% to 80%, as provided by Vical's management and based upon estimates of the likelihood of approval; and (iii) weighted average cost of capital of 12% to 14%.

For each sensitivity described above, an implied range of total and per share equity values was calculated based on Brickell's projected capitalization at transaction closing. The below table reflects the range of values implied by this analysis, which were compared to Brickell's implied total and per share equity value of $60.0 million and $4.40, respectively, in the Merger.

Metric	Metric Range	Implied Equity Value of Brickell (millions)	Implied Value of Each Brickell Share
Revenue Achievement and WACC	75% – 125%	$70 – $460	$5.00 – $47.75
U.S. Cumulative Probability of Success and WACC	60% – 80%	$185 – $330	$17.75 – $33.25

MTS Securities noted that the total and per share equity value of Brickell common stock implied by this analysis was greater than the corresponding equity and per share values implied by the Exchange Ratio.

Public Trading Comparable Companies Analysis

MTS Securities reviewed and compared the projected operating performance of Brickell with publicly available information concerning other publicly traded companies and reviewed the current market price of certain publicly traded securities of such other companies. MTS Securities utilized two sets of comparable companies: (i) selected mid to late stage 505(b)(2) and new chemical entity ("NCE") dermatology companies; and (ii) specialty NCE development stage companies with Phase 2 data. The companies included in each set are as follows:

Selected Mid to Late Stage 505(b)(2) and NCE Dermatology Companies:

- Dermira, Inc.
- Krystal Biotech, Inc.
- Cassiopea S.p.A.
- Biofrontera AG
- Aclaris Therapeutics, Inc.
- Trevi Therapeutics, Inc.

- Verrica Pharmaceuticals Inc.
- Menlo Therapeutics Inc.
- Foamix Pharmaceuticals Ltd.
- Novan, Inc.
- Sienna Biopharmaceuticals, Inc.

Selected Specialty NCE Development Stage Companies with Phase 2 data:

- Aurinia Pharmaceuticals Inc.
- Resverlogix Corp.
- Milestone Pharmaceuticals Inc.
- resTORbio, Inc.
- Minerva Neurosciences, Inc.
- Trevi Therapeutics
- Menlo Therapeutics Inc.
- Quantum Genomics Société Anonyme
- Innovate Biopharmaceuticals, Inc.
- Sienna Biopharmaceuticals, Inc.

Although none of the selected companies is directly comparable to Brickell, MTS Securities included these companies in its analysis because they are publicly traded companies with certain characteristics that, for purposes of analysis, may be considered similar to certain characteristics of Brickell.

MTS Securities calculated the enterprise value ("EV") for the Selected Mid to Late Stage 505(b)(2) and NCE Dermatology Companies, as of May 31, 2019, and the EV and the ratio of EV to Peak Sales for the Selected Specialty NCE Development Stage Companies with Phase 2 Data, using consensus equity research estimates as of May 31, 2019 for such companies.

The following are the summary statistics associated with such companies.

	Selected Mid to Late Stage 505(b)(2) and NCE Dermatology Companies (millions)	Selected Specialty NCE Development Stage Companies with Phase 2 Data (millions)	
	Enterprise Value	Enterprise Value	Enterprise Value/ Peak Sales
Top Quartile	$ 358	$ 316	0.29x
Mean	$ 187	$ 208	0.24x
Median	$ 100	$ 110	0.16x
Low Quartile	$ 54	$ 58	0.11x

For purposes of this analysis, the enterprise value of each comparable company was calculated by multiplying the closing price per share of common stock of such company on May 31, 2019 by the number of such company's fully diluted outstanding shares, using the treasury stock method, and adding to that result such company's net debt, preferred stock and minority interest.

MTS Securities derived a low quartile and top quartile EV range, as well as a low quartile and top quartile multiple range for EV/Peak Sales for the comparable companies. MTS Securities applied the low quartile and top

quartile ranges to the corresponding valuation metrics of Brickell to derive a range of equity valuations based upon each metric, EV and EV/Peak Sales, after adjusting for net debt, preferred stock and minority interest as appropriate. The EV/Peak Sales multiple range was applied to the 2028 estimate of sofpironium bromide U.S. unadjusted sales.

The table below notes the implied total and per share equity value ranges of Brickell (rounded to the nearest $0.25, for each metric), which were compared to Brickell's implied total and per share equity value of $60.0 million and $4.40, respectively, in the Merger.

Metric	Metric Range ($ in millions)	Implied Equity Value of Brickell (millions)	Implied Value of Each Brickell Share
Enterprise Value (Dermatology)	$ 54 – $358	$ 55 – $360	$ 3.25 – $36.75
Enterprise Value (Specialty)	$ 58 – $316	$ 60 – $320	$ 3.75 – $32.25
EV/Peak Sales (Specialty)	0.1x – 0.3x	$ 50 – $155	$ 3.50 – $14.00

MTS Securities noted that the total and per share equity value of Brickell common stock implied by the Exchange Ratio was at the low end of the range of values implied by this analysis.

IPO Comparables Analysis

MTS Securities also analyzed the pre- and post-money equity valuations and pre-money enterprise values of the following specialty NCE development stage companies with Phase 2 data, each of which had completed an initial public offering in 2017 or later:

- Milestone Pharmaceuticals Inc. (5/8/2019)
- Trevi Therapeutics, Inc. (5/7/2019)
- Urovant Sciences Ltd. (9/26/2018)
- Adial Pharmaceuticals, Inc. (7/26/2018)
- Verrica Pharmaceuticals Inc. (6/14/2018)
- Menlo Therapeutics Inc. (1/24/2018)
- Biohaven Pharmaceutical Holding Company Ltd. (5/3/2017)
- ObsEva SA (1/25/2017)

MTS derived the following summary statistics for the pre-money enterprise values of these companies.

Top Quartile (millions)	Mean (millions)	Median (millions)	Low Quartile (millions)
$301	$209	$217	$186

MTS Securities then applied these low quartile and top quartile ranges of pre-money enterprise value to imply a corresponding range of enterprise values of Brickell to derive low and top equity valuations for Brickell based upon each metric, after adjusting for net debt, preferred stock and minority interest as appropriate.

The table below notes the implied total and per share equity values of Brickell (rounded to the nearest $5 million and $0.25, respectively, for each metric), which were compared to Brickell's implied total and per share equity value of $60.0 million and $4.40, respectively, in the merger.

Metric	Metric Range (millions)	Implied Equity Value of Brickell (millions)	Implied Value of Each Brickell Share
Pre-Money Enterprise Value	$186 – $301	$ 190 – $305	$ 18.00 – $30.50

MTS Securities noted that the total and per share equity value of Brickell common stock implied by this analysis was greater than the corresponding equity and per share value implied by the Exchange Ratio.

Relative Valuation Analysis

MTS Securities compared the liquidation value per share of Vical common stock to the low and high values per share of Brickell common stock implied by the Brickell Valuation Analysis above to determine the implied range of exchange ratios, in terms of the number of shares of Vical common stock to be received by Brickell shareholders for each share of Brickell common stock held by them.

MTS Securities also analyzed the range of implied total and per share equity values to holders of Vical common stock in the pro forma combined company, assuming 40% Vical ownership in the pro forma combined company, as specified by the Exchange Ratio. The pro forma combined company valuation was calculated by adding the estimated net cash contributed by Vical in the merger, $34.7 million, to the equity valuation ranges in the Brickell Valuation Analysis above. MTS Securities compared these values to the total and per share liquidation value of Vical.

The following table sets forth the results of these analyses:

	Implied Exchange Ratio		Implied Per Share Value to Holders of Vical common stock in Pro Forma Combined Company
Valuation Methodology	**Low**	**High**	
Discounted Cash Flow			
Sensitized by Revenue Achievement and Weighted Average Cost of Capital	3.9046:1	37.8867:1	$ 1.55 – $6.20
Sensitized by Probability of Success and Weighted Average Cost of Capital	14.0153:1	26.4721:1	$ 2.95 – $4.65
Public Trading Comparable Companies Analysis			
Enterprise Value—Derm	2.5694:1	29.1226:1	$ 1.35 – $5.00
Enterprise Value—Specialty	2.9954:1	25.5020:1	$ 1.40 – $4.50
EV / Peak Sales—Specialty	2.8751:1	11.1863:1	$ 1.40 – $2.55
IPO Comparables			
Pre-Money Enterprise Value	14.2956:1	24.2090:1	$ 2.95 – $4.35

MTS Securities compared these ranges of implied exchange ratios to the Exchange Ratio in the Merger and found that, in all but one instance, the range of exchange ratios implied by these analyses was higher than the Exchange Ratio in the Merger, and in one instance, the Exchange Ratio in the Merger was at the low end of the range of exchange ratios implied by this analysis.

MTS Securities also compared these ranges of implied per share equity values to holders of Vical common stock in the pro forma combined company to the liquidation value of Vical and found that, in each instance, the per share liquidation value of Vical was below the range of implied per share values to holders of Vical common stock in the pro forma combined company.

Miscellaneous

The preparation of a fairness opinion is a complex analytical process involving various determinations as to the most appropriate and relevant methods of financial analysis and the application of those methods to the particular circumstances and, therefore, a fairness opinion is not readily susceptible to summary description. In arriving at its opinion, MTS Securities did not draw, in isolation, conclusions from or with regard to any factor or analysis that it considered. Rather, MTS Securities made its determination as to fairness on the basis of its experience and professional judgment after considering the results of all of the analyses.

The MTS Opinion was one of the many factors taken into consideration by the Vical board of directors in making its determination to approve the Merger Agreement. Consequently, the analyses as described above should not be viewed as determinative of the opinion of the Vical board of directors with respect to the Merger or of whether the Vical board of directors would have been willing to agree to different terms. The Exchange Ratio was determined through arm's-length negotiations between Vical and Brickell and was approved by the Vical board of directors. MTS Securities and its affiliates provided advice to Vical during these negotiations. However, neither MTS Securities nor any of its affiliates recommended any specific amount of consideration to Vical or the Vical board of directors or that any specific amount of consideration constituted the only appropriate consideration for the Merger.

MTS Securities and its affiliates, as part of their investment banking services, are regularly engaged in the valuation of businesses (including those in the healthcare industry) and securities in connection with mergers and acquisitions, and for other purposes. As noted above, MTS acted as a financial advisor to Vical in connection with the Merger and participated in certain of the negotiations leading to the Merger Agreement. Vical selected MTS as its financial advisor because it is nationally recognized in the healthcare industry as having investment banking professionals with significant experience in healthcare investment banking and merger and acquisition transactions, including transactions similar to the Merger. Pursuant to an engagement letter agreement, dated as of July 16, 2018, between Vical and MTS, Vical engaged MTS to act as its financial advisor in connection with Vical's consideration, evaluation and/or exploration of certain potential merger and acquisition transactions or similar transactions. As permitted by the terms of the engagement letter and pursuant to MTS's internal policies, MTS Securities rather than MTS, delivered the MTS Opinion. As compensation for MTS Securities' and its affiliates' financial advisory services, Vical paid a non-refundable retainer fee of $100,000 and paid a fee of $300,000 to MTS Securities for rendering the MTS Opinion in connection with the Vical board of directors' consideration of the proposed transaction with Brickell, which fee was not contingent upon the successful completion of the Merger or the conclusion reached within the MTS Opinion. Upon consummation of the Merger, Vical will be obligated to pay to MTS a transaction fee equal to approximately $2,000,000, of which up to $500,000 of such fee may be payable in shares of the combined company's common stock based upon the closing price of Vical common stock on the day of the consummation of the Merger. All fees previously paid pursuant to the engagement letter by Vical credited towards the cash portion of the transaction fee, including the fee paid by Vical upon delivery of the MTS Opinion. In addition, Vical also agreed to reimburse to MTS and its affiliates for their direct, reasonable and documented out-of-pocket expenses incurred in connection with any of the matters contemplated in the engagement letter. Vical also agreed to indemnify to MTS and each of its related parties against various liabilities in connection with their engagement.

During the two years preceding the date of the MTS Opinion, neither MTS Securities nor MTS has been engaged by, performed services for, or received any compensation from, Vical or Brickell (other than the engagements and any amounts that were paid under the engagement letter with Vical described above). MTS Securities, MTS and their affiliates may seek to provide investment banking and/or financial advisory services to Vical and Brickell in the future and would expect to receive customary fees for the rendering of any such services.

Interests of the Vical Directors and Executive Officers in the Merger

In considering the recommendation of the Vical board of directors to approve the Closing Stockholder Matters (as defined in the section titled "*The Merger Agreement—The Special Meeting*"), the Vical stockholders should be aware that some of our directors and executive officers have interests in the Merger that are different from, or in addition to, the interests of our stockholders generally. These interests may present them with actual or potential conflicts of interest, and these interests, to the extent material, are described below.

Our board of directors was aware of these potential conflicts of interest and considered them, among other matters, in reaching its conclusion (i) that the Merger and all related transactions set forth in and contemplated by the Merger Agreement are fair to, advisable and in the best interests of Vical and its stockholders and (ii) to

approve and declare advisable the Merger Agreement and the Contemplated Transactions, and to recommend, upon the terms and subject to the conditions set forth in Merger Agreement, that the stockholders of Vical vote to approve the Closing Stockholder Matters (as defined in the section titled "*The Merger Agreement—The Special Meeting*").

Ownership Interests

As of June 26, 2019, all directors and executive officers of Vical beneficially owned approximately 5.6% of the shares of Vical common stock.

Director Positions Following the Merger

Vijay B. Samant, currently the President and Chief Executive Officer of Vical and a member of its board of directors, is expected to resign from his position as President and Chief Executive Officer of Vical as of the effective time of the Merger. Mr. Samant will continue as a director of the combined company after the effective time of the Merger.

Gary A. Lyons is currently a director of Vical and will continue as a director of the combined company after the effective time of the Merger.

Potential Merger-Related Compensation of Named Executive Officers

The following table and the related footnotes present information about the compensation payable to Vical's current named executive officers that is based on or otherwise relates to the Merger. The compensation shown in the table below is intended to comply with Item 402(t) of Regulation S-K, which requires disclosure of information about compensation for each Vical named executive officer that is based on or otherwise relates to the Merger.

Larry R. Smith, Ph.D., Vical's former Senior Vice President, Research, ceased employment with Vical effective May 21, 2019 and was subsequently engaged as a consultant to Vical. Vical entered into a separation agreement with Dr. Smith pursuant to which Dr. Smith received a lump-sum cash payment equal to 12 months of his base salary as in effect on his separation date, plus the annual bonus he received in the 12-month period preceding his termination. Dr. Smith is also entitled to receive COBRA benefits for a period of 12 months post-termination and received acceleration of his equity awards that would have otherwise vested during the 12-month period after his termination. Dr. Smith's separation agreement further provides that, in the event of a "change in control," as defined in the severance agreement, during Dr. Smith's service as a consultant, Dr. Smith will be entitled to a lump sum payment equal to six months of base salary in effect on the date of his employment separation. For purposes of Dr. Smith's separation agreement, the Merger, if consummated, will constitute a change of control transaction. In addition, all outstanding unvested equity awards held by Dr. Smith will vest immediately.

Mammen P. Mammen, Jr., M.D. was terminated on February 19, 2019 in connection with Vical's decision to discontinue the clinical development of VL-2397. In accordance with his separation agreement, Dr. Mammen received severance benefits as described in Vical's Annual Report on Form10-K for the year ended December 31, 2018, as amended, and is entitled to no additional compensation in connection with the Merger.

Vijay B. Samant, Vical's President and Chief Executive Offer and a member of its board of directors, is expected to be terminated as an officer of Vical effective as of the closing of the Merger but will continue as a director of the combined company after the effective time of the Merger. Vical entered into an employment agreement with Mr. Samant providing that, in the event of Mr. Samant's termination of employment on or within 24 months of a "change in control," as defined in the employment agreement, Mr. Samant will be entitled to a lump sum payment equal to 24 months of base salary, at his then-current rate, plus a payment equal to one and

one-half times his cash bonus paid during the previous 12 months, and the payment of health insurance premiums for 18 months. For purposes of Mr. Samant's employment agreement, the Merger, if consummated, will constitute a change of control transaction. In addition, all outstanding unvested equity awards held by Mr. Samant will vest immediately.

All of Vical's outstanding equity-based awards include provisions that accelerate vesting of such awards in the event of a change of control. A change of control is defined as the occurrence of either of the following events: (i) a change in the composition of Vical's board of directors, as a result of which fewer than 50% of the incumbent directors are directors who either: (a) had been directors of Vical 24 months prior to such change; or (b) were elected, or nominated for election, to Vical's board of directors 24 months prior to such change and who were still in office at the time of the election or nomination; or (ii) any person becomes, by acquisition or aggregation of securities, the beneficial owner of securities of Vical representing 50% or more of the combined voting power of Vical's securities eligible to vote for the election of directors. For purposes of the equity-based awards, the Merger, if consummated, will constitute a change of control.

The cash and perquisites/benefits disclosure provided by the table below is quantified assuming that the Merger closed. The equity disclosure provided in this table is quantified assuming that the Merger closed. The named executive officers are not entitled to any pension or non-qualified deferred compensation benefits enhancements, or any other form of compensation that is based on or otherwise related to the Merger.

Please note that the amounts indicated below are estimates based on multiple assumptions that may or may not actually occur (including assumptions described in this proxy statement) or may occur at times different than the time assumed. Some of these assumptions are based on information currently available and, as a result, the actual amounts, if any, to be received by the named executive officers may differ in material respects from the amounts set forth below. The amounts in the chart are "double trigger" in nature, in that they require both the occurrence of the Merger and a qualifying termination of employment.

	Cash ($)(1)	Equity ($)(2)	Perquisites/ Benefits ($)(3)
Vijay B. Samant *President and Chief Executive Officer*	$1,572,440	$ —	$ 45,273
Larry R. Smith, Ph.D. *Former Senior Vice President, Research*	$ 156,050	$ —	$ —
Mammen P. Mammen, Jr., M.D. *Former Senior Vice President, Clinical Development*	$ —	$ —	$ —

(1) The amount of Mr. Samant's cash payment represents an aggregate amount equal to (i) 24 months of Mr. Samant's base salary in effect as of January 1, 2019 (i.e., $1,182,440) and (ii) one and one-half times Mr. Samant's cash bonus paid during the previous 12 months (i.e., $390,000). Mr. Samant must enter into a release agreement to be eligible to receive the above described cash payment. The cash payment is payable in a lump sum within 60 days of the effective date of the release agreement.

The amount of Dr. Smith's cash payment represents a payment equal to six months of his base salary as in effect on his separation date (i.e., $156,050). Dr. Smith must enter into a supplemental release agreement to be eligible to receive the above described cash payment. The cash payment is payable in a lump sum within 60 days of the effective date of the supplemental release agreement.

On February 19, 2019, Dr. Mammen was terminated and received a severance payment in accordance with his separation agreement. Dr. Mammen previously entered into a release agreement in connection with his termination, and is entitled to no additional compensation in connection with the Merger.

(2) Each of Mr. Samant and Dr. Smith is entitled to full acceleration of any unvested equity awards upon the consummation of the Merger. Dr. Mammen is not entitled to any acceleration of equity awards in

connection with the Merger. Calculating the price per share based on the average closing market price of Vical's common stock over the first five business days following the public announcement of the proposed Merger (i.e., June 3, 2019), all outstanding Vical options are out-of-the-money, and thus the aggregate dollar value of the accelerated equity awards is $0.

(3) The amount of Mr. Samant's perquisite/benefits represents an aggregate amount equal to the COBRA premium Mr. Samant is currently expected to receive (i.e., $45,273). Mr. Samant must enter into a release agreement to be eligible to receive the above described benefit. The COBRA premium benefit is payable until the earliest of 18 months following Mr. Samant's termination of employment, the expiration of his eligibility under COBRA or the date he becomes eligible for health insurance benefits under a subsequent employer.

Vical Director Compensation Arrangements

The intrinsic value of the unvested stock options held by thenon-employee directors that will accelerate and vest in connection with the Merger is $0. "Intrinsic value" with respect to such stock options refers to the average closing market price of Vical's common stock over the first five business days following the public announcement of the proposed Merger (i.e., June 3, 2019), over the exercise price of the Vical options held by the non-employee directors that were unvested as of June 26, 2019. Calculating the price per share based on the average closing market price of Vical's common stock over the first five business days following the public announcement of the proposed Merger (i.e., June 3, 2019), all outstanding Vical options are out-of-the-money.

Indemnification of the Vical Officers and Directors

The Merger Agreement provides that, for a period of six years following the effective time of the Merger, Vical will fulfill and honor in all respects the obligations of Vical that existed prior to the date of the Merger Agreement to indemnify Vical's present and former directors and officers and their heirs, executors and assigns. Vical has entered into indemnification agreements with each of Vical's current directors and executive officers that require Vical to indemnify these individuals to the fullest extent permitted under Delaware law against liabilities that may arise by reason of their service to Vical and to advance expenses incurred as a result of any proceeding against them as to which they could be indemnified.

The Merger Agreement provides that, for a period of six years following the effective time of the Merger, the provisions relating to the indemnification and elimination of liability for monetary damages set forth in the certificates of incorporation and bylaws of Vical will not be amended, repealed or otherwise modified in any manner that would adversely affect the rights thereunder of individuals who, at the effective time, were directors, officers, employees or agents of Vical, unless such modification is required by law.

The Merger Agreement also provides that, for a period of six years following the effective time of the Merger, Vical will maintain either a directors' and officers' liability insurance policy or a "tail" policy covering existing directors and officers of Vical. In addition, the Merger Agreement provides that Vical shall secure a "tail" policy on Vical's existing directors' and officers' liability insurance policy for a period of six years following the effective time of the Merger for Vical's existing directors and officers.

Structure

Under the Merger Agreement, Merger Sub, a wholly owned subsidiary of Vical formed in connection with the Merger, will merge with and into Brickell, with Brickell surviving as a wholly owned subsidiary of Vical.

After completion of the Merger, Vical will be renamed "Brickell Biotech, Inc." and expects to trade on the Nasdaq Capital Market under the symbol "BBI."

Merger Consideration and Exchange Ratio

For a discussion of merger consideration and the Exchange Ratio, please see the section titled "*The Merger Agreement—Merger Consideration and Exchange Ratio*" beginning on page 95.

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. 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 Vical and Brickell and specified in the certificate of Merger. Neither Vical nor Brickell can predict the exact timing of the consummation of the Merger.

Regulatory Approvals

Vical must comply with applicable federal and state securities laws and the rules and regulations of Nasdaq in connection with the issuance of shares of Vical common stock and the filing of this proxy statement with the SEC. Vical does not intend to seek any regulatory approval from antitrust authorities to consummate the transactions.

Certain Material U.S. Federal Income Tax Consequences of the Merger

Regardless of whether the Merger will qualify for U.S. federal income tax purposes as a reorganization within the meaning of Section 368(a) of the Code, the Merger will not result in any taxable gain or loss for U.S. federal income tax purposes to Brickell, Vical or any Vical stockholder in his, her or its capacity as a Vical stockholder. Vical stockholders who are also stockholders of Brickell, if any, should consult their own tax advisors as to the tax consequences to them of participating in the Merger with respect to their Brickell stock.

The foregoing discussion is for general information purposes only and is not intended to be a complete analysis or description of all potential U.S. federal income tax consequences of the Merger. In addition, the discussion does not address tax consequences which may vary with, or are contingent on, your individual circumstances. Moreover, the discussion does not address any non-income tax or any foreign, state or local tax consequences of the Merger. Accordingly, you are strongly encouraged to consult with your own tax advisor as to the tax consequences of the Merger in your particular circumstances, including the applicability and effect of the alternative minimum tax and any state, local or foreign and other tax laws and of changes in those laws.

Nasdaq Capital Market Listing

Vical common stock currently is listed on Nasdaq under the symbol "VICL." Vical has agreed to use commercially reasonable efforts to (i) prepare and submit to Nasdaq a notification form for the listing of the shares of Vical common stock to be issued to Brickell stockholders pursuant to the Contemplated Transactions, (iii) effect the Reverse Split subject to stockholder approval and (iii) the extent required by Nasdaq Marketplace Rule 5110, file the Nasdaq Listing Application and to cause such listing application to be approved for listing.

In addition, under the Merger Agreement, each of Brickell's and Vical's obligation to complete the Merger is subject to the satisfaction or waiver by each of the parties, at or prior to the Merger, of various conditions, including that the shares of Vical common stock to be issued in the Merger have been approved for listing on Nasdaq as of the closing of the Merger.

If the Nasdaq Listing Application is accepted, Vical anticipates that the common stock of the combined company will be listed on Nasdaq following the closing of the Merger under the trading symbol "BBI."

Anticipated Accounting Treatment

The Merger will be treated by Vical as a "reverse recapitalization" in accordance with accounting principles generally accepted in the United States. For accounting purposes, Brickell is considered to be acquiring Vical in this transaction. The net tangible assets acquired and liabilities assumed in connection with the transaction are at their estimated acquisition date fair values.

Appraisal and Dissenters' Rights

Under the DGCL, Vical stockholders are not entitled to appraisal rights in connection with the Merger.

Holders of Brickell common stock are entitled to appraisal rights in connection with the Merger under Section 262 of the DGCL.

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 Appendix A to this proxy statement and is incorporated by reference. The Merger Agreement has been attached to this proxy statement to provide you with information regarding its terms. It is not intended to provide any other factual information about Vical, Brickell or Merger Sub. The following description does not purport to be complete and is qualified in its entirety by reference to the Merger Agreement. You should refer to the full text of the Merger Agreement for details of the Merger and the terms and conditions of the Merger Agreement.

The Merger Agreement contains representations and warranties that Vical and Merger Sub, on the one hand, and Brickell, on the other hand, have made to one another as of specific dates. These representations and warranties have been made for the benefit of the other parties to the Merger Agreement and may be intended not as statements of fact but rather as a way of allocating the risk to one of the parties if such statements made in the representations and warranties prove to be incorrect. In addition, the assertions made in the representations and warranties are qualified by the information in confidential disclosure schedules exchanged by the parties in connection with the signing of the Merger Agreement. While Vical and Brickell do not believe that these disclosure schedules contain information required to be publicly disclosed under the applicable securities laws, other than information that has already been so disclosed, the disclosure schedules do contain information that modifies, qualifies and creates exceptions to the representations and warranties set forth in the Merger Agreement. Accordingly, you should not rely on the representations and warranties as current characterizations of factual information about Vical, Brickell or Merger Sub, because they were made as of specific dates, may be intended merely as a risk allocation mechanism between Vical and Merger Sub on the one hand, and Brickell on the other hand, and are modified by the disclosure schedules.

Structure

Under the Merger Agreement, Merger Sub, a wholly owned subsidiary of Vical formed in connection with the Merger, will merge with and into Brickell, with Brickell surviving as a wholly owned subsidiary of Vical.

Completion and Effectiveness of the Merger

The Merger will be completed as promptly as practicable after all of the conditions to completion of the Merger are satisfied or waived, including the approval of the stockholders of Vical, but no later than November 15, 2019. The required Brickell stockholder approval was obtained prior to the execution of the Merger Agreement. The Merger is anticipated to occur after the Special Meeting, which is further described on page 61. However, Vical and Brickell cannot predict the exact timing of the completion of the Merger because it is subject to various conditions.

Merger Consideration and Exchange Ratio

Merger Consideration

At the effective time of the Merger, each share of Brickell capital stock outstanding immediately prior to the effective time (excluding any (i) properly dissenting shares of Brickell common stock or (ii) shares of Brickell common stock held as treasury stock or held or owned by Brickell or Merger Sub, which will be canceled without consideration) will be automatically converted solely into the right to receive a number of shares of Vical common stock equal to the Exchange Ratio.

No fractional shares of Vical common stock will be issued in connection with the Merger. Instead, each Brickell stockholder who otherwise would be entitled to receive a fractional share of Vical common stock (after aggregating all fractional shares of Vical common stock issuable to such holder) will be entitled to receive an

amount in cash, rounded to the nearest whole cent and without interest, determined by multiplying such fraction by the volume weighted average closing trading price of a share of Vical common stock on the Nasdaq Capital Market for the five consecutive trading days ending five trading days immediately prior to the date upon which the Merger becomes effective.

Prior to the effective time of the Merger, Brickell will convert accrued dividends on Brickell's preferred stock through May 31, 2019 at the Merger price per share of Brickell common stock.

Exchange Ratio

The Exchange Ratio is calculated using a formula intended to allocate to the former Brickell securityholders and NovaQuest, collectively, approximately 60% of the aggregate number of shares of Vical common stock, and to the securityholders of Vical as of immediately prior to the Merger approximately 40% of the aggregate number of shares of Vical common stock (in each case on a fully diluted basis using the treasury stock method in instances other than with respect to the NovaQuest Warrants and certain equity issuances by Brickell following the signing of the Merger Agreement and prior to the completion of the Merger).

The exchange ratio formula is the quotient obtained by dividing the number of Brickell Merger Shares (as defined below) by the Brickell Outstanding Shares (as defined below), where:

- "Brickell Merger Shares" means the product determined by multiplying (i) the Post-Closing Vical Shares by (ii) the Brickell Allocation Fraction;
- "Brickell Outstanding Shares" means the total number of shares of Brickell capital stock outstanding immediately prior to the effective time of the Merger expressed on a fully-diluted and as-converted to Brickell common stock basis, assuming, without limitation or duplication, (i) calculated in the case of this clause (i) based on the treasury stock method, the issuance of shares of Brickell capital stock in respect of all Brickell options, warrants, convertible notes and other outstanding options, warrants, convertible notes or rights to receive such shares, in each case, outstanding as of immediately prior to the effective time of the Merger (assuming cashless exercise using the implied share price based on proposed equity value in this transaction for purposes of the treasury stock method calculation) whether conditional or unconditional and including any outstanding options, warrants or rights triggered by or associated with the consummation of the Merger (but excluding any shares of Brickell capital stock reserved for issuance other than with respect to outstanding Brickell options, warrants and convertible notes (for the avoidance of doubt including any Brickell convertible notes issued following the date of the Merger Agreement pursuant to the Note and Warrant Purchase Agreement, dated March 18, 2019, among Brickell and the persons listed on Exhibit A thereto, as in effect on the date of the Merger Agreement (the "Note Purchase Agreement") (up to an aggregate amount of $7.5 million)); and (ii) without applying the treasury stock method, (A) the issuance of shares of Vical common stock in respect of the NovaQuest Warrants and (B) unless otherwise consented to by Vical or pursuant to the Note Purchase Agreement (up to an aggregate amount of $7.5 million), the issuance of shares of Brickell capital stock or Vical common stock in respect of (1) 75% of any Brickell options and (2) any convertible debt, warrants or other equity securities of Brickell or Vical, in the case of (1) and (2), that Brickell issues or commits to issue after the date of the Merger Agreement and prior to the closing of the Merger;
- "Post-Closing Vical Shares" means the quotient determined by dividing (i) the Vical Outstanding Shares by (ii) the Vical Allocation Fraction;
- "Brickell Allocation Fraction" the quotient (rounded to two decimal places) determined by dividing (i) the Brickell Valuation by (ii) the Aggregate Valuation;
- "Vical Outstanding Shares" means the total number of shares of Vical common stock outstanding immediately prior to the effective time of the Merger expressed on a fully-diluted basis and using the

treasury stock method, but assuming, without limitation or duplication, (i) the issuance of shares of Vical common stock pursuant to that certain Letter Agreement dated July 16, 2018, by and between Vical and MTS and (ii) the issuance of shares of Vical common stock in respect of all outstanding Vical options, warrants and other outstanding options, restricted stock units, warrants or rights to receive such shares, in each case, outstanding as of immediately prior to the effective time of the Merger (assuming, for purposes of the treasury stock method calculation, cashless exercise using the volume weighted average closing trading price of a share of Vical common stock on the Nasdaq Capital Market for the five consecutive trading days ending five trading days immediately prior to the date upon which the Merger becomes effective), whether conditional or unconditional and including any outstanding options, warrants or rights triggered by or associated with the consummation of the Merger, (but excluding any shares of Vical common stock reserved for issuance other than with respect to outstanding Vical options and warrants as of immediately prior to the effective time of the Merger). No out-of-the-money Vical options or warrants shall be included in the total number of shares of Vical common stock outstanding for purposes of determining the Vical Outstanding Shares;

- "Vical Allocation Fraction" means the quotient (rounded to two decimal places) determined by dividing (i) the Vical Valuation by (ii) the Aggregate Valuation;
- "Aggregate Valuation" means the sum of (a) the Brickell Valuation, plus (b) the Vical Valuation;
- "Brickell Valuation" means $60,000,000, *provided*, that the Brickell Valuation will be reduced by one dollar for each dollar that the Brickell Net Working Capital (as defined in the section titled "*The Merger Agreement—Conditions to the Completion of the Merger*") balance is less than -$10,200,000 or increased by one dollar for each dollar that the Brickell Net Working Capital balance is more than -$9,200,000, in each case on the date of the Special Meeting and rounded to the nearest dollar; and
- "Vical Valuation" means $40,000,000, *provided*, that the Vical Valuation will be reduced by one dollar for each dollar that the Vical Net Cash (as defined in the section titled "*The Merger Agreement—Conditions to the Completion of the Merger*") balance is less than $34,200,000 or increased by one dollar for each dollar that the Vical Net Cash balance is more than $35,200,000, in each case on the date of the Special Meeting and rounded to the nearest dollar.

Treatment of Brickell Stock Options, Warrants and Convertible Notes

Under the terms of the Merger Agreement, each option to purchase shares of Brickell common stock that is outstanding and unexercised immediately prior to the effective time of the Merger, whether or not vested, will be converted into an option to purchase shares of Vical common stock. Vical will assume the Brickell 2019 Equity Incentive Plan and all rights with respect to each outstanding option to purchase Brickell common stock in accordance with its terms.

Accordingly, from and after the effective time: (i) each outstanding Brickell option assumed by Vical may be exercised solely for shares of Vical common stock; (ii) the number of shares of Vical common stock subject to each outstanding option assumed by Vical will be determined by multiplying (A) the number of shares of Brickell common stock that were subject to such Brickell option, as in effect immediately prior to the effective time, by (B) the Exchange Ratio, and rounding the resulting number down to the nearest whole number of shares of Vical common stock; (iii) the per share exercise price for the Vical common stock issuable upon exercise of each outstanding Brickell option assumed by Vical will be determined by dividing (A) the per share exercise price of the Brickell common stock subject to such Brickell option, as in effect immediately prior to the effective time, by (B) the Exchange Ratio and rounding the resulting exercise price up to the nearest whole cent; and (iv) any restriction on the exercise of any Brickell option assumed by Vical will continue in full force and effect and the term, exercisability, vesting schedule and other provisions of such Brickell option will remain unchanged, subject to certain exceptions.

The combined company will file with the SEC, promptly after the effective time of the Merger, a registration statement on Form S-8, if available for use by the combined company, relating to the shares of Vical

common stock issuable with respect to the Brickell options assumed by Vical in accordance with the Merger Agreement.

Each Brickell warrant that is outstanding immediately prior to the effective time of the Merger will be assumed by Vical and converted into a warrant to purchase Vical common stock, and Vical will assume each such Brickell warrant in accordance with its terms. All rights with respect to Brickell capital stock under the Brickell warrants assumed by Vical will be converted into rights with respect to Vical common stock. Accordingly, from and after the effective time: (i) each Brickell warrant assumed by Vical may be exercised solely for shares of Vical common stock; (ii) the number of shares of Vical common stock subject to each Brickell warrant assumed by Vical will be determined by multiplying (A) the number of shares of Brickell capital stock that were subject to such Brickell warrant, as in effect immediately prior to the effective time, by (B) the Exchange Ratio and rounding the resulting number down to the nearest whole number of shares of Vical common stock; and (iii) any restriction on any Brickell warrant assumed by Vical will continue in full force and effect and the term and other provisions of such Brickell warrant will remain unchanged.

Brickell convertible notes will convert into Brickell capital stock prior to the consummation of the Merger and the holders of such Brickell convertible notes will be treated like holders of Brickell capital stock following conversion.

Directors and Officers of the Combined Company Following the Merger

The Merger Agreement provides that the parties will use reasonable best efforts and take all necessary action so that immediately after the effective time of the Merger, the Vical board of directors is comprised of seven members, with two such members designated by Vical and five such members designated by Brickell.

The Merger Agreement also provides that, immediately after the effective time of the Merger, Vical will appoint Robert Brown as its Chief Executive Officer, Andy Sklawer as its Co-Founder, Chief Operating Officer and Secretary, Deepak Chadha as its Chief R&D Officer, R. Michael Carruthers as its Chief Financial Officer, and David McAvoy as its General Counsel. If any of the officer appointees is unable or unwilling to serve as an officer of Vical as of the effective time, the parties will mutually agree upon a successor.

Amendment to the Restated Certificate of Incorporation of Vical

Vical agreed to amend its restated certificate of incorporation to (i) change Vical's name from "Vical Incorporated" to "Brickell Biotech, Inc.", (ii) effect the Reverse Split and (iii) make such other changes as are mutually agreeable to the parties.

Conditions to the Completion of the Merger

The obligations of each party to consummate the Merger and the other Contemplated Transactions are 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 closing of the Merger, of the following conditions:

- there must not have been any temporary restraining order, preliminary or permanent injunction or other order preventing the consummation of the Contemplated Transactions issued by any court of competent jurisdiction or other governmental body of competent jurisdiction and remain in effect, and no law may have made the consummation of the Contemplated Transactions illegal;
- the Vical stockholders must have approved the amendment to Vical's restated of incorporation to effect the Reverse Split and approved the change of control resulting from the Merger pursuant to the Nasdaq Rules, and the Brickell stockholders must have adopted and approved the Merger Agreement and approved the Contemplated Transactions; and

- the shares of Vical common stock to be issued pursuant to the Merger Agreement must have been approved for listing (subject to official notice of issuance) on the Nasdaq Capital Market as of the closing of the Merger.

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

- the representations and warranties of Brickell set forth in the Merger Agreement under Sections 2.1 (Due Organization; No Subsidiaries), 2.3 (Authority; Binding Nature of Agreement), 2.4 (Vote Required), 2.6 (Capitalization) and 2.20 (No Financial Advisors) must be true and correct on and as of the closing date of the Merger (except to the extent such representations and warranties are specifically made as of a particular date, in which case such representations and warranties must be true and correct as of such date), and the other representations and warranties of Brickell contained in the Merger Agreement must be true and correct on and as of the closing date of the Merger except (a) in each case, or in the aggregate, where the failure to be true and correct would not reasonably be expected to have a Brickell Material Adverse Effect (as defined below) (without giving effect to any reference therein to any materiality qualifications), or (b) for those representations and warranties which address matters only as of a particular date (which representations will be true and correct, subject to the qualifications as set forth in the preceding clause (a), as of such particular date);
- Brickell must have materially performed and complied with all agreements and covenants required to be performed or complied with by it under the Merger Agreement at or prior to the effective time of the Merger;
- Vical must have received from Brickell (i) an officer's certificate certifying (x) that certain conditions of the Merger Agreement have been duly satisfied and (y) that the information set forth in an allocation certificate delivered by Brickell related to Brickell's capitalization is true and accurate as of the closing date of the Merger; (ii) a written resignation executed by each of the required officers and directors of Brickell; and (iii) the allocation certificate with regard to Brickell's capitalization;
- Vical must receive (i) an original signed statement from Brickell that Brickell is not, and has not been at any time during the applicable period specified in Section 897(c)(1)(A)(ii) of the Code, a "United States real property holding corporation," as defined in Section 897(c)(2) of the Code, conforming to the requirements of Treasury Regulations Section 1.1445-2(c)(3) and 1.897-2(h), and (ii) an original signed notice to be delivered to the Internal Revenue Service (the "IRS") in accordance with the provisions of Treasury Regulations Section 1.897-2(h)(2), together with written authorization for Vical to deliver such notice to the IRS on behalf of Brickell following the closing of the Merger, each dated as of the closing date of the Merger, duly executed by an authorized officer of Brickell, and in form and substance reasonably acceptable to Vical;
- Brickell must not have experienced a Brickell Material Adverse Effect since the date of the Merger Agreement;
- the Brickell investor agreements must have been terminated;
- Vical must have received duly executed copies of the required Brickelllock-up agreements, each of which must be in full force and effect as of the closing of the Merger;
- Vical must have received all requisite accredited investor questionnaires, and there must not be more than ten stockholders of Brickell who have not executed an accredited investor questionnaire certifying that such stockholder is an "accredited investor" pursuant to Regulation D under the Securities Act;
- the Funding Agreement must be in full force and effect and Vical must receive a certificate executed by (a) the Chief Executive Officer or Chief Financial Officer of Brickell certifying that all conditions precedent have been satisfied or waived and (b) an authorized officer of NovaQuest certifying that all conditions precedent have been satisfied or waived, such that the Concurrent Financing may be

consummated immediately following the closing of the Merger without the further satisfaction of any conditions;

- the Brickell Net Working Capital (defined below) balance as of the date of the Special Meeting must not be less than -$11.5 million;
- Vical must have received required written consents in the form attached to the Merger Agreement executed by holders of at leasttwo-thirds of Brickell's outstanding capital stock (on an as-converted basis), which must be in full force and effect;
- no Brickell stockholders may have exercised statutory appraisal rights with respect to their shares of Brickell capital stock; and
- Brickell's certificate of incorporation must have been amended to (a) allow the satisfaction and discharge of certain dividend rights accrued through May 31, 2019 in favor of certain holders of Brickell preferred stock and (b) increase the number of authorized shares of Brickell's common stock to be issued to Brickell's stockholders and in respect of Brickell options and warrants in connection with the Contemplated Transactions as contemplated in the Merger Agreement.

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

- the representations and warranties of Vical and Merger Sub set out in the Merger Agreement under Sections 3.1 (Due Organization; No Subsidiaries), 3.3 (Authority; Binding Nature of Agreement), 3.4 (Vote Required), 3.6 (Capitalization) and 3.21 (No Financial Advisors) must be true and correct on and as of the closing date of the Merger (except to the extent such representations and warranties are specifically made as of a particular date, in which case such representations and warranties must be true and correct as of such date), and the other representations and warranties of Vical and Merger Sub contained in the Merger Agreement must be true and correct as of the date of the Merger Agreement on and as of the closing date of the Merger except (a) in each case, or in the aggregate, where the failure to be true and correct would not reasonably be expected to have a Vical Material Adverse Effect (as defined below) (without giving effect to any reference therein to any materiality qualifications), or (b) for those representations and warranties which address matters only as of a particular date (which representations will have been true and correct, subject to the qualifications as set forth in the preceding clause (a), as of such particular date);
- Vical and Merger Sub each must have materially performed and complied with all agreements and covenants required to be performed or complied with by it under the Merger Agreement at or prior to the effective time of the Merger;
- Brickell must have received from Vical (i) an officer's certificate confirming that certain conditions of the Merger Agreement have been duly satisfied; (ii) a certificate with regard to Vical's capitalization; and (iii) a written resignation executed by each of the directors of Vical who will not continue as directors of Vical after the closing of the Merger;
- Vical must not have experienced a Vical Material Adverse Effect since the date of the Merger Agreement; and
- the Vical Net Cash (defined below) balance as of the date of the Special Meeting must not be less than $30 million.

Brickell 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 a Brickell Material Adverse Effect, has or would reasonably be expected to have a material adverse effect on the business, condition (financial or otherwise), assets, liabilities or results of operations of Brickell; provided, however, that effects arising or resulting from the following shall not be taken into account in determining whether there has been a Brickell Material Adverse

Effect: (a) general business or economic conditions affecting the industry in which Brickell operates, (b) acts of war, armed hostilities or terrorism, (c) changes in financial, banking or securities markets, (d) any change in, or any compliance with or action taken for the purpose of complying with, any law or GAAP (or interpretations of any law or GAAP) or (e) resulting from the taking of any action required to be taken by the Merger Agreement; except in each case with respect to clauses (a) through (c), to the extent disproportionately affecting Brickell, taken as a whole, relative to other similarly situated companies in the industries in which Brickell operates.

Brickell Net Working Capital means the sum of (a) Brickell's cash, cash equivalents and marketable securities (other than the proceeds of the Concurrent Financing), in each case as of the date of the Vical Stockholder Meeting, determined in a manner consistent with the manner in which such items were historically determined and in accordance with Brickell's financial statements and GAAP, plus (b) Brickell's accounts receivable as of the date of the Vical Stockholder Meeting determined in a manner consistent with the manner in which such items were historically determined and in accordance with Brickell Financials and GAAP, minus (c) the sum of Brickell's accounts payable and accrued expenses as of the date of the Vical Stockholder Meeting determined in a manner consistent with the manner in which such items were historically determined and in accordance with Brickell's financial statements and GAAP or as otherwise designated by the Merger Agreement, minus (d) the aggregate amount of all future payments under Brickell's notes payable and indebtedness for borrowed money outstanding as of the date of the Vical Stockholder Meeting.

Vical 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 a Vical Material Adverse Effect, has or would reasonably be expected to have a material adverse effect on the business, condition (financial or otherwise), assets, liabilities or results of operations of Vical; provided, however, that effects arising or resulting from the following shall not be taken into account in determining whether there has been a Vical Material Adverse Effect: (a) general business or economic conditions affecting the industry in which Vical operates, (b) acts of war, armed hostilities or terrorism, (c) changes in financial, banking or securities markets, (d) the taking of any action required to be taken by the Merger Agreement, (e) any change in the stock price or trading volume of Vical common stock (it being understood, however, that any effect causing or contributing to any change in stock price or trading volume of Vical common stock may be taken into account in determining whether a Vical Material Adverse Effect has occurred, unless such effects are otherwise excepted from this definition), (f) the failure of Vical to meet internal or analysts' expectations or projections or the results of operations of Vical; (g) any clinical trial programs or studies, including any adverse data, event or outcome arising out of or related to any such programs or studies, (h) any change in, or any compliance with or action taken for the purpose of complying with, any law or GAAP (or interpretations of any law or GAAP), (i) resulting from the announcement of the Merger Agreement or the pendency of the Contemplated Transactions, or (j) resulting from the taking of any action required to be taken by the Merger Agreement, except in each case with respect to clauses (a) through (c), to the extent disproportionately affecting Vical relative to other similarly situated companies in the industries in which Vical operates.

Vical Net Cash means, without duplication, (a) Vical's cash, cash equivalents and marketable securities as of the date of the Vical Stockholder Meeting determined in a manner consistent with the manner in which such items were historically determined and in accordance with the financial statements contained or incorporated by reference in Vical's public filings and GAAP; plus (b) Vical's accounts receivable as of the date of the Vical Stockholder Meeting determined in a manner consistent with the manner in which such items were historically determined and in accordance with the financial statements contained or incorporated by reference in Vical's public filings and GAAP; minus (c) the sum of Vical's accounts payable and accrued expenses (without duplication of any expenses otherwise accounted for in the definition of Vical Net Cash) as of the date of the Vical Stockholder Meeting determined in a manner consistent with the manner in which such items were historically determined and in accordance with the financial statements contained or incorporated by reference in Vical's public filings and GAAP; minus (d) Vical Transaction Costs (defined below) (unless paid prior to the effective time of the Merger or otherwise accounted for in the definition of Vical Net Cash); plus (e) unless otherwise accounted for in Brickell Net Working Capital, the portion of the costs and expenses payable by

Brickell pursuant to the Merger Agreement and (ii) that are paid by Vical (and not reimbursed by Brickell) prior to the date of the Vical Stockholders' Meeting.

Vical Transaction Costs means, without duplication, the aggregate amount of costs and expenses of Vical incurred in connection with the negotiation, preparation and execution of this Agreement and the consummation of the Contemplated Transactions, including: (a) any brokerage fees and commissions, finders' fees or financial advisory fees, any fees and expenses of counsel or accountants payable by Vical and any transaction bonuses or similar items in connection with the Contemplated Transactions; (b) any bonus, severance, change-in-control payments or similar payment obligations (including payments with "single-trigger" provisions triggered at and as of the consummation of the Contemplated Transactions) that become due or payable to any director, officer, employee or consultant of Vical in connection with the consummation of the Contemplated Transactions; (c) the out of pocket costs of any insurance tail policies that may be purchased by Vical relating to insurance policies held by it prior to the closing of the Merger (including all premiums payable in connection therewith) and, for clarity, shall not include the deductible under any such policy, the cost of any insurance tail policies of Brickell or the costs of Vical after the effective time of the Merger for coverage of Vical's then-serving directors or other insurance policies of Vical on or after the effective time of the Merger; and (d) the costs and expenses payable by Vical pursuant to the Merger Agreement, in each case with respect to the foregoing matters (a) through (d), to the extent unpaid and not otherwise accounted for in the definition of Vical Net Cash.

Calculation of Vical Net Cash and Brickell Net Working Capital

Within five business days prior to the date of the Vical's Stockholder Meeting, (a) Vical must deliver to Brickell a schedule (the "Net Cash Schedule") setting forth Vical's good faith estimate of its expected Vical Net Cash (the "Net Cash Calculation") as prepared by Vical's chief financial officer, together with the relevant work papers and back-up materials and (b) Brickell must deliver to Vical a net working capital schedule (the "Net Working Capital Schedule") setting forth Brickell's good faith estimate of its expected Brickell Net Working Capital (the "Net Working Capital Calculation") as prepared by Brickell's chief financial officer, together with the relevant work papers and back-up materials. The calculations and assumptions used in the Net Cash Schedule and the Net Working Capital Schedule must be consistent with the presentation and methodologies used in preparing the Vical Net Cash and Brickell Net Working Capital calculation, as applicable. Within two business days after Vical delivers the Net Cash Schedule to Brickell and Brickell delivers the Net Working Capital Schedule to Vical (the "Response Date"), the receiving party may dispute any part of such schedule by delivering a written notice (the "Dispute Notice") to that effect to the other party. Any Dispute Notice must identify in reasonable detail the nature of any proposed revisions to such disputed schedule and will be accompanied by reasonably detailed materials supporting the basis for such proposed revisions. If either party delivers a Dispute Notice on or prior to the Response Date, then the parties will attempt to resolve the underlying dispute in good faith for a period of two business days (the "Dispute Resolution Period"). If the parties agree on the amount of any of the deviations from the Net Cash Schedule or Net Working Capital Schedule, as applicable, during the Dispute Resolution Period, the Vical Net Cash or Brickell Net Working Capital amount, as applicable, they agree upon shall be final. If the parties, notwithstanding such good faith effort, fail to resolve such dispute within the Dispute Resolution Period, then the parties will jointly engage an independent accountant of national standing to make a written determination of Vical Net Cash or Brickell Net Working Capital, as applicable, as promptly as practicable, and such independent accountant's determination will be final, absent manifest error or fraud.

Representations and Warranties

The Merger Agreement contains customary representations and warranties of the parties. Brickell represents and warrants to the following matters:

- Due Organization; No Subsidiaries
- Organizational Documents
- Authority; Binding Nature of Agreement

- Vote Required
- Non-Contravention; Consents
- Capitalization
- Financial Statements
- Absence of Changes
- Absence of Undisclosed Liabilities
- Title to Assets
- Real Property; Leasehold
- Intellectual Property
- Agreements, Contracts and Commitments
- Compliance; Permits; Restrictions
- Legal Proceedings; Orders
- Tax Matters
- Employee and Labor Matters; Benefit Plans
- Environmental Matters
- Insurance
- No Financial Advisors
- Disclosures
- Transactions with Affiliates
- Anti-Bribery

Vical and Merger Sub represent and warrant to the following matters:

- Due Organization; No Subsidiaries
- Organizational Documents
- Authority; Binding Nature of Agreement
- Vote Required
- Non-Contravention; Consents
- Capitalization
- SEC Filings; Financial Statements
- Absence of Changes
- Absence of Undisclosed Liabilities
- Title to Assets
- Real Property; Leasehold
- Intellectual Property
- Agreements, Contracts and Commitments
- Compliance; Permits

- Legal Proceedings; Orders
- Tax Matters
- Employee and Labor Matters; Benefit Plans
- Environmental Matters
- Transactions with Affiliates
- Insurance
- No Financial Advisors
- Anti-Bribery
- Valid Issuance of Shares
- Opinion of Financial Advisor

The representations and warranties of Brickell, Vical and Merger Sub contained in the Merger Agreement or any certificate or instrument delivered pursuant to the Merger Agreement will terminate at the effective time of the Merger, and only the covenants that by their terms survive the effective time of the Merger and certain miscellaneous provisions of the Merger Agreement will survive the effective time of the Merger.

Non-Solicitation

Both Vical and Brickell are prohibited by the terms of the Merger Agreement from (i) soliciting, initiating or knowingly encouraging, inducing or facilitating the communication, making, submission or announcement of any acquisition proposal or acquisition inquiry or taking any action that could reasonably be expected to lead to an acquisition proposal or acquisition inquiry; (ii) furnishing any non-public information to any person in connection with or in response to an acquisition proposal or acquisition inquiry; (iii) engaging in discussions or negotiations with any person with respect to any acquisition proposal or acquisition inquiry; (iv) approving, endorsing or recommending any acquisition proposal; (v) executing or entering into any letter of intent or any contract contemplating or otherwise relating to any acquisition transaction; or (vi) publicly proposing to do any of the foregoing.

Pursuant to the terms of the Merger Agreement, each of Vical and Brickell must immediately cease any existing discussions, negotiations and communications with any person relating to any acquisition proposal or acquisition inquiry that have not already been terminated as of the date of the Merger Agreement and request the destruction or return of any of such party's nonpublic information.

Subject to certain restrictions and prior to obtaining the required Vical stockholder vote, Vical may, however, providenon-public information to, and enter into discussions or negotiations with, any person that has made (and not withdrawn) a bona fide acquisition proposal, which the board of directors of Vical determines in good faith, after consultation with Vical's outside financial advisors and outside legal counsel, constitutes, or could be reasonably likely to result in, a superior offer if: (A) neither Vical nor its representatives have breached the non-solicitation restrictions in the Merger Agreement in any material respect, (B) Vical's board of directors concludes in good faith based on the advice of outside legal counsel, that the failure to take such action could be reasonably likely to be inconsistent with the fiduciary duties of its board of directors under applicable law; (C) Vical receives from such person an executed confidentiality agreement containing provisions, in the aggregate, at least as favorable to such party as those contained in the Confidentiality Agreement dated as of January 31, 2019, between Vical and Brickell; and (D) substantially contemporaneously with furnishing any such nonpublic information to such person, Vical furnishes such nonpublic information to Brickell.

If Vical or Brickell, or any of their respective representatives, receives an acquisition proposal or acquisition inquiry prior to the closing of the Merger, then such party will (within one business day) advise the other party

orally and in writing of such acquisition proposal or acquisition inquiry (including the identity of the person making such acquisition proposal or acquisition inquiry, and the material terms of the acquisition proposal or acquisition inquiry).

An acquisition proposal means any offer or proposal, whether written or oral (other than an offer or proposal between the parties) contemplating or otherwise relating to any acquisition transaction with a party.

An acquisition inquiry means an inquiry, indication of interest or request for information (other than an inquiry, indication of interest or request for information made between the parties) that would be reasonably likely to lead to an acquisition proposal.

An acquisition transaction means any transaction or series of related transactions involving:

- 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 entity; (ii) in which a person or "group" (as defined in the Securities Exchange Act of 1934, as amended (the "Exchange Act") and its rules) 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; except, that in the case of Brickell, the Concurrent Financing will not be an "acquisition transaction"; or
- 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.

A "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 greater than 80% for these purposes) that: (a) was not obtained or made as a direct or indirect result of a breach of the Merger Agreement, and (b) is on terms and conditions that such party's board of directors determines in good faith, based on such matters that it deems relevant (including the likelihood of the consummation of the transaction), as well as any written offer by the other party to the Merger Agreement to amend the terms of the Merger Agreement, and following consultation with its outside legal counsel and outside financial advisors, if any, are more favorable, from a financial point of view, to such party's stockholders than the terms of the Contemplated Transactions.

Vical Special Meeting

Pursuant to the Merger Agreement, as promptly as reasonably practicable after the resolution of SEC staff comments, if any, and the filing of the definitive proxy statement on Schedule 14A, Vical will take all action necessary under applicable law to call, give notice of and hold a Special Meeting of the holders of Vical common stock to vote on: (i) the amendment of Vical's restated certificate of incorporation to effect the Reverse Split; (ii) the change of control resulting from the Merger pursuant to the Nasdaq Rules (the matters contemplated by clauses (i) through (ii) are collectively referred to as the "Closing Stockholder Matters". Vical will take reasonable measures to ensure that all proxies solicited in connection with the Special Meeting are solicited in compliance with all applicable law. If, on or before the date of the Special Meeting, Vical reasonably believes that it (i) will not receive proxies sufficient to obtain the required approvals or (ii) will not have sufficient shares of Vical common stock represented to constitute a quorum necessary to conduct the business of the Special Meeting, Vical may postpone or adjourn, or make one or more successive postponements or adjournments of, the Special Meeting by up to 60 calendar days.

Vical agreed that, subject to certain exceptions in the Merger Agreement: (i) the Vical board of directors will recommend that the Vical stockholders vote to approve the Closing Stockholder Matters; (ii) this proxy

statement would include a statement to the effect that the Vical board of directors recommends that the Vical stockholders vote to approve the Closing Stockholder Matters, (the " Vical Board of Directors Recommendation"); and (iii) the Vical Board of Directors Recommendation would not be withheld, amended, withdrawn or modified (and the Vical board of directors would not publicly propose to withhold, amend, withdraw or modify the Vical Board of Directors Recommendation) in a manner adverse to Brickell (the actions set forth in the foregoing clause (iii), collectively, a "Vical Board of Directors Recommendation Change").

The terms of the Merger Agreement provide that, if at any time prior to the approval of the Closing Stockholder Matters, Vical receives a written acquisition proposal (which did not arise out of a material breach of the Merger Agreement) from any person that has not been withdrawn and after consultation with outside legal counsel, the Vical board of directors has determined, in good faith, that such acquisition proposal is a superior offer, (x) the Vical board of directors may make a Vical Board of Directors Recommendation Change or (y) Vical may terminate the Merger Agreement to enter into an alternative agreement with respect to such superior offer, if and only if: (A) the Vical board of directors determines in good faith, after consultation with outside legal counsel, that the failure to do so could be inconsistent with the fiduciary duties of the Vical board of directors to the stockholders of Vical under applicable law; (B) Vical has given Brickell prior written notice of its intention to make the Vical Board of Directors Recommendation Change or terminate the Merger Agreement at least three business days prior to making the Vical Board of Directors Recommendation Change or terminating the Merger Agreement (a "Determination Notice") (which notice will not constitute a Vical Board of Directors Recommendation Change); and (C) (1) Vical has provided to Brickell a summary of the material terms and conditions of the acquisition proposal, (2) Vical has given Brickell three business days after the Determination Notice to propose revisions to the terms of the Merger Agreement or make another proposal so that such Determination Notice would no longer necessitate a Vical Board of Directors Recommendation Change and has made its representatives reasonably available to negotiate in good faith with Brickell (to the extent Brickell desires to negotiate) with respect to such proposed revisions or other proposal, if any, and (3) after considering the results of any such negotiations and giving effect to the proposals made by Brickell, if any, after consultation with outside legal counsel, the Vical board of directors has determined, in good faith, that such acquisition proposal is a superior offer and that the failure to make the Vical Board of Directors Recommendation Change or terminate the Merger Agreement could be inconsistent with the fiduciary duties of the Vical board of directors to the Vical stockholders under applicable law. The provisions of the Merger Agreement described in this paragraph also apply to any material change to the facts and circumstances relating to such acquisition proposal and a new Determination Notice would be required following any such material change, except that the references to three business days in this paragraph would be deemed to be two business days.

The terms of the Merger Agreement also provide that, other than in connection with an acquisition proposal, the Vical board of directors may make a Vical Board of Directors Recommendation Change in response to a material development or change in circumstances (other than an acquisition proposal) that affects the business, assets or operations of Vical that occurs or arises after the date of the Merger Agreement and was neither known to Vical or the Vical board of directors nor reasonably foreseeable as of the date of the Merger Agreement (a "Vical Change in Circumstance"), if and only if: (A) the Vical board of directors determines in good faith, after consultation with outside legal counsel, that the failure to do so could be inconsistent with the fiduciary duties of the Vical board of directors to Vical's stockholders under applicable law; (B) Vical has given Brickell a Determination Notice at least three business days prior to making any such Vical Board of Directors Recommendation Change; and (C) (1) Vical has specified the Vical Change in Circumstance in reasonable detail, (2) Vical has given Brickell three business days after the Determination Notice to propose revisions to the terms of the Merger Agreement or make another proposal, and will have made its representatives reasonably available to negotiate in good faith with Brickell (to the extent Brickell desires to do so) with respect to such proposed revisions or other proposal, if any, and (3) after considering the results of any such negotiations and giving effect to the proposals made by Brickell, if any, after consultation with outside legal counsel, the Vical board of directors has determined, in good faith, that the failure to make the Vical Board of Directors Recommendation Change in response to such Vical Change in Circumstance could be inconsistent with the fiduciary duties of the Vical board of directors to Vical's stockholders under applicable law. The provisions of the Merger Agreement

described in this paragraph also apply to any material change to the facts and circumstances relating to such Vical Change in Circumstance and a new Determination Notice would be required following any such material change, except that the references to three business days in this paragraph would be deemed to be two business days.

Brickell Stockholder Action by Written Consent

The Merger Agreement contemplates that, concurrently with the execution of the Merger Agreement, Brickell's officers and directors who are Brickell stockholders and holders of at least two-thirds of the outstanding capital stock of Brickell must have executed and delivered to Vical an action by written consent adopting and approving the Merger Agreement and approving the Merger and related transactions. As of June 2, 2019, the officers, directors and stockholders who held approximately 75% of the outstanding capital stock of Brickell had executed and delivered such action by written consent.

Brickell Dissenters' Rights

Brickell stockholders are entitled to assert statutory appraisal rights in connection with the Merger pursuant to Section 262 of the DGCL with respect to their shares of Brickell capital stock.

Covenants; Operation of Business Pending the Merger

During the period from the date of the Merger Agreement and continuing until the earlier of the termination of the Merger Agreement or the effective time of the Merger, except as set forth in the Merger Agreement, as required by applicable law or unless Brickell consents in writing, Vical has agreed to conduct its business and operations in the ordinary course of business and in compliance in all material respects with all applicable laws and the requirements of all of its materials contracts, and will not:

- Declare, accrue, set aside or pay any dividend or make any other distribution in respect of any shares of its capital stock or repurchase, redeem or otherwise reacquire any shares of its capital stock or other securities (except in connection with the payment of the exercise price and/or withholding taxes incurred upon the exercise, settlement or vesting of any award granted under Vical's stock plan);
- Sell, issue, grant, pledge or otherwise dispose of or encumber or authorize any of the foregoing with respect to: (a) any capital stock or other security of Vical (except for Vical common stock issued upon the valid exercise of outstanding Vical options, restricted stock units or warrants); (b) any option, warrant or right to acquire any capital stock or any other security; or (c) any instrument convertible into or exchangeable for any capital stock or other security of Vical;
- Except as required to give effect to anything in contemplation of the closing of the Merger, amend any of its organizational documents, 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;
- Form any subsidiary or acquire any equity interest or other interest in any other entity or enter into a joint venture with any other entity;
- (a) Lend money to any person except for the advancement of certain expenses in the ordinary course of business, (b) incur or guarantee any indebtedness for borrowed money, (c) guarantee any debt securities of others, or (d) make any capital expenditure or commitment in excess of the budgeted capital expenditure and commitment amounts set forth in the Vical operating budget delivered to Brickell concurrently with the execution of the Merger Agreement, other than in an aggregate amount not to exceed $50,000;
- Other than as required by applicable law or the terms of any benefit plan as in effect on the date of the Merger Agreement: (a) adopt, terminate, establish or enter into any benefit plan; (b) cause or permit

any benefit plan to be amended in any material respect; (c) pay any bonus or make any profit-sharing or similar payment to, or increase the amount of the wages, salary, commissions, benefits or other compensation or remuneration payable to, any of its directors, officers or employees, other than increases in base salary and annual cash bonus opportunities and payments made in the ordinary course of business consistent with past practice; (d) increase the severance or change of control benefits offered to any current or new employees, directors or consultants or (e) hire, terminate or give notice of termination to any officer or employee whose annual base salary is or is expected to be more than $200,000 per year;

- Recognize any labor union, labor organization, or similar person;
- Enter into any material transaction other than in the ordinary course of business;
- Acquire any material asset or sell, lease or otherwise irrevocably dispose of any of its assets or properties, or grant any encumbrance with respect to such assets or properties, except in the ordinary course of business;
- Sell, assign, transfer, license, sublicense or otherwise dispose of any material Vical intellectual property (other than pursuant tonon-exclusive licenses in the ordinary course of business);
- Make, change or revoke any material tax election, fail to pay any income or other material tax as such tax becomes due and payable, file any amendment making any material change to any tax return, settle or compromise any income or other material tax liability, enter into any tax allocation, sharing, indemnification or other similar agreement or arrangement (other than customary commercial contracts entered into in the ordinary course of business the principal subject matter of which is not taxes), request or consent to any extension or waiver of any limitation period with respect to any claim or assessment for any income or other material taxes (other than pursuant to an extension of time to file any tax return granted in the ordinary course of business of not more than six months), or adopt or change any material accounting method in respect of taxes;
- Enter into, materially amend or terminate any Vical material contract;
- Other than as required by law or GAAP, take any action to change accounting policies or procedures;
- Initiate or settle any material legal proceeding;
- Enter into or amend a contract that would reasonably be expected to prevent or materially impede, interfere with, hinder or delay the consummation of the Merger; or
- Agree, resolve or commit to do any of the foregoing.

During the period from the date of the Merger Agreement and continuing until the earlier of the termination of the Merger Agreement or the effective time of the Merger, except as set forth in the Merger Agreement, as required by applicable law or unless Vical consents in writing, Brickell will conduct its business and operations in the ordinary course of business and in compliance in all material respects with all applicable laws and the requirements of all of its material contracts, and will 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 its capital stock or other securities (except for the Vical common stock issued in connection with the conversion of accrued dividends on Brickell's preferred stock and shares of Brickell common stock from terminated employees, directors or consultants of Brickell);
- Sell, issue, grant, pledge or otherwise dispose of or encumber or authorize any of the foregoing with respect to: (a) any capital stock or other security of Brickell or its subsidiary (except for shares of Brickell common stock issued upon the valid exercise of outstanding options exercisable for Brickell common stock); (b) any option, warrant or right to acquire any capital stock or any other security (except for the NovaQuest Warrants and certain equity issuances by Brickell following the signing of

the Merger Agreement and prior to the completion of the Merger); or (c) any instrument convertible into or exchangeable for any capital stock or other security of Brickell (other than convertible notes on terms no less favorable than those in the Note Purchase Agreement);

- Except as required to give effect to anything in contemplation of the closing of the Merger, amend any of its organizational documents, 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;
- Form any subsidiary or acquire any equity interest or other interest in any other entity or enter into a joint venture with any other entity;
- (a) Lend money to any person, (b) incur or guarantee any indebtedness for borrowed money, (c) guarantee any debt securities of others, or (d) make any capital expenditure or commitment in excess of the budgeted capital expenditure and commitment amounts set forth in Brickell's operating budget delivered to Vical concurrently with the execution of the Merger Agreement;
- Other than as required by applicable law or the terms of any benefit plan as in effect on the date of the Merger Agreement: (a) adopt, terminate, establish or enter into any benefit plan; (b) cause or permit any benefit plan to be amended in any material respect; (c) pay any bonus or make any profit-sharing or similar payment to, or increase the amount of the wages, salary, commissions, benefits or other compensation or remuneration payable to, any of its directors, officers or employees, other than increases in base salary and annual cash bonus opportunities and payments made in the ordinary course of business consistent with past practice; (d) increase the severance or change of control benefits offered to any current or new employees, directors or consultants or (e) hire, terminate or give notice of termination to any officer or employee whose annual base salary is or is expected to be more than $200,000 per year;
- Recognize any labor union, labor organization, or similar person;
- Enter into any material transaction other than in the ordinary course of business, other than the Funding Agreement and related transactions;
- Acquire any material asset or sell, lease or otherwise irrevocably dispose of any of its assets or properties, or grant any encumbrance with respect to such assets or properties, except in the ordinary course of business;
- Sell, assign, transfer, license, sublicense or otherwise dispose of any material Brickell intellectual property (other than pursuant to non-exclusive licenses in the ordinary course of business);
- Make, change or revoke any material tax election, fail to pay any income or other material tax as such tax becomes due and payable, file any amendment making any material change to any tax return, settle or compromise any income or other material tax liability, enter into any tax allocation, sharing, indemnification or other similar agreement or arrangement (other than customary commercial contracts entered into in the ordinary course of business the principal subject matter of which is not taxes), request or consent to any extension or waiver of any limitation period with respect to any claim or assessment for any income or other material taxes (other than pursuant to an extension of time to file any tax return granted in the ordinary course of business of not more than six months), or adopt or change any material accounting method in respect of taxes;
- Enter into, materially amend or terminate any material contract;
- Other than as required by law or GAAP, take any action to change accounting policies or procedures;
- Initiate or settle any legal proceeding;
- Enter into or amend a contract that would reasonably be expected to prevent or materially impede, interfere with, hinder or delay the consummation of the Merger; or
- Agree, resolve or commit to do any of the foregoing.

Termination and Termination Fees

The Merger Agreement may be terminated prior to the effective time of the Merger (whether before or after the required stockholder approvals to complete the Merger have been obtained, unless otherwise specified below):

(a) By mutual written consent of Vical and Brickell;

(b) By either Vical or Brickell if the Contemplated Transactions have not been consummated by November 15, 2019 (other than in cases in which such failure to consummate the Contemplated Transactions is due to a party's action or failure to act that has been a principal cause of the failure of the Contemplated Transactions to occur on or before November 15, 2019 and such action or failure to act constitutes a breach of the Merger Agreement);

(c) By either Vical or Brickell if a governmental body issues a final and nonappealable order, decree or ruling having the effect of permanently restraining, enjoining or otherwise prohibiting the Contemplated Transactions;

(d) By either Vical or Brickell if the Special Meeting has been held and completed and the Closing Stockholder Matters have not been approved;

(e) By Brickell (at any time prior to obtaining the required vote from Vical stockholders on the Closing Stockholder Matters) if (i) Vical fails to include in this proxy statement the Vical Board of Directors Recommendation or has made a Vical Board of Directors Recommendation Change, (ii) the Vical board of directors or any committee thereof publicly approves, endorses or recommends an acquisition proposal; or (iii) Vical enters into any letter of intent or any contract relating to an acquisition proposal (other than a permitted confidentiality agreement);

(f) By Brickell, (i) upon Vical's breach of its non-solicitation obligations, (ii) upon Vical's breach of its obligations upon receipt of a written acquisition proposal or the occurrence of a Vical Change in Circumstance, or (iii) if any representation or warranty of Vical or Merger Sub shall have become inaccurate, in any case, such that would prevent Vical or Merger Sub from satisfying the closing conditions with respect to Vical's representations and warranties and covenants and such breach is not curable by the earlier of November 15, 2019 or 30 days after delivery of written notice from Brickell to Vical or Merger Sub of such breach;

(g) By Vical, upon a breach of any representation, warranty, covenant or agreement set forth in the Merger Agreement by Brickell or if any representation or warranty of Brickell shall have become inaccurate, in either case, such that would prevent Brickell from satisfying its closing conditions with respect to representations and warranties and covenants and such breach is not curable by the earlier of November 15, 2019 or 30 days after delivery of written notice from Vical to Brickell of such breach;

(h) By Vical, at any time, if Vical (i) has received a superior offer, (ii) Vical has complied with its obligations under the Merger Agreement in order to accept the superior offer, (iii) concurrently terminates the Merger Agreement and enters into a definitive agreement with respect to the superior offer and (iv) pays to Brickell a termination fee of $1.0 million within ten business days of the termination;

(i) By Vical, if Brickell's audited financial statements for the fiscal years ended 2016, 2017 and 2018 had not been provided to Vical within 15 days after the date of the Merger Agreement, which financial statements have been provided to Vical prior to the date of this proxy statement;

(j) By Brickell if, at any time after the date of the Merger Agreement and prior to the closing of the Merger, the Vical Net Cash balance has fallen below $30.0 million and remains below $30.0 million at the expiration of the 10-day period commencing upon delivery of written notice from Brickell to Vical of its intention to terminate;

(k) By Vical, if the Funding Agreement is terminated; or

(l) By Vical, if (i) the conditions precedent to Brickell's obligation to effect the Merger (other than those conditions that by their nature are to be satisfied by actions taken at the closing of the Merger) have been satisfied, (ii) Vical has irrevocably confirmed by notice to Brickell that all such conditions have been satisfied as of the date of such notice (other than those conditions that by their nature are to be satisfied by actions taken at the closing of the Merger) and that it is willing to waive any other unsatisfied conditions precedent to Vical and Merger Sub's obligations to effect the Merger (other than the conditions with regard to the Funding Agreements and those conditions that by their nature are to be satisfied by actions taken at the closing of the Merger) and (iii) the Merger has not been consummated within three business days after the delivery of such notice.

Vical must pay Brickell a termination fee of $1.0 million (i) within ten business days of consummating an alternative transaction, if (A) the Merger Agreement is terminated by Brickell pursuant to clause (e) above, (B) an acquisition proposal is publicly announced or disclosed or otherwise communicated to Vical or its board of directors after the date of the Merger Agreement but prior to the termination of the Merger Agreement and (C) within nine months after the date of such termination, Vical enters into a definitive agreement for an alternative transaction in respect of such acquisition proposal, or (ii) in connection with the termination of the Merger Agreement pursuant to clause (h) above.

Brickell must pay Vical a termination fee of $1.0 million within ten business days of the termination of the Merger Agreement by Vical pursuant to clauses (k) or (l) above (or by Brickell at a time at which Vical had the right to terminate the Merger Agreement pursuant to either of such clause).

The respective termination fees are the sole and exclusive remedies available to each party in the circumstances in which such a termination fee is owed in accordance with the terms of the Merger Agreement, in connection with or arising out of the Merger Agreement or its termination in circumstances where a termination fee is owed, any breach of the Merger Agreement giving rise to such termination, or the failure of the Contemplated Transactions to be consummated, except that the termination of the Merger Agreement in such circumstances will not relieve any party of any liability for fraud or for any willful and material breach of any representation, warranty, covenant, obligation or other provision contained in the Merger Agreement.

Other Agreements

Regulatory Approvals

Each party agreed to use reasonable best efforts to file or otherwise submit, as soon as practicable after the date of the Merger Agreement, all applications, notices, reports and other documents reasonably required to be filed or submitted by such party with or to any governmental body with respect to the Contemplated Transactions, and to submit promptly any additional information requested by any such governmental body.

Director Indemnification and Insurance

The Merger Agreement provides that, for a period of six years following the effective time of the Merger, Vical and the combined company will, jointly and severally, indemnify and hold harmless each person who is, has been, or who becomes prior to the effective time, a director, officer, fiduciary or agent of Vical or Brickell or any of their respective subsidiaries, respectively, against all claims, losses, liabilities, damages, judgments, fines and reasonable fees, costs and expenses, including attorneys' fees and disbursements, 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 such person is or was a director, officer, fiduciary or agent of Vical or of Brickell, whether asserted or claimed prior to, at or after the effective time, in each case, to the fullest extent permitted under applicable law. Each such indemnitee will be entitled to advancement of expenses incurred in the defense of any such claim, action, suit, proceeding or investigation from each of Vical and the combined company, jointly and severally.

The Merger Agreement also provides that the provisions relating to the indemnification, advancement of expenses and exculpation of present and former directors and officers of Vical set forth in Vical's restated certificate of incorporation and bylaws will not be amended, modified or repealed for a period of six years from the effective time of the Merger in any manner that would adversely affect the rights of individuals who, at the effective time of the Merger, were officers or directors of Vical. After the closing of the Merger, the certificate of incorporation and bylaws of the surviving corporation will contain provisions at least as favorable as the provisions relating to the indemnification, advancement of expenses and exculpation of present and former directors and officers presently set forth in Vical's restated certificate of incorporation and bylaws.

Vical has agreed to secure and prepay a six year "tail policy" on Vical's existing directors' and officers' liability insurance policy with an effective date as of the closing date of the Merger.

Interim Financial Statements

Brickell agreed to furnish to Vical the audited and unaudited financial statements of Brickell that are required to be included in this proxy statement.

Listing

Pursuant to the Merger Agreement, Vical must, (a) to the extent required by the rules and regulations of the Nasdaq Capital Market, prepare and submit to the Nasdaq Capital Market a notification form for the listing of the shares of the combined company's common stock to be issued in connection with the Contemplated Transactions, and use its best efforts to cause such shares to be approved for listing (subject to official notice of issuance); (b) effect the Reverse Split subject to the receipt of the required stockholder vote, and (c) to the extent required by the rules of the Nasdaq Capital Market, file the Nasdaq Listing Application and to cause the Nasdaq Listing Application to be conditionally approved prior to the effective time of the Merger. Brickell will cooperate with Vical as reasonably requested by Vical with respect to the Nasdaq Listing Application and promptly furnish to Vical all information concerning Brickell and its stockholders that may be required or reasonably requested by Vical.

Expenses

The Merger Agreement provides that all non-indemnification fees and expenses incurred in connection with the Merger Agreement and the Contemplated Transactions will be paid by the party incurring such expenses, whether or not the Merger is consummated, except that (i) Brickell will pay all fees associated with the Nasdaq Listing Application; (ii) Brickell will pay up to and including $150,000 of the total usual and customary fees to file this proxy statement with the SEC, and any amendments and supplements thereto, as well as any costs associated with printing these documents, and Vical will be responsible for any and all such filing and printing expenses in excess of the amount paid by Brickell pursuant to this clause (ii); and (iii) the parties will each pay 50% of the fees and expenses incurred in relation to the drafting of this proxy statement and any amendments and supplements thereto.

Amendment of Merger Agreement

The Merger Agreement may be amended by the parties at any time by action taken by or on behalf of their respective boards of directors, except that after the Merger Agreement has been adopted and approved by a party's stockholders, no amendment which by law requires further approval by the stockholders of that party will be made without such further stockholder approval.

Waiver Pursuant to the Merger Agreement

On July 2, 2019, Brickell and Vical agreed to a waiver of the requirement under the Merger Agreement to include a Vical Stockholder Proposal in the proxy statement to increase the Vical authorized shares in connection with the Contemplated Transactions, and the waiver and acknowledgment of related provisions to implement to foregoing. The impact of such waiver is reflected in the foregoing summary of the Merger Agreement.

AGREEMENTS RELATED TO THE MERGER

Confidentiality Agreement

On February 4, 2019, Vical and Brickell entered into a confidentiality agreement (dated to be effective January 31, 2019), which contained a standstill provision, but permitted the counterparty to privately and confidentially approach our management during the standstill period, as well as other customary confidentiality obligations.

Support Agreements

Prior to the execution of the Merger Agreement, officers, directors and certain stockholders of Brickell, who collectively held approximately 75% of the voting power of Brickell's outstanding capital stock as of June 2, 2019 and on an as-converted to common stock basis, entered into support agreements with Vical under which such stockholders agreed to, among other things, vote in favor of the adoption and approval of the Merger Agreement and the approval of the Merger and the other transactions contemplated by the Merger Agreement.

The support agreements will terminate at the earlier of the effective time of the Merger, the termination of the Merger Agreement in accordance with its terms, and written notice of termination by Vical to such stockholder.

Lock-Up Agreements

Concurrently with the execution of the Merger Agreement, the officers, directors and certain other stockholders of Brickell also entered into lock-up agreements, pursuant to which such stockholders have agreed not to, except in limited circumstances, transfer or dispose of, any shares of Vical common stock received in the Merger or any securities convertible into, or exercisable or exchangeable for, shares of Vical common stock received in the Merger for a period of 180 days after the closing date of the Merger.

The Brickell stockholders who executed lock-up agreements collectively held approximately 75% of the voting power of Brickell's outstanding capital stock as of June 2, 2019 and on an as-converted to common stock basis.

The Vical stockholders did not execute lock-up agreements in connection with the Merger.

Concurrent Financing; Funding Agreement

Concurrent with the execution of the Merger Agreement, Brickell and NovaQuest entered into the Funding Agreement pursuant to which NovaQuest committed, subject to the terms and conditions of the Funding Agreement, to provide up to $25.0 million in near-term research and development funding to Brickell in connection with sofpironium bromide in the Concurrent Financing, with $5.6 million of the commitment expected to be paid promptly following the closing of the Merger and the remaining portion of the commitment expected to be paid in quarterly payments equal to 67% of invoiced research and development expenses in connection with sofpironium bromide incurred during the following four fiscal quarters. Upon receipt of marketing approvals in the United States for sofpronium bromide, Brickell will be obligated to make certain milestone payments to NovaQuest totaling $37.5 million. Beginning in the fiscal quarter that is two years following the first commercial sale of a sofpronium bromide product, Brickell will be required to make low single digit revenue sharing payments based on annual net sales worldwide (except for Japan, China and certain other countries). Generally, if Brickell suspends or terminates its development program in respect of sofpironium bromide, Brickell will be required to pay NovaQuest $25.0 million plus interest of between 8% and 12%. However, in the event that Brickell terminates its development program for sofpromium bromide for certain reasons, including serious safety issues, a failure of the product's Phase 3 studies, or the failure of FDA to approve the product, Brickell will not be obligated to make any payments to NovaQuest unless it subsequently resumes the development program.

Under the Funding Agreement, Brickell makes various representations and warranties and commits to comply with various covenants. NovaQuest may terminate the Funding Agreement and terminate its obligation to make payments in the event of Brickell's material uncured breach of a representation or covenant under the Funding Agreement. Brickell will also enter into a Security Agreement (the "Security Agreement") with NovaQuest immediately following consummation of the Merger. Under the Security Agreement, NovaQuest will be able to exercise certain rights in the event of an event of default of the Funding Agreement. NovaQuest's rights following an event of default include, among other things, foreclosing on Brickell's assets in the United States relating to sofpironium bromide and, in certain circumstances, accelerating payment obligations under the Funding Agreement. NovaQuest also has the right to suspend its funding obligations under the Funding Agreement in the event of certain adverse developments relating to sofpironium bromide and in the event that certain of Brickell's senior executives leave Brickell and we do not find replacements acceptable to NovaQuest. These provisions of the Funding Agreement are discussed in greater detail in the section titled "*Risk Factors*" in this proxy statement.

In connection with the Concurrent Financing, immediately following the closing of the Merger, Vical is obligated to issue the NovaQuest Warrants. The number of shares of the combined company's common stock underlying the NovaQuest Warrants will be based on 10% warrant coverage on the $25.0 million commitment and the Exchange Ratio for the Merger, and the exercise price of the NovaQuest Warrants will be determined based on a 10% premium to the Brickell price per share of common stock implied in the Merger as adjusted for the Exchange Ratio.

The NovaQuest Warrants and the shares of common stock underlying the NovaQuest Warrants to be issued in the Concurrent Financing will be offered and sold in reliance on an exemption from registration under Regulation D promulgated under Section 4(a)(2) of the Securities Act. Appropriate restrictive legends will be affixed to the shares issued in the Concurrent Financing.

BRICKELL'S EXECUTIVE COMPENSATION

Brickell refers to its Chief Executive Officer, Chief Financial Officer and its other most highly compensated executive officer discussed below as its "named executive officers."

Summary Compensation Table

The following table presents information regarding compensation earned by or awarded to Brickell's named executive officers during the fiscal years ended December 31, 2018 and 2017.

Name and Principal Position	Year	Salary ($)	Bonus ($)	Option Awards ($)(1)	Non-Equity Incentive Plan Compensation ($)	All Other Compensation ($)	Total ($)
Reginald L. Hardy(2)	2018	296,400	N/A	62,340	103,613	N/A	462,353
Chief Executive Officer	2017	285,000	10,000	34,163	56,250	N/A	385,413
R. Michael Carruthers(3)	2018	N/A	N/A	55,427	N/A	134,000(4)	189,427
Chief Financial Officer	2017	N/A	N/A	72,431	N/A	4,194	76,625
Andrew Sklawer(5)	2018	296,100	N/A	415,598	107,102	N/A	818,800
Co-Founder, Chief Operating Officer and Secretary	2017	280,000	20,000	44,839	56,250	N/A	401,089
Patricia Walker(6)	2017	415,000	45,000	53,380	56,250	N/A	569,630
President and Chief Scientific Officer							

(1) The fair value of the option awards is computed in accordance with FASB ASC Topic 718. See Note 11 of Brickell's audited financial statements for the year ended December 31, 2018 for a description of the valuation of the option awards.
(2) Mr. Hardy served as Brickell's Chief Executive Officer through December 2018 and was replaced by Robert B. Brown.
(3) Mr. Carruthers joined Brickell in December 2017.
(4) Mr. Carruthers' compensation is paid pursuant to the Consultancy Agreement described below.
(5) Mr. Sklawer acted as Brickell's principal financial officer in 2017 prior to Mr. Carruthers joining in December 2017.
(6) Ms. Walker left Brickell in November 2018.

Determination of Executive Compensation

Brickell reviews compensation annually for all employees, including its named executive officers. In setting executive base salaries and bonuses and granting equity incentive awards, Brickell considers compensation for comparable positions in the market, the historical compensation levels of its executives, individual performance as compared to its expectations and objectives, its desire to motivate its employees to achieve short- and long-term results that are in the best interests of its stockholders, and a long-term commitment. Brickell does not target a specific competitive position or a specific mix of compensation among base salary, bonus or long-term incentives.

The compensation committee of Brickell's board of directors has historically determined Brickell's executive officers' compensation. Brickell's compensation committee typically reviews and discusses management's proposed compensation with the Chief Executive Officer for all executives other than the Chief Executive Officer. In the case of the Chief Executive Officer, his individual performance evaluation is conducted by the compensation committee, which determines his base salary, cash bonus, and stock-based awards.

In addition to corporate and individual goal achievement, the compensation committee also considers the following factors in determining an executive's compensation package:

- the executive's role within Brickell and the compensation data for similar persons in peer group companies and subscription compensation survey data;
- the demand for executives with the executive's specific expertise and experience;
- a comparison to other executives within Brickell having similar levels of expertise and experience; and
- uniqueness of the executive's industry skills.

Based on those discussions and its discretion, the compensation committee then recommends the compensation for each executive officer. Brickell's compensation committee, without members of management present, discusses and ultimately approves the compensation of its executive officers.

In May 2019, the compensation committee of Brickell's board of directors reviewed and considered a presentation by Compensia, Brickell's compensation consultant, with respect to equity compensation grants made to Brickell's employees and executive officers prior to the consummation of the Merger after taking into consideration industry standards following a review of the compensation practices of other public pre-commercial stage biotechnology companies. As a result, the compensation committee recommended, and the Board approved, authorizing Brickell's management to issue up to an aggregate of 2,607,274 stock options prior to the consummation of the Merger in order to retain Brickell's current employees and executive officers. Brickell expects to grant 100,000 stock options each to Dennison Veru, William Ju, Charles Stiefel and George Abercrombie and 150,000 stock options to Reginald L. Hardy prior to the consummation of the Merger.

Outstanding Equity Awards

The following table provides information about outstanding stock options and stock awards held by each of Brickell's named executive officers as of June 30, 2019.

Name	Grant Date	Securities Underlying Unexercised Options Exercisable (#)	Securities Underlying Unexercised Options Unexercisable (#)	Option Exercise Price ($)	Option Expiration Date
Robert B. Brown	8/30/19	N/A	600,000	1.87(1)	8/29/29(2)
Chief Executive Officer	12/15/18	N/A	404,467(3)	5.68	12/14/28
Andrew Sklawer	8/30/19	N/A	300,000	1.87(1)	8/29/29(4)
Co-Founder, Chief Operating Officer and Secretary	12/15/18	N/A	100,000	5.68	12/14/28
	12/15/17	10,500	N/A	5.76	12/14/27
	12/15/16	25,000	N/A	4.20	12/14/26
	12/23/15	35,000	N/A	4.20	12/23/25
	4/22/15	35,000	N/A	4.20	4/22/25
	2/14/14	50,000	N/A	2.20	2/14/24
R. Michael Carruthers	8/30/19	N/A	102,696	1.87(1)	8/29/29(5)
Chief Financial Officer	12/15/18	N/A	15,000	5.68	12/14/28
	12/15/17	15,000	N/A	5.76	12/14/27

(1) The exercise price of $1.87 is based on Vical's closing stock price of $0.81 on July 10, 2019. This price is subject to change, as it will be based on Vical's fair market value on the date of the grant, which will immediately precede the close of the Merger.
(2) Brickell expects to make grant prior to the consummation of the Merger.
(3) Includes three separate grants dated 12/15/18, including 100,000 held through Robert. B. Brown Grantor Retained Annuity Trust I and 100,000 held through Robert. B. Brown Grantor Retained Annuity Trust II.
(4) Brickell expects to make grant prior to the consummation of the Merger.
(5) Brickell expects to make grant prior to the consummation of the Merger.

Employment and Consultancy Agreements

Brickell has entered into employment and consultancy agreements with each of its named executive officers as described below.

Robert B. Brown

Robert B. Brown joined Brickell as its Chief Executive Officer in January 2019. Under the terms of the employment agreement entered into between Brickell and Mr. Brown, Mr. Brown is entitled to an annual base salary of $450,000, and is eligible for Brickell's benefit programs, vacation benefits and medical benefits. In addition, Mr. Brown is entitled to a discretionary bonus of $225,000.

The agreement provides that upon written notice, either party may terminate the employment arrangement with or without cause, but 90 days' notice is required if the agreement is terminated by Mr. Brown. In addition, the agreement provides that if Brickell terminates Mr. Brown's employment without good reason (whether or not in connection with a change of control), Mr. Brown will be eligible to receive:

- any unpaid base salary through the effective date of termination;
- any accrued by unpaid incentive compensation;
- base salary for a period of 12 months paid in a lump sum; and
- continuation of health benefits under COBRA for 12 months.

The following definitions are used in Mr. Brown's employment agreement (and have similar meanings in Andrew D. Sklawer's employment agreement as described below*)*:

- "cause" means: (i) an action or omission of Mr. Brown which constitutes a willful and material breach of, or failure or refusal (other than by reason of his disability) to perform his duties under his employment agreement or any other agreements, which is not cured within 15 days after receipt by Mr. Brown of written notice of same; (ii) fraud, embezzlement, misappropriation of funds or breach of trust in connection with his services hereunder; (iii) conviction of any crime which involves dishonesty or a breach of trust; or (iv) gross negligence in connection with the performance of Mr. Brown's duties hereunder, which is not cured within 15 days after written receipt by Mr. Brown of written notice of same;
- "good reason" means: the assignment to Mr. Brown of any duties inconsistent in any respect with his position (including status, offices, titles and reporting requirements), authority, duties or responsibilities, or any other action by us which results in a diminution in such position, authority, duties or responsibilities, excluding for this purpose an isolated, insubstantial and inadvertent action not taken in bad faith and which is remedied by us promptly after receipt of notice thereof given by Mr. Brown; (ii) any failure by us to comply with Mr. Brown's employment agreement, other than an isolated, insubstantial and inadvertent failure not occurring in bad faith and which is remedied by us promptly after receipt of notice thereof given by Mr. Brown; (iii) any purported termination by us of Mr. Brown's employment otherwise than for cause pursuant to the employment agreement, or by reason of Mr. Brown's disability, prior to the expiration date; and
- "change in control" means: approval by Brickell's stockholders of (i) a reorganization, merger, consolidation or other form of corporate transaction or series of transactions, in each case, with respect to which persons who were Brickell's stockholders immediately prior to such reorganization, merger or consolidation or other transaction do not, immediately thereafter, own more than 50% of the combined voting power entitled to vote generally in the election of directors of the reorganized, merged or consolidated company's then outstanding voting securities, in substantially the same proportions as their ownership immediately prior to such reorganization, merger, consolidation or other transaction,

(ii) a liquidation or dissolution or (iii) the sale of all or substantially all of Brickell's assets (unless such reorganization, merger, consolidation or other corporate transaction, liquidation, dissolution or sale is subsequently abandoned).

Mr. Brown's employment agreement will remain effective following the consummation of the Merger.

Andrew D. Sklawer

Under the terms of the employment agreement entered into between Brickell and Andrew D. Sklawer, Mr. Sklawer is entitled to an annual base salary of $350,000, and is eligible for Brickell's benefit programs, vacation benefits and medical benefits. In addition, Mr. Sklawer is entitled to a discretionary bonus of $122,500.

The agreement provides that upon written notice, either party may terminate the employment arrangement with or without cause, but 90 days' notice is required if the agreement is terminated by Mr. Sklawer. In addition, the agreement provides that if Brickell terminates Mr. Sklawer's employment without good reason (whether or not in connection with a change of control), Mr. Sklawer will be eligible to receive:

- any unpaid base salary through the effective date of termination;
- any accrued but unpaid incentive compensation;
- base salary for a period of 12 months to be paid in a lump sum; and
- continuation of health benefits under COBRA for 12 months.

Mr. Sklawer's employment agreement will remain effective following the consummation of the Merger.

R. Michael Carruthers

Under the terms of the consultancy agreement entered into between Brickell and R. Michael Carruthers, Mr. Carruthers is entitled to a monthly retainer of $20,000 per month for the provision of approximately 80 hours of services per month with no annual salary or bonus. In addition, if Mr. Carruthers is directed to perform services or other functions in his capacity as consultant in locations other than Brickell's headquarters in Boulder, Colorado, he is entitled to receive an additional compensation of $2,000 per day. Prior to the closing of a transaction in which Brickell receives greater than $20 million in net cash proceeds, 50% of Mr. Carruthers' monthly retainer will be paid monthly in advance in cash, and the remainder will be paid upon the closing of the transaction. Mr. Carruthers is not entitled to participate in any benefit programs that Brickell may make available to employees.

The agreement provides that either party may terminate the consultancy agreement for any reason or no reason upon 30 days' prior written notice.

Mr. Carruthers' consultancy agreement will remain effective following the consummation of the Merger.

Compensation Committee Interlocks and Insider Participation

None of Brickell's executive officers currently serves, or in the past has served, as a member of the board of directors or compensation committee of any other entity that has one or more executive officers serving on Brickell's board of directors.

Non-Employee Director Compensation

Brickell has not historically paid cash retainers or other cash compensation with respect to service on its board of directors, except for reimbursement of direct expenses incurred in connection with attending meetings

of the board of directors or committees. The following table sets forth information regarding compensation earned for service on Brickell's board of directors during the years ended December 31, 2018 and 2017 by its non-employee directors.

Name	Fees Earned or Paid in Cash ($)	Option Awards ($)	Non-equity Incentive Plan Compensation ($)	Total ($)
George Abercrombie	N/A	62,340	N/A	62,340
Charles Stiefel	N/A	62,340	N/A	62,340
William Ju	N/A	62,340	N/A	62,340

Brickell expects that the combined company's board of directors will adopt a director compensation policy fornon-employee directors to be effective following the consummation of the Merger.

MATTERS BEING SUBMITTED TO A VOTE OF VICAL STOCKHOLDERS

PROPOSAL NO. 1:
APPROVAL OF THE AMENDMENT TO RESTATED CERTIFICATE OF INCORPORATION, AS AMENDED, OF VICAL EFFECTING THE REVERSE SPLIT

At the Special Meeting, Vical stockholders will be asked to approve an amendment to the restated certificate of incorporation, as amended, of Vical that will implement a reverse split of the issued shares of Vical common stock, at a ratio in the range of between one new share for every five shares and one new share for every fifteen shares outstanding (the "Reverse Split Charter Amendment"). Upon stockholder approval and in connection with the closing of the Merger, Vical and Brickell will mutually agree upon the exact reverse split ratio within that approved range. Upon the effectiveness of the Reverse Split Charter Amendment, or the split effective time, the issued shares of Vical common stock immediately prior to the split effective time will be reclassified into a smaller number of shares such that a Vical stockholder will own one new share of Vical common stock for the specified number of shares of issued common stock held by that stockholder immediately prior to the split effective time.

The Vical board of directors may determine to effect the Reverse Split, if it is approved by the stockholders, even if the other proposals to be acted upon at the meeting are not approved, including the consummation of a change of control of Vical resulting from the Merger.

The Reverse Split Charter Amendment, as more fully described below, will effect the Reverse Split but will not change the number of authorized shares of Vical common stock or preferred stock, or the par value of Vical common stock or preferred stock. The form of Reverse Split Charter Amendment is attached to this proxy statement as Appendix C.

Purpose

The Vical board of directors approved the proposal approving the Reverse Split Charter Amendment for the following reasons:

- the Vical board of directors believes effecting the Reverse Split will cause the minimum bid price of Vical's common stock to increase and may reduce the risk of a delisting of the Vical common stock (and the common stock of the combined company after the closing of the Merger) from Nasdaq in the future;
- the Vical board of directors believes a higher stock price may help generate investor interest in Vical (and the combined company, after the closing of the Merger) and help the combined company attract and retain employees; and.
- the requirements for listing on Nasdaq set forth below.

If the Reverse Split successfully increases the per share price of Vical common stock, Vical's board of directors believes this increase may increase trading volume in Vical common stock and facilitate future financings by the combined company after the closing of the Merger, as well as enhance stockholder liquidity.

Nasdaq Requirements for Listing on the Nasdaq Capital Market

Vical common stock is listed on Nasdaq under the symbol "VICL." Vical intends to file an initial listing application in the near term for the combined company with Nasdaq.

According to Nasdaq rules, an issuer must, in a case such as this, apply for initial inclusion following a transaction whereby the issuer combines with a non-Nasdaq entity, resulting in a change of control of the issuer

and potentially allowing the non-Nasdaq entity to obtain a Nasdaq listing. Accordingly, the listing standards of Nasdaq will require the combined company to have, among other things, a $4.00 per share minimum bid price upon the closing of the Merger. Therefore, the Reverse Split may be necessary in order to consummate the Merger.

One of the effects of the Reverse Split will be to effectively increase the proportion of authorized shares that are unissued relative to those that are issued. This could result in the combined company's management being able to issue more shares without further stockholder approval. For example, before the Reverse Split, Vical's authorized but unissued shares of common stock immediately prior to the closing of the Merger would be 50.0 million compared to shares issued of approximately 22.8 million. If Vical effects the Reverse Split using a 1 for 10 ratio, its authorized but unissued shares immediately prior to the closing of the Merger would be 50.0 million compared to shares issued of approximately 2.3 million. Vical currently has no plans to issue shares, other than in connection with the Contemplated Transactions, and to satisfy obligations under the Vical warrants and stock options (including those warrants and options assumed from Brickell in connection with the Merger and the NovaQuest Warrants to be issued following the Merger) from time to time as these warrants and options are exercised. The Reverse Split will not affect the number of shares of Vical capital stock that will continue to be authorized pursuant to the restated certificate of incorporation of Vical, as amended.

Potential Increased Investor Interest

On June 28, 2019, Vical common stock closed at $0.85 per share. An investment in Vical common stock may not appeal to brokerage firms that are reluctant to recommend lower priced securities to their clients. Investors may also be dissuaded from purchasing lower priced stocks because the brokerage commissions, as a percentage of the total transaction, tend to be higher for such stocks. Moreover, the analysts at many brokerage firms do not monitor the trading activity or otherwise provide coverage of lower priced stocks. Also, the Vical board of directors believes that many investment funds are reluctant to invest in lower priced stocks.

There are risks associated with the Reverse Split, including that the Reverse Split may not result in an increase in the market trading price of Vical common stock.

The history of similar reverse stock splits for companies in like circumstances is varied. There is no assurance that:

- the market price per share of Vical common stock after the Reverse Split will rise in proportion to the reduction in the number of shares of Vical common stock outstanding before the Reverse Split;
- the Reverse Split will result in a per share price that will attract brokers and investors who do not trade in lower priced stocks;
- the Reverse Split will result in a per share price that will increase the ability of Vical (or the combined company, after the closing of the Merger) to attract and retain employees; or
- the market price per share will be sufficient to list the common stock of the combined company on Nasdaq or will either exceed or remain in excess of the $1.00 minimum bid price as required by Nasdaq for continued listing thereafter.

The market price of Vical common stock will also be based on performance of Vical and other factors, some of which are unrelated to the number of shares outstanding. If the Reverse Split is effected and the market price of Vical common stock declines, the percentage decline as an absolute number and as a percentage of the overall market capitalization of Vical may be greater than would occur in the absence of a Reverse Split. Furthermore, the liquidity of Vical common stock could be adversely affected by the reduced number of shares that would be outstanding after the Reverse Split.

Principal Effects of the Reverse Split

The form of Reverse Split Charter Amendment is set forth in Appendix C to this proxy statement.

The Reverse Split will be effected simultaneously for all outstanding shares of Vical common stock. The Reverse Split will affect all of the Vical stockholders uniformly and will not affect any stockholder's percentage ownership interests in Vical, except to the extent that the Reverse Split results in any of the Vical stockholders owning a fractional share. Vical common stock issued pursuant to the Reverse Split will remain fully paid and nonassessable. The Reverse Split does not affect the total proportionate ownership of Vical following the Merger. The Reverse Split does not affect the total proportionate ownership of the combined company by Vical's stockholders relative to Brickell's stockholders following the Merger. The Reverse Split will not affect Vical's continuing periodic reporting requirements of the the Exchange Act.

Determination of Reverse Stock Split Ratio

The ratio of the Reverse Split, if approved and implemented, will be a ratio of not less than1-for-5 and not more than 1-for-15, as mutually agreed upon by Vical and Brickell. In determining the Reverse Split ratio, numerous factors will be considered, including:

- the historical performance of the Vical common stock and the projected performance of the combined company's common stock, assuming the Merger is consummated;
- prevailing market conditions;
- general economic and other related conditions prevailing in Vical's industry and in the marketplace;
- the projected impact of the selected Reverse Split ratio on trading liquidity in the combined company's common stock and the ability to continue the listing of the combined company's common stock on Nasdaq;
- the capitalization of the combined company upon consummation of the Merger (including the number of shares of common stock issued and outstanding);
- the prevailing trading price for the Vical common stock and the volume level thereof; and
- potential devaluation of the market capitalization of the combined company as a result of a Reverse Split.

The purpose of asking for authorization to implement the Reverse Split at a ratio to be mutually agreed by Vical and Brickell, as opposed to a ratio fixed in advance, is to give Vical and Brickell the flexibility to take into account then-current market conditions and changes in price of the Vical common stock and to respond to other developments that may be deemed relevant when considering the appropriate ratio.

Procedure for Effecting the Reverse Split and Exchange of Stock Certificates

If the Vical stockholders approve the Reverse Split Charter Amendment, Vical will file the appropriate Reverse Split Charter Amendment with the Secretary of State of the State of Delaware at such time as the Vical board of directors has determined to be the appropriate split effective time. The Vical board of directors may delay effecting the Reverse Split without resoliciting stockholder approval. Beginning at the split effective time, each stock certificate representing pre-split shares will be deemed for all corporate purposes to evidence ownership of post-split shares.

As soon as practicable after the split effective time, stockholders will be notified of the selected reverse split ratio and that the Reverse Split has been effected. Vical expects that the Vical transfer agent will act as exchange agent for purposes of implementing the exchange of stock certificates. If applicable, holders of pre-split shares will be asked to surrender to the exchange agent stock certificatesrepresenting pre-split shares in exchange for stock certificates representing post-split shares in accordance with the procedures to be set forth in a letter of transmittal to be sent by Vical. No new certificates will be issued to a stockholder until such stockholder has surrendered such stockholder's outstanding certificate(s) together with the properly completed and executed

letter of transmittal to the exchange agent. Any pre-split shares submitted for transfer, whether pursuant to a sale or other disposition, or otherwise, will automatically be exchanged for post-split shares. **Vical stockholders should not destroy any stock certificate(s) and should not submit any certificate(s) unless and until requested to do so.**

Fractional Shares

No fractional shares will be issued in connection with the Reverse Split. Stockholders of record who otherwise would be entitled to receive fractional shares because they hold a number of pre-split shares not evenly divisible by the number of pre-split shares for which each post-split share is to be reclassified, will be entitled, upon surrender to the exchange agent of certificates representing such shares, to, with respect to each such fractional share, a cash payment in lieu thereof at a price equal to the fraction to which the stockholder would otherwise be entitled multiplied by the fair value per share of the common stock immediately prior to the split effective time as determined by the board of directors of Vical. The ownership of a fractional interest will not give the holder thereof any voting, dividend, or other rights except to receive payment therefor as described herein.

Stockholders should be aware that, under the escheat laws of the various jurisdictions where stockholders reside, where Vical is domiciled, and where the funds will be deposited, sums due for fractional interests that are not timely claimed after the effective date of the split may be required to be paid to the designated agent for each such jurisdiction, unless correspondence has been received by Vical or the exchange agent concerning ownership of such funds within the time permitted in such jurisdiction. Thereafter, stockholders otherwise entitled to receive such funds will have to seek to obtain them directly from the state to which they were paid.

By approving Proposal No. 1, the Vical stockholders will be: (a) approving a series of alternate amendments to Vical's restated certificate of incorporation, as amended, pursuant to which any whole number of outstanding shares of common stock between and including 5 and 15 could be combined into one share of common stock; and (b) authorize Vical's board of directors to file only one such amendment, as determined by Vical's board of directors, and to abandon each amendment not selected by Vical's board of directors, based upon the mutual agreement of Vical and Brickell. Vical in mutual agreement with Brickell may also elect not to undertake any Reverse Split and therefore abandon all amendments. However, effecting the Reverse Split is expected to be necessary to consummate the Merger.

Potential Anti-Takeover Effect

Although the increased proportion of unissued authorized shares to issued shares could, under certain circumstances, have an anti-takeover effect, for example, by permitting issuances that would dilute the stock ownership of a person seeking to effect a change in the composition of the Vical board of directors or contemplating a tender offer or other transaction for the combination of Vical with another company, the Reverse Split proposal is not being proposed in response to any effort of which Vical is aware to accumulate shares of Vical common stock or obtain control of Vical, other than in connection with the Merger, nor is it part of a plan by management to recommend a series of similar amendments to the Vical board of directors and stockholders. Other than the proposals being submitted to the Vical stockholders for their consideration at the Special Meeting, the Vical board of directors does not currently contemplate recommending the adoption of any other actions that could be construed to affect the ability of third parties to take over or change control of Vical. For more information, please see the section titled "Risk Factors" contained in the Vical 10-K, which is incorporated in this proxy statement by reference.

Certain Material U.S. Federal Income Tax Consequences of the Reverse Split to U.S. Holders

The following is a discussion of certain material U.S. federal income tax consequences of the Reverse Split to certain U.S. Holders (as defined below) of Vical common stock but does not purport to be a complete analysis

of all potential tax effects. This discussion is based on provisions of the Code, Treasury Regulations thereunder and administrative rulings, court decisions and other legal authorities related thereto, each as in effect as of the date of this proxy statement and all of which are subject to change or differing interpretations. Any such change or differing interpretation, which may or may not be retroactive, could alter the tax consequences to the Vical stockholders described herein. In addition, there can be no assurance that the Internal Revenue Service will not take a contrary position to the tax consequences described herein or that such position would not be sustained by a court. This discussion is included for general informational purposes only and does not purport to consider all aspects of U.S. federal income taxation that might be relevant to a U.S. Holder.

The discussion below only addresses the Vical stockholders who hold Vical common stock as a capital asset within the meaning of Section 1221 of the Code (generally property held for investment). It does not address all aspects of U.S. federal income tax that may be relevant to a Vical stockholder in light of such stockholder's particular circumstances or to a stockholder subject to special rules, such as stockholders who are not U.S. Holders (as defined below), brokers or dealers in securities or foreign currencies, regulated investment companies, real estate investment trusts, traders who mark to market, financial institutions or insurance companies, mutual funds, stockholders holding their stock through individual retirement or other tax-deferred accounts, tax-exempt organizations, stockholders holding their stock as "qualified small business stock" pursuant to Section 1202 of the Code or as Section 1244 stock for purposes of the Code, stockholders who acquired their stock in connection with the exercise of warrants, stock options or stock purchase plans or other employee plans or compensatory arrangements, stockholders whose functional currency is not the U.S. dollar, partnerships or other pass-through entities or securityholders, members or partners in such entities, stockholders who hold their stock as part of an integrated investment (including a "straddle," a pledge against currency risk, a hedge or other "constructive" sale or "conversion" transaction) comprised of shares of Vical common stock and one or more other positions, stockholders who exercise dissenters' or appraisal rights, stockholders required to accelerate the recognition of any item of gross income with respect to their stock as a result of such income being recognized on an applicable financial statement (within the meaning of Section 451 of the Code), or stockholders who may have acquired their stock in a transaction subject to the gain rollover provisions of Section 1045 of the Code. In addition, this summary does not address any tax consequences other than certain U.S. federal income tax consequences of the Reverse Split, including the tax consequences of the Reverse Split under state, local or non-U.S. tax laws or under estate, gift, excise or other non-income tax laws, the alternative minimum tax, the Medicare contribution tax on net investment income, the tax consequences of transactions effectuated prior or subsequent to, or concurrently with, the Reverse Split (whether or not any such transactions are consummated in connection with the Reverse Split) including, without limitation, the receipt of payments under any retention bonus plan, the conversion of any convertible notes or the tax consequences to holders of options, warrants or similar rights to acquire Vical common stock.

For purposes of this discussion, a "U.S. Holder" means a beneficial owner of shares of Vical common stock that is any of the following:

- an individual citizen or resident of the United States or someone treated as a U.S. citizen or resident for U.S. federal income tax purposes;
- a corporation (or other entity treated as a corporation for U.S. federal income tax purposes) created or organized in or under the laws of the United States, any state thereof, or the District of Columbia;
- an estate, the income of which is subject to U.S. federal income taxation regardless of its source; or
- a trust if (i) a U.S. court can exercise primary supervision over the trust's administration and one or more U.S. persons are authorized or have the authority to control all substantial decisions of the trust or (ii) it has a valid election in effect under applicable U.S. Treasury Regulations to be treated as a U.S. person.

STOCKHOLDERS SHOULD CONSULT THEIR TAX ADVISORS WITH RESPECT TO THE APPLICATION OF THE U.S. FEDERAL INCOME TAX LAWS TO THEIR PARTICULAR SITUATIONS AS WELL AS ANY TAX CONSEQUENCES OF THE REVERSE SPLIT ARISING UNDER THE U.S. FEDERAL ESTATE OR GIFT TAX LAWS OR UNDER THE LAWS OF ANY STATE, LOCAL OR NON-U.S. TAXING JURISDICTION OR UNDER ANY APPLICABLE INCOME TAX TREATY.

Tax Consequences of the Reverse Split

We intend to treat the Reverse Split as a "recapitalization" for U.S. federal income tax purposes. As a result, a U.S. Holder generally should not recognize gain or loss upon the Reverse Split, except with respect to cash received in lieu of a fractional share of Vical common stock, as discussed below. A U.S. Holder's aggregate tax basis in the shares of Vical common stock received pursuant to the Reverse Split should equal the aggregate tax basis of the shares of the Vical common stock surrendered (excluding any portion of such basis that is allocated to any fractional share of Vical common stock), and such U.S. Holder's holding period in the shares of Vical common stock received should include the holding period in the shares of Vical common stock surrendered. Treasury Regulations provide detailed rules for allocating the tax basis and holding period of the shares of Vical common stock surrendered to the shares of Vical common stock received in a recapitalization pursuant to the Reverse Split. U.S. Holders who acquired shares of Vical common stock on different dates and at different prices should consult their tax advisors regarding the allocation of the tax basis and holding period of such shares.

Cash in Lieu of Fractional Shares

A U.S. Holder that receives cash in lieu of a fractional share of Vical common stock pursuant to the Reverse Split is expected to recognize capital gain or loss in an amount equal to the difference between the amount of cash received and the U.S. Holder's tax basis in the shares of Vical common stock surrendered that is allocated to such fractional share of Vical common stock. Such capital gain or loss should be long-term capital gain or loss if the U.S. Holder's holding period for Vical common stock surrendered exceeded one year at the effective time of the Reverse Split.

Information Reporting and Backup Withholding

A U.S. Holder may be subject to information reporting and backup withholding on cash paid in lieu of fractional shares in connection with the Reverse Split. A U.S. Holder will be subject to backup withholding if such holder is not otherwise exempt and such holder does not provide its taxpayer identification number in the manner required or otherwise fails to comply with applicable backup withholding tax rules.

Backup withholding is not an additional tax. Any amounts withheld under the backup withholding rules may be refunded or allowed as a credit against a U.S. Holder's federal income tax liability, if any, provided the required information is timely furnished to the IRS. U.S. Holders should consult their tax advisors regarding their qualification for an exemption from backup withholding and the procedures for obtaining such an exemption.

In addition, for each stockholder that owns, immediately before the Reverse Split, at least 5% of Vical's outstanding stock (whether by voting power or value) or that has tax basis of at least $1,000,000 in our securities, U.S. Treasury regulations section 1.368-3 will require a statement to be included in the stockholder's U.S. federal income tax return for the year of the Reverse Split setting forth (i) the name and employer identification number of our company, (ii) the date of the Reverse Split, and (iii) the fair market value and the adjusted tax basis of the stockholder's shares of our common stock immediately before the Reverse Split.

Required Vote

If a quorum is present, the affirmative vote of the holders of a majority of the outstanding shares of Vical common stock entitled to vote at the Special Meeting is required to approve the Reverse Split Charter

Amendment effecting a Reverse Split of the Vical common stock, at a ratio of one new share for every five to fifteen shares outstanding (depending on the Reverse Split ratio subsequently mutually agreed upon by Vical and Brickell). Abstentions and broker non-votes will have the effect of a "NO" vote for Proposal No. 1. It is anticipated that Proposal No. 1 will be a discretionary proposal considered routine under the rules of the NYSE.

VICAL'S BOARD OF DIRECTORS RECOMMENDS A VOTE "FOR" THIS PROPOSAL NO. 1 TO APPROVE THE REVERSE SPLIT CHARTER AMENDMENT.

PROPOSAL NO. 2:

APPROVAL OF THE CHANGE OF CONTROL OF VICAL RESULTING FROM THE CONTEMPLATED TRANSACTIONS PURSUANT TO THE NASDAQ RULES

At the Special Meeting, Vical stockholders will be asked to approve the change of control of Vical resulting from the Merger pursuant to the Nasdaq rules.

Immediately following the Merger, assuming the Vical Net Cash is at least $34.2 million (and not more than $35.2 million) and the Brickell Net Working Capital is at least -$10.2 million (and not more than -$9.2 million), the former Brickell securityholders and NovaQuest, collectively, are expected to own, subject to adjustment, approximately 60% of the aggregate number of shares of Vical common stock, and the securityholders of Vical as of immediately prior to the Merger are expected to own, subject to adjustment, approximately 40% of the aggregate number of shares of Vical common stock (in each case on a fully diluted basis using the treasury stock method in instances other than with respect to the NovaQuest Warrants and certain equity issuances by Brickell following the signing of the Merger Agreement and prior to the completion of the Merger). Changes in the amount of the Vical Net Cash and the Brickell Net Working Capital could result in relative ownership percentages that are different than those described above.

The terms of, reasons for and other aspects of the Merger Agreement, the Merger and the issuance of Vical common stock in the Contemplated Transactions are described in detail in the other sections in this proxy statement. A copy of the Merger Agreement is attached as Appendix A to this proxy statement and is incorporated by reference.

Under Nasdaq Listing Rule 5635(a)(1), a company listed on Nasdaq is required to obtain stockholder approval prior to the issuance of common stock, among other things, in connection with the acquisition of another company's stock, if the number of shares of common stock to be issued is in excess of 20% of the number of shares of common stock then outstanding. The potential issuance of up to 55,596,573 shares of Vical common stock in the Merger (including to Brickell stockholders, and with respect to Brickell options, Brickell warrants, the NovaQuest Warrants and the issuance of up to $12.5 million in convertible notes and related warrants at 50% coverage, to acquire 2,493,665 shares of common stock (based on the estimated price per share of Brickell common stock implied in the Merger)) requires the approval of Vical's stockholders under the Nasdaq Listing Rules. Accordingly, in order to ensure compliance with Nasdaq Listing Rule 5635(a)(1), Vical must obtain the approval of Vical's stockholders for the issuance of these securities in the Merger.

Required Vote

If a quorum is present, the affirmative vote of a majority of the votes cast in person or by proxy at the Special Meeting is required to approve the change of control of Vical resulting from the Contemplated Transactions pursuant to the Nasdaq rules. Abstentions and broker non-votes will be not be considered votes cast and will have no effect on the vote for this Proposal No. 2. It is anticipated that this Proposal No. 2 will be a non-discretionary proposal considered non-routine under the rules of the NYSE.

VICAL'S BOARD OF DIRECTORS RECOMMENDS A VOTE "FOR" THIS PROPOSAL NO. 2 TO APPROVE THE CHANGE OF CONTROL OF VICAL RESULTING FROM THE CONTEMPLATED TRANSACTIONS PURSUANT TO THE NASDAQ RULES.

PROPOSAL NO. 3:

APPROVAL OF POSSIBLE POSTPONEMENT OR ADJOURNMENT OF THE SPECIAL MEETING

If Vical fails to receive a sufficient number of votes to approve Proposal Nos. 1 or 2, Vical may propose to postpone or adjourn the Special Meeting, for a period of not more than 60 days, for the purpose of soliciting additional proxies to approve Proposal Nos. 1 or 2. Vical currently does not intend to propose postponement or adjournment at the Special Meeting if there are sufficient votes to approve Proposal Nos. 1 or 2.

Required Vote

The affirmative vote of the majority of votes present in person or by proxy and entitled to vote is required to approve the postponement or adjournment of the Special Meeting for the purpose of soliciting additional proxies to approve Proposal Nos. 1 or 2. Abstentions and broker non-votes will be considered votes cast and have the effect of a "NO" vote for this Proposal No. 3. It is anticipated that this Proposal No. 3 will be a discretionary proposal considered routine under the rules of the NYSE.

VICAL'S BOARD OF DIRECTORS RECOMMENDS A VOTE "FOR" THIS PROPOSAL NO. 3 TO POSTPONE OR ADJOURN THE SPECIAL MEETING, IF NECESSARY, TO SOLICIT ADDITIONAL PROXIES IF THERE ARE NOT SUFFICIENT VOTES IN FAVOR OF PROPOSAL NOS. 1 OR 2. THEREFORE, THE APPROVAL OF EACH SUCH PROPOSAL IS REQUIRED TO CONSUMMATE THE MERGER UNLESS THE PARTIES AGREE TO WAIVE SUCH CONDITION.

Unless otherwise instructed, it is the intention of the persons named in the accompanying proxy to vote shares "FOR" the ratification to postpone or adjourn the Special Meeting, if necessary, to solicit additional proxies if there are not sufficient votes in favor of Proposal Nos. 1 or 2.

DESCRIPTION OF VICAL'S BUSINESS

In addition to the information set forth below, please refer to the Vical 10-K and the Vical Quarterly Reports on Form 10-Q for the quarters ended March 31, 2019 and June 30, 2019, and the other documents filed with the SEC and incorporated by reference into this proxy statement for additional information regarding our business.

Overview

Vical was incorporated in April 1987 as a Delaware corporation and has devoted substantially all of its resources since that time to the research and development of biopharmaceutical products, including those based on its patented DNA delivery technologies for the prevention and treatment of serious or life-threatening diseases. Vical has a completed preclinical program, with an allowed investigational new drug application (IND) using its CyMVectin prophylactic vaccine formulated with its Vaxfectin adjuvant to prevent CMV infection before and during pregnancy.

Until recently, Vical was focused on developing its novel antifungal VL-2397, for the treatment of patients with invasive aspergillosis. VL-2397 was being evaluated in a multicenter, open label randomized Phase 2 clinical study, designed to compare the efficacy and safety of VL-2397 to standard treatment for invasive aspergillosis in acute leukemia patients and recipients of allogeneic hematopoietic cell transplant (HCT). In February 2019, Vical decided to discontinue the Phase 2 clinical trial of VL-2397.

Product Development

In March 2015, Vical entered into a license agreement with Astellas Pharma Inc. ("Astellas"), granting Vical exclusive worldwide license to develop and commercialize, including the exclusive right to Astellas patents which claim the composition of matter of, and methods of making or using, VL-2397. VL-2397 represents a potential new class of antifungal compound to address invasive aspergillus infections, which are major causes of morbidity and mortality in immunocompromised patients, including transplant. In preclinical studies to date, it has demonstrated faster fungicidal activity than marketed drugs and activity against azole-resistant fungal pathogens. Current treatment options have limited efficacy, as approximately 50-60% of allogeneic hematopoietic stem cell transplant recipients with invasive aspergillosis infections die within 12 weeks. Over the past 30 years, only one new class of antifungal drugs (echinocandins) has been introduced.

The U.S. FDA has advised that VL-2397 would be eligible for a Limited Use Indication (LUI) approval assuming a successful outcome of a single Phase 2 trial carried out in accordance with a protocol and statistical analysis plan consistent with the Agency's advice. The final determination whether the drug is approvable will be made by FDA after review of all relevant data. The LUI is a provision of the Limited Population Pathway established under the 21st Century Cures Act of 2016. In the case of VL-2397, the LUI approval would be for patients for whom alternative regimens are not available to treat their invasive aspergillosis. A Phase 3 trial would be required to support full approval of VL-2397 for the treatment of invasive aspergillosis in a broader population. The FDA has granted Vical Qualified Infectious Disease Product (QIDP), Orphan Drug and Fast Track designations for VL-2397 in the treatment of invasive aspergillosis.

About Invasive Aspergillosis

Invasive aspergillosis is a life-threatening infection that typically affects immunocompromised patients, including those with acute leukemia and recipients of allogeneic HCT or lung transplants. Infection typically starts in the lungs and rapidly disseminates to other tissues. An estimated 200,000 cases of invasive aspergillosis are diagnosed annually worldwide.

Intellectual Property

All of the Astellas issued U.S. patents and foreign counterparts expired on March 13, 2019. Vical is the sole assignee of issued U.S. patents covering numerous examples of cationic lipid compounds that are used to

facilitate delivery of plasmids to some tissues. Vical's Vaxfectin® adjuvant are protected in-part by lipid technology and/or lipid compound patents that extend up to March 24, 2020. Patent protection of these key lipids also has been obtained in Europe, Canada and Japan. Under the Hatch-Waxman Act, a U.S. patent term extension for up to 5 years may be available under certain conditions.

Property

Vical occupies approximately 17,000 square feet of research laboratory and office space at a single site in San Diego, California through a sublease with Genopis, Inc. ending on December 31, 2019.

Legal Proceedings

Vical is unaware of any lawsuits presently pending against Vical which, individually or in the aggregate, are deemed to be material to its financial condition or results of operations.

DESCRIPTION OF BRICKELL'S BUSINESS

Overview

Brickell is a clinical-stage pharmaceutical company focused on developing innovative and differentiated prescription therapeutics for the treatment of debilitating skin diseases. Brickell's pipeline consists of potential novel therapeutics for hyperhidrosis, cutaneous T-cell lymphoma, psoriasis, and other prevalent dermatological conditions. Brickell believes that Brickell's portfolio of product candidates targets significant market opportunities where innovative therapies are needed. Brickell's executive management team and board of directors bring extensive experience in product development and global commercialization, having served in leadership roles at large global pharmaceutical companies and biotechs that have developed and/or launched successful products, including several that were first-in-class and/or achieved iconic status, such as Cialis®, Taltz®, Gemzar®, Prozac®, Cymbalta® and Juvederm®. Brickell's strategy is to leverage this experience toin-license, acquire, develop and commercialize innovative products that Brickell believes can be successful in the currently underserved dermatology global marketplace.

Brickell's pivotal Phase 3-ready clinical-stage product candidate, sofpironium bromide, is a new molecular entity and "soft" drug that belongs to a class of medications called anticholinergics. Anticholinergics block the action of acetylcholine, a chemical that transmits signals within the nervous system that are responsible for a range of bodily functions, including activation of the sweat glands. Soft drugs, such as sofpironium bromide, exert their action topically and are rapidly metabolized once absorbed into the blood. This mechanism of action may allow for highly effective doses to be used while limiting systemic side effects. Brickell is developing sofpironium bromide as a potential best-in-class, self-administered, once-daily, topical therapy for the treatment of primary axillary hyperhidrosis. Hyperhidrosis is a life-altering condition of sweating beyond what is physiologically required to maintain normal thermal regulation, is believed to be caused by an overactive cholinergic response of the sweat glands, and affects an estimated 15.3 million, or 4.8%, of the United States (U.S.) population. According to a 2016 update on the prevalence and severity of hyperhidrosis in the United States by Doolittle et al., axillary (underarm) hyperhidrosis, which is the targeted first indication for sofpironium bromide, is the most common occurrence of hyperhidrosis, affecting 65% of patients in the United States or an estimated 10 million individuals.

Brickell and Brickell's development partner, Kaken, have conducted 19 Phase 1 and Phase 2 clinical studies of sofpironium bromide gel that encompass over 1,200 subjects. These studies have evaluated the safety, tolerability, pharmacokinetics (PK), and efficacy of sofpironium bromide gel in adult and pediatric primary axillary hyperhidrosis patients and healthy adult subjects. In addition, Kaken reported positive pivotal Phase 3 results, achieving statistical significance on all primary and secondary endpoints, in its clinical study conducted in Japan in March 2019. Based on the positive results achieved from three completed Phase 2b clinical trials (two in the U.S. and one in Japan by Kaken), Kaken's recently completed pivotal Phase 3 clinical trial in subjects with primary axillary hyperhidrosis in Japan, as well as Brickell's ongoing fully-enrolled Phase 3 long-term safety study in 300 subjects with primary axillary hyperhidrosis in the U.S., Brickell intends to initiate two pivotal Phase 3 clinical trials in approximately 450 subjects per study with primary axillary hyperhidrosis in the U.S. in the fourth quarter of 2019 with the goal of submitting a New Drug Application ("NDA") to the FDA. Brickell expects to obtain results from the pivotal Phase 3 clinical trials in the fourth quarter of 2020.

Brickell's second product candidate, BBI-3000, is a selective, potentially highly tolerable and potent novel retinoid X receptor (RXR) agonist being developed for the oral treatment of cutaneous T-cell lymphoma ("CTCL"). Retinoids are derivatives of vitamin A that play a pivotal role in a diverse group of biologic processes including, but not limited to, cellular proliferation, differentiation, apoptosis, and development. The biological activity and tolerability of retinoids depends in part on the binding availability to RAR and RXR receptors. There are several topical and oral retinoids currently on the market that have shown efficacy in the treatment of several skin conditions, such as CTCL (e.g., bexarotene/Targretin®), acne and psoriasis (e.g., tazarotene, adapalene and tretinoin). BBI-3000 currently is being tested by the National Cancer Institute (NCI) in two Phase 1 clinical

studies as a chronic, orally-administered chemoprevention agent for breast cancer. The product candidate has been well tolerated in the NCI investigations conducted to date, providing an encouraging signal of the potential overall favorable systemic safety profile of BBI-3000 for CTCL. Brickell is targeting the initiation of a proof-of-concept clinical study with BBI-3000 for CTCL in late 2020.

Brickell's third product candidate, BBI-6000, is a novel retinoic acid-related orphan nuclear receptor gamma (RORg) inhibitor that Brickell is developing for the topical treatment of mild-to-moderate psoriasis. RORg inhibition targets the pathway of a validated cytokine (IL-17) that has been implicated in the pathogenesis of psoriasis. Monoclonal antibodies targeting IL-17 have recently shown significant efficacy in the treatment of psoriasis, and Brickell is planning to develop BBI-6000 as a topically applied, potent and selective small-molecule therapeutic targeting this pathway.BBI-6000 is currently in the preclinical stages of development, and upon completion of the required Investigational New Drug ("IND")-enabling studies, Brickell intends to commence a proof-of-concept clinical trial in patients with mild-to-moderate psoriasis in early 2021.

Brickell also has early-stage research programs targeting other prevalent skin diseases, such as androgenic alopecia and allergic contact dermatitis.

Brickell's Strategy

Brickell's strategy is to in-license, acquire, develop and commercialize innovative and differentiated medical dermatology products that Brickell believes can be successful in the dermatology marketplace to transform lives by solving currently unmet patient needs. The key components of Brickell's patient-focused strategy are to:

Rapidly advance Brickell's lead late-stage product candidate, sofpironium bromide, through pivotal Phase 3 clinical trials and engage with patients and members of the dermatology community. Brickell believes that its management team's expertise in designing and executing product development programs in dermatology, combined with the relative efficiencies of dermatology product development, will enable Brickell to advance sofpironium bromide rapidly through pivotal Phase 3 clinical trials. If approved, Brickell intends to promote awareness of sofpironium bromide, and also the disease being targeted, among key opinion leaders, including prescribing dermatologists and pediatricians, patient advocacy groups like the International Hyperhidrosis Society, and directly to patients and their families coping with primary axillary hyperhidrosis. Consumer activation through a variety of media will be essential to educate patients regarding hyperhidrosis and the benefits associated with a safe, effective, and differentiated treatment option for this debilitating condition.

Efficiently establish proof-of-concept for Brickell's existing early-stage dermatology product candidates and rapidly progress promising candidates into late-stage clinical development. Brickell seeks to establish quickly and efficiently proof-of-concept for Brickell's early-stage product candidates, including BBI-3000 and BBI-6000. Brickell intends to progress these product candidates through the required IND-enabling studies, followed by initiation of proof-of-concept clinical trials for BBI-3000 and BBI-6000 in late 2020 and early 2021, respectively. Brickell also owns and/or has intellectual property rights to early-stage research programs targeting other prevalent skin diseases, and Brickell's objective is to pursue development of these early-stage product candidates selectively with a strong focus on large and untapped patient populations with significant unmet medical needs. Brickell believes it will be able to advance product candidates expeditiously into the next stages of development by leveraging the extensive global pharmaceutical experience of Brickell's management team across multiple functional areas.

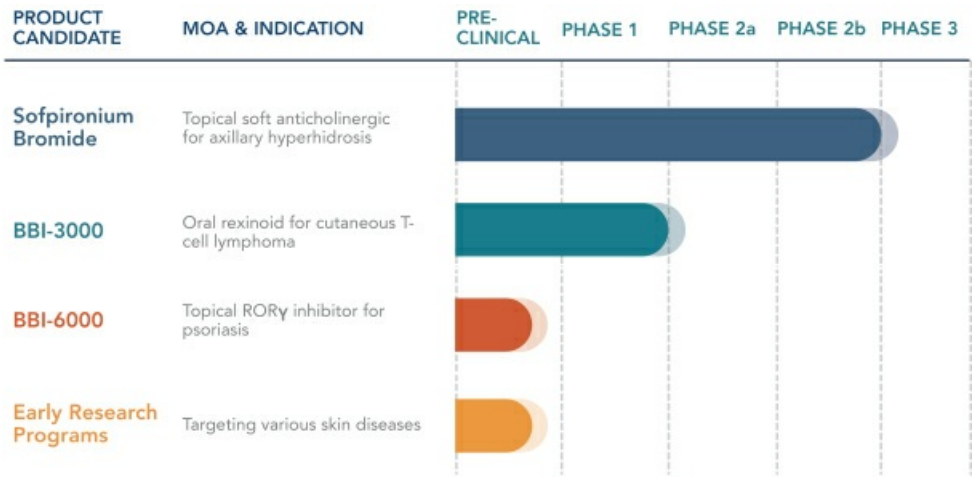
In-license and acquire new product candidates and, potentially, commercial-stage products while maintaining strong relationships with Brickell's current strategic partner. Since Brickell's founding in 2009, Brickell has executed numerous transactions with low upfront costs and favorable low royalty obligations, resulting in its promising product candidate portfolio. Brickell intends to continue to identify, evaluate, in-license and acquire attractive product candidates at the right level of investment from a variety of strategic sources. In

2015, Brickell entered into an out-license transaction with Kaken, for the development and commercialization of sofpironium bromide in Japan and certain other Asian countries. Brickell expects to continue to engage with Kaken and further develop Brickell's strong global partnership to create value for sofpironium bromide in the U.S., Japan and other countries.

Continue to expand Brickell's team of enthusiastic, committed, and experienced professionals. Brickell will continue to expand its team by identifying and hiring dedicated, talented, experienced, and patient-centric employees who align with Brickell's culture, values, and patient-centric mission and can make significant contributions to the combined company.

Product Candidates

Brickell's current portfolio of product candidates, all of which are new molecular entities accompanied with intellectual property rights, are summarized in the following chart:



Sofpironium Bromide for the Potential Treatment of Hyperhidrosis

Sofpironium bromide is a pivotal Phase 3-ready potentially best-in-class topical, small-molecule soft-anticholinergic product candidate Brickell is developing for once-daily treatment of primary axillary hyperhidrosis in adults and teens. Sofpironium bromide was designed as a structural analog of a well-known potent anticholinergic, glycopyrrolate, to achieve its therapeutic effect at the application site (skin) similar to glycopyrrolate. However, it differs from glycopyrrolate in that sofpironium bromide includes an easy-to-metabolize moiety, or part of a molecule, that results in rapid deactivation of the compound when it reaches systemic circulation. This soft drug design may, therefore, result in a meaningful reduction of the potentially undesirable systemic anticholinergic side effects while potentially maintaining and/or improving upon the intended anticholinergic efficacy.

Hyperhidrosis is a debilitating life-altering skin disorder of chronic excessive sweating beyond what is necessary for thermoregulation of the body. Current estimates show that primary hyperhidrosis (excessive sweating without an alternative origin) affects approximately 4.8% of the U.S. population, or roughly 15.3 million people, with the prevalence highest (8.8%) among the U.S. population ages 18–39. Of these individuals, 70% report severe excessive sweating that they cannot control or shut off in at least one body area. The most common area is the underarms (axilla), followed by the face (42%), palms of the hands (40%), and the

soles of the feet (38%). It is estimated that nearly half (49%) of people with hyperhidrosis have not discussed their condition with a healthcare professional, either because they do not yet know it is a medical condition or believe that no adequate treatment options exist. Furthermore, in one survey 75% of subjects with hyperhidrosis said that it has had negative impacts on their professional and social lives, sense of well-being, and emotional and mental health. Brickell believes that, due to the lack of diagnosis and available treatment options, and general lack of knowledge about the disease, hyperhidrosis presents a substantial market opportunity for a new, innovative, effective, well-tolerated, topical treatment. Brickell believes such a therapy could not only further penetrate the segment of patients who currently seek treatment from a physician, but also encourage more patients to seek treatment for this condition that causes them to deal with (and try to hide) it each and every day.

Brickell and Kaken have conducted 19 Phase 1 and Phase 2 clinical studies of sofpironium bromide gel that encompass over 1,200 subjects. These studies have evaluated the safety, tolerability, pharmacokinetics (PK), and efficacy of sofpironium bromide gel in adult and pediatric primary hyperhidrosis patients and healthy adult subjects. In addition, Kaken has reported positive pivotal Phase 3 results, achieving statistical significance on all primary and secondary endpoints, in its clinical study conducted in Japan in March 2019. Based upon the positive results achieved from three completed Phase 2b clinical trials (two in the U.S. and one in Japan via Kaken), Kaken's recently completed pivotal Phase 3 clinical trial in subjects with primary axillary hyperhidrosis in Japan, as well as Brickell's ongoing fully-enrolled Phase 3 long-term safety study in 300 subjects with primary axillary hyperhidrosis in the U.S., Brickell intends to initiate two pivotal Phase 3 clinical trials in approximately 450 subjects per study with primary axillary hyperhidrosis in the U.S. in the fourth quarter of 2019. Brickell expects to obtain results from the pivotal Phase 3 clinical trials in the fourth quarter of 2020.

The prior positive results, coupled with an attractive and significant market opportunity, reinforce Brickell's confidence in sofpironium bromide as a potential best-in-class new prescription treatment option for the millions of people in the U.S., Japan and other countries, suffering daily on a chronic basis with axillary hyperhidrosis.

Current Hyperhidrosis Treatment Options and Limitations

The market for products to control sweating is large and highly underpenetrated by innovative prescription pharmaceutical products thoroughly tested in clinical trials. More specifically, current hyperhidrosis treatment options generally fall into one of the following categories:

- **Self-administered topicals**, which include topical antiperspirants containing metal salts that block the release of sweat to the skin surface by clogging the opening of the duct and Qbrexza (glycopyrronium), approved in June 2018 by the FDA for the topical treatment of primary axillary hyperhidrosis in adults and pediatric patients nine years of age and older. For decades, topical antiperspirants containing metal salts have been the most widely used treatment option for hyperhidrosis. Over-the-counter ("OTC") antiperspirants contain low concentrations of metal salts and are generally well-tolerated but limited in efficacy. Prescription antiperspirants containing higher concentrations of metal salts are typically recommended as the treatment of choice when OTC antiperspirants are ineffective. However, these are only marginally more effective, and their tolerability is limited by skin irritation associated with increased metal salt concentrations, which react with water to form irritating hydrochloric acid on the skin. Qbrexza is administered by prescription using a single-use cloth pre-moistened with the active ingredient, 2.4% glycopyrronium solution, packaged in individual pouches. Qbrexza inhibits the action of acetylcholine on sweat glands, thereby reducing sweating. While Qbrexza has shown to be effective in treating hyperhidrosis in certain subjects, Brickell believes that there is room for improved and more sustained efficacy, as well as products that may potentially result in a lower incidence of unwanted systemic anticholinergic side effects including, but not limited to, dry mouth, blurred vision, and urinary hesitancy.
- **Injectable, systemic, and other treatments** that block activation of the sweat glands. Therapeutic options for patients who are not satisfied with topical therapies are largely limited to more cumbersome or invasive treatment strategies directed to either blocking the activation of, destroying, or removing

the sweat glands. Intradermal injections of botulinum toxin, or BOTOX®, a neurotoxin that blocks the release of acetylcholine, are effective but can be painful, costly, and must be administered by a physician with patients receiving on average 20 to 30 injections to each arm pit every six to nine months. A microwave device, MiraDry®, is designed to overheat and destroy sweat glands. However, treatment can: be painful, require multiple physician visits, cause destruction of the sweat gland and is not generally covered by insurance. All these treatments are time-consuming and require a significant investment of physician training and administration time and, in the case of microwave treatment, capital investment by the treating physician. As a result, these treatments have limited attractiveness both to doctors and their patients. Furthermore, they are also not approved or well-suited for application to the hands or feet. In contract, we believe sofpironium bromide may be developed for hands and feet. Iontophoresis, which involves soaking the hands or feet in water through which an electrical current is passed, can be performed in a physician's office or at home, but requires repeated, time-consuming and often bothersome treatments.

- **Surgical and other procedures intended to destroy or remove sweat glands** Some patients with severe hyperhidrosis may choose to be treated with invasive surgical techniques that involve removal of sweat glands or destruction of nerves that transmit activating signals to the glands. Surgery is a significant and costly permanent undertaking that can be associated with numerous severe side effects, including increased compensatory sweat production in other body areas.

Deciding among these available treatments depends on many factors including the affected area, severity of the disease and impact on the patient's quality of life due to the disease being uncontrolled.

Brickell's Potential Hyperhidrosis Solution

As a result of the limitations of these currently available treatment options, Brickell believes that there is a significant unmet patient need for a new, effective, safe, well-tolerated, self-administered, prescription topical hyperhidrosis therapy. To address this need, Brickell is developing sofpironium bromide gel, a soft anticholinergic for the once-daily topical prescription treatment of hyperhidrosis. Soft drugs are designed to provide maximal therapeutic effect with a favorable safety and tolerability systemic profile.

Key attributes of a soft drug include:

- The synthesis of a soft drug is achieved by starting with a known inactive metabolite of a known active drug (e.g., glycopyrrolate).
- The inactive, or less active, metabolite is then structurally modified to an active form that will undergo a predictable one-step transformation back into the inactive metabolite in vivo.
- Thus, the soft drug concept is based upon predictable metabolic deactivation processes by enzymes found predominantly in the systemic circulation.

Brickell believes that soft-anticholinergic, such as sofpironium bromide, that exerts its action topically and is rapidly metabolized into a less active metabolite when it reaches circulation can allow delivery of potentially effective doses without the limiting systemic side effects.

Clinical Development of Sofpironium Bromide for Primary Axillary Hyperhidrosis

Phase 1 and Phase 2 Clinical Trials

Brickell, together with Brickell's partner Kaken, has conducted 19 Phase 1 and Phase 2 clinical studies of sofpironium bromide gel that encompass over 1,200 subject exposures. These studies have evaluated the safety, tolerability, PK, and efficacy of sofpironium bromide gel in adult and pediatric primary hyperhidrosis patients and healthy adult subjects.

In clinical studies conducted to date, all three concentrations of sofpironium bromide gel tested (5%, 10%, and 15%) were safe and tolerable. Treatment-emergent adverse events (TEAEs) were mostly mild or moderate in severity. No deaths or serious adverse reactions have been reported in any clinical studies with sofpironium bromide gel. Six serious adverse events have been reported and all were determined to be unrelated to sofpironium bromide gel administration. Consistent with the soft drug design, a low incidence of systemic anticholinergic adverse events (AEs) has been found in all clinical studies of sofpironium bromide gel. The most common anticholinergic AE was dry mouth, and all anticholinergic AEs observed were expected. Of note, the anticholinergic AEs were predominantly mild or moderate in severity and transient in duration (i.e., resolving gradually with continued use). All TEAEs completely resolved spontaneously with treatment discontinuation. Local application site tolerability reactions of burning, itching, pain, erythema, and dryness at the axillae were predominantly minimal in severity and typically transient.

Overall, all three sofpironium bromide gel concentrations, 5%, 10%, and 15%, exhibited a larger absolute mean reduction in gravimetric sweat production ("GSP") from baseline to end of treatment ("EOT") compared with vehicle. Better improvement in GSP response was associated with higher concentrations of sofpironium bromide. However, while there was a slight trend toward dose response, all gel concentrations were essentially similar in patient-reported outcome measures based on the Hyperhidrosis Disease Severity Measure-Axillary ("HDSM-Ax"), Dermatology Life Quality Index ("DLQI"), and Hyperhidrosis Disease Severity Score ("HDSS"). The response was seen as early as Day 8 and remained consistent throughout the applicable treatment period.

Confirmatory Phase 2b Clinical Trial (BBI-4000-CL-203)

The confirmatory Phase 2b clinical study was a multicenter, randomized, double blind, vehicle-controlled clinical trial to evaluate the safety and efficacy of topically-applied sofpironium bromide gel, 5%, 10%, and 15%, in subjects with primary axillary hyperhidrosis. The study enrolled a total of 227 subjects across 23 clinical sites in the U.S, with subjects randomized to one of Brickell's cohorts, either sofpironium bromide gel, 5% (n=57), 10% (n=57), 15% (n=56), or vehicle gel (placebo; n=57) and applied the assigned product to the axillae (underarms) once daily, at bedtime, for 42 days. The objectives of this study were to evaluate (1) the effect of sofpironium bromide gel, 5%, 10%, and 15% on hyperhidrosis disease severity as it relates to HDSM-Ax, GSP, HDSS, and DLQI; and (2) the safety and local tolerability of sofpironium bromide gel, 5%, 10%, and 15%.

Changes in HDSM-Ax measures indicated statistically significant responses in all dose groups with all methods of analysis. Statistically significant differences were observed as early as Day 8 and were sustained over time. A significant proportion of subjects had at least a 2-point change from baseline to EOT in HDSM-Ax-7 items scale (5% gel: 47.4%, p=0.0122; 10% gel: 47.4%, p=0.0169; 15% gel: 53.7%, p=0.0025; vehicle: 24.6%). Larger absolute mean reductions in GSP from baseline to EOT were found for all sofpironium bromide gel concentrations compared to vehicle gel. Treatment with sofpironium bromide gel, 15% (pivotal Phase 3 active dose group) resulted in statistically significant reduction in GSP from baseline to EOT (-219 mg, p=0.01; vehicle -151.63). Consistently superior ranked values were determined for sofpironium bromide, 15% in comparison to other sofpironium bromide gel groups and vehicle. The ranked order analysis does not indicate a response for the vehicle, thus indicating the improvement is real and not observed by chance. All sofpironium bromide gel groups met the secondary efficacy endpoints for HDSS and DLQI.

Among the safety population (includes all subjects who received study drug at least once; n=225), the incidence of TEAEs was relatively low (32%), with a higher incidence in the 15% gel group (51.9%) compared to the other groups (5% gel, 29.8%; 10% gel, 33.6%; vehicle gel, 15.8%). A total of 177 TEAEs were reported by 73 subjects. The most common AEs included dry mouth (14.2%) and blurred vision (5.8%). Observed systemic TEAEs were consistent with known adverse effects of drugs of this class (i.e., anticholinergic activity). All TEAEs resolved spontaneously with treatment discontinuation. One SAE was reported, which was not related to the study drug. Treatment in all dose groups was well-tolerated. The majority of subjects (³ 91%) in all sofpironium bromide gel dose groups reported absent, minimal or mild itching and burning at any time point.

Investigator tolerability assessments rated as absent, minimal or mild for at least 92% of subjects with only one severe assessment.

Phase 3 Clinical Trials

Kaken recently completed its pivotal Phase 3 clinical trial in subjects with primary axillary hyperhidrosis in Japan and achieved statistical significance ($p<0.05$) for primary and all secondary efficacy endpoints.

Based upon the positive results achieved from three completed Phase 2b clinical trials (two in the U.S. and one in Japan via Kaken), Kaken's pivotal Phase 3 clinical trial, as well as Brickell's ongoing fully-enrolled Phase 3 long-term safety study in 300 subjects with primary axillary hyperhidrosis in the U.S., Brickell intends to initiate two pivotal Phase 3 clinical trials in approximately 450 subjects per study with primary axillary hyperhidrosis in the U.S. in the fourth quarter of 2019 which are expected to suppport an NDA submission with the FDA. Brickell expects to obtain results from the pivotal Phase 3 clinical trials in the fourth quarter of 2020.

BBI-3000 for the Oral Treatment of Cutaneous T-Cell Lymphoma (CTCL)

BBI-3000 was designed as a highly selective and safer (compared to Targretin®) RXR retinoid agonist currently under development for retinoid responsive skin conditions. While Brickell believes there are several skin indications for which a novel RXR retinoid agonist, such as BBI-3000, may have therapeutic effect (e.g., psoriasis, photo-aging and CTCL), Brickell is currently focused on the development of BBI-3000 as a potentially better tolerated retinoid for the oral treatment of CTCL.

Retinoids are derivatives of vitamin A that play a pivotal role in a diverse group of biologic processes including, but not limited to, cellular proliferation, differentiation, apoptosis, and development. The biological activity and tolerability of the retinoid depends in part on the binding availability to RAR and RXR receptors. There are several topical retinoids and oral retinoids currently on the market that have shown efficacy in the treatment of several skin conditions, such as CTLC (e.g. bexarotene/Targretin®) and acne and psoriasis (e.g., tazarotene, adapalene and tretinoin). A common adverse reaction with the use of bexarotene is hyperlipidemia, resulting in abnormally elevated levels of lipids in the blood. Based on current data, Brickell does not expect that BBI-3000 will cause hyperlipidemia. Considering that BBI-3000 is an RXR-RXR agonist with no RAR activity, BBI-3000 may provide improvements to the treatment of CTCL by decreasing the incidence of systemic side effects while retaining the efficacy associated with systemic retinoid use. Brickell believes that new oral retinoid treatments, such as BBI-3000, with potentially improved tolerability, and efficacy comparable to Targretin®, would be welcome in the marketplace.

Clinical Development of BBI-3000

BBI-3000 is being tested by the National Cancer Institute (NCI) in a Phase 1 clinical study as a chronic, orally administered chemoprevention agent for breast cancer. The product has been well tolerated in the NCI investigations conducted to date (two Phase 1 studies), providing an encouraging signal of the potential overall favorable systemic safety profile of BBI-3000. Brickell is targeting the initiation of a proof-of-concept clinical study with BBI-3000 for CTCL in late 2020.

BBI-6000 for the Topical Treatment of Psoriasis

BBI-6000 is a novel small molecule retinoic acid-related orphan nuclear receptor gamma (RORg) inhibitor Brickell is developing as a potential prescription topical treatment for psoriasis. Brickell believes that RORg inhibitors possess the potential to inhibit Th17 cell differentiation and reduce IL-17 production. BBI-6000 has been shown to exhibit specific effects on Th17-cell differentiation and has demonstrated selectivity for RORg. Additionally, studies with mouse Th17 cells have demonstrated that the compound suppresses IL-17A with no effect on interferon and in preclinical pharmacology screening, BBI-6000 specifically exhibited strong inhibition of IL-17A expression. Given the role of BBI-6000 and RORg on IL-17 cytokine production, Brickell believes BBI-6000 to have potential against a wide range of autoimmune diseases, such as psoriasis.

Preclinical Development

BBI-6000 is currently in the preclinical stages of development, with drug substance manufacturing, preclinical pharmacology testing and pre-formulation studies having been completed to date. Upon completion of the requiredIND-enabling studies, Brickell intends to commence a proof-of-concept clinical trial in patients withmild-to-moderate psoriasis in early 2021.

Rest of Industry

Brickell's industry is highly competitive and subject to rapid and significant change. While Brickell believes that Brickell's team's extensive development and commercialization pharmaceutical experience in launching blockbuster drugs across multiple therapeutic areas, scientific knowledge, and global industry relationships provide Brickell with competitive advantages, Brickell faces competition from pharmaceutical and biotechnology companies, including specialty pharmaceutical companies, as well as generic drug companies, over-the-counter companies, academic institutions, government agencies and research institutions.

Many of Brickell's competitors have significantly greater financial, technical and human resources than does Brickell. Mergers and acquisitions in the pharmaceutical and biotechnology industries may result in even more resources being concentrated amongst a smaller number of Brickell's competitors. Brickell's commercial opportunity could be reduced or eliminated if its competitors develop or market products or other novel therapies that are more effective, safer or less costly than Brickell's current or future product candidates or obtain regulatory approval for their products more rapidly than Brickell may obtain approval for Brickell's product candidates. Brickell's success will be based in part on Brickell's ability to identify, develop and manage a patented portfolio of product candidates that are safer and more effective than competing products and which will transform patient lives suffering from debilitating skin orders that are chronic and do not go away even with conventional treatment options.

Hyperhidrosis

If approved for the treatment of primary axillary hyperhidrosis, Brickell anticipate that sofpironium bromide would compete with other therapies used for hyperhidrosis, including:

- Self-Administered Treatments. Self-administered treatments, such as OTC and prescription topical antiperspirants, and Qbrexza (glycopyrronium) 2.4% topical cloths. Oral and compounded topical anticholinergics may also be used off-label.
- Non-Surgical Office-Based Procedures. Office-based procedures have been approved for the treatment of hyperhidrosis, including intradermal injections of BOTOX®, marketed by Allergan plc., and MiraDry®, a microwave-based treatment marketed by Miramar Labs, Inc.
- Surgical Treatments. Surgical treatments include techniques for the removal of sweat glands, such as excision, curettage and liposuction. Surgical procedures, such as endoscopic thoracic sympathectomy, are also used to destroy nerves that transmit activating signals to sweat glands.

In addition to approved hyperhidrosis treatments, there are also several treatments under development that could potentially be used to treat hyperhidrosis and may compete with sofpironium bromide.

Intellectual Property and In-Licensing Agreements

Brickell's success depends in large part upon Brickell's ability to obtain and maintain proprietary protection for Brickell's products and technologies, and to operate without infringing the proprietary rights of others. Brickell seeks to avoid the latter by monitoring patents and publications that may affect Brickell's business, and to the extent Brickell identifies such developments, evaluate and take appropriate courses of action. With respect to the former, Brickell's policy is to protect Brickell's proprietary position by, among other methods, filing for patent applications on inventions that are important to the development and conduct of Brickell's business with the U.S. Patent and Trademark Office and its foreign counterparts.

Patents extend for varying periods according to the date of patent filing or grant and the legal term of patents in various countries where patent protection is obtained. The actual protection afforded by a patent, which can vary from country to country, depends on the type of patent, the scope of its coverage and the availability of legal remedies in the country.

Brickell also intends to use regulatory exclusivity (also called data package exclusivity) as a means of acquiring intellectual property protections that are separate and distinct to patents. This kind of right involves being given exclusivity for varying periods of time depending on the country to incentivize innovators who invest in clinical trials to produce data to demonstrate a drug is safe and effective and, as such, the data package in an NDA for the FDA should receive protection even if no patent is available. Other countries to varying extents do the same.

Brickell further protects its proprietary information by requiring Brickell's employees, consultants, contractors and other advisors to execute nondisclosure and assignment of invention agreements upon commencement of their respective employment or engagement. Agreements with Brickell's employees also prevent them from bringing the proprietary rights of third parties to Brickell. In addition, Brickell requires confidentiality or service agreements from third parties that receive Brickell's confidential information or materials.

As of June 30, 2019, Brickell owns or possesses an exclusive license to 23 issued U.S. patents and 43 issued foreign patents, which include granted European patent rights that have been validated in various EU member states, and nine pending U.S. patent applications and 94 pending foreign patent applications. U.S. and foreign patents and pending U.S. and foreign patent applications for sofpironium bromide, if issued, will expire between 2031 and 2039, taking potential patent term extension into consideration.

Sofpironium bromide is covered by issued patents (composition of matter and methods of use and dosing thereof) in the United States with expected coverage through 2031 (including potential patent term extension which Brickell anticipates adding 4 to 5 years of patent exclusivity) and 2034, with potential additional U.S. and global coverage through 2034 and 2039 (formulations, methods, devices and manufacturing). Brickell also filed a new composition of matter patent application in the United States that would provide expected coverage through 2040, if approved.

Brickell also uses other forms of protection besides regulatory exclusivity, such as trademark, copyright, and trade secret protection, to enhance its intellectual property, particularly where Brickell does not believe patent protection is appropriate or obtainable. Brickell aims to take advantage of all of the intellectual property rights that are available to Brickell and believe that this comprehensive approach will provide Brickell with proprietary exclusive positions for Brickell's product candidates, where available.

In-License Agreements

Sofpironium Bromide

Brickell executed a license agreement in December 2012 with Bodor Laboratories, Inc. ("Bodor") for a worldwide, exclusive license to develop, manufacture, market, sell and sublicense technology products containing the compound based upon the patents referenced, with a field of use, limited to the treatment of hyperhidrosis and excessive sweating. In exchange for such rights, Brickell agreed to pay Bodor: (i) an upfront payment upon execution of the license; (ii) half of all royalties received from covered sales in Asia; (iii) a low to mid-single digit royalty on all covered sales of products anywhere outside of Asia by us; (iv) a low to mid-single digit royalty on all sales of products by sub-licensees, plus a percentage in the event such sub-licensee patent royalty rate exceeds a certain threshold percentage; (v) additional regulatory and sales milestone payments commencing at the completion of a Phase 2 study; and (vi) certain sublicensing fees. In addition, the license agreement imposes various diligence, milestone, royalty, insurance and other obligations on Brickell. If Brickell fails to comply with these obligations, Bodor may have the right to terminate the license, in which event Brickell may not be able to develop or market sofpironium bromide.

BBI-3000

In June 2012, Brickell executed a license agreement with the UAB Research Foundation ("UABRF") for a worldwide, exclusive license to manufacture, market, sell and sublicense technology products containing the compound based upon the patents referenced with a field of use limited to all dermatological indications. In exchange for such rights, Brickell agreed to pay UABRF: (i) an upfront payment upon the execution of the license agreement; (ii) a low to mid-single digit royalty on all sales of products anywhere in the world by Brickell and itssub-licensees; (iii) additional regulatory and sales milestone payments commencing at the successful completion of a Phase 2 study; and (iv) certain sublicensing fees. In addition, Brickell will be responsible for the payment of future expenses for filing, prosecuting and maintaining licensed technologies and for any new patents that Brickell intends to file, prosecute and maintain. The license agreement also imposes various diligence, milestone, royalty, insurance and other obligations on Brickell. If Brickell fails to comply with these obligations, UABRF may have the right to terminate the license, in which event Brickell may not be able to develop or market BBI-3000.

BBI-6000

In November 2015, Brickell executed an asset purchase agreement with Orca Pharmaceuticals LLC ("Orca") to acquire certain compounds, assigned technology, inventory and patent files associated with BBI-6000. One of the assets purchased from Orca was a license agreement between Orca and New York University ("NYU") which granted Orca an exclusive license to manufacture, market, sell and sublicense technology products based upon certain specified patents. In exchange for such rights, Brickell agreed to pay Orca: (i) an upfront payment upon execution of the agreement; (ii) a low to mid-single digit royalty on net sales of products anywhere in the world by Brickell and itssub-licensees; and (iii) additional regulatory and sales milestone payments. In addition, the asset purchase agreement imposes various diligence, milestone, royalty, insurance and other obligations on Brickell. If Brickell fails to comply with these obligations, Orca may have the right to terminate the agreement, in which event Brickell may not be able to develop or market BBI-6000.

Early-Stage Research Programs

Brickell also owns early-stage research programs targeting other skin diseases, such as androgenic alopecia and contact dermatitis, that were acquired through asset purchase or license agreements in exchange for (i) upfront payments upon execution of the license; (ii) low to mid-single to high-single digit royalties on product sales; (iii) regulatory and sales milestone payments; and (iv) certain sublicensing fees.

Collaborations and Out-License Agreements

Out-License and Collaboration Agreement with Kaken

For a description of the Collaboration Agreement with Kaken and the applicable upfront and milestone payments, please see the description in "*Management's Discussion and Analysis of Brickell's Financial Condition and Results of Operations—Research and Development.*"

Rights Agreement with AMOREPACIFIC GROUP

For a description of the Collaboration Agreement with AMOREPACIFIC GROUP ("AP"), please see the description in "*Management's Discussion and Analysis of Brickell's Financial Condition and Results of Operations—Research and Development*."

Government Regulation

FDA Drug Approval Process

In the United States, pharmaceutical products are subject to extensive regulation by the FDA. The Federal Food, Drug, and Cosmetic Act (the "FDC Act") and other federal and state statutes and regulations, govern,

among other things, the research, development, testing, manufacture, storage, recordkeeping, approval, labeling, advertising, promotion and marketing, distribution, post-approval monitoring and reporting, sampling and import and export of pharmaceutical products. Failure to comply with applicable U.S. requirements may subject a company to a variety of administrative or judicial sanctions, such as FDA refusal to approve pending NDAs, warning or untitled letters, product recalls, product seizures, total or partial suspension of production or distribution, injunctions, fines, civil penalties, corporate integrity agreements, and criminal prosecution.

Pharmaceutical product development for a new product or certain changes to an approved product in the United States typically involves preclinical laboratory and animal tests, the submission to the FDA of an IND, which must become effective before clinical testing may commence, and adequate and well-controlled clinical trials to establish the safety and effectiveness of the drug for each indication for which FDA approval is sought. In addition, other tests on the chemistry, manufacturing and controls (CMC) of producing the drug and its various formulations to establish the shelf life, storage conditions and quality parameters and specification must be conducted and submitted.

Satisfaction of FDA pre-market approval requirements typically takes many years and the actual time required may vary substantially based upon the type, complexity and novelty of the product or disease. Preclinical tests include laboratory evaluation of product chemistry, formulation and toxicity, as well as animal trials to assess the characteristics and potential safety and efficacy of the product. The conduct of the preclinical tests must comply with federal regulations and requirements, including good laboratory practices. The results of preclinical testing are submitted to the FDA as part of an IND along with other information, including information about product chemistry, manufacturing and controls described above and a proposed clinical trial protocol. Long-term preclinical tests, such as animal tests of reproductive toxicity and carcinogenicity, may continue after the IND is submitted.

A 30-day waiting period after the submission of each IND is required prior to the commencement of clinical testing in humans. If the FDA has neither commented on nor questioned the IND within this 30-day period, the clinical trial proposed in the IND may begin.

Clinical trials involve the administration of the investigational new drug to healthy volunteers or patients under the supervision of a qualified physician investigator. Clinical trials must be conducted (1) in compliance with federal and state regulations; (2) in compliance with good clinical practice (“GCP”), an international standard meant to protect the rights and health of patients and to define the roles of clinical trial sponsors, administrators and monitors; and (3) under protocols detailing the objectives of the trial, the parameters to be used in monitoring safety and the effectiveness criteria to be evaluated as well as the actual primary and secondary endpoints of the study to be evaluated. Each protocol involving testing on U.S. patients and subsequent protocol amendments must be submitted to the FDA as part of the IND.

The FDA may order the temporary, or permanent, discontinuation of a clinical trial at any time, or impose other sanctions, if it believes that the clinical trial either is not being conducted in accordance with FDA requirements or presents an unacceptable risk to the clinical trial patients. The study protocol and informed consent information for patients in clinical trials must also be submitted to a local or central institutional review board (“IRB”) (outside the U.S. these are called Ethics Committees) for approval at each site at which the clinical trial will be conducted. An IRB may also require the clinical trial at the site to be halted, either temporarily or permanently, for failure to comply with the IRB’s requirements, or may impose other conditions.

Clinical trials to support NDAs for marketing approval are typically conducted in three sequential phases, but the phases may overlap, or in rarer cases early phases may be skipped depending on the amount and quality of data that exists. In Phase 1, the initial introduction of the drug into healthy human subjects or patients, the drug is tested to assess pharmacological actions, side effects associated with increasing doses and, if possible, early evidence on effectiveness. For dermatology products, Phase 2 usually involves trials in a limited patient population to determine metabolism, pharmacokinetics, the effectiveness of the drug for a particular indication,

dosage tolerance and optimum dosage, and to identify common adverse effects and safety risks. If a compound demonstrates evidence of effectiveness and an acceptable safety profile in Phase 2 evaluations, Phase 3 clinical trials are undertaken to obtain the additional information about clinical efficacy and safety in a larger number of patients, typically at geographically dispersed clinical trial sites, to permit the FDA to evaluate the overall benefit-risk relationship of the drug and to provide adequate information for the labeling of the drug. In most cases the FDA requires two adequate and well-controlled prospective Phase 3 clinical trials with statistically significant results to demonstrate the efficacy of the drug by comparing a treatment arm against a control (placebo or best supportive care) arm. A single Phase 3 clinical trial with other confirmatory evidence may be sufficient in rare instances for FDA registration where the study is a large multicenter trial demonstrating internal consistency and a statistically very persuasive finding of an effect on mortality, irreversible morbidity or prevention of a disease with a potentially serious outcome and confirmation of the result in a second trial would be practically impossible or ethically problematic.

After completion of the required clinical testing, a new drug application ("NDA") is prepared and submitted to the FDA. FDA approval of the NDA is required before marketing of the product may begin in the United States, although there are programs during this stage that allow the investigational drug to be used in a compassionate care or right-to-try setting when certain facts are present. The NDA must include the results of all preclinical, clinical and other testing and a compilation of data relating to the product's pharmacology, chemistry, manufacture and controls. The cost of preparing and submitting an NDA is substantial. The submission of most NDAs is additionally subject to a substantial application user fee, and the manufacturer and sponsor under an approved new drug application are also subject to annual product and establishment user fees. These fees are typically increased annually.

The FDA has 60 days from its receipt of an NDA to determine whether the application will be accepted for filing based on the agency's threshold determination that it is sufficiently complete to permit substantive review. Once the submission is accepted for filing, the FDA begins an in-depth review. The FDA has agreed with Congress to certain performance goals in the review of new drug applications. Priority review or similar accelerated pathways can be applied to drugs that the FDA determines offer major advances in treatment, or provide a treatment where no adequate or satisfactory, comparable therapy exists. For biologics, priority review is further limited only for drugs intended to treat a serious or life-threatening disease relative to the currently approved products. The review process for both standard and priority review may be extended by the FDA for three additional months to consider certain late-submitted information, or information intended to clarify information already provided in the submission.

The FDA may also refer applications for novel drug products, or drug products that present difficult questions of safety or efficacy, to an advisory committee, typically a panel that includes independent clinicians and other experts in the targeted disease, for review, evaluation and a recommendation as to whether the application should be approved. The FDA is not bound by the recommendation of an advisory committee, but it generally follows such recommendations. Before approving an NDA, the FDA will typically inspect one or more of the sponsor's clinical sites to assure compliance with GCP. Additionally, the FDA will inspect the facility or the facilities at which the drug is manufactured. The FDA will not approve the product unless compliance with current good manufacturing practice ("cGMP") is satisfactory and the NDA contains data that provide substantial evidence that the drug is safe and effective in the indication studied.

After the FDA evaluates the NDA and the manufacturing facilities, it issues either an approval letter or a complete response letter. A complete response letter generally outlines the deficiencies in the submission and may require substantial additional testing, or information, in order for the FDA to reconsider the application. If, or when, those deficiencies have been addressed to the FDA's satisfaction in a resubmission of the NDA, the FDA will issue an approval letter. The FDA has committed to reviewing such resubmissions in two or six months depending on the type of information required.

An approval letter authorizes commercial marketing of the drug with specific prescribing information for specific indications. The approval letter may contain safety information that limits the ability of the drug to be

marketed (e.g., black box warning) or contains contraindications, warnings and/or precautions that limit the potential of the drug's desirability. As another potential condition of NDA approval, the FDA may require a risk evaluation and mitigation strategy ("REMS") to help ensure that the benefits of the drug outweigh the potential risks. REMS can include medication guides, communication plans for healthcare professionals and elements to assure safe use ("ETASU"). ETASU can include, but are not limited to, special training or certification for prescribing or dispensing, dispensing only under certain circumstances, special monitoring and the use of patient registries. The requirement for a REMS can materially affect the potential market and profitability of the drug. Moreover, product approval may require substantial post-approval testing and surveillance to monitor the drug's safety or efficacy. Once granted, product approvals may be withdrawn if compliance with regulatory standards is not maintained or problems are identified following initial marketing and/or manufacturing.

Changes to some of the conditions established in an approved application, including changes in indications, labeling, or manufacturing processes or facilities, require submission and FDA approval of a new NDA or NDA supplement before the change can be implemented. An NDA supplement for a new indication typically requires clinical data similar to that in the original application, and the FDA uses the same procedures and actions in reviewing NDA supplements as it does in reviewing NDAs.

The Hatch-Waxman Act

In seeking approval for a drug through an NDA, applicants are required to list with the FDA each patent whose claims cover the applicant's product. Upon approval of a drug, each of the patents listed in the application for the drug is then published in the FDA's Approved Drug Products with Therapeutic Equivalence Evaluations, commonly known as the Orange Book. Drugs listed in the Orange Book can, in turn, be cited by potential generic competitors in support of approval of an abbreviated new drug application ("ANDA"). An ANDA provides for marketing of a drug product that has the same active ingredients in the same strengths and dosage form as the listed drug and has been shown through bioequivalence testing to be therapeutically equivalent to the listed drug. Other than the requirement for bioequivalence testing, ANDA applicants are not required to conduct, or submit results of, preclinical or clinical tests to prove the safety or effectiveness of their drug product. Drugs approved in this way are commonly referred to as "generic equivalents" to the listed drug, and can often be substituted by pharmacists under prescriptions written for the original listed drug and may be required to be switched to from the original innovator drug by certain laws or insurance and formulary practices, which can affect the profitability of the drug adversely.

The ANDA applicant is required to certify to the FDA concerning any patents listed for the approved product in the FDA's Orange Book. Specifically, the applicant must certify that (1) the required patent information has not been filed; (2) the listed patent has expired; (3) the listed patent has not expired, but will expire on a particular date and approval is sought after patent expiration; or (4) the listed patent is invalid or will not be infringed by the new product. The ANDA applicant may also elect to submit a section viii statement certifying that its proposed ANDA label does not contain (or carves out) any language regarding the patented method-of-use rather than certify to a listedmethod-of-use patent. If the applicant does not challenge the listed patents, the ANDA will not be approved until all the listed patents claiming the referenced product have expired.

A certification that the new product will not infringe the already approved product's listed patents, or that such patents are invalid, is called a Paragraph IV certification. If the ANDA applicant has provided a Paragraph IV certification to the FDA, the applicant must also send notice of the Paragraph IV certification to the NDA and patent holders once the ANDA has been accepted for filing by the FDA. The NDA and patent holders may then commence a patent infringement lawsuit in response to the notice of the Paragraph IV certification. The filing of a patent infringement lawsuit within 45 days of the receipt of a Paragraph IV certification automatically prevents the FDA from approving the ANDA until the earlier of 30 months, expiration of the patent, settlement of the lawsuit, or a decision in the infringement case that is favorable to the ANDA applicant.

The ANDA also will not be approved until any applicablenon-patent exclusivity listed in the Orange Book for the referenced product has expired.

Regulatory Exclusivity

Upon NDA approval of a new chemical entity or NCE, which is a drug that contains no active molecule that has been approved by the FDA in any other NDA, that drug receives five years of marketing exclusivity during which the FDA cannot receive any ANDA seeking approval of a generic version of that drug. Certain changes to a drug, such as the addition of a new indication to the package insert, are associated with a three-year period of exclusivity during which the FDA cannot approve an ANDA for a generic drug that includes the change.

An ANDA may be submitted one year before NCE exclusivity expires if a Paragraph IV certification is filed. If there is no listed patent in the Orange Book, there may not be a Paragraph IV certification and, thus, no ANDA may be filed before the expiration of the exclusivity period.

Section 505(b)(2) New Drug Applications

Most drug products obtain FDA marketing approval pursuant to an NDA or an ANDA. A third alternative is a special type of NDA, commonly referred to as a Section 505(b)(2), or 505(b)(2), NDA, which enables the applicant to rely, in part, on the FDA's previous approval of a similar product, or published literature, in support of its application.

505(b)(2) NDAs often provide an alternate path to FDA approval for new or improved formulations or new uses of previously approved products. Section 505(b)(2) permits the filing of an NDA where at least some of the information required for approval comes from studies not conducted by, or for, the applicant and for which the applicant has not obtained a right of reference. If the 505(b)(2) applicant can establish that reliance on the FDA's previous approval is scientifically appropriate, it may eliminate the need to conduct certain preclinical or clinical studies of the new product. The FDA may also require companies to perform additional studies or measurements to support the change from the approved product. The FDA may then approve the new product candidate for all, or some, of the label indications for which the referenced product has been approved, as well as for any new indication sought by the Section 505(b)(2) applicant.

To the extent that the Section 505(b)(2) applicant is relying on studies conducted for an already approved product, the applicant is required to certify to the FDA concerning any patents listed for the approved product in the Orange Book to the same extent that an ANDA applicant would. Thus approval of a 505(b)(2) NDA can be stalled until all the listed patents claiming the referenced product have expired, until any non-patent exclusivity, such as exclusivity for obtaining approval of a new chemical entity, listed in the Orange Book for the referenced product has expired, and, in the case of a Paragraph IV certification and subsequent patent infringement suit, until the earlier of 30 months, settlement of the lawsuit or a decision in the infringement case that is favorable to the Section 505(b)(2) applicant.

Patent Term Extension

After NDA approval, owners of relevant drug patents may apply for up to a five-year patent extension. The allowable patent term extension is calculated as half of the drug's testing phase, the time between IND application and NDA submission, and all of the review phase, the time between NDA submission and approval, up to a maximum of five years. The time can be shortened if the FDA determines that the applicant did not pursue approval with due diligence. The total patent term after the extension may not exceed 14 years.

For patents that might expire during the application phase, the patent owner may request an interim patent extension. An interim patent extension increases the patent term by one year and may be renewed up to Brickell's times. For each interim patent extension granted, the post-approval patent extension is reduced by one year. The director of the USPTO must determine that approval of the drug covered by the patent for which a patent extension is being sought is likely. Interim patent extensions are not available for a drug for which an NDA has not been submitted.

Post-Approval Requirements

Once an NDA is approved, a product will be subject to certain post-approval requirements. For instance, the FDA closely regulates, in part, the post-approval marketing and promotion of drugs, including standards and regulations for direct-to-consumer advertising, off-label promotion, formulary and reimbursement presentations, product sampling, sales force activities including dissemination of peer-reviewed journal articles and detailing practices with prescribers, health care practitioner interactions, industry-sponsored scientific and educational activities and promotional activities involving the internet while other parts of the government regulate against false claims, foreign corrupt practices, trade sanctions, and anti-kickbacks. States often impose strict legal requirements and prohibitions on a variety of post-approval drug marketing practices. Drugs may be marketed by the sponsor only for the approved indications and in accordance with the provisions of the approved labeling.

Adverse event reporting, pharmacovigilance and submission of periodic reports is required following FDA approval of an NDA. The FDA also may require post-marketing testing, known as Phase 4 testing, the aforementioned REMS and surveillance to monitor the effects of an approved product, or the FDA may place conditions on an approval that could restrict the distribution or use of the product. In addition, quality-control, drug manufacture, packaging and labeling procedures must continue to conform to cGMPs after approval. Drug manufacturers and certain of their subcontractors are required to register their establishments with the FDA and certain state agencies. Registration with the FDA subjects entities to periodic unannounced inspections by the FDA, during which the agency inspects manufacturing facilities to assess compliance with cGMPs. Accordingly, manufacturers must continue to expend time, money and effort in the areas of production and quality-control to maintain compliance with cGMPs or risk being sanctioned by FDA from supplying the drugs they manufacture. Regulatory authorities also may withdraw product approvals or request product recalls if a company fails to comply with regulatory standards, if it encounters problems following initial marketing and supply, or if previously unrecognized problems are subsequently discovered.

Pediatric Information

Under the Pediatric Research Equity Act, NDAs or supplements to NDAs must contain data to assess the safety and effectiveness of the drug for the claimed indications in all relevant pediatric subpopulations and to support dosing and administration for each pediatric subpopulation for which the drug is safe and effective. The FDA may grant full or partial waivers, or deferrals, for submission of data.

The Best Pharmaceuticals for Children Act (“BPCA”) provides NDA holders asix-month extension of any exclusivity, patent or non-patent, for a drug if certain conditions are met. Conditions for exclusivity include the FDA’s determination that information relating to the use of a new drug in the pediatric population may produce health benefits in that population, the FDA making a written request for pediatric studies and the applicant agreeing to perform, and report on, the requested studies within the statutory timeframe. Applications under the BPCA are treated as priority applications, with all of the benefits that designation confers.

Disclosure of Clinical Trial Information

Sponsors of clinical trials of FDA-regulated products, including drugs, are required to register and disclose certain clinical trial information, including when a clinical trial is initiated (often on www.clintrials.gov). Information related to the product, patient population, phase, type and scope of investigation, study sites and investigators and other aspects of the clinical trial is then made public as part of the registration process. Sponsors are also obligated to discuss the results of their clinical trials after completion and industry trade association ethics guidelines require publication of both favorable and unfavorable study results, which can affect the potential for a drug. Disclosure of the results of these trials can be delayed until the new product or new indication being studied has been approved. Competitors may use this publicly available information to gain knowledge regarding the progress of development programs.

Regulation Outside of the United States

In addition to regulations in the United States, Brickell will be subject to regulations of other countries governing any clinical trials and commercial sales and distribution of Brickell's product candidates, as well as extent, scope and enforceability of intellectual property rights associated with the product candidate. Whether or not Brickell obtains FDA approval for a product, Brickell must obtain approval by the comparable regulatory authorities of countries outside of the United States before it can commence clinical trials in such countries and approval of the regulators of such countries or economic areas, such as the European Union, before Brickell may market products in those countries or areas. Certain countries outside of the United States have a process similar to the FDA's that requires the submission of a clinical trial application ("CTA"), much like the IND prior to the commencement of human clinical trials. In the European Union, for example, a CTA must be submitted to each country's national health authority and an independent ethics committee, much like the FDA and IRB, respectively. Once the CTA is approved in accordance with a country's requirements, clinical trial development may proceed. The approval process and requirements governing the conduct of clinical trials, product licensing, pricing and reimbursement vary greatly from place to place, and the time may be longer or shorter than that required for FDA approval. In some cases, once the investigational drug is approved by a regulatory agency in certain established markets, like the FDA in the U.S., other countries will allow a sponsor to rely on that other country's approval and extend it, with the same terms and conditions, in the foreign country and this can greatly accelerate the introduction of the drug in foreign markets, where applicable (often called a free sales certificate ("FSC") process).

Under European Union regulatory systems, a company may submit marketing authorization applications either under a centralized or decentralized procedure. The centralized procedure, which is compulsory for medicines produced by biotechnology or those medicines intended to treat AIDS, cancer, neurodegenerative disorders or diabetes and is optional for those medicines which are highly innovative, provides for the grant of a single marketing authorization that is valid for all European Union member states. The decentralized procedure provides for mutual recognition of national approval decisions. Under this procedure, the holder of a national marketing authorization may submit an application to the remaining member states. Within 90 days of receiving the applications and assessments report, each member state must decide whether to recognize approval. If a member state does not recognize the marketing authorization, the disputed points are eventually referred to the European Commission, whose decision is binding on all member states.

Anti-Kickback, False Claims Laws

In addition to FDA restrictions on marketing of pharmaceutical products, several other types of state and federal laws have been applied to restrict or prohibit certain marketing practices in the pharmaceutical industry. These laws include, among others, anti-kickback statutes, false claims statutes and other statutes pertaining to healthcare fraud and abuse, and anticorruption. The federal healthcare program anti-kickback statute prohibits, among other things, knowingly and willfully offering, paying, soliciting or receiving remuneration to induce, or in return for, purchasing, leasing, ordering or arranging for the purchase, lease or order of any healthcare item or service reimbursable under Medicare, Medicaid or other federally financed healthcare programs. The Patient Protection and Affordable Care Act, as amended ("PPACA"), amended the intent element of the federal anti-kickback statute so that a person or entity no longer needs to have actual knowledge of the statute or specific intent to violate it. This statute has been interpreted to apply to arrangements between pharmaceutical manufacturers on the one hand and prescribers, purchasers and formulary managers on the other. Although there are a number of statutory exceptions and regulatory safe harbors protecting certain common activities from prosecution or other regulatory sanctions, the exceptions and safe harbors are drawn narrowly, and practices that involve remuneration intended to induce prescribing, purchases or recommendations may be subject to scrutiny if they do not qualify for an exception or safe harbor.

Federal false claims laws prohibit any person or entity from, among other things, knowingly presenting, or causing to be presented, a false claim for payment to the federal government, or knowingly making, or causing to

be made, a false statement to have a false claim paid. This includes claims made to programs where the federal government reimburses, such as Medicaid, as well as programs where the federal government is a direct purchaser, such as when it purchases off the Federal Supply Schedule. Pharmaceutical and other healthcare companies have been prosecuted under these laws for, among other things, allegedly inflating drug prices they report to pricing services, which in turn were used by the government to set Medicare and Medicaid reimbursement rates, and for allegedly providing free product to customers with the expectation that the customers would bill federal programs for the product. In addition, certain marketing practices, including off-label promotion, may also violate federal false claims laws. Additionally, PPACA amended the federal healthcare program anti-kickback statute such that a violation of that statute can serve as a basis for liability under certain federal false claims laws.

The majority of states also have statutes or regulations similar to the federal anti-kickback law and false claims laws, which apply to items and services reimbursed under Medicaid and other state programs, or, in several states, apply regardless of the payor.

Other federal statutes pertaining to healthcare fraud and abuse include the civil monetary penalties statute, which prohibits, among other things, the offer or payment of remuneration to a Medicaid or Medicare beneficiary that the offeror or payor knows or should know is likely to influence the beneficiary to order or receive a reimbursable item or service from a particular supplier, and the healthcare fraud and false statements statutes, which prohibit, among other things, knowingly and willfully executing or attempting to execute a scheme to defraud any healthcare benefit program or obtain by means of false or fraudulent pretenses, representations, or promises any money or property owned by or under the control of any healthcare benefit program in connection with the delivery of or payment for healthcare benefits, items, or services.

Violations of these federal healthcare fraud and abuse laws are punishable by imprisonment, criminal fines, civil monetary penalties and exclusion from participation in federal healthcare programs.

Other Federal and State Regulatory Requirements

The Centers for Medicare & Medicaid Services (“CMS”) has issued a final rule pursuant to PPACA that requires certain manufacturers of prescription drugs to annually collect and report information on payments or transfers of value to physicians and teaching hospitals, as well as ownership and investment interests held by physicians and their immediate family members. Manufacturers are required to collect information with the reported data posted in searchable form on a public website. Failure to submit required information may result in civil monetary penalties. Other countries require similar reporting, especially in France and Belgium.

Federal law also requires pharmaceutical companies to post public statements, usually via the Internet, on whether they will approve compassionate use requests for their investigational drugs still in the clinic.

In addition, several states now require prescription drug companies to report expenses relating to the marketing and promotion of drug products and to report gifts and payments to individual healthcare practitioners and entities in these states. Other states prohibit various other marketing-related activities. Still other states require the posting of information relating to clinical studies and their outcomes. In addition, California, Connecticut, Nevada and Massachusetts require pharmaceutical companies to implement compliance programs and marketing codes. Several additional states are considering similar proposals. Some of the state laws are broader in scope than federal laws. Compliance with these laws is difficult and time-consuming, and companies that do not comply with these state laws face civil or other penalties.

Reimbursement

Sales of any of Brickell’s product candidates that are approved will depend, in part, on the extent to which the costs of its approved products will be covered and reimbursed by third-party payors, such as government

health programs, commercial insurance and managed healthcare organizations. These third-party payors are increasingly challenging the prices charged for medical products and services and often create drug formularies with onerous requirements for inclusion where inclusion is the only way a drug can be reimbursed. Additionally, the containment of healthcare costs has become a priority of federal and state governments and the prices of drugs have been a focus in this effort. The U.S. government, state legislatures and foreign governments have shown significant interest in implementing cost-containment programs, including price controls, restrictions on reimbursement and requirements for voluntary and sometimes mandatory substitution of generic products. In addition, certain government purchasers of medicines, like CMS under the Medicaid program, impose a best pricing system where the best price that is offered to any U.S. customer must also be given to the federal government. And foreign countries increasingly are adopting reference pricing where the lowest price offered by a drug sponsor in a particular list of countries must be offered in the referencing country. Adoption of price controls and cost-containment measures, and adoption of more restrictive policies in jurisdictions with existing controls and measures, could further limit Brickell's net revenue and results. If any of the company's products are approved and these third-party payors do not consider Brickell's approved products to be cost-effective compared to other therapies, they may not cover Brickell's approved products as a benefit under their plans or, if they do, the level of payment may not be sufficient to allow Brickell to sell its approved products on a profitable basis.

The Medicare Prescription Drug, Improvement, and Modernization Act of 2003 ("MMA") imposed new requirements for the distribution and pricing of prescription drugs for Medicare beneficiaries. Under Part D, Medicare beneficiaries may enroll in prescription drug plans offered by private entities which will provide coverage of outpatient prescription drugs. Part D plans include both stand-alone prescription drug benefit plans and prescription drug coverage as a supplement to Medicare Advantage plans. Unlike Medicare Part A and B, Part D coverage is not standardized. Part D prescription drug plan sponsors are not required to pay for all covered Part D drugs, and each drug plan can develop its own drug formulary that identifies which drugs it will cover and at what tier or level. However, Part D prescription drug formularies must include drugs within each therapeutic category and class of covered Part D drugs, though not necessarily all the drugs in each category or class. Any formulary used by a Part D prescription drug plan must be developed and reviewed by a pharmacy and therapeutic committee. Government payment for some of the costs of prescription drugs may increase demand for Brickell's products for which it receives marketing approval. However, any negotiated prices for Brickell's approved products covered by a Part D prescription drug plan will likely be lower than the prices Brickell might otherwise obtain. Moreover, while the MMA applies only to drug benefits for Medicare beneficiaries, private payors often follow Medicare coverage policy and payment limitations in setting their own payment rates. Any reduction in payment that results from the MMA may result in a similar reduction in payments from nongovernmental payors.

The ARRA provides funding for the federal government to compare the effectiveness of different treatments for the same illness. A plan for the research will be developed by the Department of Health and Human Services, the Agency for Healthcare Research and Quality and the National Institutes for Health, and periodic reports on the status of the research and related expenditures will be made to the U.S. Congress. Although the results of the comparative effectiveness studies are not intended to mandate coverage policies for public or private payors, it is not clear what effect, if any, the research will have on the sales of any approved product, if any such product or the condition that it is intended to treat is the subject of a study. It is also possible that if comparative effectiveness research demonstrates benefits in a competitor's product, this could adversely affect the sales of Brickell's product candidates. If third-party payors do not consider Brickell's approved products to be cost-effective based on health economics data compared to other available therapies, they may not cover Brickell's approved products as a benefit under their plans or, if they do, the level of payment may not be sufficient to allow Brickell to sell its approved products on a profitable basis.

In addition, in some non-U.S. jurisdictions, the proposed pricing for a product candidate must be approved before it may be lawfully marketed. The requirements governing drug pricing vary widely from country to country. For example, the European Union provides options for its member states to restrict the range of

medicinal products for which their national health insurance systems provide reimbursement and to control the prices of medicinal products for human use. A member state may approve a specific price for the medicinal product or it may instead adopt a system of direct or indirect controls on the profitability of the company placing the medicinal product on the market. There can be no assurance that any country that has price controls or reimbursement limitations for pharmaceutical products will allow favorable reimbursement and pricing arrangements for any of Brickell's product candidates. Historically, product candidates launched in the European Union do not follow price structures of the United States and generally tend to be significantly lower, even lower than pricing that might be obtainable in emerging market countries.

Manufacturing and Supply

Brickell currently contracts with third parties for the manufacture of its small-molecule drug substances and drug products for preclinical studies and clinical trials and intends to continue to do so in the future. To Brickell's knowledge, all of its clinical drug product manufacturing activities are in compliance with cGMP. Brickell has assembled a team of experienced employees and consultants to provide the necessary technical, quality and regulatory oversight over the contract manufacturing organizations ("CMOs") with which Brickell contracts. Brickell relies on third-party cGMP manufacturers for scale-up and process development work and to produce sufficient quantities of development product candidates for use in clinical and preclinical trials.

Employees

As of June 30, 2019, Brickell had 11 regular full-time employees, including seven in research and development. From time to time, Brickell retain independent contractors. None of Brickell's employees is represented by a labor union or covered by a collective bargaining agreement. Brickell have not experienced any work stoppages, and Brickell consider Brickell's relations with Brickell's employees to be excellent.

Facilities

Brickell's corporate headquarters are currently, and following the Merger, will continue to be located in Boulder, Colorado, where it occupies facilities totaling approximately 3,038 square feet under lease agreements that expire in October 2021. Brickell uses its current facilities for research and development and general and administrative personnel. Brickell may seek to expand its current facilities or place certain operations in other states in the next 12 to 18 months.

Legal Proceedings

From time to time, Brickell may become involved in legal proceedings arising in the ordinary course of its business. Brickell is not presently a party to any legal proceedings that, if determined adversely to it, would individually or taken together have a material adverse effect on Brickell.

VICAL MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

For Vical management's discussion and analysis of financial condition and results of operations, please refer to Item 7 set forth in the Vical's Annual Report on Form 10-K for the year ended December 31, 2018 (the "Vical10-K") and Item 2 set forth in the Vical Quarterly Reports on Form10-Q for the quarters ended March 31, 2019 and June 30, 2019 (the "Vical 10-Qs"), which sections are incorporated by reference herein. The discussion and analysis of financial condition and results of operations should be read together with the section titled "*Selected Historical and Unaudited Pro Forma Combined Financial Data—Selected Historical Financial Data of Vical*" in this proxy statement and the consolidated financial statements of Vical and accompanying notes appearing in the Vical 10-K and in the Vical 10-Qs.

QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT THE MARKET RISK OF VICAL

For quantitative and qualitative disclosures about Vical's market risk, please refer to Item 7A set forth in the Vical10-K, which section is incorporated by reference herein.

MANAGEMENT'S DISCUSSION AND ANALYSIS OF BRICKELL'S FINANCIAL CONDITION AND RESULTS OF OPERATIONS

The following discussion and analysis of Brickell's financial condition and results of operations should be read together with its financial statements and the other financial information appearing elsewhere in this proxy statement. This discussion contains forward-looking statements that involve risks and uncertainties. Brickell's actual results could differ materially from those anticipated in the forward-looking statements as a result of various factors, including those discussed below and those discussed in the section titled "Risk Factors" included elsewhere in this proxy statement.

Overview

Brickell is a clinical-stage pharmaceutical company focused on developing innovative and differentiated prescription therapeutics for the treatment of debilitating skin diseases. Brickell's pipeline consists of potential novel therapeutics for hyperhidrosis, cutaneous T-cell lymphoma, psoriasis, and other prevalent dermatological conditions. Brickell believes that its portfolio of product candidates targets significant market opportunities where innovative therapies are needed. Brickell's pivotal Phase 3-ready clinical-stage product candidate, sofpironium bromide, is a new molecular entity and "soft" drug that belongs to a class of medications called anticholinergics. Brickell is developing sofpironium bromide as a potential best-in-class, self-administered, once-daily, topical prescription hyperhidrosis therapy for the treatment of primary axillary hyperhidrosis. Brickell intends to maximize the value of its pipeline assets via continued development activities or partnership opportunities.

Brickell's operations to date have been limited to business planning, raising capital, developing Brickell's pipeline assets (in particular sofpironium bromide), identifying product candidates, and other research and development. To date, Brickell has financed operations primarily through private placements of convertible preferred stock, debt and funds received from license and collaboration agreements. Brickell does not have any products approved for sale and has not generated any product sales. Since inception and through June 30, 2019, Brickell has raised an aggregate of $85.9 million to fund operations, of which $39.1 million was through license and collaboration agreements, $33.6 million was from the sale of convertible preferred stock, $7.5 million was from the sale of debt, and $5.1 million was from the sale of convertible notes. As of June 30, 2019, Brickell had cash and cash equivalents totaling $2.1 million.

Since inception, Brickell has incurred operating losses. Brickell recorded a net loss of $8.2 million and $3.0 million for the six months ended June 30, 2019 and 2018, respectively. Brickell incurred a net loss of $9.2 million and $11.1 million for the years ended December 31, 2018 and 2017, respectively. As of June 30, 2019, Brickell had an accumulated deficit of $69.3 million. Brickell expects to continue incurring significant expenses and operating losses for at least the next several years as it:

- initiates and completes its two pivotal Phase 3 clinical trial for sofpironium bromide;
- contracts to manufacture product candidates;
- advances research and development related activities to develop and expand the product pipeline;
- maintains, expands and protects the intellectual property portfolio;
- hires additional staff, including clinical, scientific, and management personnel; and
- adds operational and finance personnel to support product development efforts and, if the Merger is approved, to support operating a public company.

Brickell does not expect to generate significant revenue unless and until it successfully completes development of, obtains marketing approval for and commercializes product candidates, either alone or in

collaboration with third parties. Brickell expects these activities will take several years and its success in these efforts is subject to significant uncertainty. Accordingly, Brickell expects it will need to raise additional capital prior to the regulatory approval and commercialization of any of its product candidates. Until such time, if ever, that Brickell generates substantial product revenues, Brickell expects to finance its operations through public or private equity or debt financings, collaborations or licenses or other available financing transactions. However, Brickell may be unable to raise additional funds through these or other means when needed.

Merger Agreement

On June 2, 2019, Brickell, Merger Sub, and Vical, entered into the Merger Agreement, pursuant to which, among other matters, and subject to the satisfaction or waiver of the conditions set forth in the Merger Agreement, Merger Sub will merge with and into Brickell, with Brickell continuing as a wholly-owned subsidiary of Vical and the surviving corporation of the Merger.

Subject to the terms and conditions of the Merger Agreement, at the effective time of the Merger, each outstanding share of Brickell's preferred stock and common stock, along with outstanding convertible notes, will be converted into shares of Vical common stock. Applying the Exchange Ratio, the former Brickell securityholders and NovaQuest, collectively, are expected to own, subject to adjustment, approximately 60% of the aggregate number of shares of Vical common stock, and the securityholders of Vical as of immediately prior to the Merger are expected to own, subject to adjustment, approximately 40% of the aggregate number of shares of Vical common stock (in each case on a fully diluted basis using the treasury stock method in instances other than with respect to the NovaQuest Warrants and certain equity issuances by Brickell following the signing of the Merger Agreement and prior to the completion of the Merger). The exchange ratio formula is based on a $60.0 million valuation of Brickell and a $40.0 million valuation of Vical and is subject to adjustment based on the Vical Net Cash and Brickell Net Working Capital balances prior to the completion of the Merger.

Concurrent Financing; Funding Agreement

Concurrent with the execution of the Merger Agreement, Brickell and NovaQuest entered into the Funding Agreement pursuant to which NovaQuest committed, subject to the terms and conditions of the Funding Agreement, to provide up to $25.0 million in near-term research and development funding to Brickell in connection with sofpironium bromide in the Concurrent Financing, with $5.6 million of the commitment expected to be paid promptly following the closing of the Merger and the remaining portion of the commitment expected to be paid in quarterly payments equal to 67% of invoiced research and development expenses in connection with sofpironium bromide incurred during the following four fiscal quarters. Upon receipt of marketing approvals in the United States for sofpronium bromide, Brickell will be obligated to make certain milestone payments to NovaQuest totaling $37.5 million. Beginning in the fiscal quarter that is two years following the first commercial sale of a sofpronium bromide product, Brickell will be required to make low single digit revenue sharing payments based on annual net sales worldwide (except for Japan, China and certain other countries). Generally, if Brickell suspends or terminates its development program in respect of sofpironium bromide, Brickell will be required to pay NovaQuest $25.0 million plus interest of between 8% and 12%. However, in the event that Brickell terminates its development program for sofpromium bromide for certain reasons, including serious safety issues, a failure of the product's Phase 3 studies, or the failure of FDA to approve the product, Brickell will not be obligated to make any payments to NovaQuest unless it subsequently resumes the development program.

Under the Funding Agreement, Brickell makes various representations and warranties and commits to comply with various covenants. NovaQuest may terminate the Funding Agreement and terminate its obligation to make payments in the event of Brickell's material uncured breach of a representation or covenant under the Funding Agreement. Brickell will also enter into a Security Agreement (the "Security Agreement") with NovaQuest immediately following consummation of the Merger. Under the Security Agreement, NovaQuest will be able to exercise certain rights in the event of an event of default of the Funding Agreement. NovaQuest's

rights following an event of default include, among other things, foreclosing on Brickell's assets in the United States relating to sofpironium bromide and, in certain circumstances, accelerating payment obligations under the Funding Agreement. NovaQuest also has the right to suspend its funding obligations under the Funding Agreement in the event of certain adverse developments relating to sofpironium bromide and in the event that certain of Brickell's senior executives leave Brickell and we do not find replacements acceptable to NovaQuest. These provisions of the Funding Agreement are discussed in greater detail in the section titled "*Risk Factors*" in this proxy statement.

Key Components of Brickell's Results of Operations

Collaboration Revenue

Collaboration revenues generally consist of revenues recognized under Brickell's strategic collaboration agreements for the development and commercialization of its product candidates. Brickell's strategic collaboration agreements generally outline overall development plans and include payments Brickell receives at signing, payments for the achievement of certain milestones, and royalties. For these activities and payments Brickell utilizes judgment to assess the nature of the performance obligations to determine whether the performance obligations are satisfied over time or at a point in time and, if over time, the appropriate method of measuring progress for purposes of recognizing revenue. Brickell has not recognized any royalty revenue to date. Other than the revenue Brickell may generate in connection with these agreements, Brickell does not expect to generate any revenue from any product candidates that it develops unless and until Brickell obtains regulatory approval and commercializes its products or enters into other collaborative agreements with third parties.

Research and Development

Research and development expenses principally consist of payments to third parties know as Clinical Research Organizations, or CROs. These CROs help plan, organize and conduct clinical and nonclinical studies under the direction of Brickell. Personnel costs, including wages, benefits and share-based compensation, related to Brickell's research and development staff in support of product development activities are also included, as well as costs incurred for supplies, pre-clinical studies and toxicology tests, consultants, and facility and related overhead costs.

Below is a summary of Brickell's research and development expenses by categories of costs for the periods presented. The other expenses category includes travel, lab and office supplies, clinical trial management software, license fees and other miscellaneous expenses.

	Three Months Ended June 30,		Six Months Ended June 30,		Year Ended December 31,	
	2019	2018	2019	2018	2018	2017
			(in thousands)			
Direct program expenses						
Sofpironium bromide	$ 3,391	$ 996	$ 8,419	$1,863	$ 9,030	$ 7,273
BBI-2000	—	—	—	—	—	796
BBI-6000	—	—	—	—	—	765
Total direct program expenses	3,391	996	8,419	1,863	9,030	8,834
Personnel and other expenses						
Salaries, benefits and stock-based compensation	795	887	1,655	1,794	3,111	2,512
Regulatory and compliance	31	139	140	487	650	265
Other expenses	12	232	34	292	169	274
Total research and development expenses	$ 4,229	$ 2,254	$10,248	$4,436	$12,960	$11,885

Brickell expects to increase its investment in research and development in order to advance sofpironium bromide through two identical Phase 3 pivotal studies in people with hyperhidrosis beginning in the fourth

quarter of 2019 by working with CROs and hiring additional research and development staff. Brickell also plans to increase the number of clinical studies and other tests for developing additional product candidates. As a result, Brickell expects that its research and development expenses will increase for the foreseeable future.

General and Administrative

General and administrative expenses consist primarily of personnel costs, including wages, benefits and share-based compensation, related to Brickell's executive, sales, marketing, finance and human resources personnel, as well as professional fees, including legal and accounting fees, and sublicensing fees.

Brickell expects its general and administrative expenses to increase in the near term, both in absolute dollars and as a percentage of revenue largely driven by hiring additional personnel to spot the growth of the business. There will also be significant additional expenses associated with operating as a public company. Such increases may include increased insurance premiums, investor relations expenses, legal and accounting fees associated with the expansion of Brickell's business and corporate governance, financial reporting expenses, and expenses related to Sarbanes-Oxley and other regulatory compliance obligations.

Total Other Income (Expense)

Interest Expense

Interest expense consists primarily of interest and amortization of debt related to the loan and security agreement (the "Loan Agreement") entered into with Hercules Capital, Inc. (the "Lender") under which Brickell borrowed $7.5 million upon the execution of the Loan Agreement on February 18, 2016. The Loan Agreement's applicable interest rate is variable based upon the greater of either (i) 9.2% and (ii) the sum of (a) the Prime Rate as reported in the Wall Street Journal minus 3.5%, plus (b) 9.2%. Payments by Brickell under the Loan Agreement were interest only until June 1, 2017, followed by equal monthly payments of principal and interest through the scheduled maturity date on September 1, 2019. The Loan Agreement is expected to be paid in full at approximately the same time as the consummation of the Merger.

Interest Income

Interest income consists primarily of interest earned on cash and cash equivalent balances. Brickell's interest income will vary each reporting period depending on its average cash balances during the period and market interest rates. Brickell expects interest income to fluctuate in the future with changes in average cash balances and market interest rates.

Change in Fair Value of Warrant Liability

In connection with the Loan Agreement, Brickell issued warrants to the Lender, which are exercisable for 26,087 shares of Series C redeemable convertible preferred stock at a per share exercise price of $11.50.

In March 2019, Brickell initiated a convertible promissory notes offering, of up to $12.5 million in principal, pursuant to which Brickell issued unsecured convertible promissory notes (the "Convertible Notes"), bearing interest at 12.00% and maturing in one year and that can be converted into shares of Series C-1 redeemable convertible preferred stock or the most senior preferred equity outstanding at the time of conversion at the option of the holder at a conversion price of $10.72 per share. In addition, the Convertible Notes will automatically convert if a qualified financing of at least $15.0 million occurs before maturity, and such mandatory conversion price will equal 80% of the effective price per share paid in the qualified financing, but not to exceed $13.40 per share. In connection with the issuance of the full $12.5 million in Convertible Notes and based on the estimated price per share of Brickell common stock implied in the Merger, Brickell intends to issue warrants at 50% coverage, to acquire 2,493,665 shares of Brickell common stock. The warrants are exercisable for a term of five years at an exercise price of $14.74 or a 10% premium to the effective price per share paid in the qualified financing. At the effective time of the Merger, outstanding Convertible Notes and accrued interest will convert into shares of Vical common stock.

Brickell accounts for the warrants as liabilities at their estimated fair value. The warrants are subject to remeasurement to fair value at each balance sheet date, and any fair value adjustments are recognized as changes in fair value of warrant liability in the statements of operations. Brickell will continue to adjust the liability for changes in fair value until the earlier of the exercise, expiration of the warrants or consummation of the Merger. At that time, the warrant liability will be adjusted to fair value in the statements of operations with the final fair value reclassified to equity.

Results of Operations

The following table sets forth certain statements of operations data for the periods indicated:

	Three Months Ended June 30,		Six Months Ended June 30,		Year Ended December 31,	
	2019	2018	2019	2018	2018	2017
	(in thousands)					
Collaboration revenue	$ 2,573	$ 373	$ 6,065	$ 5,373	$10,888	$ 7,567
Operating expenses:						
Research and development	4,229	2,254	10,248	4,436	12,960	11,885
General and administrative	1,323	1,434	3,389	3,488	6,379	5,648
Total operating expenses	5,552	3,688	13,637	7,924	19,339	17,533
Loss from operations	(2,979)	(3,315)	(7,572)	(2,551)	(8,451)	(9,966)
Total other expense, net	(675)	(237)	(662)	(474)	(785)	(1,150)
Net loss	$ (3,654)	$ (3,552)	$ (8,234)	$(3,025)	$ (9,236)	$(11,116)

Comparison of Three Months Ended June 30, 2019 and 2018

Collaboration Revenue

	Three Months Ended June 30,		Change	
	2019	2018	$	%
	(unaudited)			
	(in thousands)			
Collaboration revenue	$ 2,573	$ 373	$2,200	590%

Collaboration revenue increased by $2.2 million, or 590%, for the three months ended June 30, 2019 from the three months ended June 30, 2018. For the three months ended June 30, 2019, the revenue recognized was due to research and development activities related to the Collaboration Agreement for which Kaken provided funding.

Research and Development

	Three Months Ended June 30,		Change	
	2019	2018	$	%
	(unaudited)			
	(in thousands)			
Research and development	$ 4,229	$ 2,254	$1,975	88%

Research and development expense increased by $2.0 million, or 88%, for the three months ended June 30, 2019 from the three months ended June 30, 2018, primarily due to an increase of $2.3 million in clinical studies for sofpironium bromide, which was partially offset by a decrease of $0.2 million in other research and development expenses and a decrease of $0.1 million in regulatory and compliance fees.

General and Administrative Expenses

	Three Months Ended June 30,		Change	
	2019	2018	$	%
	(unaudited)			
	(in thousands)			
General and administrative expenses	$ 1,323	$ 1,434	$(111)	(8)%

General and administrative expenses decreased by $0.1 million, or 8%, for the three months ended June 30, 2019 from the three months ended June 30, 2018, primarily due to a decrease of $0.2 million in professional fees for legal, accounting and auditing services, which was partially offset by a $0.1 million increase in payroll expenses due to increased headcount.

Total Other Expense, Net

	Three Months Ended June 30,		Change	
	2019	2018	$	%
	(unaudited)			
	(in thousands)			
Total other expense, net	$ 675	$ 237	$438	2%

Other expense, net, increased by $0.4 million, or 2%, for the three months ended June 30, 2019 from the three months ended June 30, 2018, primarily due to an increase of $0.4 million in interest expense related to the convertible notes.

Comparison of Six Months Ended June 30, 2019 and 2018

Collaboration Revenue

	Six Months Ended June 30,		Change	
	2019	2018	$	%
	(unaudited)			
	(in thousands)			
Collaboration revenue	$ 6,065	$ 5,373	$692	13%

Collaboration revenue increased by $0.7 million, or 13%, for the six months ended June 30, 2019 from the six months ended June 30, 2018. The revenue recognized for the six months ended June 30, 2019 was due to research and development activities related to the Collaboration Agreement for which Kaken provided funding. The revenue recognized for the six months ended June 30, 2018 was primarily the result of Kaken achieving a milestone.

Research and Development

	Six Months Ended June 30,		Change	
	2019	2018	$	%
	(unaudited)			
	(in thousands)			
Research and development	$10,248	$ 4,436	$5,812	131%

Research and development expenses increased by $5.8 million, or 131%, for the six months ended June 30, 2019 from the six months ended June 30, 2018, primarily due to an increase of $6.3 million in clinical studies for sofpironium bromide, which was partially offset by a decrease of $0.3 million in regulatory and compliance fees.

General and Administrative Expenses

	Six Months Ended June 30,		Change	
	2019	2018	$	%
	(unaudited)			
	(in thousands)			
General and administrative expenses	$3,389	$3,488	$(99)	(3)%

General and administrative expenses decreased by $0.1 million, or 3%, for the six months ended June 30, 2019 from the six months ended June 30, 2018, primarily due to a decrease of $1.0 million in sub-licensing fees, which was partially offset by an increase of $0.5 million in professional fees for legal, accounting and auditing services and an increase of $0.4 million in payroll expenses due to increased headcount.

Total Other Expense, Net

	Six Months Ended June 30,		Change	
	2019	2018	$	%
	(unaudited)			
	(in thousands)			
Total other expense, net	$ 662	$ 474	$188	40%

Other expense, net, increased by $0.2 million, or 40%, for the six months ended June 30, 2019 from the six months ended June 30, 2018, primarily due to an increase of $0.4 million in interest expense related to the convertible notes, which was partially offset by a $0.2 million change in fair value of warrant liabilities.

Comparison of Years Ended December 31, 2018 and 2017

Collaboration Revenue

	Year Ended December 31,		Change	
	2018	2017	$	%
	(in thousands)			
Collaboration Revenue	$10,888	$7,567	$3,321	44%

Collaboration revenues increased by $3.3 million, or 44%, for the year ended December 31, 2018 from the year ended December 31, 2017, as a result of entering into an amendment to the Collaboration Agreement with Kaken in May 2018, which provided Brickell with funds to conduct specific clinical studies to support registration of sofpironium bromide. Revenue recognized prior to this amendment consisted of $5.0 million milestone payments in each period and in the 2017 period, prior to the adoption of ASC 606, the recognition of the up-front license payment over the term of the Collaboration Agreement.

Research and Development

	Year Ended December 31,		Change	
	2018	2017	$	%
	(in thousands)			
Research and development	$12,960	$11,885	$1,075	9%

Research and development expense increased by $1.1 million, or 9%, for the year ended December 31, 2018 from the year ended December 31, 2017, primarily due to initiating the Phase 3 Long-Term Safety Study for sofpironium bromide, as well as other studies to support registration.

General and Administrative

	Year Ended December 31,		Change	
	2018	2017	$	%
	(in thousands)			
General and administrative	$6,379	$5,648	$731	13%

General and administrative expense increased by $0.7 million, or 13%, for the year ended December 31, 2018 from the year ended December 31, 2017, primarily due to an increase of $1.0 million in professional fees for legal, accounting and auditing services, which was partially offset by a reduction of $0.5 million in sub-licensing fees.

Total Other Income (Expense), net

	Year Ended December 31,		Change	
	2018	2017	$	%
	(in thousands)			
Total other income (expense), net	$ (785)	$ (1,150)	$365	(32)%

Other expense, net increased by $0.4 million, or 32%, for the year ended December 31, 2018 from the year ended December 31, 2017, primarily due to a $0.4 million change in fair value of redeemable convertible preferred stock warrant liability.

Liquidity and Capital Resources

Brickell has incurred significant operating losses and has an accumulated deficit as a result of ongoing efforts to develop its product candidates, including conducting preclinical and clinical trials and providing general and administrative support for these operations. For the six months ended June 30, 2019 and 2018, Brickell had a net loss of $8.2 million and $3.0 million, respectively. For the years ended December 31, 2018 and 2017, Brickell had a net loss of $9.2 million and $11.1 million, respectively. As of June 30, 2019 and December 31, 2018, Brickell had an accumulated deficit of $69.3 million and $71.6 million, respectively. As of June 30, 2019 and December 31, 2018, Brickell had cash and cash equivalents of $2.1 million and $8.1 million, respectively. Since inception, Brickell has financed operations primarily through sales of equity securities, convertible promissory notes and warrants, as well as payments received under strategic collaboration and licensing agreements. Brickell also entered into a loan and security agreement (the "Loan Agreement") with Hercules Capital, Inc. (the "Lender") under which Brickell borrowed $7.5 million upon the execution of the Loan Agreement on February 18, 2016. The Loan Agreement is expected to be paid in full at approximately the same time as the consummation of the Merger.

Brickell expects to continue to incur additional substantial losses in the foreseeable future as a result of its research and development activities. Brickell believes that the cash and cash equivalents as of June 30, 2019 along with the payments and proceeds expected to be received in connection with the Merger and the Funding Agreement, will be sufficient to fund its operations for at least the next twelve months from the issuance of the unaudited financial statements, however the Merger is subject to conditions such as a shareholder vote. Additional funding will be required in the future to maintain Brickell's present and proposed research activities. There can be no assurance that additional equity or debt financing will be available on acceptable terms, if at all. If Brickell is unable to raise additional funding to meet the working capital needs in the future, Brickell will be forced to delay or reduce the scope of the research programs and/or limit or cease these operations.

Cash Flows

Since inception, Brickell has primarily used its available cash to fund expenditures related to product discovery and development activities. The following table sets forth a summary of cash flows for the periods presented:

	Six Months Ended June 30,		Year Ended December 31,	
	2019	2018	2018	2017
	(unaudited) (in thousands)			
Net cash provided by (used in) operating activities	$(9,502)	$13,029	$ 3,967	$(9,408)
Net cash used in investing activities	(4)	(8)	(12)	(11)
Net cash provided by (used in) financing activities	3,518	(492)	(1,287)	6,364
Net increase (decrease) in cash and cash equivalents	$(5,988)	$12,529	$ 2,668	$(3,055)

Cash Flows for the Six Months Ended June 30, 2019 and 2018

Operating Activities

Net cash used in operating activities of $9.5 million during the six months ended June 30, 2019 decreased compared to cash provided by operating activities of $13.0 million during the same period in the prior year primarily due to $20.6 million in milestone and research and development funding received from Kaken during the six months ended June 30, 2018, as well as changes in current liabilities.

Investing Activities

There were no significant investing activities during the six months ended June 30, 2019 or 2018.

Financing Activities

Net cash provided by financing activities of $3.5 million during the six months ended June 30, 2019 increased compared to net cash used in financing activities of $0.5 million during the prior year. The increase was primarily related to proceeds of $5.1 million from the issuance of convertible promissory notes, partially offset by payments of $1.6 million towards the note payable pursuant to the Loan Agreement.

Net cash used by financing activities of $0.5 million during the six months ended June 30, 2018 was primarily related to payments towards the note payable pursuant to the Loan Agreement.

Cash Flows for the Year Ended December 31, 2018 and 2017

Operating Activities

Net cash provided by operating activities of $4.0 million during the year ended December 31, 2018 was primarily related to an increase in deferred revenue of $9.7 million due to timing of payments received from the Collaboration Agreement, an increase in accounts payable of $2.8 million, and non-cash charges for stock-based compensation of $0.7 million and amortization of debt discounts and financing costs of $0.5 million, which was partially offset by a net loss of $9.2 million.

Net cash used in operating activities of $9.4 million during the year ended December 31, 2017 consisted primarily of a net loss of $11.1 million, offset by non-cash charges for stock-based compensation of $0.9 and amortization of debt discounts and financing costs of $0.4 million. Changes in operating assets and liabilities were unfavorable to cash flows from operations primary due to a decrease in deferred revenue of $2.6 million, and a partial increase in accounts payable and accrued expenses of $1.8 million.

Investing Activities

There were no significant investing activities during the year ended December 31, 2018 or 2017.

Financing Activities

Net cash used in financing activities of $1.3 million during the year ended December 31, 2018 was primarily related to principal payments made on notes payable of $1.3 million.

Net cash provided by financing activities of $6.4 million during the year ended December 31, 2017 was primarily related to proceeds from the issuance of redeemable convertible preferred stock, net of issuance costs of $7.8 million, which was partially offset by principal payments made on notes payable of $1.4 million.

Contractual Obligations and Commitments

The following is a summary of the contractual obligations as of June 30, 2019 and the effect such obligations are expected to have on the liquidity and cash flows in future periods:

	Total	Less than 1 year	1-3 Years	3-5 Years	More than 5 Years
			(unaudited) (in thousands)		
Note payable	$3,869	$3,869	$—	$ —	$ —
Operating lease commitments	207	83	124	$ —	$ —
Total	$4,076	$3,952	$124	$ —	$ —

Under various agreements, including the Funding Agreement, Brickell will be required to make milestone payments and pay royalties and other amounts to third parties, including NovaQuest. Brickell has not included any contingent payment obligations, such as milestones or royalties, in the table above as the amount, timing and likelihood of such payments are not known.

Brickell enters into contracts in the normal course of business with CROs for clinical trials, preclinical research studies and testing, chemistry and manufacturing, and other services and products for operating purposes. These contracts generally provide for termination upon notice, and therefore Brickell believes that the non-cancelable obligations under these agreements are not material.

Off-Balance Sheet Arrangements

As of June 30, 2019 and December 31, 2018, Brickell had not been involved in any materialoff-balance sheet arrangements, as defined in the rules and regulations of the SEC.

Critical Accounting Policies and Estimates

Brickell has prepared the financial statements in accordance with U.S. GAAP. The preparation of these financial statements requires Brickell to make estimates, assumptions and judgments that affect the reported amounts of assets, liabilities, expenses and related disclosures at the date of the financial statements. On an ongoing basis, management evaluates its critical estimates, including those related to revenue recognition, accrued research and development expenses, convertible notes, redeemable convertible preferred stock, warrants and stock-based compensation. Brickell bases its estimates on its historical experience and also on assumptions that it believes are reasonable; however, actual results differ materially from these estimates under different assumptions or conditions.

For information on Brickell's significant accounting policies, please refer Note 2 to Brickell's financial statements.

Revenue Recognition

Brickell currently recognizes revenue generated primarily from licensing fees received under Brickell's Collaboration Agreement with Kaken. The terms of the agreements include non-refundable upfront fees, funding of research and development activities, payments based upon achievement of milestones, and royalties on net product sales.

Under Accounting Standards Update ("ASU") No. 2014-09, Revenue from Contracts with Customers ("Topic 606"), an entity recognizes revenue when its customer obtains control of promised goods or services, in an amount that reflects the consideration which the entity expects to receive in exchange for those goods or services. To determine revenue recognition for arrangements that an entity determines are within the scope of Topic 606, the entity performs the following five steps: (i) identify the promised goods or services in the contract with a customer; (ii) identify the performance obligations in the contract; (iii) determine the transaction price, including the constraint on variable consideration; (iv) allocate the transaction price to the performance obligations in the contract; and (v) recognize revenue when or as the entity satisfies a performance obligation.

At contract inception, Brickell assesses the goods or services promised within each contract, determines those that are performance obligations, and assesses whether each promised good or service is distinct. Brickell then recognizes as revenue the amount of the transaction price that is allocated to the respective performance obligation when or as the performance obligation is satisfied. Brickell utilizes judgment to assess the nature of the performance obligation to determine whether the performance obligation is satisfied over time or at a point in time and, if over time, the appropriate method of measuring progress. Brickell evaluates the measure of progress each reporting period and, if necessary, adjusts the measure of performance and related revenue recognition.

Licenses of intellectual property

If a license to Brickell's intellectual property is determined to be distinct from the other performance obligations identified in the arrangement, Brickell recognizes revenues from non-refundable, up-front fees allocated to the license when the license is transferred to the customer, and the customer can use and benefit from the license.

Milestone payments

At the inception of each arrangement that includes milestone payments, Brickell evaluates whether the milestones are considered probable of being achieved and estimates the amount to be included in the transaction price using the most likely amount method. If it is probable that a significant revenue reversal would not occur, the value of the associated milestone (such as a regulatory submission) is included in the transaction price, which is then allocated to each performance obligation. Milestone payments that are not within the control of Brickell or its partner, such as approvals from regulators, are not considered probable of being achieved until those approvals are received. At the end of each subsequent reporting period, Brickell re-evaluates the probability of achievement of such development milestones and, if necessary, adjusts its estimate of the overall transaction price. Any such adjustments are recorded on a cumulative catch-up basis, which would affect license, collaboration, and other revenues and earnings in the period of adjustment and in future periods through the end of the performance obligation period.

Royalties

For arrangements that include sales-based royalties, including milestone payments based on the level of sales, and where the license is deemed to be the predominant item to which the royalties relate, Brickell recognizes revenue at the later of (a) when the related sales occur, or (b) when the performance obligation to which some or all of the royalty has been allocated has been satisfied (or partially satisfied). To date, Brickell has not recognized any royalty revenue resulting from any of its licensing arrangements.

For a complete discussion of accounting for collaborative licensing agreements, see Note 2, to Brickell's financial statements. Brickell's revenue to date has been generated primarily from collaboration and licensing fees received under its Collaboration Agreement with Kaken.

Research and Development

Research and development costs are charged to expense when incurred and consist of costs incurred for independent and collaborative research and development activities. The major components of research and development costs include formulation development, clinical studies, clinical manufacturing costs, salaries and employee benefits, toxicology studies, allocations of various overhead and occupancy costs. Research costs typically consist of applied research, preclinical, and toxicology work. Pharmaceutical manufacturing development costs consist of product formulation, chemical analysis, and the transfer and scale up of manufacturing at contract manufacturers.

As part of the process of recording research and development costs, Brickell is required to estimate and accrue expenses, the largest of which are research and development expenses. This process involves the following:

- communicating with appropriate internal personnel to identify services that have been performed on Brickell's behalf and estimating the level of service performed and the associated cost incurred for the service when Brickell has not yet been invoiced or otherwise notified of actual cost;
- estimating and accruing expenses in Brickell's financial statements as of each balance sheet date based on facts and circumstances known to Brickell at the time; and
- periodically confirming the accuracy of Brickell's estimates with service providers and making adjustments, if necessary.

Examples of estimated research and development expenses that Brickell accrues include:

- payments to CROs in connection with preclinical and toxicology studies and clinical trials;
- payments to investigative sites in connection with clinical trials;
- payments to CMOs in connection with the production of clinical trial materials; and
- professional service fees for consulting and related services.

Brickell bases its expense accruals related to clinical trials on Brickell's estimates of the services received and efforts expended pursuant to contracts with multiple research institutions and CROs that conduct and manage clinical trials on Brickell's behalf. The financial terms of these agreements vary from contract to contract and may result in uneven payment flows. Payments under some of these contracts depend on factors such as the successful enrollment of patients and the completion of clinical trial milestones. In accruing costs, Brickell estimates the time period over which services will be performed and the level of effort to be expended in each period. If Brickell does not identify costs that Brickell has begun to incur or if Brickell underestimates or overestimates the level of services performed or the costs of these services, Brickell's actual expenses could differ from estimates.

To date, Brickell has not experienced significant changes in its estimates of accrued research and development expenses after a reporting period. However, due to the nature of estimates, Brickell cannot assure that Brickell will not make changes to its estimates in the future as Brickell becomes aware of additional information about the status or conduct of its clinical trials and other research activities.

Stock-Based Compensation

Stock options granted to employees and non-employees under the Brickell's stock option plan are accounted for by using a fair value based method. Stock-based payments to employees and non-employees are measured

based on their fair values at the date of grant, net of forfeitures, and are recorded on a straight-line basis over the requisite employee service period. Brickell uses the Black-Scholes option pricing model to estimate the fair value of stock options at the grant date. For performance-based awards where the vesting of the options may be accelerated upon the achievement of certain milestones, vesting and the related stock-based compensation is recognized as an expense when it is probable the milestone will be met.

When awards are modified, Brickell compares the fair value of the affected award measured immediately prior to modification to its value after modification. To the extent that the fair value of the modified award exceeds the original award, the incremental fair value of the modified award is recognized as compensation on the date of modification for vested awards, and over the remaining vesting period for unvested awards.

One of the inputs in the Black-Scholes option pricing model is the estimated fair value of common stock. Because there has been no public market for the Brickell's common stock, the fair value is determined by a third-party valuation firm at each balance sheet date by considering a number of objective and subjective factors, including valuation of comparable companies, sales of capital stock to unrelated third parties, operating and financial performance, the lack of liquidity of capital stock, and general and industry specific economic outlook, among other factors. The valuations are prepared in accordance with methodologies outlined in the American Institute of Certified Public Accountants Practice Aid, Valuation of Privately-Held-Company Equity Securities Issued as Compensation (the "Practice Aid").

There are significant judgments and estimates inherent in the determination of these valuations. These judgments and estimates include assumptions regarding Brickell's future performance, including the successful completion of future clinical trials and the time to liquidity, as well as the determination of the appropriate valuation methods at each valuation date. If different assumptions were used, Brickell's valuation could have been different. The foregoing valuation methodologies are not the only methodologies available, and they will not be used to value the combined organization's common stock if the merger is completed. Accordingly, stockholders and investors should not place undue reliance on the foregoing valuation methodologies as an indicator of the combined organization's future stock price.

Redeemable Convertible Preferred Stock

Redeemable convertible preferred stock is classified as a mezzanine instrument outside of the Brickell's capital accounts. Accretion of redeemable convertible preferred stock includes the accrual of dividends on and accretion of issuance costs of the Brickell's redeemable convertible preferred stock. The carrying values of the redeemable convertible preferred stock are increased by periodic accretion or reduction to their respective redemption values based on the current estimated redemption value. These increases or decreases are recorded as charges or recoveries against additional paid-in capital balance until the additional paid-in capital balance is reduced to zero. At that time, additional accretion adjustments are recorded to accumulated deficit.

Convertible Debt

From time to time, Brickell enters into debt financing transactions whereby such convertible debt contains conversion features into preferred or common shares. Brickell accounts for such instruments under ASC, 470-20 "Debt with Conversion and Other Options" which requires companies to bifurcate conversion options from their host instruments and account for them as free standing derivative financial instruments according to certain criteria. Brickell accounts for instruments issued with convertible debt that have been determined to be free standing derivative financial instruments or embedded derivatives in accordance with ASC 815 "Derivatives and Hedging". Under ASC 815, a portion of the proceeds received upon the issuance of the convertible debt is allocated to the fair value of the derivative and a corresponding discount is recorded on the convertible debt. The derivative is subsequently marked to market at each reporting date based on current fair value, with the changes in fair value reported in the statements of operations.

During the six months ended June 30, 2019, Brickell issued an aggregate of $5.1 million of convertible debt and warrants to investors containing a redemption feature, which was deemed an embedded derivative and required Brickell to bifurcate and separately account for the embedded derivative as a liability. The warrants also required fair value accounting and were accounted as a liability. The discount on the debt is amortized through interest expense based on the effective interest method.

BRICKELL'S MANAGEMENT

The following table provides information regarding the expected directors and executive officers of the combined company following the closing of the Merger:

Name	Age	Position
Reginald L. Hardy	61	Co-Founder and Chairman of the Board
George Abercrombie	64	Director
William Ju, M.D.	62	Director
Dennison T. Veru	58	Director
Vijay B. Samant	66	Director
Gary A. Lyons	67	Director
Robert B. Brown	58	Chief Executive Officer and Director
Andrew D. Sklawer	35	Co-Founder, Chief Operating Officer and Secretary
R. Michael Carruthers	62	Chief Financial Officer
Deepak Chadha	49	Chief Research & Development Officer
Jose Breton	30	Controller and Chief Accounting Officer
David McAvoy	57	General Counsel

Board of Directors

Reginald L. Hardy, Co-Founder and Chairman of the Board

Mr. Hardy has over 30 years of experience in serving as the Chief Executive Officer and/or the President for publicly-traded and privately-held pharmaceutical companies. Prior to co-founding Brickell and serving as its Chief Executive Officer from inception in 2009 through 2018, Mr. Hardy was the co-founder and President of Concordia Pharmaceuticals, Inc., an oncology drug development company acquired by Kadmon Corporation in 2011. Mr. Hardy was co-founder and served as president of SANO Corporation, a pharmaceutical company focused on the development of novel transdermal drug delivery systems that was acquired by Elan Corporation in 1998, from 1992 to 1998. Prior to SANO, Mr. Hardy served as the president of the generics group at IVAX Corporation, a pharmaceutical company focused on the development and manufacture of medicines for pain, respiratory disease, oncology and women's health. Mr. Hardy has also held various corporate roles with Hoechst-Roussel Pharmaceuticals, Inc. and Key Pharmaceuticals, Inc. Mr. Hardy earned his B.S. degree in pharmacy from the University of North Carolina—Chapel Hill and M.B.A. from UNC—Greensboro. Mr. Hardy's management experience as the Chief Executive Officer of Brickell for nine years and his past development of medicines and drug delivery systems provide him with the qualifications and skill to serve on the combined company's board of directors.

George B. Abercrombie, Director

Mr. Abercrombie served as Senior Vice President and Chief Commercial Officer of Innoviva, Inc., a royalty management company focused on respiratory assets partnered with Glaxo Group Limited from 2014 to 2018. Mr. Abercrombie joined the Brickell Board of Directors in 2010. Mr. Abercrombie served as the President and Chief Executive Officer of Hoffmann-La Roche, Inc. from 2001 to 2009 where he was responsible leading Roche's North American Pharmaceutical Operations including the United States and Canada. Prior to joining Roche, Mr. Abercrombie served as Senior Vice President of U.S. Commercial Operations at Glaxo Wellcome Inc, with responsibilities encompassing pharmaceutical sales and marketing, electronic commerce, the U.S. managed care system, disease management, business planning and development, and late-stage clinical drug studies. He joined Glaxo Wellcome as Vice President and General Manager of the Glaxo Pharmaceuticals Division in 1993 following 10 years at Merck & Co., Inc., where he held a broad range of positions in sales, marketing, executive sales management and business development. Mr. Abercrombie serves on the Boards of Directors of Biocryst Pharmaceuticals, Hessian Pharmaceuticals, and the North Carolina GlaxoSmithkline

Foundation. As an Adjunct Professor at Duke University's Fuqua School of Business, he teaches second year MBA candidates in Fuqua's Health Sector Curriculum. Mr. Abercrombie received a B.S. degree in Pharmacy from the University of North Carolina—Chapel Hill. He also earned an M.B.A. from Harvard University. Mr. Abercrombie's pharmaceuticals experience provides him with the qualification and skill to serve on the combined company's board of directors.

William Ju, Director

Dr. Ju is a board-certified dermatologist and has over 20 years of biopharmaceutical experience in a wide variety of therapeutic areas, including dermatology. Since 2012, Dr. Ju has served as the President and a Founding Trustee of Advancing Innovation in Dermatology, Inc., a not-for-profit organization focused on the development of new dermatologic solutions for patients and healthcare providers. Dr. Ju joined the Brickell Board of Directors in 2014. Dr. Ju has served as President and Chief Executive Officer of Follica, Inc., a biotechnology company that develops a treatment system for hair loss in adults, from 2009 to 2012 and Chief Operating Officer at PTC Therapeutics, Inc, a pharmaceutical company focused on the discovery, development and commercialization of medicines for the treatment of rare disorders from 2003 to 2009. In addition, he has held executive positions at Pharmacia Corporation/Pfizer, Inc. Merck & Co., Inc., and Hoffmann-La Roche, Inc. in a broad spectrum of product development functions. Dr. Ju served as project leader for SUTENT®, introduced CANCIDAS® into humans, and was part of the product development teams for CRIXIVAN® and TRANSLARNA™. Dr. Ju began his pharmaceutical career at Hoffmann-La Roche where he was a clinical leader for the development of dermatology compounds. Dr. Ju received his M.D. from the University of Pennsylvania School of Medicine and his A.B. from Princeton University. Mr. Ju's dermatology experience provides him with the qualification and skill to serve on the combined company's board of directors.

Dennison (Dan) T. Veru, Director

Mr. Veru has served as Chief Investment Officer and Co-Chairman of Palisade Capital Management, an independent asset management firm, since 2000. Mr. Veru has oversight responsibilities for all the investment strategies at Palisade Capital Management involving publicly traded securities. Mr. Veru joined the Brickell Board of Directors in 2014. From 1992 through 1999, Mr. Veru was the President and Director of Research at Award Asset Management and helped oversee the firm's growth. Prior to Awad, Mr. Veru worked at Drexel Burnham Lambert and later at Smith Barney Harris Upham where he held a variety of analytical roles. In addition to his professional responsibilities, Mr. Veru is a member of the Board of Overseers of the St. Lukes and Roosevelt Hospital, a member of the finance committee of the Dwight-Englewood School, and a member of the board of directors of the McCarton School for Autistic Children. Mr. Veru graduated from Franklin & Marshall College. Mr. Veru's public company investment experience provides him with the qualification and skill to serve on the combined company's board of directors.

Vijay B. Samant, Director

Mr. Samant served as President and Chief Executive Officer of Vical since November 2000. Prior to joining Vical, he had 23 years of diverse U.S. and international sales, marketing, operations, and business development experience with Merck. From 1998 to 2000, he was Chief Operating Officer of the Merck Vaccine Division. From 1990 to 1998, he served in the Merck Manufacturing Division as Vice President of Vaccine Operations, Vice President of Business Affairs and Executive Director of Materials Management. Mr. Samant holds a master's degree in management studies from the Sloan School of Management at MIT, a master's degree in chemical engineering from Columbia University, and a bachelor's degree in chemical engineering from the University of Bombay, University Department of Chemical Technology. Mr. Samant was a member of the board of directors of AmpliPhi Biosciences Corporation from 2015 to 2019, a member of the board of directors of Raptor Pharmaceutical Corporation from 2011 to 2014, and a member of the board of directors for BioMarin Pharmaceutical Inc. from 2002 to 2004. Mr. Samant was a Director of the Aeras Global TB Vaccine Foundation from 2001 to 2010, a member of the Board of Trustees for the National Foundation for Infectious Diseases from

2003 to 2012, and a member of the Board of Trustees for the International Vaccine Institute in Seoul, Korea from 2008 to 2012. Mr. Samant's extensive expertise in biopharmaceutical development and product commercialization, as well as his strong technical and entrepreneurial experience in diverse fields provide him with the qualifications and skills to serve on the combined company's board of directors.

Gary A. Lyons, Director

Mr. Lyons held various positions with Neurocrine Biosciences, Inc., a biopharmaceutical company, for 16 years through January 2008, including President, Chief Executive Officer and member of the board of directors. From 1983 to 1993, Mr. Lyons held various executive positions at Genentech, Inc., a biotechnology company, including Vice President of Business Development, Vice President of Sales, and Director of Sales and Marketing. Mr. Lyons presently serves as a member of the board of directors of Neurocrine Biosciences, Inc. and Novus Therapeutics, Inc. (Nasdaq: NVUS) and is chairman of the board of directors of Rigel Pharmaceuticals, Inc. and Retrophin, Inc., all of which are publicly held biotechnology companies. In addition, Mr. Lyons served previously on the board of directors of PDL BioPharma, Facet Biotech Corporation, KaloBios Pharmaceuticals, Inc. and NeurogesX, Inc. Mr. Lyons holds a bachelor's degree in marine biology from the University of New Hampshire and an M.B.A. degree from Northwestern University, JL Kellogg Graduate School of Management. Mr. Lyons' extensive managerial experience, including his role as a Chief Executive Officer and other executive level positions at public and private companies in the biotechnology sector provide him with the qualifications and skills to serve on the combined company's board of directors.

Robert B. Brown, Chief Executive Officer and Director

Mr. Brown joined Brickell as its Chief Executive Officer and Director in January 2019 after having spent over 30 years at Eli Lilly and Company, where he most recently served as the Chief Marketing Officer and Senior Vice President of marketing from 2009 through 2018. As Chief Marketing Officer, Mr. Brown was responsible for building and leading marketing capabilities across Eli Lilly and Company's pharmaceutical business units, including diabetes, oncology, emerging markets and Lilly-BioMedicines, a business area focused on treatments for debilitating diseases. Prior to his role as Chief Marketing Officer, Mr. Brown held the position of Vice President and Chief Marketing Officer for Lilly USA from 2007 to 2009, in which he partnered with the business units to ensure Eli Lilly and Company continued to develop industry leading marketing capabilities, streamline and improve marketing processes, and transform marketing by building a consumer marketing center of excellence. From 2003 to 2007, Mr. Brown was the executive director of marketing for the Intercontinental region, including responsibility for Europe. As the head marketer for Eli Lilly and Company's international operations, Mr. Brown was responsible for the marketing of all Eli Lilly and Company's products outside the United States. Mr. Brown joined Eli Lilly and Company in 1985, after receiving a B.S. in economics from DePauw University and a M.S. in business administration from Indiana University. Mr. Brown currently serves on the board of trustees of Franklin College. Mr. Brown's product development and management experience provides him with the qualifications and skill to serve on the combined company's board of directors.

Executive Officers

Andrew D. Sklawer, Co-Founder, Chief Operating Officer and Secretary

Mr. Sklawer has served as Brickell's Chief Operating Officer and Secretary since its inception in 2009 and is one of its founders. Prior to co-founding Brickell, Mr. Sklawer served as the Head of Operations at Concordia Pharmaceuticals, Inc., an oncology drug development company that was acquired by Kadmon Corporation in 2011. Prior to joining Concordia, Mr. Sklawer held various positions at Verid, Inc., a developer of security technology prior to its acquisition by EMC Corporation. Mr. Sklawer holds a B.A. in marketing from the University of Florida and earned his M.B.A from the University of Miami. Mr. Sklawer currently serves as a board member for StartUp FIU, a Florida International University platform that supports researchers, inventors, innovators, and entrepreneurs to conceive, launch, and scale solutions, is a member of the Advisory Committee of Advancing Innovation in Dermatology Accelerator Fund and is a board member of the Colorado BioScience Association.

R. Michael Carruthers, Chief Financial Officer

Mr. Carruthers has served as Brickell's Chief Financial Officer since 2017. He has over 20 years of experience serving as the Chief Financial Officer for publicly-traded pharmaceutical companies. Mr. Carruthers previously served as Interim President of Nivalis Therapeutics (Nasdaq: NVLS), a pharmaceutical company that focuses on the discovery and development of product candidates for cystic fibrosis, beginning in January 2017 until December 2017 and Chief Financial Officer and Secretary since February 2015. From 1998 to 2015, he served as Chief Financial Officer for Array BioPharma (Nasdaq: ARRY), a biopharmaceutical company that focuses on the discovery, development, and commercialization of small molecule drugs to treat patients with cancer and other diseases. Prior to this, his professional experience included serving as Chief Financial Officer of Sievers Instrument, treasurer and controller for the Waukesha division of Dover Corporation and accountant with Coopers & Lybrand. Mr. Carruthers received a B.S. in accounting from the University of Colorado and a M.B.A. from the University of Chicago.

Deepak Chadha, Chief Research & Development Officer

Mr. Chadha has served as Brickell's Chief Research & Development Officer since 2018 and previously served as Brickell's Chief Regulatory, Pre-clinical and Quality Compliance Officer from 2016 to 2018. Prior to joining Brickell, Mr. Chadha served as Vice President, Global Regulatory Affairs at Suneva Medical, a medical technology company that develops, manufactures, and commercializes aesthetic products for the dermatology, plastic, and cosmetic surgery markets, from 2014 to 2016. During his time at Suneva Medical, Mr. Chadha led the regulatory approval for BELLAFILL® dermal filler for acne scar correction and supported the company's commercial products life cycle management. Prior to joining Suneva, Mr. Chadha worked at Allergan (f.k.a. KYTHERA) from 2007 to 2014, where Mr. Chadha led the development of their product, KYBELLA®, from an early clinical phase to an NDA stage, and also supported the ex-U.S. regulatory activities. Mr. Chadha also served as Vice President of Global Regulatory Affairs at Allergan Medical (f.k.a. Inamed Corporation) from 2004 to 2007, where he assisted in building the organization's Global Regulatory Affairs department, and was involved with the approval for JUVEDERM®, Bioenterics®, LAP-BAND® and Silicone gel-filled breast implants. Mr. Chadha holds a B.S. in pharmaceutical sciences from Berhampur University in Orissa, India, an M.S. in pharmaceutics from Hamdard University in New Delhi, India, and an M.B.A. in international business from California State University, Dominguez Hills.

Jose Breton, Controller and Chief Accounting Officer

Mr. Breton has served as Brickell's Controller and Chief Accounting Officer since 2013. Prior to joining Brickell, Mr. Breton was an auditor from 2014 to 2015 at Deloitte LLP. Mr. Breton began his career in 2012 as a Client Manager at Global Resource Partners, Inc., an accounting and business advisory firm. In this role, Mr. Breton had overall responsibility for clients' financial reporting, planning and budgeting, systems of internal controls, corporate and benefits accounting and administration of stock option activity. Mr. Breton holds a B.B.A. degree in Accounting and Finance and a Master's Degree in Taxation from the University of Miami.

David McAvoy, General Counsel

Mr. McAvoy has served as Brickell's General Counsel since 2019. He previously served as General Counsel, Vice President and Chief Compliance Officer for Endocyte, Inc., a nuclear medicine and oncology biotech, from 2017 to 2018. Prior to joining Endocyte Inc., Mr. McAvoy was at Eli Lilly and Company for 27 years serving in various positions, including as General Counsel of Lilly Emerging Markets, and most recently, in an executive management business role running strategic alliances for the food animal production group at Eli Lilly and Company's former Elanco Animal Health subsidiary. While at Eli Lilly and Company, Mr. McAvoy was lead counsel for several medicines, including Prozac® for depression, Gemzar® for pancreatic and lung cancers, and ReoPro®, one of the first interventional cardiology agents. Mr. McAvoy earned a J.D. and M.S. in environmental science from Indiana University and a B.A. in political science from the University of Notre Dame. He serves on the board of directors for The Villages of Indiana, Inc., championing families for abandoned and abused children.

Independence of the Board of Directors

Under the Nasdaq listing standards, a majority of the members of the combined company's board of directors must qualify as "independent," as affirmatively determined by the board of directors. The board of directors has affirmatively determined that all of the expected directors, except for Mr. Hardy and Mr. Brown, are independent directors within the meaning of the applicable Nasdaq listing standards. All members of the combined company's audit committee, compensation committee (except for Mr. Hardy) and nominating and corporate governance committee will be independent directors under the applicable Nasdaq listing standards.

Board Leadership

The Chairman position is a non-executive position and is separate from the position of Chief Executive Officer. Separating these positions is expected to allow the Chief Executive Officer of the combined company to focus on its day-to-day business, while allowing the Chairman to lead the board of directors in its fundamental role of providing advice to and independent oversight of management. The board of directors believes that having separate positions, with an independent, non-executive director serving as Chairman, is the appropriate leadership structure for the combined company.

Committees of Our Board of Directors

The combined company's board of directors will establish an audit committee, a compensation committee and a nominating and corporate governance committee. The expected composition and responsibilities of each committee are described below. Members will serve on these committees until their resignations or until otherwise determined by the board of directors. The audit committee, compensation committee and nominating and governance committee each will operate under a written charter adopted by the board of directors, all of which will be available on the company's website.

Audit Committee

The combined company's audit committee is expected to be comprised of three members. Dennison Veru is expected to be the chairperson of the audit committee, and George Abercrombie and Vijay Samant will be members. Each member of the audit committee will meet the requirements for independence under current Nasdaq listing standards and SEC rules and regulations and will be financially literate as required by Nasdaq listing standards. In addition, the board of directors has determined that Dennison Veru is an "audit committee financial expert" as defined in Item 407(d)(5)(ii) of Regulation S-K promulgated under the Securities Act. This designation does not impose any duties, obligations or liabilities that are greater than those generally imposed on members of the audit committee and the board of directors.

Among other functions, the combined company's audit committee will evaluate the performance of and assesses the qualifications of the independent registered public accounting firm; engage the independent registered public accounting firm; determine whether to retain or terminate the existing independent registered public accounting firm or to appoint and engage a new independent registered public accounting firm; confer with senior management and the independent registered public accounting firm regarding the adequacy and effectiveness of internal control over financial reporting; establish procedures, as required under applicable law, for the receipt, retention and treatment of complaints received regarding accounting, internal accounting controls or auditing matters and the confidential and anonymous submission by employees of concerns regarding questionable accounting or auditing matters; review and approve the retention of the independent registered public accounting firm to perform any proposed permissible non-audit services; monitor the rotation of partners of the independent registered public accounting firm on the audit engagement team as required by law; review annually the audit committee's written charter and the committee's performance; review the financial statements to be included in the Annual Report on Form 10-K; and discuss with management and the independent registered public accounting firm the results of the annual audit and the results in the quarterly financial statements. The audit committee will have the authority to retain special legal, accounting or other advisors or consultants as it deems necessary or appropriate to carry out its duties.

Compensation Committee

The combined company's compensation committee is expected to be comprised of three members. Reginald Hardy is expected to be the chairperson of the compensation committee, and Dennison Veru and Gary Lyons will be members. The composition of the compensation committee will meet the requirements for independence under current Nasdaq listing standards and SEC rules and regulations.

The combined company's compensation committee will oversee the overall compensation strategy and related policies, plans and programs. Among other functions, the compensation committee will determine and approve the compensation and other terms of employment of the Chief Executive Officer; determine and approve the compensation and other terms of employment of the other executive officers, as appropriate; review and recommend to the board of directors the type and amount of compensation to be paid to board members; recommend to the board of directors the adoption, amendment and termination of the Amended and Restated Stock Incentive Plan (the "Stock Incentive Plan"); administer the Stock Incentive Plan; and review and establish appropriate insurance coverage for the directors and executive officers. The compensation committee will have the authority to retain special legal, accounting or other advisors or consultants as it deems necessary or appropriate to carry out its duties.

Nominating and Corporate Governance Committee

The combined company's nominating and corporate governance committee is expected to be comprised of three members. George Abercrombie is expected to be the chairperson of the nominating and corporate governance committee, and Gary Lyons and William Ju will be members. The composition of the nominating and corporate governance committee will meet the requirements for independence under current Nasdaq listing standards and SEC rules and regulations.

The combined company's nominating and corporate governance committee will be responsible for identifying, reviewing and evaluating candidates to serve on the board of directors; reviewing and evaluating incumbent directors and the performance of the board of directors; recommending candidates to the board of directors for election; making recommendations regarding the membership of the committees of the board of directors; assessing the performance of the board of directors, including its committees; and developing a set of corporate governance guidelines for the combined company.

Director Liability and Indemnification

The combined company purchased directors' and officers' liability insurance and will enter into indemnification arrangements with each of its directors and executive officers. The indemnification agreements and the combined company's amended and restated certificate of incorporation and bylaws will require it to indemnify the directors and officers to the fullest extent permitted by Delaware law.

Corporate Governance Guidelines

The combined company's board of directors will adopt Corporate Governance Guidelines that set forth expectations for directors, director independence standards, board committee structure and functions and other policies for the governance of the combined company in accordance with Nasdaq's listing standards. The Corporate Governance Guidelines will be made available on the company's website.

Code of Business Conduct and Ethics

The combined company's board of directors will adopt a Code of Business Conduct and Ethics that applies to all board members, officers and employees. The Code of Business Conduct and Ethics, and any applicable waivers or amendments, will be made available on the company's website.

RELATED PARTY TRANSACTIONS OF DIRECTORS AND EXECUTIVE OFFICERS OF THE COMBINED COMPANY

Described below are any transactions occurring since January 1, 2018, and any currently proposed transactions to which either Vical or Brickell was a party and in which:

- The amounts involved exceeded or will exceed $120,000; and
- A director, executive officer, holder of more than 5% of the outstanding capital stock of Vical or Brickell, or any member of such person's immediate family had or will have a direct or indirect material interest.

Vical Transactions

Change in Control and Severance Benefits Arrangements

See "*The Merger—Interests of the Vical Directors and Executive Officers in the Merger*" for a description of the terms of the change in control and severance benefits arrangements.

Director and Executive Officer Compensation

For information regarding the compensation of Vical's directors and executive officers, refer to the information under Item 11 of Part III of the Vical 10-K, which is incorporated by reference into this proxy statement.

Brickell Transactions

Convertible Notes and Warrants Offering

In March 2019, Brickell initiated a convertible promissory notes and warrants offering pursuant to which Brickell expects to issue up to an aggregate of $12.5 million unsecured convertible promissory notes that will mature upon the consummation of the Merger. The table below sets forth, as of the date of this proxy statement, based on the estimated price per share of Brickell common stock implied in the Merger and without giving effect to the Reverse Split, for each holder of Brickell convertible promissory notes that is one of Brickell's directors, executive officers or 5% stockholders and their respective affiliates, the principal value of Brickell convertible promissory notes held and the number of shares of the combined company's common stock into which such notes are convertible upon consummation of the Merger. Sales to employees, directors, and executives are made on the same terms and at the same price as sales to third parties.

Name	Convertible Notes ($)	Shares of Common Stock Issuable (#)
George Abercrombie	50,000	50,087
Robert B. Brown	896,899(1)	898,494(1)
Andrew D. Sklawer	45,000	45,079
D&S Entrepreneurial Fund, LLC(2)	1,400,000	1,402,493
Dennison Veru	50,000	50,087
David McAvoy	200,000	200,356
Reginald Hardy	350,000(3)	350,622(3)
Deepak Chadha	100,000	100,179
Jose Breton	15,000	15,028

(1) Includes $448,450 aggregate principal amount and 449,247 shares invested by Robert B. Brown Grantor Retained Annuity Trust I and $448,449 aggregate principal amount and 449,247 shares invested by Robert. B. Brown Grantor Retained Annuity Trust II. Robert B. Brown is the beneficiary of the Robert B. Brown Grantor Retained Annuity Trust I and the Robert B. Brown Grantor Retained Annuity Trust II.

(2) D&S Entrepreneurial Fund, LLC is a 5% stockholder of Brickell.

(3) Includes $300,000 aggregate principal amount and 300,535 shares invested by Hardy Capital, Ltd. and $50,000 aggregate principal amount and 50,087 shares invested by Manuela Hardy.

The table below sets forth, as of the date of this proxy statement, for each holder of warrants to purchase shares of the Brickell's common stock that is one of Brickell's directors, executive officers or 5% stockholders and their respective affiliates, the Brickell warrants held as of the date of this proxy statement.

Name	Warrants Held (#)	Weighted Average Exercise Price ($)
George Abercrombie	22,977	1.50
Robert B. Brown	412,156(1)	1.50
Andrew D. Sklawer	20,679	1.50
D&S Entrepreneurial Fund, LLC	643,347	1.50
Dennison Veru	22,977	1.50
David McAvoy	91,907	1.50
Reginald Hardy	160,839(2)	1.50
Deepak Chadha	45,955	1.50
Jose Breton	6,894	1.50

(1) Includes 206,078 warrants invested by Robert B. Brown Grantor Retained Annuity Trust I and 206,078 warrants invested by Robert. B. Brown Grantor Retained Annuity Trust II.

(2) Includes 137,862 warrants invested by Hardy Capital, Ltd and 22,977 warrants invested by Manuela Hardy.

Executive Compensation and Employment Arrangements

Please see "*Brickell's Executive Compensation*" for information on compensation arrangements with Brickell's executive officers.

Director and Officer Indemnification and Insurance

Brickell has entered into indemnification arrangements with its directors and the combined company intends to purchase directors' and officers' liability insurance. Effective upon the consummation of the Merger, the combined company intends to enter into indemnification agreements with its directors and certain of its executive officers. The indemnification agreements and the combined company's amended and restated certificate of incorporation and bylaws will require it to indemnify its directors and officers to the fullest extent permitted by Delaware law. See "*Other Agreements—Director Indemnification and Insurance*."

UNAUDITED PRO FORMA COMBINED FINANCIAL STATEMENTS

The following information and all other information contained in this proxy statement does not give effect to a Reverse Split described in Proposal No. 1.

The unaudited pro forma combined financial statements were prepared in accordance with the regulations of the SEC. The following unaudited pro forma combined financial statements give effect to the proposed Merger. The transaction is expected to be accounted for as a reverse recapitalization under existing GAAP, which is subject to change and interpretation. Accordingly, for accounting purposes, the transaction will be treated as the equivalent of Brickell issuing shares of common stock for the net assets, primarily cash and investments, accompanied by a recapitalization. The net assets of Vical will be recognized at fair value (which is expected to be consistent with carrying value), with no goodwill or intangible assets recorded. The unaudited pro forma combined financial statements presented below are based upon the historical financial statements of Brickell and Vical, included in this proxy statement, adjusted to give effect to the reverse recapitalization, for accounting purposes. The pro forma adjustments are described in the accompanying notes presented on the following pages.

The unaudited pro forma combined balance sheet as of June 30, 2019, and the unaudited pro forma combined statement of operations and comprehensive loss for the six months June 30, 2019 and the year ended December 31, 2018 presented herein are based on the historical financial statements of Brickell and Vical, adjusted to give effect to the proposed reverse recapitalization. The pro forma assumptions and adjustments are described in the accompanying notes presented in the following pages.

Brickell has been determined to be the accounting acquirer based on an evaluation of the facts of the Merger. Upon completion of the Merger, Brickell securityholders and NovaQuest, collectively, will hold approximately 60% of the aggregate number of shares of Vical common stock (on a fully diluted basis using the treasury stock method in instances other than with respect to the NovaQuest Warrants and certain equity issuances by Brickell following the signing of the Merger Agreement and prior to the completion of the Merger) and the Brickell directors and management will hold a majority of board seats and all key positions in the management of the combined company. Other factors were considered, including the purpose and intent of the Merger, composition of the post-merger stockholders and the location of the combined company's headquarters noting that the preponderance of the evidence is indicative that Brickell is the accounting acquirer.

After the closing of the Merger, the stockholders' equity of Brickell will be restated to give effect to the exchange of shares in the Merger and the historical results of operations of Brickell will be reflected as the results of operations of the combined company following the Merger.

The Brickell balance sheet as of June 30, 2019 and statement of operations for the six months ended June 30, 2019 were derived from its unaudited financial statements, included elsewhere in this proxy statement. The statement of operations and comprehensive loss for year ended December 31, 2018 were derived from its audited financial statements, included elsewhere in this proxy statement.

The Vical balance sheet as of June 30, 2019 and statement of operations for the six months ended June 30, 2019 were derived from its unaudited financial statements, included in the Vical 10-Q2, which is incorporated by reference in this proxy statement. The statement of operations and comprehensive loss for year ended December 31, 2018 were derived from its audited consolidated financial statements included in the Vical 10-K, incorporated by reference in this proxy statement.

The historical financial statements have been adjusted to give pro forma effect to events that are (i) directly attributable to the Merger, (ii) factually supportable, and (iii) with respect to the statement of operations, expected to have a continuing impact on the combined results. These adjustments include estimates for the issuance of shares of common stock in the Merger resulting from the anticipated issuance of securities by Brickell prior to the closing of the Merger. Differences between these preliminary estimates and the final

accounting will occur and could have a material impact on the accompanying unaudited pro forma combined financial statements and the combined company's future results of operations and financial position. The actual amounts recorded as of the completion of the Merger may differ materially from the information presented in these unaudited pro forma combined financial statements as a result of the timing of completion of the Merger, issuances of common stock, convertible notes, warrants or options to purchase common stock and other changes in the Vical or Brickell net assets that occur prior to the completion of the Merger, which could cause material differences in the information presented below.

The unaudited pro forma combined financial statements do 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 Merger. The unaudited pro forma combined financial data also do not include any integration costs. The unaudited pro forma combined financial statements have been prepared for illustrative purposes only and are not necessarily indicative of the financial position or results of operations in future periods or the results that actually would have been realized had Brickell and Vical been a combined company during the specified period. The unaudited pro forma combined financial statements, including the notes thereto, should be read in conjunction with the Brickell historical audited financial statements for the year ended December 31, 2018 included elsewhere in this proxy statement and in conjunction with the Vical historical audited consolidated financial statements included in Vical 10-K.

The unaudited pro forma combined financial statements also do not give effect to the Concurrent Financing. In connection with the Concurrent Financing, immediately following the closing of the Merger, Vical will issue the NovaQuest Warrants. The number of shares of Vical common stock underlying the NovaQuest Warrants will be based on 10% warrant coverage on the $25.0 million NovaQuest funding commitment and the final exchange ratio for the Merger, and the exercise price of the NovaQuest Warrants will be determined based on a 10% premium to the Brickell per share price of common stock implied in the Merger, as adjusted for the Exchange Ratio.

Unaudited Pro Forma Combined Balance Sheet
As of June 30, 2019

	Historical Vical, Inc.	Historical Brickell Biotech, Inc.	Pro forma Merger Adjustments	Note	Pro Forma Combined
Assets					
Current assets					
Cash, cash equivalents and marketable securities	$ 41,720,000	$ 2,079,000	$ (2,605,000)	A1	$ 41,194,000
Receivables and other current assets	979,000	362,000	—		1,341,000
Total current assets	42,699,000	2,441,000	(2,605,000)		42,535,000
Property and equipment, net	2,000	20,000	—		22,000
Operating lease right of use asset	—	186,000	—		186,000
Other assets	—	441,000	—		441,000
Total assets	$ 42,701,000	$ 3,088,000	$ (2,605,000)		$ 43,184,000
Liabilities and stockholders' equity (deficit)					
Current liabilities:					
Accounts payable and accrued liabilities	$ 1,159,000	$ 11,159,000	$ 2,610,000	A3	$ 14,928,000
Lease liability		67,000	—		67,000
Deferred revenue	—	3,040,000	—		3,040,000
Convertible promissory notes	—	3,598,000	(3,598,000)	A4	—
Derivative liability		1,007,000	(1,007,000)	A4	—
Current portion of notes payable	—	3,184,000	—		3,184,000
Total current liabilities	1,159,000	22,055,000	(1,995,000)		21,219,000
Contingent consideration	—	145,000			145,000
Warrant liability	—	1,048,000	(1,048,000)	A6	—
Lease liability, net of current portion	—	111,000	—		111,000
Deferred revenue, net of current portion	—	608,000	—		608,000
Total liabilities	1,159,000	23,967,000	(3,043,000)		22,083,000
Preferred Stock	—	47,934,000	(47,934,000)	A5	—
Stockholders equity (deficit)					
Common Stock	229,000	—	357,000	A5	587,000
			1,000	A4	
Additional paid-in capital	490,343,000	520,000	(453,156,000)	A2	90,707,000
			1,048,000	A6	
			4,604,000	A4	
			47,348,000	A5	
Accumulated deficit	(449,072,000)	(69,333,000)	453,427,000	A2	(70,193,000)
			(2,605,000)	A1	
			(2,610,000)	A3	
Accumulated other comprehensive income	42,000	—	(42,000)	A2	—
Total stockholders' equity (deficit)	41,542,000	(68,813,000)	438,000		21,101,000
Total liabilities and stockholders' equity (deficit)	$ 42,701,000	3,088,000	$ (2,605,000)		$ 43,184,000

Unaudited Pro Forma Combined Statement of Operations and Comprehensive Loss
For the Year Ended December 31, 2018

	Historical Vical, Inc.	Historical Brickell Biotech, Inc.	Pro forma Merger Adjustments	Note	Pro Forma Combined
Revenues:					
Collaboration Revenue	—	10,888,000	—		$ 10,888,000
Contract revenue	1,582,000	—	—		1,582,000
License and royalty revenue	40,000	—	—		40,000
Total Revenues	1,622,000	10,888,000	—		$ 12,510,000
Operating expenses:					
Research and development	12,327,000	12,960,000	—		25,287,000
Manufacturing and production	1,436,000	—	—		1,436,000
General and Administrative	7,505,000	6,379,000	—		13,884,000
Total operating expenses	21,268,000	19,339,000	—		40,607,000
Loss from operations	(19,646,000)	(8,451,000)	—		(28,097,000)
Net investment and other income	3,392,000	61,000	—		3,453,000
Interest expense	—	(1,090,000)	—		(1,090,000)
Change in fair value of warrant liability	—	244,000	(244,000)	A6	—
Net loss	$(16,254,000)	$ (9,236,000)	$ (244,000)		$(25,734,000)
(Accretion)reduction of redeemable convertible preferred stock to redemption value	—	(5,936,000)	5,936,000	A5	—
Net loss attributable to common shareholders	$(16,254,000)	$ (15,172,000)	5,692,000		$(25,734,000)
Net income(loss) per share, basic	$ (0.74)	$ (8.92)			$ (0.44)
Net income(loss) per share, diluted	$ (0.74)	$ (8.92)			$ (0.44)
Weighted average shares used to compute basic net income(loss) per share	21,842,000	1,700,000	35,108,000		58,650,000
Weighted average shares used to compute diluted net income(loss) per share	21,842,000	1,700,000	35,108,000		58,650,000

Unaudited Pro Forma Combined Statement of Operations and Comprehensive Loss
For the Six Months Ended June 30, 2019

	Historical Vical, Inc.	Historical Brickell Biotech, Inc.	Pro forma Merger Adjustments	Note	Pro Forma Combined
Revenues:					
Collaboration Revenue	—	$ 6,065,000	—		$ 6,065,000
Contract revenue	—	—	—		—
License and royalty revenue	—	—	—		—
Total Revenues	—	$ 6,065,000	—		$ 6,065,000
Operating expenses:					
Research and development	4,641,000	10,248,000	—		14,889,000
General and Administrative	3,618,000	3,389,000	(955,000)	A7	6,052,000
Total operating expenses	8,259,000	13,637,000	(955,000)		20,941,000
Loss from operations	(8,259,000)	(7,572,000)	955,000		(14,876,000)
Net investment and other income	1,251,000	10,000	—		1,261,000
Interest expense	—	(884,000)	497,000	A4	(387,000)
Change in fair value of derivative liability	—	(11,000)	11,000	A4	—
Change in fair value of warrant liability	—	223,000	(223,000)	A6	—
Net loss	$ (7,008,000)	$ (8,234,000)	$ 1,240,000		$(14,002,000)
Reduction of redeemable convertible preferred stock to redemption value	—	10,356,000	(10,356,000)	A5	—
Net income (loss) to common shareholders	$ (7,008,000)	$ 2,122,000	(9,116,000)		$(14,002,000)
Net income(loss) per share, basic	$ (0.31)	$ 1.24			$ (0.24)
Net loss per share, diluted	$ (0.31)	$ (1.54)			$ (0.24)
Weighted average shares used to compute basic net income(loss) per share	22,404,000	1,706,000	34,540,000		58,650,000
Weighted average shares used to compute basic net loss per share	22,404,000	5,346,000	30,900,000		58,650,000

NOTES TO UNAUDITED PRO FORMA COMBINED FINANCIAL INFORMATION

1. Description of Transaction and Basis of Presentation

Description of Transaction

On June 2, 2019, Brickell entered into the Merger Agreement with Vical and Merger Sub. Pursuant to the terms and subject to the conditions set forth in the Merger Agreement, Merger Sub will merge with and into Brickell, with Brickell surviving as a wholly owned subsidiary of Vical.

At the effective time of the Merger, each outstanding share of the capital stock of Brickell will be converted into the right to receive a number of shares of Vical common stock as determined pursuant to the Exchange Ratio described in the Merger Agreement, and all outstanding options, warrants or other rights to purchase shares of capital stock of Brickell, will be exchanged for rights to acquire Vical common stock based on the Exchange Ratio described in the Merger Agreement. No fractional shares of Vical common stock will be issued in connection with the Merger, and holders of Brickell capital stock will be entitled to receive cash for any fractional share ownership in lieu of stock thereof.

Upon completion of the Merger, Brickell securityholders and NovaQuest, collectively, will hold approximately 60% of the aggregate number of shares of Vical common stock, and to the securityholders of Vical as of immediately prior to the Merger will hold approximately 40% of the aggregate number of shares of Vical common stock (in each case on a fully diluted basis using the treasury stock method in instances other than with respect to the NovaQuest Warrants and certain equity issuances by Brickell following the signing of the Merger Agreement and prior to the completion of the Merger).

Basis of Presentation

Based on the terms of the Merger, the transaction will be treated as a reverse recapitalization of Brickell in accordance with accounting principles generally accepted in the United States.

The pro forma adjustments are preliminary and have been prepared to illustrate the estimated effect of the Merger. To the extent there are significant changes to the combined company's business prior to or following completion of the Merger, the assumptions set forth in the unaudited pro forma combined financial statements could change significantly.

The unaudited pro forma combined balance sheet as of June 30, 2019 combines the historical balance sheets of Brickell and Vical as of June 30, 2019 as if the Merger had been completed on that date.

The unaudited pro forma combined statement of operations and comprehensive loss for the year ended December 31, 2018 combine the historical statements of operations and comprehensive loss of Brickell and Vical for their respective periods and give pro forma effect to the Merger as if it had been completed on January 1, 2018.

The unaudited pro forma combined statement of operations and comprehensive loss for the six months ended June 30, 2019 combine the historical statements of operations and comprehensive loss of Brickell and Vical for their respective periods and give pro forma effect to the Merger as if it had been completed on January 1, 2018.

The unaudited pro forma combined financial statements assume an exchange ratio of 2.3035 of Vical common stock for each share of Brickell common stock. The exchange ratio does not give any effect to the Vical proposed reverse common stock split. The Exchange Ratio, calculated pursuant to the formula set forth in the Merger Agreement, is intended to allocate to the former Brickell securityholders and NovaQuest, collectively,

approximately 60% of the aggregate number of shares of Vical common stock, and to the securityholders of Vical as of immediately prior to the Merger approximately 40% of the aggregate number of shares of Vical common stock (in each case on a fully diluted basis using the treasury stock method in instances other than with respect to the NovaQuest Warrants and certain equity issuances by Brickell following the signing of the Merger Agreement and prior to the completion of the Merger). This Exchange Ratio is an estimate only and the final Exchange Ratio will be determined pursuant to Merger Agreement. This Exchange Ratio assumes the following:

- Exchange of 1,706,251 shares of Brickell common stock outstanding as of June 30, 2019
- Conversion of 3,639,905 shares of Brickell preferred stock outstanding as of June 30, 2019
- Conversion of $14.4 million of accrued dividends through May 31, 2019 on Brickell's preferred stock at the Merger price per share of Brickell common stock

The estimated Exchange Ratio and pro forma shares of common stock outstanding in these unaudited pro forma financial statements is also impacted by estimated securities, which are assumed to be issued prior to the closing of the Merger and which could vary including:

- The issuance by Brickell of additional options to purchase common stock with an exercise price equal to the Merger price per share of Brickell common stock
- The issuance of the warrants in accordance with the Funding Agreement with an exercise price equal to a 10% premium to the Brickell price per share of common stock implied in the Merger, as adjusted for the Exchange Ratio
- The raise of the maximum of $12.5 million of convertible notes and related warrants to purchase Brickell common stock and conversion of these notes and minimum accrued interest (nine months at 9%) at 80% of the Merger price per share of Brickell common stock ($5.1 million of such notes were outstanding at June 30, 2019)

2. Pro Forma Combined Earnings Per Share

The pro forma combined weighted average share outstanding included in the calculation of basic and diluted pro forma combined earnings (loss) per share consists of the following:

	Year ended December 31, 2018
Historical Vical weighted average shares	21,842,000
Shares issued to Brickell	36,808,000
Pro forma weighted common shares, basic and diluted	58,650,000

	Six months ended June 30, 2019
Historical Vical weighted average shares	22,404,000
Shares issued to Brickell	36,246,000
Pro forma weighted common shares, basic and diluted	58,650,000

3. Pro Forma Adjustments

The unaudited pro forma combined financial statements include pro forma adjustments to give effect to certain significant transactions as a direct result of the proposed Merger and reverse recapitalization for accounting purposes.

The pro forma adjustments reflecting the completion of the Merger are based upon the preliminary accounting analysis conclusion that the Merger should be accounted for as a reverse recapitalization and upon the assumptions set forth below.

The unaudited pro forma combined financial statements do not not give effect to a Reverse Split described in Proposal No. 1.

The pro forma adjustments are as follows:

A1: To reflect vendor payments for strategic advisor, legal, accounting and other direct costs of Vical and Brickell related to the Merger, which are not recognized in the respective balance sheets as of June 30, 2019.

A2: To reflect the elimination of Vical's historical stockholders' equity balances, including accumulated deficit.

A3: To reflect accrual for Vical's executive severance costs directly related to the Merger, which are not recognized in Vical's balance sheets as of June 30, 2019.

A4: To reflect the conversion of the Brickell convertible notes into common stock prior to the close of Merger and prior to the exchange of shares.

A5: To reflect the exchange of shares of Brickell common and convertible preferred stock outstanding, immediately prior to the closing of the Merger for shares of Vical common stock upon closing of the Merger.

A6: To reclassify Brickell's warrant liability to equity upon the conversion of preferred stock to common stock upon the close of the Merger as the warrants are no longer expected to be required to be reflected as a liability upon becoming warrants to purchase common stock at a fixed exercise price.

A7: To eliminate Merger cost incurred in the statement of operations, which are non-recurring.

PRINCIPAL STOCKHOLDERS OF VICAL

For information regarding beneficial ownership of Vical's securities, please refer to the section titled "Item 12 Security Ownership of Certain Beneficial Owners and Management and Related Stockkholder Matters" set forth in Vical's Amendment No. 1 to Annual Report on Form 10-K, as filed with the SEC on April 17, 2019, which report is incorporated by reference herein.

PRINCIPAL STOCKHOLDERS OF BRICKELL

The following table sets forth information regarding beneficial ownership of Brickell's securities on an as-converted basis, as of June 30, 2019, and as adjusted to reflect the shares of common stock to be outstanding following the consummation of the Merger, by:

- each person or group of affiliated persons known by Brickell to be the beneficial owner of more than 5% of its common stock;
- each of Brickell's named executive officers;
- each of Brickell's directors; and
- all current executive officers and directors as a group.

The following table assumes no changes to the expected Exchange Ratio and does not give effect to the Reverse Split.

Brickell has determined beneficial ownership in accordance with SEC rules. The information does not necessarily indicate beneficial ownership for any other purpose. Under these rules, the number of shares of common stock deemed outstanding includes shares issuable upon exercise of warrants or options held by the respective person or group that may be exercised within 60 days after June 30, 2019. For purposes of calculating each person's or group's percentage ownership, warrants and options exercisable within 60 days after June 30, 2019 are included for that person or group but not the warrants or options of any other person or group.

Applicable percentage ownership is based on 12,446,989 shares of common stock outstanding at June 30, 2019, assuming the automatic conversion of all outstanding shares (including accrued dividends and conversion of notes and interest) of Brickell's Series A Preferred Stock, Series B Preferred Stock, Series C Preferred Stock and Series C-1 Preferred Stock, on a one-for-one basis, into 3,066,246, 1,893,748, 1,726,918 and 1,546,845 shares of common stock, respectively.

Unless otherwise indicated and subject to applicable community property laws, to Brickell's knowledge, each stockholder named in the following table possesses sole voting and investment power over the shares listed. Unless otherwise noted below, the address of each person listed on the table is c/o Brickell Biotech, Inc., 5777 Central Avenue, Suite 102, Boulder, Colorado, 80301.

	Shares Beneficially Owned Prior to the Merger		Shares Beneficially Owned After the Merger	
Name and Address of Beneficial Owner	**Shares (#)**	**Percent (%)**	**Shares (#)**	**Percent (%)**
5% Stockholders:				
Palisade Concentrated Equity Partnership II, L.P.(1)	2,858,134	20.7%	6,583,712	12.3%
Charles Stiefel(2)	1,626,814	11.8%	3,747,366	7.0%
D&S Entrepreneurial Fund, LLC(3)	1,374,098	9.9%	3,165,235	5.9%
Directors and Executive Officers:				
Reginald L. Hardy(4)	1,593,503	11.5%	3,670,634	6.8%
George Abercrombie(5)	487,757	3.5%	1,123,550	2.1%
William Ju(1)(6)	98,909	*	227,837	*
Dennison T. Veru(1)	31,719	*	73,065	*
Robert B. Brown(7)	568,982	4.1%	1,310,650	2.4%
Andrew D. Sklawer(8)	407,466	2.9%	938,598	1.7%
R. Michael Carruthers(9)	15,000	*	34,553	*
Deepak Chadha(10)	136,150	1.2%	313,622	*
Jose Breton(11)	29,308	*	67,511	*
David McAvoy(12)	126,878	*	292,263	*
Brickell's directors and executive officers as a group (13 persons)	9,366,384	67.8%	21,575,469	40.2%

* Represents beneficial ownership of less than 1%.

(1) Includes 2,824,801 shares owned by Palisade Concentrated Equity Partnership II, L.P. and 33,333 shares owned by Palisade Capital Advisors before the Merger. Includes 6,506,929 shares owned by Palisade Concentrated Equity Partnership II, L.P. and 76,783 shares owned by Palisade Capital Advisors after the Merger. Corresponds to 6,583,712 shares of common stock issuable upon conversion of preferred stock, dividends, options and warrants held by Palisade Concentrated Equity Partnership II, L.P. The Co-Chair and Chief Information Officer of Palisade Concentrated Equity Partnership II, L.P. is Dennison T. Veru, who may be deemed to have shared voting and dispositive power over the shares listed in the table. The principal business address of Palisade Concentrated Equity Partnership II, L.P. is One Bridge Plaza, Suite 695, Fort Lee, NJ 07024.

(2) Includes 1,010,104 shares owned by Charles W. Stiefel Declaration of Trust dated August 13, 2009 and 616,710 shares owned by Charles W. Stiefel before the Merger. Includes 2,326,775 shares owned by Charles W. Stiefel Declaration of Trust dated August 13, 2009 and 1,420,591 shares owned by Charles W. Stiefel after the Merger. Includes 3,725,142 shares of common stock issuable upon conversion of preferred stock, dividends and options.

(3) Includes 1,278,137 shares owned by D&S Entrepreneurial Fund, LLC and 95,961 shares owned by Alexandra Long Henson Restated 1997 Revocable Trust before the Merger. Includes 2,944,189 shares owned by D&S Entrepreneurial Fund, LLC and 221,046 shares owned by Alexandra Long Henson Restated 1997 Revocable Trust after the Merger. Includes 3,165,235 shares of common stock issuable upon conversion of notes, interest, preferred stock, dividends and warrants. The Manager of D&S Entrepreneurial Fund, LLC is Alexandra Henson, who may be deemed to have shared voting and dispositive power over the shares listed in the table. The principal business address of D&A Entrepreneurial Fund, LLC is 317 Circle Park Place, Chapel Hill, NC 27517.

(4) Includes 858,714 shares of owned by Hardy Capital, Ltd., 582,948 shares owned by Reginald L. Hardy, 50,000 shares owned by Manuela A. Hardy and Gerard Coombs, Trustees of the Hanna Renata Hardy 2017

Irrevocable Trust u/a/d 10/06/2017, 50,000 shares owned by PAH Irrevocable Trust, 37,711 shares owned by Manuela A. Hardy and 14,130 shares owned by Manuela A. Hardy and Angela Maria Camargo Jtwros before the merger. Includes 1,978,048 shares of owned by Hardy Capital, Ltd., 1,342,821 shares owned by Reginald L. Hardy, 115,175 shares owned by Manuela A. Hardy and Gerard Coombs, Trustees of the Hanna Renata Hardy 2017 Irrevocable Trust u/a/d 10/06/2017, 115,175 shares owned by PAH Irrevocable Trust, 86,867 shares owned by Manuela A. Hardy and 32,548 shares owned by Manuela A. Hardy and Angela Maria Camargo Jtwros after the merger. Includes 1,535,207 shares of common stock issuable upon conversion of conversion of notes, interest, preferred stock, dividends, options and warrants.

(5) Includes 417,757 shares owned by George B. Abercrombie, 35,000 shares owned by Irrevocable Trust by George B. Abercrombie dated June 4, 2010 for Mark J. Abercrombie and 35,000 shares owned by Irrevocable Trust by George B. Abercrombie dated June 4, 2010 for Samuel T. Abercrombie before the Merger. Includes 962,304 shares owned by George B. Abercrombie, 80,623 shares owned by Irrevocable Trust by George B. Abercrombie dated June 4, 2010 for Mark J. Abercrombie and 80,623 shares owned by Irrevocable Trust by George B. Abercrombie dated June 4, 2010 for Samuel T. Abercrombie after the Merger. Includes 932,304 shares of common stock issuable upon conversion of notes, interest, preferred stock, dividends, options and warrants.

(6) Includes 40,076 shares owned by Ju Innovation Partners I, L.P. and 58,833 shares owned by William Ju prior to merger. Includes 92,315 shares owned by Ju Innovation Partners I, L.P. and 135,522 shares owned by William Ju after the Merger. Includes 227,837 shares of common stock issuable upon conversion of preferred stock, dividends, options and warrants.

(7) Includes 284,491 shares owned by Robert B. Brown Grantor Retained Annuity Trust I and 284,491 shares owned by Robert. B. Brown Grantor Retained Annuity Trust II prior to merger. Includes 655,325 shares owned by Robert B. Brown Grantor Retained Annuity Trust I and 655,325 shares owned by Robert. B. Brown Grantor Retained Annuity Trust II after the Merger. Includes 1,310,650 shares of common stock issuable upon conversion of notes, interest and warrants.

(8) Includes 477,898 shares of common stock issuable upon conversion of notes, interest, preferred stock, dividends, options and warrants.

(9) Includes 34,553 shares of common stock issuable upon conversion of options.

(10) Includes 313,622 shares of common stock issuable upon conversion of notes, interest, preferred stock, dividends, options and warrants.

(11) Includes 67,511 shares of common stock issuable upon conversion of notes, interest, options and warrants.

(12) Includes 292,263 shares of common stock issuable upon conversion of notes, interest and warrants.

HOUSEHOLDING OF PROXY MATERIALS

The SEC has adopted rules that permit companies and intermediaries (*e.g.*, brokers) to satisfy the delivery requirements for proxy statements and annual reports with respect to two or more stockholders sharing the same address by delivering a single proxy statement addressed to those stockholders. This process, which is commonly referred to as "householding," potentially means extra convenience for stockholders and cost savings for companies.

A number of brokers with account holders who are Vical stockholders will be householding our proxy materials. A single proxy statement will be delivered to multiple stockholders sharing an address unless contrary instructions have been received from the affected stockholders. Once you have received notice from your broker that they will be householding communications to your address, householding will continue until you are notified otherwise or until you revoke your consent. If, at any time, you no longer wish to participate in householding and would prefer to receive a separate proxy statement and annual report, please notify your broker, direct your written request to Vical Incorporated, Investor Relations, 10390 Pacific Center Court, San Diego, California 92121-4340 or contact Vijay B. Samant at (858) 646-1100. Stockholders who currently receive multiple copies of the proxy statement at their address and would like to request householding of their communications should contact their broker.

FUTURE STOCKHOLDER PROPOSALS

To be considered for inclusion in our proxy materials for our 2019 Annual Meeting of Stockholders, your proposal must be submitted in writing to our Secretary at Brickell Biotech, Inc., 5777 Central Avenue, Suite 102, Boulder, Colorado, 80301. If you wish to submit a proposal (including a director nomination), your proposal generally must be submitted in writing to the same address not fewer than 60 nor more than 90 days prior to the date approved by the board of directors to hold the 2019 Annual Meeting of Stockholders; provided, that if we provide fewer than 60 days' notice of such date, your proposal (including a director nomination) must be received by our Secretary not later than the tenth day following the day on which the notice of the date of the 2019 Annual Meeting of Stockholders is mailed or publicly disclosed. Please review our current bylaws, which contain additional requirements regarding advance notice of stockholder proposals and nominations.

WHERE YOU CAN FIND MORE INFORMATION

Vical files annual, quarterly and special reports, proxy statements and other information with the SEC. Vical SEC filings are also available to the public from commercial document retrieval services and on the website maintained by the SEC at http://www.sec.gov.

In addition, the SEC allows Vical to disclose important information to you by referring you to other documents filed separately with the SEC. This information is considered to be a part of this proxy statement, except for any information that is superseded by information included directly in this proxy statement or incorporated by reference subsequent to the date of this proxy statement as described below.

INFORMATION INCORPORATED BY REFERENCE

This proxy statement incorporates by reference the documents listed below that Vical has previously filed with the SEC (other than, in each case, documents or information deemed to have been furnished and not filed in accordance with SEC rules). They contain important information about Vical and its financial condition.

- Annual Report on Form 10-K for the fiscal year ended December 31, 2018, filed with the SEC on March 1, 2019, including all amendments;
- Quarterly Reports on Form 10-Q filed with the SEC on May 2, 2019 and July 12, 2019;
- Current Reports on Form 8-K filed with the SEC on May 24, 2019 and June 3, 2019; and
- the description of Vical's common stock contained in its registration statement on Form 8-A, filed with the SEC on January 8, 1993, including all amendments and reports filed for the purpose of updating such description.

To the extent that any information contained in any report on Form 8-K, or any exhibit thereto, was furnished to, rather than filed with, the SEC by Vical, such information or exhibit is specifically not incorporated by reference.

In addition, Vical incorporates by reference any future filings it may make with the SEC under Section 13(a), 13(c), 14 or 15(d) of the Exchange Act after the date of this proxy statement and before the date of the Special Meeting (excluding any current reports on Form 8-K to the extent disclosure is furnished and not filed). Those documents are considered to be a part of this proxy statement, effective as of the date they are filed. In the event of conflicting information in these documents, the information in the latest filed document should be considered correct.

Vical has supplied all information contained in this proxy statement relating to Vical, and Brickell has supplied all information contained in this proxy statement relating to Brickell.

If you would like to request documents from Vical or Brickell, please send a request in writing or by telephone to either Vical or Brickell at the following addresses:

Vical Incorporated
Investor Relations
10390 Pacific Center Court
San Diego, California, 92121-4340
Telephone: (858) 646-1100
Email: ir@vical.com

Brickell Biotech, Inc.
5777 Central Avenue, Suite 102
Boulder, Colorado, 80301
(720) 565-4755
E-mail: asklawer@brickellbio.com

BRICKELL BIOTECH, INC.

INDEX TO FINANCIAL STATEMENTS

Unaudited Financial Statements for the Three and Six Months Ended June 30, 2019

Audited Financial Statements for the Years Ended December 31, 2018 and 2017

BRICKELL BIOTECH, INC.
CONDENSED BALANCE SHEETS
(In thousands, except share and per share data)

	June 30, 2019 (unaudited)	December 31, 2018
Assets		
Current assets:		
Cash and cash equivalents	$ 2,079	$ 8,067
Prepaid expenses and other current assets	362	204
Total current assets	2,441	8,271
Property and equipment, net	20	37
Operating lease right-of-use asset	186	—
Intangible assets	441	441
Total assets	$ 3,088	$ 8,749
Liabilities, redeemable convertible preferred stock and stockholders' deficit		
Current liabilities:		
Accounts payable	$ 7,120	$ 4,067
Accrued liabilities	4,039	3,272
Lease liability, current portion	67	—
Deferred revenue, current portion	3,040	8,117
Convertible promissory notes	3,598	—
Derivative liability	1,007	—
Notes payable	3,184	4,639
Total current liabilities	22,055	20,095
Contingent consideration	145	145
Lease liability, net of current portion	111	—
Warrant liability	1,048	242
Deferred revenue, net of current portion	608	1,595
Total liabilities	23,967	22,077
Redeemable convertible preferred stock (Series A, B, C and C-1), $0.0001 par value, 4,446,228 and 4,182,943 shares authorized at June 30, 2019 and December 31, 2018, respectively; 3,639,905 shares issued and outstanding at June 30, 2019 and December 31, 2018; aggregate liquidation preference of $48,017 and $46,985 at June 30, 2019 and December 31, 2018, respectively	47,934	58,290
Commitments and contingencies (Note 7)		
Stockholders' deficit:		
Common Stock, $0.0001 par value, 10,000,000 and 8,000,000 shares authorized at June 30, 2019 and December 31, 2018, respectively; 1,706,251 issued and outstanding at June 30, 2019 and December 31, 2018	—	—
Additional paid-in capital	520	—
Accumulated deficit	(69,333)	(71,618)
Total stockholders' deficit	(68,813)	(71,618)
Total liabilities, redeemable convertible preferred stock and stockholders' deficit	$ 3,088	$ 8,749

See accompanying notes to unaudited financial statements.

BRICKELL BIOTECH, INC.
UNAUDITED CONDENSED STATEMENTS OF OPERATIONS
(In thousands, except share and per share data)

	Three Months Ended June 30,		Six Months Ended June 30,	
	2019	2018	2019	2018
Collaboration revenue	$ 2,573	$ 373	$ 6,065	$ 5,373
Operating expenses:				
Research and development	$ 4,229	$ 2,254	10,248	4,436
General and administrative	1,323	1,434	3,389	3,488
Total operating expenses	5,552	3,688	13,637	7,924
Loss from operations	(2,979)	(3,315)	(7,572)	(2,551)
Interest income	$ 4	$ 16	10	22
Interest expense	(660)	(255)	(884)	(502)
Change in fair value of derivative liability	(11)	—	(11)	—
Change in fair value of warrant liability	(8)	2	223	6
Net loss	(3,654)	(3,552)	(8,234)	(3,025)
(Accretion) reduction of redeemable convertible preferred stock to redemption value	(163)	(865)	10,356	(4,105)
Net income (loss) attributable to common stockholders	$ (3,817)	$ (4,417)	$ 2,122	$ (7,130)
Basic net income (loss) per common share attributable to common stockholders	$ (2.24)	$ (2.60)	$ 1.24	$ (4.20)
Diluted net income (loss) per common share attributable to common stockholders	$ (2.24)	$ (2.60)	$ (1.54)	$ (4.20)
Weighted-average shares used to compute basic net loss per share attributable to common stockholders	1,706,251	1,699,584	1,706,251	1,699,478
Weighted-average shares used to compute diluted net loss per share attributable to common stockholders	1,706,251	1,699,584	5,346,156	1,699,478

See accompanying notes to unaudited financial statements.

BRICKELL BIOTECH, INC.
UNAUDITED CONDENSED STATEMENTS OF REDEEMABLE CONVERTIBLE PREFERRED STOCK AND STOCKHOLDERS' DEFICIT
(In thousands, except share and per share data)

	Series A, B, C & C-1 Reedemable Convertible Preferred Stock		Common Stock		Additional	Accumulated	Total Stockholders'
	Shares	Carrying Value	Shares	Par Value	Paid-In-Capital	Deficit	Deficit
Balance, December 31, 2017	3,639,905	$ 52,354	1,695,418	$ —	$ —	$ (59,936)	$ (59,936)
Effect of adoption of Topic 606	—	—	—	—	—	2,734	2,734
Stock based compensation	—	—	—	—	190	—	190
Issuance of common stock through exercise of stock option	—	—	4,166	—	17	—	17
Accretion of redeemable convertible preferred stock to redemption value	—	3,240	—	—	(207)	(3,033)	(3,240)
Net income	—	—	—	—	—	527	527
Balance, March 31, 2018 (unaudited)	3,639,905	$ 55,594	1,699,584	$ —	$ —	$ (59,708)	$ (59,708)
Stock based compensation	—	—	—	—	175	—	175
Accretion of redeemable convertible preferred stock to redemption value	—	865	—	—	(175)	(690)	(865)
Net loss	—	—	—	—	—	(3,552)	(3,552)
Balance, June 30, 2018 (unaudited)	**3,639,905**	**$ 56,459**	**1,699,584**	**$ —**	**$ —**	**(63,950)**	**(63,950)**
Balance, December 31, 2018	3,639,905	$ 58,290	1,706,251	$ —	$ —	$ (71,618)	$ (71,618)
Stock based compensation	—	—	—	—	384	—	384
Reduction of redeemable convertible preferred stock to redemption value	—	(10,519)	—	—	—	10,519	10,519
Net loss	—	—	—	—	—	(4,580)	(4,580)
Balance, March 31, 2019 (unaudited)	3,639,905	$ 47,771	1,706,251	$ —	$ 384	$ (65,679)	$ (65,295)
Stock based compensation	—	—	—	—	299	—	299
Accretion of redeemable convertible preferred stock to redemption value	—	163	—	—	(163)	—	(163)
Net loss	—	—	—	—	—	(3,654)	(3,654)
Balance, June 30, 2019 (unaudited)	**3,639,905**	**$ 47,934**	**1,706,251**	**$ —**	**$ 520**	**(69,333)**	**(68,813)**

See accompanying notes to unaudited financial statements.

BRICKELL BIOTECH, INC.
UNAUDITED CONDENSED STATEMENTS OF CASH FLOWS
(In thousands)

	Six Months Ended June 30,	
	2019	2018
	(unaudited)	
CASH FLOWS FROM OPERATING ACTIVITIES:		
Net loss	$ (8,234)	$ (3,025)
Adjustments to reconcile net loss to net cash provided by (used in) operating activities:		
Depreciation	21	25
Change in fair value of derivative liability	11	—
Change in fair value of warrant liability	(224)	(6)
Amortization of convertible promissory notes discount	381	—
Amortization of debt discounts and financing costs	170	196
Stock-based compensation	683	365
Changes in operating assets and liabilities:		
Prepaid expenses and other current assets	(165)	(74)
Accounts payable	3,053	1,225
Accrued liabilities	866	(907)
Deferred revenue	(6,064)	15,230
Total adjustments	(1,268)	16,054
Net cash provided by (used in) operating activities	(9,502)	13,029
CASH FLOWS FROM INVESTING ACTIVITIES:		
Capital expenditures	(4)	(8)
Net cash used in investing activities	(4)	(8)
CASH FLOWS FROM FINANCING ACTIVITIES:		
Principal payments made on note payable	(1,609)	(509)
Proceeds from issuance of convertible promissory notes	5,127	—
Proceeds from the exercise of stock options	—	17
Net cash provided by (used in) financing activities	3,518	(492)
NET INCREASE (DECREASE) IN CASH AND CASH EQUIVALENTS	(5,988)	12,529
CASH AND CASH EQUIVALENTS—BEGINNING	8,067	5,399
CASH AND CASH EQUIVALENTS—ENDING	$ 2,079	$ 17,928
Supplement Disclosure of Cash Flow Information:		
Interest paid	$ 234	$ 310
Supplement Disclosure of Non-Cash Financing and Investing Activities:		
Accretion (reduction) of redeemable convertible preferred stock to redemption value	$ (10,376)	$ 4,085
Accretion of redeemable convertible preferred stock issuance costs	$ 20	$ 20
Deferred financing costs included in accrued liabilities	$ 154	$ —
Derivative liability issued with convertible promissory notes	$ 996	$ —
Warrants issued with convertible promissory notes to purchase common stock	$ 1,029	$ —

See accompanying notes to unaudited financial statements.

BRICKELL BIOTECH, INC.
NOTES TO UNAUDITED FINANCIAL STATEMENTS

NOTE 1. ORGANIZATION AND NATURE OF OPERATIONS

Brickell Biotech, Inc. (the "Company") was incorporated in the state of Delaware and commenced activities on September 17, 2009. The Company is a clinical-stage pharmaceutical company focused on developing of innovative and differentiated therapeutics for the treatment of debilitating skin diseases. The Company's pipeline consists of potential novel therapeutics for hyperhidrosis, cutaneous T-cell lymphoma, psoriasis, and other prevalent dermatological conditions. The Company's pivotal Phase 3-ready clinical-stage product candidate, sofpironium bromide, is a new molecular entity and "soft" drug that belongs to a class of medications called anticholinergics. The Company is developing sofpironium bromide as a potential best-in-class, self-administered, once daily, topical prescription hyperhidrosis therapy for the treatment of primary axillary hyperhidrosis. The Company's operations to date have been limited to business planning, raising capital, developing its pipeline assets (in particular sofpironium bromide), identifying product candidates, and other research and development. The Company is headquartered in Boulder, Colorado.

Agreement and Plan of Merger

On June 2, 2018, the Company, Victory Subsidiary, Inc. ("Merger Sub"), and Vical Incorporated ("Vical"), entered into the Merger Agreement, pursuant to which, among other matters, and subject to the satisfaction or waiver of the conditions set forth in the Merger Agreement, Merger Sub will merge with and into the Company, with the Company continuing as a wholly-owned subsidiary of Vical and the surviving corporation of the Merger.

Subject to the terms and conditions of the Merger Agreement, at the closing of the Merger, each outstanding share of the Company capital stock will be converted into the right to receive shares of Vical common stock (subject to the payment of cash in lieu of fractional shares and after giving effect to a reverse stock split of Vical common stock if determined necessary or appropriate by the Company, Vical and Merger Sub) such that, immediately following the Effective Time, preexisting Company stockholders, optionholders and warrantholders are expected to own, or hold rights to acquire, approximately 60% of the Fully-Diluted Common Stock of Vical, and preexisting Vical stockholders, optionholders and warrantholders are expected to own, or hold rights to acquire, approximately 40% of the Fully-Diluted Common Stock of Vical. Consummation of the Merger is subject to certain closing conditions, including, among other things, approval by the stockholders of Vical, and satisfaction of minimum net working capital thresholds by each of Vical and the Company. At the effective time of the Merger, the Board of Directors of Vical is expected to consist of seven members, five of whom will be designated by the Company and two of whom will be designated by Vical.

Contemporaneously with the execution and delivery of the Merger Agreement, and as a condition of the willingness of Vical to enter into the Merger Agreement, the Company entered into a funding agreement with NovaQuest Capital Management, LLC ("NovaQuest") pursuant to which NovaQuest committed up to $25 million in research and development funding to the Company following the closing of the Merger. Concurrently with the closing of the funding agreement, the surviving corporation of the Merger will issue a warrant to NovaQuest to purchase shares of Vical common stock in an amount based on 10% warrant coverage on the $25.0 million funding commitment and the exchange ratio for the Merger.

Liquidity and Capital Resources

The accompanying financial statements have been prepared assuming that the Company will continue as a going concern, which contemplates the realization of assets and the settlement of liabilities and commitments in the normal course of business. The financial statements do not reflect any adjustments relating to the recoverability and reclassification of assets and liabilities that might be necessary if the Company is unable to continue as a

going concern. The Company has incurred significant operating losses and has an accumulated deficit as a result of ongoing efforts to develop product candidates, including conducting preclinical and clinical trials and providing general and administrative support for these operations. For the six months ended June 30, 2019, the Company had a net loss of $8.2 million and net cash used in operating activities of $9.5 million. As of June 30, 2019, the Company had cash and cash equivalents of $2.1 million and an accumulated deficit of $69.3 million.

The Company expects to continue to incur additional substantial losses in the foreseeable future as a result of the Company's research and development activities. The Company believes that its cash and cash equivalents as of June 30, 2019 as well as cash received from the Merger and the transactions mentioned in Note 11 will be sufficient to fund its operations for at least the next twelve months from the issuance of the unaudited financial statements, however the Merger is subject to conditions such as a shareholder vote and while expected, this is not certain. Additional funding will be required in the future to maintain its present and proposed research activities. There can be no assurance that additional equity or debt financing will be available on acceptable terms, if at all. If the Company is unable to raise additional funding to meet its working capital needs in the future, it will be forced to delay or reduce the scope of its research programs and/or limit or cease its operations. These factors raise substantial doubt about the Company's ability to continue as a going concern for a period of twelve months subsequent to the issuance of these financial statements.

NOTE 2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Basis of Presentation

The accompanying unaudited condensed financial statements are presented in U.S. dollars and have been prepared in accordance with accounting principles generally accepted in the United States of America ("US GAAP") and applicable rules and regulations of the U.S. Securities and Exchange Commission ("SEC") for interim reporting. As permitted under those rules and regulations, certain footnotes or other financial information normally included in financial statements prepared in accordance with US GAAP have been condensed or omitted. These condensed financial statements have been prepared on the same basis as our annual financial statements and, in the opinion of our management, reflect all adjustments, consisting only of normal recurring adjustments, which are necessary for a fair presentation of our financial information. The results of operations for the three and six months ended June 30, 2019 are not necessarily indicative of the results to be expected for the full year ending December 31, 2019 or any other future period. The condensed balance sheet as of June 30, 2019 has been derived from financial statements at that date but does not include all of the information required by US GAAP for complete financial statements.

Risks and Uncertainties

The Company's business is subject to significant risks common to early-stage companies in the pharmaceutical industry including, but not limited to, the ability to develop appropriate formulations, scale up and production of the compounds, dependence on collaborative parties, uncertainties associated with obtaining and enforcing patents, clinical success, the lengthy and expensive regulatory approval process, compliance with regulatory requirements, competition from other products; uncertainty of broad adoption of its approved products, if any, by physicians and patients; significant competition; ability to manage third-party manufacturers, suppliers and contract research organizations ("CROs") and obtaining additional financing to fund the Company's efforts.

The product candidates developed by the Company require approvals from the FDA and foreign regulatory agencies prior to commercial sales in the United States or foreign jurisdictions, respectively. There can be no assurance that the Company's current and future product candidates will receive the necessary approvals. If the Company is denied approval or approval is delayed, it may have a material adverse impact on the Company's business and its financial condition.

The Company expects to incur substantial operating losses for the next several years and will need to obtain additional financing in order to complete clinical studies and launch and commercialize any product candidates

for which it receives regulatory approval. There can be no assurance that such financing will be available or will be at terms acceptable by the Company.

Fair Value Measurements

Fair value is the price that the Company would receive to sell an asset or pay to transfer a liability in a timely transaction with an independent counterparty in the principal market or in the absence of a principal market, the most advantageous market for the asset or liability. A three-tier hierarchy is established to distinguish between (1) inputs that reflect the assumptions market participants would use in pricing an asset or liability developed based on market data obtained from sources independent of the reporting entity (observable inputs) and (2) inputs that reflect the reporting entity's own assumptions about the assumptions market participants would use in pricing an asset or liability developed based on the best information available in the circumstances (unobservable inputs), and establishes a classification of fair value measurements for disclosure purposes.

The hierarchy is summarized in the three broad levels listed below.

Level 1—quoted prices in active markets for identical assets and liabilities

Level 2—other significant observable inputs (including quoted prices for similar assets and liabilities, interest rates, credit risk, etc.)

Level 3—significant unobservable inputs (including the Company's own assumptions in determining the fair value of assets and liabilities)

The following tables set forth the fair value of the Company's financial assets and liabilities measured at fair value on a recurring basis based on the three-tier fair value hierarchy as of June 30, 2019 and December 31, 2018 (in thousands):

	June 30, 2019		
	Level 1	Level 2	Level 3
Assets:			
Money market funds	$2,079	$ —	$ —
Total	$2,079	$ —	$ —
Liabilities:			
Contingent consideration	$ —	$ —	$ 145
Redeemable convertible preferred stock warrant liability	—	—	2
Derivative liability	—	—	1,007
Common stock warrant liability	—	—	1,046
Total	$ —	$ —	$2,200

	December 31, 2018		
	Level 1	Level 2	Level 3
Assets:			
Money market funds	$8,067	$ —	$ —
Total	$8,067	$ —	$ —
Liabilities:			
Contingent consideration	$ —	$ —	$ 145
Redeemable convertible preferred stock warrant liability	—	—	242
Total	$ —	$ —	$ 387

Fair Value of Financial Instruments

The following methods and assumptions were used by the Company in estimating the fair values of each class of financial instrument disclosed herein:

Money market funds—The carrying amounts reported in the balance sheets approximate their fair values due to theirshort-term nature and/or market rates of interest (Level 1 of the fair value hierarchy).

Contingent consideration—These amounts represent future payments in conjunction with various business combinations. The ultimate amount of future payments is based on specified future criteria, such as the achievement of certain future development and regulatory milestones. The Company evaluates its estimates of the fair value of contingent consideration on a periodic basis. The fair value of the contingent consideration was determined by a third-party valuation firm applying the income approach. This approach estimates the fair value of the contingent consideration related to the achievement of future development and regulatory milestones by assigning an achievement probability and date of expected completion to each potential milestone and discounting the associated cash payment to its present value using a risk-adjusted rate of return. The probability of success of each milestone assumes that the prerequisite developmental milestones are successfully completed and is based on the asset's current stage of development and anticipated regulatory requirements. The probability of success for each milestone is determined by multiplying the preceding probabilities of success. The unobservable inputs (Level 3 of the fair value hierarchy) to the valuation models that have the most significant effect on the fair value of the Company's contingent consideration are the probabilities that certain in-process development projects will meet specified development milestones, including ultimate approval by the FDA, with individual cumulative probabilities ranging from 2.1% to 20.9%. Other unobservable inputs used in this approach include: risk-adjusted discount rates ranging from 15.5% to 27.1% and estimates of the timing of the achievement of the various product development, regulatory approval and sales milestones.

Redeemable convertible preferred stock warrant liability—These amounts represent potential future obligations to transfer assets to the holders at a future date. The Company remeasures these warrants to current fair value at each balance sheet date, and any change in fair value is recognized as a change in fair value of warrant liability in the statements of operations. The Company estimated the fair value of these warrants at the respective balance sheet dates using the Black-Scholes option-pricing model (Level 3 of the fair value hierarchy table) (see further discussion in Note 6).

Inputs used to determine estimated fair value of the warrant liabilities include the estimated fair value of the underlying stock at the valuation date, the estimated term of the warrants, risk-free interest rates, expected dividends and the expected volatility of the underlying stock. The most significant unobservable inputs used in the fair value measurement of the convertible preferred stock warrant liability are the fair value of the underlying stock at the valuation date and the estimated term of the warrants. Generally, increases (decreases) in the fair value of the underlying stock and estimated term would result in a directionally similar impact to the fair value measurement.

The fair value of the outstanding convertible preferred stock warrants was remeasured as of each period end using the Black-Scholes option-pricing model with the following assumptions:

	2019	2018
Expected term (in years)	6.6	7.1
Expected volatility	30.00%	30.00%
Risk free interest rate	1.87%	2.59%
Expected dividend yield	— %	— %

*Fair Value of Redeemable Convertible Preferred Stock.*The fair value of the shares of the convertible preferred stock underlying the preferred stock warrants has historically been determined by a third-party valuation firm.

Because there has been no public market for the Company's convertible preferred stock, the third-party valuation firm has determined fair value of the convertible preferred stock at each balance sheet date by considering a number of objective and subjective factors, including valuation of comparable companies, sales of convertible preferred stock to unrelated third parties, operating and financial performance, the lack of liquidity of capital stock, and general and industry specific economic outlook, among other factors.

Remaining Term. The Company derived the expected term based on the time from the balance sheet date until the preferred stock warrant's expiration date.

Expected Volatility. Since the Company was a private entity with no historical data regarding the volatility of its preferred stock, the expected volatility used is based on volatility of a group of similar entities. In evaluating similarity, the Company considered factors such as industry, stage of life cycle and size.

Risk-Free Interest Rate. The risk-free interest rate is based on U.S. Treasuryzero-coupon issues with remaining terms similar to the expected term of the warrants.

Expected Dividend Rate. The Company has never paid any dividends and does not plan to pay dividends in the foreseeable future and, therefore, used an expected dividend rate of zero in the valuation model.

Derivative liability—These amounts represent potential future obligations to transfer assets to the holders at a future date. The fair value of the derivative liability has historically been determined by a third-party valuation firm (Level 3 of the fair value hierarchy table) (see further discussion in Note 5). Because there has been no public market for the Company's common stock, the third-party valuation firm has determined fair value of the stock at each balance sheet date by considering a number of objective and subjective factors, including valuation of comparable companies, sales of common stock to unrelated third parties, operating and financial performance, the lack of liquidity of capital stock, and general and industry specific economic outlook, among other factors. The derivative liability is marked-to-market each measurement period and any change in fair value is recorded in the statements of operations.

The fair value of the derivative liability as of June 30, 2019 was determined using the following assumptions: contractual term of 0.2 years, expected volatility of 70.00%, risk-free rate of 1.75%, and expected dividend yield of 0%.

Common stock warrant liability—These amounts represent potential future obligations to transfer assets to the holders at a future date. The fair value of the warrants has historically been determined by a third-party valuation firm (Level 3 of the fair value hierarchy table) (see further discussion in Note 5). Because there has been no public market for the Company's common stock, the third-party valuation firm has determined fair value of the stock at each balance sheet date by considering a number of objective and subjective factors, including valuation of comparable companies, sales of common stock to unrelated third parties, operating and financial performance, the lack of liquidity of capital stock, and general and industry specific economic outlook, among other factors. These warrants are remeasured to fair value at each balance sheet date, and any change in fair value is recognized as a change in fair value of warrant liability in the statements of operations. The Company estimated the fair value of these warrants at the respective balance sheet dates using the Black-Scholes option-pricing model.

Inputs used to determine estimated fair value of the warrant liabilities include the estimated fair value of the underlying stock at the valuation date, the estimated term of the warrants, risk-free interest rates, expected dividends and the expected volatility of the underlying stock. The most significant unobservable inputs used in the fair value measurement of the warrant liability are the fair value of the underlying stock at the valuation date and the estimated term of the warrants. Generally, increases (decreases) in the fair value of the underlying stock and estimated term would result in a directionally similar impact to the fair value measurement.

The fair value of the warrants as of June 30, 2019 was determined using the following assumptions: contractual term of 4.6 years, expected volatility of 70.00%, risk-free rate of 1.75%, and expected dividend yield of 0%.

The following table sets forth a summary of the changes in the fair value of the Company's Level 3 financial instruments as follows (in thousands):

	Derivative Liability	Common Stock Warrant Liability	Redeemable Convertible Preferred Stock Warrant Liability	Contingent Consideration Liabilities
Fair value as of December 31, 2017	$ —	$ —	$ 486	$ 148
Change in fair value	—	—	(244)	(3)
Fair value as of December 31, 2018	—	—	242	145
Fair value of financial instruments issued (unaudited)	996	1,029	—	—
Change in fair value (unaudited)	11	17	(240)	—
Fair value as of June 30, 2019 (unaudited)	$ 1,007	$ 1,046	$ 2	$ 145

Leases

On January 1, 2019, the Company adopted Financial Accounting Standards Board ("FASB") Accounting Standards Codification ("ASC") 842, Leases ("ASC 842), using the modified retrospective method for all lease arrangements at the beginning of the period of adoption. Results for reporting periods beginning January 1, 2019 are presented under ASC 842, while prior period amounts were not adjusted and continue to be presented in accordance with the Company's historical accounting under ASC Topic 840, Leases. ASC 842 had an impact on the Company's Condensed Balance Sheet but did not have a significant impact on the Company's net loss.

Under ASC 842, the Company determines if an arrangement is a lease at inception. Leases with a term greater than one year are recognized on the balance sheet as right-of-use assets, lease liabilities and, if applicable, long-term lease liabilities. The Company has elected the practical expedient not to recognize on the balance sheet leases with terms of one-year or less and not to separate lease components and non-lease components for long-term real-estate leases. Lease liabilities and their corresponding right-of-use assets are recorded based on the present value of lease payments over the expected lease term. The interest rate implicit in lease contracts is typically not readily determinable. As such, the Company estimates the incremental borrowing rate based on industry peers in determining the present value of lease payments. The Company's facility operating lease has one single component. The lease component results in a right-of-use asset being recorded on the balance sheet and amortized as lease expense on a straight-line basis in the Company's statements of operations.

Redeemable Convertible Preferred Stock

Redeemable convertible preferred stock is classified as a mezzanine instrument outside of the Company's capital accounts. Accretion of redeemable convertible preferred stock includes the greater of an adjustment to fair market value or the accrual of dividends on and accretion of issuance costs of the Company's redeemable convertible preferred stock. The carrying values of the redeemable convertible preferred stock are increased or reduced by periodic accretion or reduction to their respective redemption values, using the effective interest method, from the date of issuance to the earliest date the holders can demand redemption. These increases are recorded as charges against additional paid-in capital balance until the additional paid-in capital balance is reduced to zero. At that time, additional accretion adjustments are recorded as additions to accumulated deficit.

Preferred stock issuance costs represent costs related to the Company issuing redeemable convertible preferred stock. These amounts are included as a reduction of redeemable convertible preferred stock and are amortized over the estimated redemption period. Amortization of preferred stock issuance costs amounted to approximately $20,000 for the six months ended June 30, 2019 and 2018.

Redeemable Convertible Preferred Stock Warrants

The Company accounts for warrants to purchase shares of its redeemable convertible preferred stock as liabilities at their estimated fair value because the underlying shares are redeemable, which may obligate the Company to transfer assets to the holders at a future date. The warrants are subject to remeasurement to fair value at each balance sheet date, and any fair value adjustments are recognized as change in fair value of redeemable convertible preferred stock warrant liability in the statements of operations. The Company will continue to adjust the liability for changes in fair value until the earlier of the exercise or expiration of the redeemable convertible preferred stock warrants, conversion of redeemable convertible preferred stock into common stock, or until holders of the redeemable convertible preferred stock can no longer trigger a deemed liquidation event. At that time, the redeemable convertible preferred stock warrant liability will be adjusted to fair value in the statements of operations with the final fair value reclassified to equity.

Revenue Recognition

The Company recognizes revenue upon the transfer of promised goods or services to customers in an amount that reflects the consideration to which the Company expects to be entitled in exchange for those goods or services. To determine revenue recognition for contracts with customers the Company performs the following five steps: (i) identify the contract(s) with a customer; (ii) identify the performance obligations in the contract; (iii) determine the transaction price; (iv) allocate the transaction price to the performance obligations in the contract; and (v) recognize revenue when (or as) the Company satisfies the performance obligations. At contract inception, the Company assesses the goods or services promised within each contract and assesses whether each promised good or service is distinct and determines those that are performance obligations. The Company then recognizes as revenue the amount of the transaction price that is allocated to the respective performance obligation when (or as) the performance obligation is satisfied.

To date, the Company's drug candidates have not been approved for sale by the FDA and the Company has not generated or recognized any revenue from the sale of products.

In March 2015, the Company entered into a license and collaboration agreement with Kaken Pharmaceutical, Co., Ltd. ("Kaken"), which is referred to as the "Collaboration Agreement". Under the Collaboration Agreement, the Company granted to Kaken an exclusive right to develop, manufacture and commercialize the Company's sofpironium bromide compound (formerly BBI-4000), a topical anticholinergic, in Japan and certain other Asian countries (the "Territory"). In exchange, Kaken paid the Company an upfront, non-refundable payment of $11.0 million (the "upfront fee"). In addition, the Company is entitled to receive aggregate payments of up to $10.0 million upon the achievement of specified development milestones, and $30.0 million upon the achievement of commercial milestones, as well as tiered royalties based on a percentage of net sales of licensed products in the Territory. The Collaboration Agreement further provides that Kaken will be responsible for funding all development and commercial costs for the program in the Territory and, until such time, if any, as Kaken elects to establish its own source of supply of drug product, Kaken can purchase product supply from the Company to perform all non-clinical studies, and Phase I and Phase II clinical trials in Japan at cost. Kaken is also required to enter into negotiations with the Company, to supply the Company, at cost, with clinical supplies to perform Phase III clinical trials in the U.S.

Collaboration arrangement subsequent to adoption of Topic 606

The Company evaluates collaboration arrangements to determine whether units of account within the collaboration arrangement exhibit the characteristics of a vendor and customer relationship. The Company determined that the licenses transferred to Kaken in exchange for the upfront fees were representative of this type of a relationship. If a license to our intellectual property is determined to be distinct from the other performance obligations identified in the arrangement, the Company recognizes revenues from non-refundable, upfront fees allocated to the license when the license is transferred to the licensee and the licensee is able to use and benefit

from the license. For licenses that are bundled with other performance obligations, the Company utilizes judgment to assess the nature of the combined performance obligation to determine whether the combined performance obligation is satisfied over time or at a point in time and, if over time, the appropriate method of measuring progress for purposes of recognizing revenue. The Company evaluates the measure of progress each reporting period and, if necessary, adjust the measure of performance and related revenue recognition on a prospective basis.

Under Topic 606, the Company evaluated the terms of the Collaboration Agreement and the transfer of intellectual property and manufacturing rights (the "license") was identified as the only performance obligation as of the inception of the agreement. The Company concluded that the license for the intellectual property was distinct from its ongoing supply obligations. The Company further determined that the transaction price under the arrangement was comprised of the $11.0 million upfront payment. The future potential milestone amounts were not included in the transaction price, as they were all determined to be fully constrained. As part of our evaluation of the development and regulatory milestones constraint, the Company determined that the achievement of such milestones is contingent upon success in future clinical trials and regulatory approvals, each of which is uncertain at this time. The Company will re-evaluate the transaction price each quarter and as uncertain events are resolved or other changes in circumstances occur. Future potential milestone amounts would be recognized as revenue from collaboration arrangements, if unconstrained. The remainder of the arrangement, which largely consisted of both parties incurring costs in their respective territories, provides for the reimbursement of the ongoing supply costs. These costs were representative of a collaboration arrangement outside of the scope of Topic 606 as it does not have the characteristics of a vendor and customer relationship. Reimbursable program costs are recognized proportionately with the delivery of drug substance and are accounted for as reductions to research and development expense and are excluded from the transaction price.

Under Topic 606, the entire transaction price of $11.0 million was allocated to the license performance obligation. The license was deemed to be delivered in 2015 in connection with the execution of the Collaboration Agreement and upon transfer of the underlying intellectual property the performance obligation was fully satisfied. As a result, a cumulative adjustment to reduce deferred revenue and the corresponding sublicensing costs of $2.7 million was recorded upon the adoption of Topic 606 on January 1, 2018. As of June 30, 2019, the Company does not have a deferred revenue or deferred sublicensing costs balance related to the upfront fee on the balance sheet.

In May 2018, the Company entered into an amendment to the Collaboration Agreement (as further amended, "Collaboration Agreement"), pursuant to which, the Company received an upfront non-refundable fee of $15.6 million (the "Collaboration R&D Payment"), which was initially recorded as deferred revenue, to provide the Company with research and development funds to conduct certain clinical trials related to sofpironium bromide. These clinical trials have a benefit to Kaken and have the characteristics of a vendor and customer relationship. The Company has accounted for these under the provisions of Topic 606. This Collaboration R&D Payment will be initially recognized using an input method over the average estimated performance period of 1.45 years in proportion to the cost incurred. Upon receipt of the Collaboration R&D Payment, on May 31, 2018, a milestone payment originally due upon the first commercial sale in Japan was removed from the Collaboration Agreement and all future royalties to the Company under the Collaboration Agreement were reduced 150 basis points.

Consequently, during the three and six months ended June 30, 2019, the Company recognized revenue of $2.6 million and $6.1 million, respectively related to the Collaboration R&D Payment. As of June 30, 2019, the Company has a deferred revenue balance related to the Collaboration R&D Payment of $3.6 million, of which $3.0 million, is recorded in deferred revenue, current portion on the accompanying balance sheets.

Milestones

At the inception of each arrangement that includes milestone payments (variable consideration), the Company evaluates whether the milestones are considered probable of being reached and estimates the amount to be

included in the transaction price using the most likely amount method. If it is probable that a significant revenue reversal would not occur, the associated milestone value is included in the transaction price. Milestone payments that are not within our or our collaboration partner's control, such as regulatory approvals, are generally not considered probable of being achieved until those approvals are received. The transaction price is then allocated to each performance obligation on a relative stand-alone selling price basis, for which the Company recognizes revenue as or when the performance obligations under the contract are satisfied. At the end of each subsequent reporting period, the Company re-evaluates the probability of achievement of such milestones and any related constraint, and if necessary, adjust the Company's estimate of the overall transaction price. Any such adjustments are recorded on a cumulative catch-up basis, which would affect license, collaboration or other revenues and earnings in the period of adjustment.

In October 2017, the Company entered into an amendment to the Collaboration Agreement, pursuant to which, the Company granted Kaken a prepayment option (the "Kaken Option") on 50% of the Initiation of Phase III milestone (the "Phase III milestone"). The Kaken Option was exercisable by Kaken within 25 business days of receipt of the BBI-4000-CL-203 study topline results. In December 2017, Kaken exercised the Kaken Option and paid the Company $5.0 million (the "Kaken Option Payment"). Upon receipt of the non-refundable Kaken Option Payment, the Company provided Kaken the right to negotiate an exclusive license to develop, manufacture and commercialize each of the Company's other product candidates in Japan ("ROFN Agreement"). Under the ROFN Agreement, following the completion of any Initial Proof of Concept Clinical Trial ("Initial POC") for the Company's other product candidates, the Company must provide Kaken with certain information relating to the results of the clinical trial ("Initial POC Package"). The ROFN Agreement is exercisable by Kaken within 30 days of receipt of the Initial POC Package. In December 2017, the Company recognized collaboration revenue related to the Collaboration Agreement of $5.0 million, in connection with the Kaken Option. Additionally, the Company recognized sublicensing costs of $1.0 million, which are included in general and administrative expenses.

The Collaboration Agreement was further amended in March 2018 to accelerate payment of the Phase III milestone. The Phase III milestone was modified to be due upon the successful completion of the End of Phase 2 Meeting with the PMDA by Kaken on March 8, 2018, as determined by Kaken in its reasonable discretion (the "Third Milestone"). In March 2018, Kaken triggered the Third Milestone and paid the Company $5.0 million (the "Third Milestone Payment"). Upon receipt of the non-refundable Third Milestone Payment, the ROFN Agreement was amended (the "Amended ROFN Agreement") to grant an additional option to exercise upon completion of a Subsequent Clinical Trial (first clinical trial after the Initial POC) for the Company's other product candidates. The Company has determined that the ROFN Agreement is not a material right and has not allocated transaction price to this provision. As of June 30, 2019, Kaken has not exercised the Amended ROFN Agreement. In March 2018, the Company recognized collaboration revenue related to the Collaboration Agreement of $5.0 million in connection with the Third Milestone. Additionally, the Company recognized sublicensing costs of $1.0 million, which are included in general and administrative expenses.

Royalties

For arrangements that include sales-based royalties, including milestone payments based on the level of sales, and for which the license is deemed to be the predominant item to which the royalties relate, the Company recognized revenue at the later of (i) when the related sales occur, or (ii) when the performance obligation to which some or all of the royalty has been allocated has been satisfied (or partially satisfied). To date, the Company has not recognized any royalty revenue from any collaborative arrangement.

Under collaborative arrangements, the Company has been reimbursed for a portion of the Company's research and development expenses, including costs of drug supplies. When the research and development services are performed under a reimbursement or cost sharing model with a collaboration partner, the Company records these reimbursements as a reduction of research and development expense in the Company's statements of operations.

Net Income (Loss) per Common Share

Basic and diluted net income (loss) per common share is computed by dividing net income (loss) attributable to common stockholders by the weighted average number of common shares outstanding. When the effects are not anti-dilutive, diluted earnings per share is computed by dividing the Company's net earnings by the weighted average number of common shares outstanding and the impact of all dilutive potential common shares.

Diluted earnings per share gives effect to all dilutive potential common shares outstanding during the period, including stock options and warrants, using the treasury stock method, and redeemable convertible preferred stock, using the if-converted method. In computing diluted earnings per share, the average stock price for the period is used in determining the number of shares assumed to be purchased from the exercise of stock options or warrants. Potentially dilutive common share equivalents are excluded from the diluted earnings per share computation in net loss periods, since their effect would be anti-dilutive.

The following table sets forth the potential common shares excluded from the calculation of net loss per common share, because their inclusion would be anti-dilutive:

	Three Months Ended June 30,		Six Months Ended June 30,	
	2019	2018	2019	2018
			(Unaudited)	
Redeemable convertible preferred stock (as converted into common stock)	3,639,905	3,639,905	—	3,639,905
Promissory notes convertible into Series C-1 Redeemable Convertible Preferred Stock (as converted into common stock)	489,065	—	489,065	—
Options to purchase common stock	1,811,800	1,350,000	1,811,800	1,350,000
Warrants to purchase common stock	399,496	160,365	399,496	160,365
Warrants to purchase redeemable convertible preferred stock (as converted into common stock)	26,087	26,087	26,087	26,087
	6,366,353	5,176,357	2,726,448	5,176,357

NOTE 3. RECENT ACCOUNTING PRONOUNCEMENTS

In August 2018, the FASB issued ASU 2018-13, Fair Value Measurement Disclosure Framework—Changes to the Disclosure Requirements for Fair Value Measurement ("ASU 2018-13"), which amends certain disclosure requirements over Level 1, Level 2 and Level 3 fair value measurements. ASU 2018-13 is effective for fiscal years beginning after December 15, 2019 and interim periods within those fiscal years. Early adoption is permitted. The Company is currently evaluating the impact of adopting ASU 2018-13, but does not anticipate it will have a material impact on its disclosures.

In February 2016, the FASB issued ASU No. 2016-02, "Leases (Topic 842)" ("ASU 2016-02"). ASU 2016-02 is aimed at making leasing activities more transparent and comparable, and requires substantially all leases be recognized by lessees on their balance sheets as a right-of-use asset and corresponding lease liability, including leases currently accounted for as operating leases. The Company adopted ASU 2016-02 on January 1, 2019 using the modified retrospective approach. The adoption did not have a material impact on the Company's statements of operations. The new standard has required the Company to establish liabilities and corresponding right-of-use assets on its condensed balance sheet for operating leases of $0.2 million that existed as of the January 1, 2019 adoption date. The impact on the Condensed Balance Sheets as of January 1, 2019 was as follows:

Balance Sheet	Topic 840 January 1, 2019	Topic 842 January 1, 2019	Impact of Adoption
Operating lease right-of-use asset	$ —	$ 219	$ 219
Lease liability, current portion	—	(68)	(68)
Lease liability, net of current portion	—	(151)	(151)

NOTE 4. ACCRUED LIABILITIES

Accrued liabilities consisted of the following (in thousands):

	June 30, 2019	December 31, 2018
	(unaudited)	
Accrued compensation	$ 428	$ 569
Accrued note issuance costs	587	587
Accrued professional fees	1,458	1,269
Accrued contracted research and development services	1,566	847
	$ 4,039	$ 3,272

NOTE 5. CONVERTIBLE PROMISSORY NOTES

In March 2019, the Company initiated a convertible promissory notes offering pursuant to which the Company issued unsecured convertible promissory notes (the "Prom Notes"), bearing interest at 12.00% and maturing in one year and can be converted into shares of Series C-1 redeemable convertible preferred stock or the most senior preferred equity outstanding at the time of conversion at the option of the holder at a conversion price of $10.72 per share. In addition, the Prom Notes will automatically convert if a qualified financing of at least $15.0 million occurs before maturity and such mandatory conversion price will equal 80% of the effective price per share paid in the qualified financing, but not to exceed $13.40 per share. As of June 30, 2019, the Company had raised an aggregate principal amount of $5.1 million in Prom Notes.

The Prom Notes also provide for the issuance of warrants at 50% coverage, to acquire a minimum of 239,131 shares of common stock. The warrants are exercisable for a term of five years at an exercise price of $14.74 or 10% premium to the effective price per share paid in the qualified financing. The Company evaluated the various financial instruments under ASC 480 and ASC 815 and determined the warrants required fair value accounting. The fair value of the warrants was recorded as a warrant liability upon issuance. The fair value of the warrants on the date of issuance of $1.0 million was determined by a third-party valuation firm. The fair value of the warrants was recorded as a debt discount upon issuance and will be amortized to interest expense over the term of the Prom Notes based on the effective interest method.

The Company analyzed the conversion feature of the agreement for derivative accounting consideration under ASC 815 and determined that the embedded conversion features should be classified as a derivative because the exercise price of the Prom Notes are subject to a variable conversion rate. The Company has determined that the variable conversion feature is a redemption feature that is not clearly and closely related to the Prom Notes and is therefore required to be bifurcated. In accordance with AC 815, the Company has bifurcated the conversion feature of the Prom Notes and recorded a derivative liability.

The embedded derivative for the Prom Notes is carried on the Company's balance sheet at fair value. The derivative liability is marked-to-market each measurement period and any change in fair value is recorded as a component of the statements of operations. The fair value of the derivative liability on the date of issuance of $1.0 million was determined by a third-party valuation firm. The fair value of the conversion feature was recorded as a debt discount upon issuance and will be amortized to interest expense over the term of the Prom Notes based on the effective interest method.

The Company then evaluated the conversion option to discern whether a beneficial conversion feature existed based upon comparing the effective exercise price of the convertible notes to the fair value of the shares they are convertible into. The Company concluded no beneficial conversion feature existed. During the three and six months ended June 30, 2019 recognized $0.5 million of interest expense, including $0.4 million of accretion of discounts using an effective interest rate of 12.00%.

As of June 30, 2019, there were unaccreted debt discounts of $1.6 million, which were recorded as a direct deduction from convertible promissory notes on the accompanying balance sheets.

NOTE 6. NOTE PAYABLE

Note Payable

On February 18, 2016, the Company entered into a loan and security agreement (the "Loan Agreement") with Hercules Capital, Inc. (the "Lender") under which the Company borrowed $7.5 million upon the execution of the Loan Agreement on February 18, 2016. The interest rate applicable to each tranche is variable based upon the greater of either (i) 9.2% and (ii) the sum of (a) the Prime Rate as reported in The Wall Street Journal minus 3.5%, plus (b) 9.2%; notwithstanding the above, such rate shall not exceed the permissible rates of interest on commercial loans under the laws of the State of California. Payments under the Loan Agreement were interest only until June 1, 2017, followed by equal monthly payments of principal and interest through the scheduled maturity date on September 1, 2019.

The Company's obligations under the Loan Agreement are secured by a first priority security interest in substantially all of the Company's assets, other than its intellectual property. The Company also has agreed not to pledge or otherwise encumber its intellectual property assets, except that the Company may grant non-exclusive licenses of intellectual property entered into in the ordinary course of business, and licenses approved by the Company's Board of Directors that may be exclusive in respects other than territory and may be exclusive as to territory as to discrete geographical areas outside of the United States.

The Company has paid the Lender a facility fee of $150,000 in connection with the Loan Agreement. In addition, if the Company repays all or a portion of the loan prior to maturity, it will pay the Lender a prepayment penalty fee, based on a percentage of the then outstanding principal balance, equal to 3% if the prepayment occurs prior to February 19, 2017, 2% if the prepayment occurs prior to February 19, 2018, or 1% if the prepayment occurs thereafter. In addition, the Company is required to make an end of term payment of 4.5% of the sum of (i) term loan advances, plus (ii) 50% of the aggregate unfunded term loan commitments.

The Loan Agreement was amended in December 2017 (as further amended, "Loan Agreement") to provide for an additional three-month interest only period ending on March 1, 2018, at which time the outstanding loan balance would continue to be paid in equal monthly installments of principal and interest. Pursuant to the Loan Agreement, the end of term payment was increased by $30,500.

The Loan Agreement was further amended in March 2018 to provide for an additionaltwo-month interest only period ending on June 1, 2018, at which time the outstanding loan balance would continue to be paid in equal monthly installments of principal and interest. Pursuant to the Loan Agreement, a facility fee of $25,000 was paid upon execution and the end of term payment was increased by $25,000.

The Loan Agreement was again amended in July 2018 to provide for an additional three-month interest only period ending on October 1, 2018, at which time the outstanding loan balance would continue to be paid in equal monthly installments of principal and interest. Pursuant to the Loan Agreement, a facility fee of $25,000 was paid upon execution and the end of term payment was increased by $25,000.

The Loan Agreement includes customary affirmative and restrictive covenants, and also includes customary events of default, including payment defaults, breaches of covenants following any applicable cure period, a material impairment in the perfection or priority of the Lender's security interest or in the value of the collateral, and a material impairment of the prospect of repayment of the loans. Upon the occurrence of an event of default and following any applicable cure periods, a default interest rate of an additional 4% may be applied to the outstanding loan balances, and the Lender may declare all outstanding obligations immediately due and payable and take such other actions as set forth in the Loan Agreement.

Under the Loan Agreement, the Company grants the Lender the right to participate in and/or designate one or more of its affiliates to participate in any subsequent financing in an amount up to $1.0 million on the same terms, conditions and pricing afforded to other participating in such subsequent financing.

Note payable at June 30, 2019 consisted of the following (in thousands):

Face value of note payable	$ 7,500
Accrued interest	30
Discounts on note payable related to warrants	(329)
Note payable issuance costs	(1,061)
	6,140
Principal payments through June 30, 2019	(4,300)
Accumulated accretion	1,344
Note payable	$ 3,184

The following is a schedule of aggregate note payable maturities, excluding the unamortized amount related to the end of term payment, for each of the years subsequent to June 30, 2019 (in thousands):

Year Ending December 31,	
2019	$3,199
	$3,199

In connection with the Loan Agreement, the Company issued warrants to the Lender, which are exercisable for 26,087 shares of Series C redeemable convertible preferred stock at a per share exercise price of $11.50 (the "Warrants"). The Warrants will terminate, if not earlier exercised, on February 18, 2026. The fair value of the warrants was recorded as a redeemable convertible preferred stock warrant liability upon issuance. The fair value of the warrants on the date of issuance of $0.3 million was determined using the Black-Scholes option-pricing model. The fair value of the warrants was recorded as a debt discount upon issuance and will be amortized to interest expense over the term of the loan based on the effective interest method.

As of June 30, 2019, there were unaccreted debt discounts and issuance costs of $0.1 million, which were recorded as a direct deduction from note payable on the accompanying balance sheets.

NOTE 7. COMMITMENTS AND CONTINGENCIES

Operating Leases

In August 2016, the Company entered into a five-year lease for office space in Boulder, Colorado that expires on October 31, 2021 (the "Boulder Lease") subject to the Company's option to renew the Boulder Lease for two additional terms of three years each. Pursuant to the Boulder Lease, the Company leased 3,038 square feet of space in a multi-suite building. Rent payments under the Boulder Lease included base rent of $4,430 per month during the first year of the Boulder Lease with an annual increase of 3.5%, and additional monthly fees to cover the Company's share of certain facility expenses, including utilities, property taxes, insurance and maintenance, which were $2,160 per month during the first year of the Boulder Lease.

The Company recognized a right-of-use asset and corresponding lease liability on January 1, 2019, by calculating the present value of lease payments, discounted at 12.0%, the Company's estimated incremental borrowing rate, over the 2.8 years expected remaining term. As the Company's lease does not provide an implicit rate, the Company estimated the incremental borrowing rate based on industry peers. Industry peers consist of several public companies in the biotechnology industry with comparable characteristics, including clinical trials progress

and therapeutic indications. Amortization of the operating lease right-of-use asset for the Boulder Lease amounted to $17,000 and $33,000 for the three and six months ended June 30, 2019, respectively, and was included in operating expense. As of June 30, 2019, the remaining lease term was 2.3 years.

The terms of the Boulder Lease provide for rental payments on a monthly basis on a graduated scale. The Company recognizes rent expense on a straight-line basis over the lease period. Lease expense for the three and six months ended June 30, 2019 and 2018 was $0.1 million.

NOTE 8. REDEEMABLE CONVERTIBLE PREFERRED STOCK

As of June 30, 2019 and December 31, 2018, the Company had authorized 4,446,228 and 4,182,943 shares of redeemable convertible preferred stock, par value of $0.0001, of which 1,162,505 are designated Series A redeemable convertible preferred stock ("Preferred Stock A"), 882,216 are designated Series B redeemable convertible preferred stock ("Preferred Stock B"), 869,565 are designated Series C redeemable convertible preferred stock ("Preferred Stock C") and 1,531,942 are designated Series C-1 redeemable convertible preferred stock ("Preferred Stock C-1")

In connection with the issuance of the Preferred Stock A, B, C and C-1 (the "Preferred Stock"), the Company incurred approximately $0.5 million of issuance costs. The unaccreted discount as of June 30, 2019 and December 31, 2018 amounted to approximately $0.1 million.

Redeemable convertible preferred stock consisted of the following (in thousands, except share data):

	June 30, 2019					
	Preferred Shares Authorized	Preferred Shares Issued and Outstanding	Par Value	Carrying Value	Liquidation Preference	Common Stock Issuable Upon Conversion
Series A	1,162,505	1,162,505	$ 1,163	$ 12,160	$ 12,164	1,162,505
Series B	882,216	828,998	829	10,080	10,084	828,998
Series C	869,565	743,326	743	11,616	11,630	743,326
Series C-1	1,531,942	905,076	905	14,078	14,139	905,076
	4,446,228	3,639,905	$ 3,640	$ 47,934	$ 48,017	3,639,905

	December 31, 2018					
	Preferred Shares Authorized	Preferred Shares Issued and Outstanding	Par Value	Carrying Value	Liquidation Preference	Common Stock Issuable Upon Conversion
Series A	1,162,505	1,162,505	$ 1,163	$ 16,098	$ 11,898	1,162,505
Series B	882,216	828,998	829	13,011	9,803	828,998
Series C	869,565	743,326	743	13,018	11,418	743,326
Series C-1	1,268,657	905,076	905	16,163	13,866	905,076
	4,182,943	3,639,905	$ 3,640	$ 58,290	$ 46,985	3,639,905

The rights, preferences and privileges of the Preferred Stock are as follows:

Dividends

The Company recognizes certain dividend rights for the holders of the Preferred Stock, in that these holders will receive preference to any declaration or payment of dividends at the rate of 8% of the original issue price of $5.3333 of Preferred Stock A, $8.14 of Preferred Stock B, $11.50 of Preferred Stock C, and $13.40 of Preferred Stock C-1 per share per annum, compounded annually, on each outstanding share. Holders of Preferred Stock A, B, C and C-1 rank pari passu with respect to the payment of accrued dividends.

In May 2019, the Company amended dividend rights that have accrued through May 31, 2019 whereby the accrued dividends payable to the holders of the Company's outstanding preferred stock will settle with shares of the Company's common stock in lieu of cash. Dividends will not continue to accrue after May 31, 2019.

Accrued dividends at June 30, 2019 amounted to $6.0 million ($5.13 per share), $3.3 million ($4.02 per share), $3.1 million ($4.15 per share), and $2.0 million ($2.22 per share) on Preferred Stock A, B, C and C-1, respectively. Accrued dividends at December 31, 2018 amounted to $5.7 million ($4.90 per share), $3.1 million ($3.68 per share), $2.9 million ($3.86 per share), and $1.7 million ($1.92 per share) on Preferred Stock A, B, C and C-1, respectively. Accrued dividends are included as a component of redeemable convertible preferred stock in the accompanying balance sheets.

Liquidation Preference

Preferred Stock carries certain liquidation rights upon the liquidation, dissolution, or winding up of the Company, whether voluntary or involuntary (including a change in control), whereas before any distribution or payment shall be made to the holders of any common stock, the holders of the Preferred Stock shall be entitled to be paid an amount equal to the original purchase price plus any accrued but unpaid dividends out of the assets of the Company legally available for distribution for each share. If the assets of the Company available for distribution upon liquidation are not sufficient to pay the preferred stock preference amount, the assets will be distributed ratably among the holders of the Preferred Stock in proportion to the full amount of the preference amount such holder is otherwise entitled to receive.

Any proceeds remaining after the distribution of the preference amount shall be distributed pro rata to the holders of the Preferred Stock (on as-if-converted to Common Stock basis) and the holders of Common Stock.

Conversion

Preferred Stock may be converted into common stock at the initial conversion ratio of 1:1, which ratio shall be altered in accordance with stock dividends, splits, combinations and other similar events, including the sale of additional shares of common or preferred stock at an effective price per common share lower than the conversion price then in effect. Each share of the Preferred Stock will automatically convert into shares of common stock, at the applicable conversion ratio of each series of redeemable convertible preferred stock then in effect, upon (i) a qualified public offering with net proceeds of not less than $30 million and a price of not less than $57.50 per share, subject to appropriate adjustment for any stock dividend, stock split, combination or other similar recapitalization, or (ii) the date specified by written consent or agreement of the holders of at least two-thirds of the then outstanding shares of Preferred Stock voting together as a single class on an as-if-converted to Common Stock basis.

Redemption

At any time after July 16, 2021, the holders of the Company's Preferred Stock will have the right to require the Company to redeem all or a portion of their shares for cash at a redemption price equal to the greater of: (i) the purchase price of such shares plus all accrued and unpaid dividends thereon, or the (ii) fair market value of the shares.

Voting Rights

The holders of Preferred Stock are entitled to vote, together with the holders of common stock, on all matters submitted to stockholders for a vote. Holders of Preferred Stock have the right to vote the number of shares equal to the number of shares of common stock into which such Preferred Stock could convert on the record date for determination of stockholders entitled to vote. The holders of the majority of Preferred Stock, voting separately as a single class, are entitled to elect two directors of the Company.

NOTE 9. STOCK-BASED COMPENSATION

Total stock-based compensation expense related to stock options granted under the 2009 Plan was allocated as follows:

	Three Months Ended June 30,		Six Months Ended June 30,	
	2019	2018	2019	2018
Research and development	$ 78	$ 93	$ 156	$ 187
General and administrative	221	82	527	178
Total stock-based compensation expense	$ 299	$ 175	$ 683	$ 365

NOTE 10. STOCKHOLDERS' DEFICIT

Common Stock

As of June 30, 2019, the Company had authorized 10,000,000 shares of common stock, par value $0.0001 per share.

The Company has reserved authorized shares of common stock, on anas-converted basis, for future issuance at June 30, 2019 as follows:

	2019
Conversion of Preferred Stock A	1,162,505
Conversion of Preferred Stock B	828,998
Conversion of Preferred Stock C	743,326
Conversion of Preferred Stock C-1	905,076
Preferred Stock C warrants issued with note payable	26,087
Conversion of convertible promissory notes	489,065
Common stock warrants	399,496
Common stock options outstanding	1,811,800
Options available for grant under the 2009 Plan	2,607,274
	8,973,627

NOTE 11. SUBSEQUENT EVENTS

Bridge Financing—Convertible Promissory Notes with Warrants

In July 2019, the Company issued additional Prom Notes under substantially similar terms and related common warrants for gross proceeds of $775,000.

Evaluation Date

The Company has evaluated events that have occurred after the balance sheet date through July 12, 2019, which is when these financial statements were issued.

Report of Independent Registered Public Accounting Firm

To the Shareholders and the Board of Directors of Brickell Biotech, Inc.

Opinion on the Financial Statements

We have audited the accompanying balance sheets of Brickell Biotech, Inc. (the Company) as of December 31, 2018 and 2017, the related statements of operations, redeemable convertible preferred stock and stockholders' deficit and cash flows for the years then ended, 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 at December 31, 2018 and 2017, and the results of its operations and its cash flows for the years then ended, in conformity with U.S. generally accepted accounting principles.

The Company's Ability to Continue as a Going Concern

The accompanying financial statements have been prepared assuming that the Company will continue as a going concern. As discussed in Note 1 to the financial statements, the Company has suffered recurring losses from operations and has stated that substantial doubt exists about the Company's ability to continue as a going concern. Management's evaluation of the events and conditions and management's plans regarding these matters are also described in Note 1. 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 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 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 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.

/s/ Ernst & Young LLP

We have served as the Company's auditor since 2017
Denver, Colorado
July 2, 2019

BRICKELL BIOTECH, INC.
BALANCE SHEETS
(In thousands, except share and per share data)

	December 31, 2018	December 31, 2017
Assets		
Current assets:		
Cash and cash equivalents	$ 8,067	$ 5,399
Prepaid expenses and other current assets	204	89
Deferred sublicensing costs, current portion	—	342
Total current assets	8,271	5,830
Property and equipment, net	37	74
Intangible assets	441	441
Deferred sublicensing costs, net of current portion	—	342
Total assets	$ 8,749	$ 6,687
Liabilities, redeemable convertible preferred stock and stockholders' deficit		
Current liabilities:		
Accounts payable	$ 4,067	$ 1,222
Accrued liabilities	3,272	3,456
Deferred revenue, current portion	8,117	1,709
Notes payable, current portion	4,639	2,131
Total current liabilities	20,095	8,518
Contingent consideration	145	148
Redeemable convertible preferred stock warrant liability	242	486
Note payable, net of current portion	—	3,408
Deferred revenue, net of current portion	1,595	1,709
Total liabilities	22,077	14,269
Redeemable convertible preferred stock (Series A, B, C and C-1), $0.0001 par value, 4,182,943 shares authorized at December 31, 2018 and 2017; 3,639,905 shares issued and outstanding at December 31, 2018 and 2017; aggregate liquidation preference of $46,985 and $43,493 at December 31, 2018 and 2017, respectively	58,290	52,354
Commitments and contingencies (Note 9)		
Stockholders' deficit:		
Common Stock, $0.0001 par value, 8,000,000 shares authorized at December 31, 2018 and 2017; 1,706,251 and 1,695,418 issued and outstanding at December 31, 2018 and 2017, respectively	—	—
Additional paid-in capital	—	—
Accumulated deficit	(71,618)	(59,936)
Total stockholders' deficit	(71,618)	(59,936)
Total liabilities, redeemable convertible preferred stock and stockholders' deficit	$ 8,749	$ 6,687

BRICKELL BIOTECH, INC.
STATEMENTS OF OPERATIONS
(In thousands, except share and per share data)

	Year Ended December 31,	
	2018	2017
Collaboration revenue	$ 10,888	$ 7,567
Operating expenses:		
Research and development	12,960	11,885
General and administrative	6,379	5,648
Total operating expenses	19,339	17,533
Loss from operations	(8,451)	(9,966)
Interest income	61	25
Interest expense	(1,090)	(1,049)
Change in fair value of redeemable convertible preferred stock warrant liability	244	(126)
Net loss	(9,236)	(11,116)
Accretion of redeemable convertible preferred stock to redemption value	(5,936)	(11,925)
Net loss attributable to common stockholders	$ (15,172)	$ (23,041)
Basic and diluted net loss per common share attributable to common stockholders	$ (8.92)	$ (13.60)
Shares used in computing basic and diluted net loss per share attributable to common stockholders	1,700,344	1,693,581

BRICKELL BIOTECH, INC.
STATEMENTS OF REDEEMABLE CONVERTIBLE PREFERRED STOCK AND STOCKHOLDERS' DEFICIT
(In thousands, except share and per share data)
YEARS ENDED DECEMBER 31, 2018 AND 2017

	Series A, B, C & C-1 Reedemable Convertible Preferred Stock		Common Stock		Additional	Accumulated	Total Stockholders'
	Shares	Par Value	Shares	Par Value	Paid-In-Capital	Deficit	Deficit
Balance, December 31, 2016	3,053,064	$ 32,685	1,692,918	$ —	$ —	$ (37,786)	$ (37,786)
Stock based compensation	—	—	—	—	881	—	881
Issuance of common stock through exercise of stock option	—	—	2,500	—	10	—	10
Issuance of Series C-1 convertible preferred stock, net of issuance costs of $120	586,841	7,744	—	—	—	—	—
Accretion of redeemable convertible preferred stock to redemption value	—	11,925	—	—	(891)	(11,034)	(11,925)
Net loss	—	—	—	—	—	(11,116)	(11,116)
Balance, December 31, 2017	3,639,905	$ 52,354	1,695,418	$ —	$ —	$ (59,936)	$ (59,936)
Effect of adoption of Topic 606	—	—	—	—	—	2,734	2,734
Stock based compensation	—	—	—	—	711	—	711
Issuance of common stock through exercise of stock option	—	—	10,833	—	45	—	45
Accretion of redeemable convertible preferred stock to redemption value	—	5,936	—	—	(756)	(5,180)	(5,936)
Net income	—	—	—	—	—	(9,236)	(9,236)
Balance, December 31, 2018	**3,639,905**	**$ 58,290**	**1,706,251**	**$ —**	**$ —**	**$ (71,618)**	**$ (71,618)**

BRICKELL BIOTECH, INC.
STATEMENTS OF CASH FLOWS
(In thousands)

	Year Ended December 31,	
	2018	**2017**
Cash flows from operating activities:		
Net loss	$ (9,236)	$ (11,116)
Adjustments to reconcile net loss to net cash provided by (used in) operating activities:		
Depreciation	49	48
Change in fair value of convertible preferred stock warrant liability	(244)	126
Change in fair value of contingent consideration	(3)	(45)
Amortization of debt discounts and financing costs	489	358
Stock-based compensation	711	881
Changes in operating assets and liabilities:		
Prepaid expenses and other current assets	(115)	545
Deferred sublicensing fees	—	513
Accounts payable	2,845	262
Accrued liabilities	(241)	1,587
Deferred revenue	9,712	(2,567)
Net cash provided by (used in) operating activities	3,967	(9,408)
Cash flows from investing activities:		
Capital expenditures	(12)	(11)
Net cash used in investing activities	(12)	(11)
Cash flows from financing activities:		
Principal payments made on note payable	(1,282)	(1,410)
Proceeds from issuance of redeemable convertible preferred stock, net of issuance costs	—	7,764
Note payable issuance costs	(50)	—
Proceeds from the exercise of stock options	45	10
Net cash provided by (used in) financing activities	(1,287)	6,364
Net increase (decrease) in cash and cash equivalents	2,668	(3,055)
Cash and cash equivalents—Beginning	5,399	8,454
Cash and cash equivalents—Ending	$ 8,067	$ 5,399
Supplement disclosure of cash flow information:		
Interest paid	$ 608	$ 699
Supplement disclosure of non-cash financing and investing activities:		
Accretion of redeemable convertible preferred stock to redemption value	$ 5,896	$ 11,897
Accretion of redeemable convertible preferred stock issuance costs	$ 40	$ 28

BRICKELL BIOTECH, INC.
NOTES TO FINANCIAL STATEMENTS

NOTE 1. ORGANIZATION AND NATURE OF OPERATIONS

Brickell Biotech, Inc. (the "Company") was incorporated in the state of Delaware and commenced activities on September 17, 2009. The Company is a clinical-stage pharmaceutical company focused on the development of innovative and differentiated therapeutics for the treatment of skin diseases. Its current pipeline consists of new molecular entities targeting the treatment of the following indications: hyperhidrosis, allergic contact dermatitis, androgenic alopecia, cutaneous t-cell lymphoma and psoriasis. The Company's lead product candidate, sofpironium bromide, for the topical treatment of axillary hyperhidrosis (underarm sweating beyond what is needed for normal body temperature regulation), demonstrated positive results in a confirmatory Phase 2b study in the fourth quarter of 2017. Based upon these results, along with the completion of the Company's end-of-Phase 2 meeting with the U.S. Food and Drug Administration ("FDA") in the first quarter of 2018, the Company expects to initiate its pivotal Phase 3 clinical trials in the U.S. and Canada in the first half of 2019. The Company is headquartered in Boulder, Colorado.

Liquidity and Capital Resources

The accompanying financial statements have been prepared assuming that the Company will continue as a going concern, which contemplates the realization of assets and the settlement of liabilities and commitments in the normal course of business. The financial statements do not reflect any adjustments relating to the recoverability and reclassification of assets and liabilities that might be necessary if the Company is unable to continue as a going concern. The Company has incurred significant operating losses and has an accumulated deficit as a result of ongoing efforts to develop product candidates, including conducting preclinical and clinical trials and providing general and administrative support for these operations. For the year ended December 31, 2018, the Company had a net loss of $9.2 million and net cash provided by operating activities of $4.0 million. As of December 31, 2018, the Company had cash and cash equivalents of $8.1 million and an accumulated deficit of $71.6 million.

The Company expects to continue to incur additional substantial losses in the foreseeable future as a result of the Company's research and development activities. The Company plans to finance operations through equity or debt financing arrangements, and/or third-party collaboration funding. Additional funding will be required in the future to maintain its present and proposed research activities. There can be no assurance that additional equity or debt financing will be available on acceptable terms, if at all. If the Company is unable to raise additional funding to meet its working capital needs in the future, it will be forced to delay or reduce the scope of its research programs and/or limit or cease its operations. These factors raise substantial doubt about the Company's ability to continue as a going concern for a period of twelve months subsequent to the issuance of these financial statements.

NOTE 2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Basis of Presentation

The accompanying financial statements are presented in U.S. dollars and have been prepared in accordance with accounting principles generally accepted in the United States of America ("US GAAP").

Use of Estimates in the Preparation of Financial Statements

The preparation of financial statements, in conformity with US GAAP, requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and

liabilities as of the balance sheet dates and the reported amounts of revenues and expenses for the periods presented. On an ongoing basis, management evaluates its estimates, including those related to revenue recognition, accrued research and development expenses, intangible assets, other long-lived assets, redeemable convertible preferred stock, warrants, stock-based compensation, and the valuation of deferred tax assets. The Company bases its estimates on its historical experience and also on assumptions that it believes are reasonable; however, actual results could significantly differ from those estimates.

Risks and Uncertainties

The Company's business is subject to significant risks common to early-stage companies in the pharmaceutical industry including, but not limited to, the ability to develop appropriate formulations, scale up and production of the compounds, dependence on collaborative parties, uncertainties associated with obtaining and enforcing patents, clinical success, the lengthy and expensive regulatory approval process, compliance with regulatory requirements, competition from other products; uncertainty of broad adoption of its approved products, if any, by physicians and patients; significant competition; ability to manage third-party manufacturers, suppliers and contract research organizations ("CROs") and obtaining additional financing to fund the Company's efforts.

The product candidates developed by the Company require approvals from the FDA and foreign regulatory agencies prior to commercial sales in the United States or foreign jurisdictions, respectively. There can be no assurance that the Company's current and future product candidates will receive the necessary approvals. If the Company is denied approval or approval is delayed, it may have a material adverse impact on the Company's business and its financial condition.

The Company expects to incur substantial operating losses for the next several years and will need to obtain additional financing in order to complete clinical studies and launch and commercialize any product candidates for which it receives regulatory approval. There can be no assurance that such financing will be available or will be at terms acceptable by the Company.

Cash and Cash Equivalents

The Company considers all highly liquid debt instruments with an original maturity of three months or less from date of purchase to be cash equivalents. Cash equivalents, which are stated at cost, consist primarily of amounts held in short-term money market accounts with highly rated financial institutions.

Concentrations of Credit Risk

Financial instruments that potentially subject the Company to concentrations of credit risk consist principally of cash and cash equivalents. The Company maintains cash balances in several accounts with one financial institution which, from time to time, are in excess of federally insured limits.

Property and Equipment

Property and equipment is stated at cost, less accumulated depreciation. Expenditures for major betterments and additions are charged to the asset accounts, while replacements, maintenance and repairs, which do not improve or extend the lives of the respective assets, are charged to expense as incurred. Depreciation is computed using the straight-line method over the estimated useful lives of the assets, generally between three and five years. Depreciation expense amounted to approximately $49,000 and $48,000 for the years ended December 31, 2018 and 2017, respectively. Accumulated depreciation amounted to approximately $146,000 and $97,000 as of December 31, 2018 and 2017, respectively.

Impairment of Long-Lived Assets

The Company assesses changes in the performance of its product candidates in relation to its expectations, and industry, economic and regulatory conditions and makes assumptions regarding estimated future cash flows in evaluating the value of its property and equipment, and in-process research and development ("IPR&D").

The Company periodically evaluates long-lived assets for impairment whenever events or changes in circumstances indicate that the carrying amount of an asset may not be recoverable. If the sum of the expected future undiscounted cash flows is less than the carrying amount of the asset, an impairment loss is recognized to the extent the carrying amount of the impaired asset exceeds its fair value.

IPR&D represents the fair value assigned to incomplete research projects that the Company acquires in business acquisitions, which, at the time of acquisition, have not reached technological feasibility. Amounts capitalized and accounted for as indefinite-lived intangible assets are subject to impairment testing until completion or abandonment of the project. The Company tests IPR&D for impairment at least annually, or more frequently, if impairment indicators exist, by first assessing qualitative factors to determine whether it is more likely than not that the fair value of the IPR&D intangible asset is less than its carrying amount. If the Company concludes it is more likely than not that the fair value is less than the carrying amount, a quantitative test that compares the fair value of the IPR&D intangible asset with its carrying value is performed. If the Company discontinues or abandons a program related to IPR&D and determines that there are no other indicators of value, the Company will impair the entire amount of the related intangible asset. There were no impairments of IPR&D during the years ended December 31, 2018 and 2017.

Fair Value Measurements

Fair value is the price that the Company would receive to sell an asset or pay to transfer a liability in a timely transaction with an independent counterparty in the principal market or in the absence of a principal market, the most advantageous market for the asset or liability. A three-tier hierarchy is established to distinguish between (1) inputs that reflect the assumptions market participants would use in pricing an asset or liability developed based on market data obtained from sources independent of the reporting entity (observable inputs) and (2) inputs that reflect the reporting entity's own assumptions about the assumptions market participants would use in pricing an asset or liability developed based on the best information available in the circumstances (unobservable inputs), and establishes a classification of fair value measurements for disclosure purposes.

The hierarchy is summarized in the three broad levels listed below.

Level 1—quoted prices in active markets for identical assets and liabilities

Level 2—other significant observable inputs (including quoted prices for similar assets and liabilities, interest rates, credit risk, etc.)

Level 3—significant unobservable inputs (including the Company's own assumptions in determining the fair value of assets and liabilities)

The following tables set forth the fair value of the Company's financial assets and liabilities measured at fair value on a recurring basis based on the three-tier fair value hierarchy as of December 31, 2018 and 2017 (in thousands):

	December 31, 2018		
	Level 1	Level 2	Level 3
Assets:			
Money market funds	$8,067	$ —	$ —
Total	$8,067	$ —	$ —
Liabilities:			
Redeemable convertible preferred stock warrant liability	$ —	$ —	$ 242
Contingent consideration	—	—	145
Total	$ —	$ —	$ 387

	December 31, 2017		
	Level 1	Level 2	Level 3
Assets:			
Money market funds	$5,399	$ —	$ —
Total	$5,399	$ —	$ —
Liabilities:			
Redeemable convertible preferred stock warrant liability	$ —	$ —	$ 486
Contingent consideration	—	—	148
Total	$ —	$ —	$ 634

Fair Value of Financial Instruments

The following methods and assumptions were used by the Company in estimating the fair values of each class of financial instrument disclosed herein:

Money market funds—The carrying amounts reported in the balance sheets approximate their fair values due to theirshort-term nature and/or market rates of interest (Level 1 of the fair value hierarchy).

Contingent consideration—These amounts represent future payments in conjunction with various business combinations. The ultimate amount of future payments is based on specified future criteria, such as the achievement of certain future development and regulatory milestones. The Company evaluates its estimates of the fair value of contingent consideration on a periodic basis. The fair value of the contingent consideration was determined by a third-party valuation firm applying the income approach. This approach estimates the fair value of the contingent consideration related to the achievement of future development and regulatory milestones by assigning an achievement probability and date of expected completion to each potential milestone and discounting the associated cash payment to its present value using a risk-adjusted rate of return. The probability of success of each milestone assumes that the prerequisite developmental milestones are successfully completed and is based on the asset's current stage of development and anticipated regulatory requirements. The probability of success for each milestone is determined by multiplying the preceding probabilities of success. The unobservable inputs (Level 3 of the fair value hierarchy) to the valuation models that have the most significant effect on the fair value of the Company's contingent consideration are the probabilities that certain in-process development projects will meet specified development milestones, including ultimate approval by the FDA, with individual cumulative probabilities ranging from 2.1% to 20.9%. Other unobservable inputs used in this approach include: risk-adjusted discount rates ranging from 15.5% to 27.1% and estimates of the timing of the achievement of the various product development, regulatory approval and sales milestones.

Redeemable convertible preferred stock warrant liability—These amounts represent potential future obligations to transfer assets to the holders at a future date. The Company remeasures these warrants to current fair value at each balance sheet date, and any change in fair value is recognized as a change in fair value of warrant liability in the statements of operations. The Company estimated the fair value of these warrants at the respective balance sheet dates using the Black-Scholes option-pricing model (Level 3 of the fair value hierarchy table) (see further discussion in Note 7).

Inputs used to determine estimated fair value of the warrant liabilities include the estimated fair value of the underlying stock at the valuation date, the estimated term of the warrants, risk-free interest rates, expected dividends and the expected volatility of the underlying stock. The most significant unobservable inputs used in the fair value measurement of the convertible preferred stock warrant liability are the fair value of the underlying stock at the valuation date and the estimated term of the warrants. Generally, increases (decreases) in the fair value of the underlying stock and estimated term would result in a directionally similar impact to the fair value measurement.

The fair value of the outstanding convertible preferred stock warrants was remeasured as of December 31, 2018 using the Black-Scholes option-pricing model with the following assumptions: contractual term of 7.1 years, expected volatility of 30.0%, risk-free rate of 2.59%, and expected dividend yield of 0%.

*Fair Value of Redeemable Convertible Preferred Stock.*The fair value of the shares of the convertible preferred stock underlying the preferred stock warrants has historically been determined by a third-party valuation firm. Because there has been no public market for the Company's convertible preferred stock, the third-party valuation firm has determined fair value of the convertible preferred stock at each balance sheet date by considering a number of objective and subjective factors, including valuation of comparable companies, sales of convertible preferred stock to unrelated third parties, operating and financial performance, the lack of liquidity of capital stock, and general and industry specific economic outlook, among other factors.

Remaining Term. The Company derived the expected term based on the time from the balance sheet date until the preferred stock warrant's expiration date.

Expected Volatility. Since the Company was a private entity with no historical data regarding the volatility of its preferred stock, the expected volatility used is based on volatility of a group of similar entities. In evaluating similarity, the Company considered factors such as industry, stage of life cycle and size.

Risk-Free Interest Rate. The risk-free interest rate is based on U.S. Treasuryzero-coupon issues with remaining terms similar to the expected term of the warrants.

Expected Dividend Rate. The Company has never paid any dividends and does not plan to pay dividends in the foreseeable future and, therefore, used an expected dividend rate of zero in the valuation model.

The following table sets forth a summary of the changes in the fair value of the Company's Level 3 financial instruments as follows (in thousands):

	Redeemable Convertible Preferred Stock Warrant Liability	Contingent Consideration Liabilities
Fair value as of December 31, 2016	$ 360	$ 193
Change in fair value	126	(45)
Fair value as of December 31, 2017	486	148
Change in fair value	(244)	(3)
Fair value as of December 31, 2018	$ 242	$ 145

Redeemable Convertible Preferred Stock

Redeemable convertible preferred stock is classified as a mezzanine instrument outside of the Company's capital accounts. Accretion of redeemable convertible preferred stock includes the greater of an adjustment to fair market value or the accrual of dividends on and accretion of issuance costs of the Company's redeemable convertible preferred stock. The carrying values of the redeemable convertible preferred stock are increased by periodic accretion to their respective redemption values, using the effective interest method, from the date of issuance to the earliest date the holders can demand redemption. These increases are recorded as charges against additional paid-in capital balance until the additional paid-in capital balance is reduced to zero. At that time, additional accretion adjustments are recorded as additions to accumulated deficit.

Preferred stock issuance costs represent costs related to the Company issuing redeemable convertible preferred stock. These amounts are included as a reduction of redeemable convertible preferred stock and are amortized over the estimated redemption period. Amortization of preferred stock issuance costs amounted to approximately $40,000 and $28,000 for the years ended December 31, 2018 and 2017, respectively.

Redeemable Convertible Preferred Stock Warrants

The Company accounts for warrants to purchase shares of its redeemable convertible preferred stock as liabilities at their estimated fair value because the underlying shares are redeemable, which may obligate the Company to transfer assets to the holders at a future date. The warrants are subject to remeasurement to fair value at each balance sheet date, and any fair value adjustments are recognized as change in fair value of redeemable convertible preferred stock warrant liability in the statements of operations. The Company will continue to adjust the liability for changes in fair value until the earlier of the exercise or expiration of the redeemable convertible preferred stock warrants, conversion of redeemable convertible preferred stock into common stock, or until holders of the redeemable convertible preferred stock can no longer trigger a deemed liquidation event. At that time, the redeemable convertible preferred stock warrant liability will be adjusted to fair value in the statements of operations with the final fair value reclassified to equity.

Revenue Recognition

Effective January 1, 2018, the Company adopted Accounting Standards Update ("ASU") 2018-18, Collaborative Arrangements: Clarifying the Interaction Between Topic 808 and Topic 606 ("Topic 808" or "ASU 2018-18") using the retrospective method and ASU 2014-09, Revenue from Contracts with Customers (Topic 606) ("Topic 606" or "ASU 2014-09") using the modified retrospective method which consisted of applying and recognizing the cumulative effect of Topic 606 at the date of initial application. Topic 606 supersedes the revenue recognition requirements in Accounting Standards Codification ("ASC") Topic 605, Revenue Recognition ("Topic 605"), including most industry-specific revenue recognition guidance throughout the Industry Topics of the ASC. All periods prior to the adoption date of Topic 606 have not been restated to reflect the impact of the adoption of Topic 606, but continue to be accounted for and presented under Topic 605.

The Company recognizes revenue upon the transfer of promised goods or services to customers in an amount that reflects the consideration to which the Company expects to be entitled in exchange for those goods or services. To determine revenue recognition for contracts with customers the Company performs the following five steps: (i) identify the contract(s) with a customer; (ii) identify the performance obligations in the contract; (iii) determine the transaction price; (iv) allocate the transaction price to the performance obligations in the contract; and (v) recognize revenue when (or as) the Company satisfies the performance obligations. At contract inception, the Company assesses the goods or services promised within each contract and assesses whether each promised good or service is distinct and determines those that are performance obligations. The Company then recognizes as revenue the amount of the transaction price that is allocated to the respective performance obligation when (or as) the performance obligation is satisfied.

To date, the Company's drug candidates have not been approved for sale by the FDA and the Company has not generated or recognized any revenue from the sale of products.

In March 2015, the Company entered into a license and collaboration agreement with Kaken Pharmaceutical, Co., Ltd. ("Kaken"), which is referred to as the "Collaboration Agreement". Under the Collaboration Agreement, the Company granted to Kaken an exclusive right to develop, manufacture and commercialize the Company's sofpironium bromide compound (formerly BBI-4000), a topical anticholinergic, in Japan and certain other Asian countries (the "Territory"). In exchange, Kaken paid the Company an upfront, non-refundable payment of $11.0 million (the "upfront fee"). In addition, the Company is entitled to receive aggregate payments of up to $10.0 million upon the achievement of specified development milestones, and $30.0 million upon the achievement of commercial milestones, as well as tiered royalties based on a percentage of net sales of licensed products in the Territory. The Collaboration Agreement further provides that Kaken will be responsible for funding all development and commercial costs for the program in the Territory and, until such time, if any, as Kaken elects to establish its own source of supply of drug product, Kaken can purchase product supply from the Company to perform all non-clinical studies, and Phase I and Phase II clinical trials in Japan at cost. Kaken is also required to enter into negotiations with the Company, to supply the Company, at cost, with clinical supplies to perform Phase III clinical trials in the U.S.

Collaboration arrangement subsequent to adoption of Topic 606

The Company evaluates collaboration arrangements to determine whether units of account within the collaboration arrangement exhibit the characteristics of a vendor and customer relationship. The Company determined that the licenses transferred to Kaken in exchange for the upfront fees were representative of this type of a relationship. If a license to our intellectual property is determined to be distinct from the other performance obligations identified in the arrangement, the Company recognizes revenues from non-refundable, upfront fees allocated to the license when the license is transferred to the licensee and the licensee is able to use and benefit from the license. For licenses that are bundled with other performance obligations, the Company utilizes judgment to assess the nature of the combined performance obligation to determine whether the combined performance obligation is satisfied over time or at a point in time and, if over time, the appropriate method of measuring progress for purposes of recognizing revenue. The Company evaluates the measure of progress each reporting period and, if necessary, adjust the measure of performance and related revenue recognition on a prospective basis.

Under Topic 606, the Company evaluated the terms of the Collaboration Agreement and the transfer of intellectual property and manufacturing rights (the "license") was identified as the only performance obligation as of the inception of the agreement. The Company concluded that the license for the intellectual property was distinct from its ongoing supply obligations. The Company further determined that the transaction price under the arrangement was comprised of the $11.0 million upfront payment. The future potential milestone amounts were not included in the transaction price, as they were all determined to be fully constrained. As part of our evaluation of the development and regulatory milestones constraint, the Company determined that the achievement of such milestones is contingent upon success in future clinical trials and regulatory approvals, each of which is uncertain at this time. The Company will re-evaluate the transaction price each quarter and as uncertain events are resolved or other changes in circumstances occur. Future potential milestone amounts would be recognized as revenue from collaboration arrangements, if unconstrained. The remainder of the arrangement, which largely consisted of both parties incurring costs in their respective territories, provides for the reimbursement of the ongoing supply costs. These costs were representative of a collaboration arrangement outside of the scope of Topic 606 as it does not have the characteristics of a vendor and customer relationship. Reimbursable program costs are recognized proportionately with the delivery of drug substance and are accounted for as reductions to research and development expense and are excluded from the transaction price.

Under Topic 606, the entire transaction price of $11.0 million was allocated to the license performance obligation. The license was deemed to be delivered in 2015 in connection with the execution of the Collaboration Agreement and upon transfer of the underlying intellectual property the performance obligation was fully satisfied. As a result, a cumulative adjustment to reduce deferred revenue and the corresponding sublicensing costs of $2.7 million was recorded upon the adoption of Topic 606 on January 1, 2018. As of December 31,

2018, the Company does not have a deferred revenue or deferred sublicensing costs balance related to the upfront fee on the balance sheet.

In May 2018, the Company entered into an amendment to the Collaboration Agreement (as further amended, "Collaboration Agreement"), pursuant to which, the Company received an upfront non-refundable fee of $15.6 million (the "Collaboration R&D Payment"), which was initially recorded as deferred revenue, to provide the Company with research and development funds to conduct certain clinical trials. These clinical trials have a benefit to Kaken and have the characteristics of a vendor and customer relationship. The Company has accounted for these under the provisions of Topic 606. This Collaboration R&D Payment will be initially recognized using an input method over the average estimated performance period of 1.45 years in proportion to the cost incurred. Upon receipt of the Collaboration R&D Payment, on May 31, 2018, a milestone payment originally due upon the first commercial sale in Japan was removed from the Collaboration Agreement and all future royalties to the Company under the Collaboration Agreement were reduced 150 basis points.

Consequently, during the year ended December 31, 2018, the Company recognized revenue of $5.9 million related to the Collaboration R&D Payment. As of December 31, 2018, the Company has a deferred revenue balance related to the Collaboration R&D Payment of $9.7 million, of which $8.1 million, is recorded in deferred revenue, current portion on the accompanying balance sheets.

Milestones

At the inception of each arrangement that includes milestone payments (variable consideration), the Company evaluates whether the milestones are considered probable of being reached and estimates the amount to be included in the transaction price using the most likely amount method. If it is probable that a significant revenue reversal would not occur, the associated milestone value is included in the transaction price. Milestone payments that are not within our or our collaboration partner's control, such as regulatory approvals, are generally not considered probable of being achieved until those approvals are received. The transaction price is then allocated to each performance obligation on a relative stand-alone selling price basis, for which the Company recognizes revenue as or when the performance obligations under the contract are satisfied. At the end of each subsequent reporting period, the Company re-evaluates the probability of achievement of such milestones and any related constraint, and if necessary, adjust the Company's estimate of the overall transaction price. Any such adjustments are recorded on a cumulative catch-up basis, which would affect license, collaboration or other revenues and earnings in the period of adjustment.

In October 2017, the Company entered into an amendment to the Collaboration Agreement, pursuant to which, the Company granted Kaken a prepayment option (the "Kaken Option") on 50% of the Initiation of Phase III milestone (the "Phase III milestone"). The Kaken Option was exercisable by Kaken within 25 business days of receipt of the BBI-4000-CL-203 study topline results. In December 2017, Kaken exercised the Kaken Option and paid the Company $5.0 million (the "Kaken Option Payment"). Upon receipt of the non-refundable Kaken Option Payment, the Company provided Kaken the right to negotiate an exclusive license to develop, manufacture and commercialize each of the Company's other product candidates in Japan ("ROFN Agreement"). Under the ROFN Agreement, following the completion of any Initial Proof of Concept Clinical Trial ("Initial POC") for the Company's other product candidates, the Company must provide Kaken with certain information relating to the results of the clinical trial ("Initial POC Package"). The ROFN Agreement is exercisable by Kaken within 30 days of receipt of the Initial POC Package. In December 2017, the Company recognized collaboration revenue related to the Collaboration Agreement of $5.0 million, in connection with the Kaken Option. Additionally, the Company recognized sublicensing costs of $1.0 million, which are included in general and administrative expenses.

The Collaboration Agreement was further amended in March 2018 to accelerate payment of the Phase III milestone. The Phase III milestone was modified to be due upon the successful completion of the End of Phase 2 Meeting with the PMDA by Kaken on March 8, 2018, as determined by Kaken in its reasonable discretion (the

"Third Milestone"). In March 2018, Kaken triggered the Third Milestone and paid the Company $5.0 million (the "Third Milestone Payment"). Upon receipt of the non-refundable Third Milestone Payment, the ROFN Agreement was amended (the "Amended ROFN Agreement") to grant an additional option to exercise upon completion of a Subsequent Clinical Trial (first clinical trial after the Initial POC) for the Company's other product candidates. The Company has determined that the ROFN Agreement is not a material right and has not allocated transaction price to this provision. As of December 31, 2018, Kaken has not exercised the Amended ROFN Agreement. In March 2018, the Company recognized collaboration revenue related to the Collaboration Agreement of $5.0 million in connection with the Third Milestone. Additionally, the Company recognized sublicensing costs of $1.0 million, which are included in general and administrative expenses.

Royalties

For arrangements that include sales-based royalties, including milestone payments based on the level of sales, and for which the license is deemed to be the predominant item to which the royalties relate, the Company recognized revenue at the later of (i) when the related sales occur, or (ii) when the performance obligation to which some or all of the royalty has been allocated has been satisfied (or partially satisfied). To date, the Company has not recognized any royalty revenue from any collaborative arrangement.

Under collaborative arrangements, the Company has been reimbursed for a portion of the Company's research and development expenses, including costs of drug supplies. When the research and development services are performed under a reimbursement or cost sharing model with a collaboration partner, the Company records these reimbursements as a reduction of research and development expense in the Company's statements of operations.

Revenue recognition prior to adoption of Topic 606

Prior to the adoption of Topic 606, the Company was initially recorded the $11.0 million upfront fee as deferred revenue. This upfront fee, along with the corresponding sublicensing fees, was initially recognized over the estimated period during which the research and development plan would be conducted. Consequently, during the years ended December 31, 2017 and 2016, the Company recognized revenue of $2.6 million and $2.9 million, respectively. As of December 31, 2017 and 2016, the Company has a deferred revenue balance related to the upfront fee of $3.4 million and $6.0 million, respectively, of which $1.7 million and $2.9 million, respectively, is recorded in deferred revenue, current portion on the accompanying balance sheets.

Additionally, during the years ended December 31, 2017 and 2016, the Company recognized sublicensing costs of $0.5 million and $0.6 million, respectively, which are included in general and administrative expenses in the accompanying statements of operations. As of December 31, 2017 and 2016, the Company has $0.7 million and $1.2 million, respectively, in deferred sublicensing costs related to the upfront fee, of which $0.3 million and $0.6 million, respectively, is recorded in deferred sublicensing costs, current portion on the accompanying balance sheets.

Contingent Consideration

Contingent consideration represents future amounts the Company may be required to pay in conjunction with business combinations. The ultimate amount of future payments is based on specified future criteria, such as the achievement of certain future development and regulatory milestones. The Company estimates the fair value of the contingent consideration related to the achievement of future development and regulatory milestones by assigning an achievement probability to each potential milestone and discounting the associated cash payment to its present value using a risk-adjusted rate of return. The Company evaluates its estimates of the fair value of contingent consideration on a periodic basis. Any changes in the fair value of contingent consideration are recorded in the accompanying statements of operations as general and administrative expenses. The total estimated fair value of contingent consideration was approximately $145,000 and $148,000 at December 31, 2018 and 2017, respectively.

Research and Development

Research and development costs are charged to expense when incurred and consist of costs incurred for independent and collaborative research and development activities. The major components of research and development costs include formulation development, clinical studies, clinical manufacturing costs, salaries and employee benefits, toxicology studies, allocations of various overhead and occupancy costs, and licensing fees and milestone payments incurred under license agreements. Research costs typically consist of applied research, preclinical, and toxicology work. Pharmaceutical manufacturing development costs consist of product formulation, chemical analysis, and the transfer and scale-up of manufacturing at contract manufacturers.

Accrued Research and Development Expenses

The Company records accruals for estimated costs of research, preclinical and clinical studies, and manufacturing development, which are a significant component of research and development expenses. A substantial portion of the Company's ongoing research and development activities is conducted by third-party service providers, including CROs. The Company's contracts with CROs generally include pass-through fees such as regulatory expenses, investigator fees, travel costs and other miscellaneous costs, including shipping and printing fees. The financial terms of these contracts are subject to negotiations, which vary from contract to contract and may result in payment flows that do not match the periods over which materials or services are provided to the Company under such contracts. The Company accrues the costs incurred under agreements with these third parties based on actual work completed in accordance with the respective agreements. In the event the Company makes advance payments, the payments are recorded as a prepaid asset and recognized as the services are performed. The Company determines the estimated costs through discussions with internal personnel and external service providers as to the progress or stage of completion of the services and the agreed-upon fees to be paid for such services.

The Company makes significant judgments and estimates in determining the accrual balance in each reporting period. As actual costs become known, the Company adjusts its accruals. Although the Company does not expect its estimates to be materially different from amounts actually incurred, the Company understands the status and timing of services performed relative to the actual status and timing of services performed may vary and could result in the Company reporting amounts that are too high or too low in any particular period. The Company's accrual is dependent, in part, upon the receipt of timely and accurate reporting from CROs and other third-party vendors. To date, there have been no material differences from the Company's accrued estimated expenses to the actual clinical trial expenses. However, variations in the assumptions used to estimate accruals including, but not limited to the number of patients enrolled, the rate of patient enrollment, and the actual services performed may vary from the Company's estimates, resulting in adjustments to, clinical trial expense in future periods. Changes in these estimates that result in material changes to the Company's accruals could materially affect its financial condition and results of operations.

Prepaid expenses and other current assets includes prepaid research and development costs of $95,000 and $12,000 as of December 31, 2018 and 2017, respectively.

Stock-Based Compensation

Stock options granted to employees and non-employees under the Company's stock option plan are accounted for by using a fair value based method. Stock-based payments to employees, including grants of employee stock options, are measured based on their fair values at the date of grant, net of forfeitures, and are recorded on a straight-line basis over the requisite employee service period. The fair value of stock-based payments to non-employees is estimated at each reporting period, net of forfeitures, until a measurement date is reached, and recorded over the service period on a straight-line basis.

Net Loss per Common Share

Basic and diluted net loss per common share is computed by dividing net loss attributable to common stockholders by the weighted average number of common shares outstanding. When the effects are not anti-dilutive, diluted earnings per share is computed by dividing the Company's net earnings by the weighted average number of common shares outstanding and the impact of all dilutive potential common shares.

Diluted earnings per share gives effect to all dilutive potential common shares outstanding during the period, including stock options and warrants, using the treasury stock method, and redeemable convertible preferred stock, using the if-converted method. In computing diluted earnings per share, the average stock price for the period is used in determining the number of shares assumed to be purchased from the exercise of stock options or warrants. Potentially dilutive common share equivalents are excluded from the diluted earnings per share computation in net loss periods, since their effect would be anti-dilutive.

The following table sets forth the potential common shares excluded from the calculation of net loss per common share, because their inclusion would be anti-dilutive:

	2018	2017
Redeemable convertible preferred stock (as converted into common stock)	3,639,905	3,639,905
Options to purchase common stock	1,090,045	826,225
Warrants to purchase common stock	160,365	160,365
Warrants to purchase redeemable convertible preferred stock (as converted into common stock)	26,087	26,087
	4,916,402	4,652,582

Income Taxes

The Company accounts for income taxes under the liability method, whereby deferred tax assets and liabilities are provided for the future tax consequences attributable to temporary differences between the financial statement carrying amounts of existing assets and liabilities and their respective tax bases. Deferred tax assets and liabilities are measured using enacted rates expected to apply to taxable income in the years in which those temporary differences are expected to be recovered or settled.

Deferred tax assets, net of a valuation allowance, are recorded when management believes it is more likely than not that the tax benefits will be realized. Realization of the deferred tax assets is dependent upon generating sufficient taxable income in the future. The amount of deferred tax asset considered realizable could change in the near term if estimates of future taxable income are modified. The Company assesses its tax positions and determines whether it has any material unrecognized liabilities for uncertain tax positions expected to be taken in a tax return for open tax years (generally a period of three years from the later of each return's due date or the date filed) that remain subject to examination by the Company's major tax jurisdictions. Generally, the Company is no longer subject to income tax examinations by major taxing authorities for years before 2014.

The Company assesses its tax positions and determines whether it has any material unrecognized liabilities for uncertain tax positions. The Company records these liabilities to the extent it deems them more likely than not to be incurred. Interest and penalties related to uncertain tax positions, if any, would be classified as a component of income tax expense. The Company believes that it does not have any significant uncertain tax positions requiring recognition or measurement in the accompanying financial statements.

Segment Data

The Company manages its operations as a single segment for the purposes of assessing performance and making operating decisions. The Company's singular focus is identifying, developing and commercializing innovative and differentiated therapeutics for the treatment of skin diseases. No revenue from sales of product has been generated since inception, and all tangible assets are held in the United States.

NOTE 3. RECENT ACCOUNTING PRONOUNCEMENTS

In November 2018, the Financial Accounting Standards Board ("FASB") issued ASU2018-18. ASU 2018-18 clarifies when certain transactions between collaborative arrangement participants should be accounted for under ASC 606 and incorporates unit-of-account guidance consistent with ASC 606 to aid in this determination. ASU 2018-18 is effective for public companies for annual and interim periods beginning after December 15, 2019, with early adoption permitted. ASU 2018-18 should generally be applied retrospectively to the date of initial application of Topic 606. The Company adopted this standard as of January 1, 2018 in connection with its adoption of Topic 606.

As noted above, effective January 1, 2018, the Company adopted Topic 606. Since ASU2014-09 was issued, several additional ASUs have been issued and incorporated within Topic 606 to clarify various elements of the guidance. As part of its adoption efforts, the Company completed the assessment of its collaboration and license agreements under Topic 606. The Company adopted Topic 606 in the first quarter of 2018 using the modified retrospective method which consists of applying and recognizing the cumulative effect of Topic 606 at the date of initial application and providing certain additional disclosures as defined per Topic 606. On January 1, 2018, the Company recorded a cumulative adjustment to decrease deferred revenue, deferred sublicensing costs and accumulated deficit by approximately $2.7 million, to reflect the impact of the adoption of Topic 606.

Below is a summary of the affected line items on the balance sheets upon adoption of Topic 606 (in thousands):

Balance Sheet	Balance at December 31, 2017	Adjustments Due to Topic 606	Balance at January 1, 2018
Deferred sublicensing costs, current portion	$ (342)	$ 342	$ —
Deferred sublicensing costs, net of current portion	(342)	342	—
Deferred revenue, current	1,709	(1,709)	—
Deferred revenue, net of current portion	1,709	(1,709)	—
Accumulated deficit	$ (59,936)	2,734	(57,202)

As a result of adopting Topic 606 on January 1, 2018 under the modified retrospective method, the Company did not revise the comparative financial statements for the prior years as if Topic 606 had been effective for those periods. Below is disclosure of what the affected line items on the statement of operations would have been in the year ended December 31, 2018 under Topic 605 (in thousands):

	Year Ended December 31, 2018		
Statement of Operations	As Reported	Balances Without Adoption Topic 606	Effect of Change
Collaboration revenue	$ 10,888	13,186	(2,298)
General and administrative	(6,379)	(6,724)	345

In August 2018, the FASB issued ASU 2018-13, Fair Value Measurement Disclosure Framework—Changes to the Disclosure Requirements for Fair Value Measurement ("ASU 2018-13"), which amends certain disclosure requirements over Level 1, Level 2 and Level 3 fair value measurements. ASU 2018-13 is effective for fiscal years beginning after December 15, 2019 and interim periods within those fiscal years. Early adoption is permitted. The Company is currently evaluating the impact of adopting ASU 2018-13, but does not anticipate it will have a material impact on its disclosures.

In January 2017, the FASB issued ASU2017-01, "Business Combinations (Topic 805): Clarifying the Definition of a Business" ("ASU2017-01"), which clarifies 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 amendments of ASU 2017-01 are effective for fiscal years beginning after

December 15, 2017 and interim periods within those fiscal years for public companies and for annual periods beginning after December 15, 2018, and interim periods within annual periods beginning after December 15, 2019 for private companies. The Company adopted this standard as of January 1, 2018, and there was no material impact to the Company's financial statements as a result of the adoption.

In August 2016, the FASB issued ASU 2016-15, "Statement of Cash Flows (Topic 230): Classification of Certain Cash Receipts and Cash Payments" ("ASU 2016-15"), which will make eight targeted changes to how cash receipts and cash payments are presented and classified in the statement of cash flows. ASU 2016-15 is effective for fiscal years beginning after December 15, 2017 for public companies and for annual periods beginning after December 15, 2018, and interim periods within annual periods beginning after December 15, 2019 for private companies. ASU 2016-15 will require adoption on a retrospective basis. Early adoption is permitted. The Company adopted this standard as of January 1, 2018, and there was no material impact to the Company's financial statements as a result of the adoption.

In February 2016, the FASB issued ASUNo. 2016-02, "Leases (Topic 842)" ("ASU 2016-02"). ASU 2016-02 is aimed at making leasing activities more transparent and comparable, and requires substantially all leases be recognized by lessees on their balance sheets as a right-of-use asset and corresponding lease liability, including leases currently accounted for as operating leases. This ASU is effective for fiscal years, and interim periods within those years, beginning after December 15, 2018 for public companies and for annual periods beginning after December 15, 2018, and interim periods within annual periods beginning after December 15, 2019 for private companies. Early adoption is permitted. The Company will adopt ASU 2016-02 on January 1, 2019. The Company expects to recognize a right-of-use asset and a lease liability on its balance sheet for the discounted value of future lease payments from the adoption of this ASU. As of December 31, 2018, the Company had aggregate future minimum lease payments of approximately $0.3 million. The Company is currently evaluating the full impact that the adoption of this ASU will have on its financial statements and related disclosures.

NOTE 4. ACCRUED LIABILITIES

Accrued liabilities consisted of the following (in thousands):

	December 31,	
	2018	2017
Accrued sublicensing fees	$ —	$1,000
Accrued compensation	569	206
Accrued note issuance costs	587	537
Accrued professional fees	1,269	968
Accrued contracted research and development services	847	745
	$3,272	$3,456

NOTE 5. INTANGIBLE ASSETS

In January 2015, the Company acquired certain assets and assumed certain liabilities associated with the rights to an IPR&D molecular compound in the Phase I stage of development, BBI-5000, for $100,000 plus up to an aggregate of $13.5 million in payments contingent upon achieving certain future development milestones. The Company intends to develop BBI-5000 as a potential once-daily oral treatment for patients with moderate to severe atopic dermatitis.

In November 23, 2015, the Company secured the exclusive worldwide rights to a series of novel retinoic acid-related orphan nuclear receptor gamma ("RORy") inhibitors from Orca Pharmaceuticals ("Orca") and New York University ("NYU"), for an upfront payment of $105,000 plus up to an aggregate of $3.4 million in payments contingent upon achieving certain future development and sales milestones. The Company intends to develop BBI-6000 as a potential topical treatment for patients with psoriasis.

The Company accounted for both transactions as business combinations. The asset purchase agreements meet the definition of a business pursuant to the guidance prescribed in ASC Topic 805, "Business Combinations". Accordingly, for BBI-5000 and BBI-6000, the Company capitalized the $321,000 and $120,000 acquisition-date fair values of these intangible assets, respectively. As of all periods presented, these assets are considered to be indefinite-lived and will not be amortized, but will be tested for impairment on an annual basis, as well as between annual tests if changes in circumstances indicate a reduction in the fair value of the IPR&D projects below their respective carrying amounts. If and when development is complete, the associated assets would be deemed finite-lived and would then be amortized based on their respective estimated useful lives.

For BBI-5000 and BBI-6000 the Company has estimated the fair value of the contingent consideration to be $221,000 and $15,000, respectively, as of the acquisition date by assigning an achievement probability to each potential milestone and discounting the associated cash payment to its present value using a risk-adjusted rate of return. The Company evaluates its estimates of the fair value of contingent consideration on a periodic basis. Any changes in the fair value of contingent consideration are recorded as general and administrative expense.

NOTE 6. INCOME TAXES

During the years ended December 31, 2018 and 2017, the Company recorded no income tax benefits for the net operating losses incurred in each year, due to its uncertainty of realizing a benefit from those items.

A reconciliation of the U.S. federal statutory income tax rate to the Company's effective income tax rate is as follows:

	2018	2017
Federal statutory income tax rate	21.00%	34.00%
State taxes, net of federal benefit	3.71	1.07
Research and development tax credits	8.77	6.15
Permanent differences and other	2.36	(2.14)
Change in tax rate	1.80	(46.04)
Change in deferred tax asset valuation allowance	(37.64)	6.96
Effective income tax rate	0.00%	0.00%

At December 31, approximate deferred tax assets (liabilities) resulting from timing differences between financial and tax bases related to the following items:

	2018	2017
Net operating loss carryforwards	$ 8,918,000	$ 7,967,000
Stock-based compensation	520,000	393,000
Research and development credit	3,207,000	2,398,000
Net book value of intangible assets	75,000	70,000
Deferred revenue	2,040,000	718,000
Other	514,000	251,000
Net deferred tax asset	15,274,000	11,797,000
Less: valuation allowance	(15,274,000)	(11,797,000)
	$ —	$ —

As of December 31, 2018, the Company had net operating loss carryforwards for federal income tax reporting purposes of approximately $36.5 million, which begin to expire in 2030, and state net operating loss carryforwards of $30.9 million, which begin to expire in 2030. As of December 31, 2018, the Company also had research and development tax credit carryforwards for federal income tax reporting purposes available of $3.2 million, which begin to expire in 2035.

On December 22, 2017, the U.S. Tax Cuts and Jobs Acts ("Tax Act") was signed into law. The Tax Act significantly revised the U.S. corporate income tax regime by, among other changes, lowering the federal corporate tax rate from 34% to 21% effective January 1, 2018. Based on provisions of the Tax Act, the Company remeasured its deferred tax assets and liabilities to reflect the lower statutory tax rate. The Company has recorded a decrease related to deferred tax assets of $5.1 million. However, since the Company established a valuation allowance to offset its deferred tax assets, there is no impact to its effective tax rate, as any changes to deferred taxes would be offset by the valuation allowance.

The Company has evaluated the positive and negative evidence bearing upon its ability to realize the deferred tax assets. Management has considered the Company's history of cumulative net losses incurred since inception and its lack of commercialization of any products or generation of any revenue from product sales since inception and has concluded that it is more likely than not that the Company will not realize the benefits of the deferred tax assets. Accordingly, a full valuation allowance has been established against the deferred tax assets as of December 31, 2018 and 2017. Management reevaluates the positive and negative evidence at each reporting period. The Company's valuation allowance increased by approximately $3.5 million and decreased by approximately $0.8 million for the years ended December 31, 2018 and 2017, respectively.

NOTE 7. NOTE PAYABLE

Note Payable

On February 18, 2016, the Company entered into a loan and security agreement (the "Loan Agreement") with Hercules Capital, Inc. (the "Lender") under which the Company borrowed $7.5 million upon the execution of the Loan Agreement. The interest rate applicable to each tranche is variable based upon the greater of either (i) 9.2% and (ii) the sum of (a) the Prime Rate as reported in The Wall Street Journal minus 3.5%, plus (b) 9.2%; notwithstanding the above, such rate shall not exceed the permissible rates of interest on commercial loans under the laws of the State of California. Payments under the Loan Agreement were interest only until June 1, 2017, followed by equal monthly payments of principal and interest through the scheduled maturity date on September 1, 2019.

The Company's obligations under the Loan Agreement are secured by a first priority security interest in substantially all of the Company's assets, other than its intellectual property. The Company also has agreed not to pledge or otherwise encumber its intellectual property assets, except that the Company may grant non-exclusive licenses of intellectual property entered into in the ordinary course of business, and licenses approved by the Company's Board of Directors that may be exclusive in respects other than territory and may be exclusive as to territory as to discrete geographical areas outside of the United States.

The Company has paid the Lender a facility fee of $150,000 in connection with the Loan Agreement. In addition, if the Company repays all or a portion of the loan prior to maturity, it will pay the Lender a prepayment penalty fee, based on a percentage of the then outstanding principal balance, equal to 3% if the prepayment occurs prior to February 19, 2017, 2% if the prepayment occurs prior to February 19, 2018, or 1% if the prepayment occurs thereafter. In addition, the Company is required to make an end of term payment of 4.5% of the sum of (i) term loan advances, plus (ii) 50% of the aggregate unfunded term loan commitments.

The Loan Agreement was amended in December 2017 (as further amended, "Loan Agreement") to provide for an additional three-month interest only period ending on March 1, 2018, at which time the outstanding loan balance would continue to be paid in equal monthly installments of principal and interest. Pursuant to the Loan Agreement, the end of term payment was increased by $30,500.

The Loan Agreement was further amended in March 2018 to provide for an additionaltwo-month interest only period ending on June 1, 2018, at which time the outstanding loan balance would continue to be paid in equal monthly installments of principal and interest. Pursuant to the Loan Agreement, a facility fee of $25,000 was paid upon execution and the end of term payment was increased by $25,000.

The Loan Agreement was again amended in July 2018 to provide for an additional three-month interest only period ending on October 1, 2018, at which time the outstanding loan balance would continue to be paid in equal monthly installments of principal and interest. Pursuant to the Loan Agreement, a facility fee of $25,000 was paid upon execution and the end of term payment was increased by $25,000.

The Loan Agreement includes customary affirmative and restrictive covenants, and also includes customary events of default, including payment defaults, breaches of covenants following any applicable cure period, a material impairment in the perfection or priority of the Lender's security interest or in the value of the collateral, and a material impairment of the prospect of repayment of the loans. Upon the occurrence of an event of default and following any applicable cure periods, a default interest rate of an additional 4% may be applied to the outstanding loan balances, and the Lender may declare all outstanding obligations immediately due and payable and take such other actions as set forth in the Loan Agreement.

Under the Loan Agreement, the Company grants the Lender the right to participate in and/or designate one or more of its affiliates to participate in any subsequent financing in an amount up to $1.0 million on the same terms, conditions and pricing afforded to other participating in such subsequent financing.

Note payable at December 31, 2018 consisted of the following (in thousands):

Face value of note payable	$ 7,500
Accrued interest	46
Discounts on note payable related to warrants	(329)
Note payable issuance costs	(1,061)
	6,156
Principal payments through December 31, 2018	(2,692)
Accumulated accretion	1,175
Note payable	$ 4,639

The following is a schedule of aggregate note payable maturities, excluding the unamortized amount related to the end of term payment, for each of the years subsequent to December 31, 2018 (in thousands):

Year Ending December 31,	
2019	$4,808
	$4,808

In connection with the Loan Agreement, the Company issued warrants to the Lender, which are exercisable for 26,087 shares of Series C redeemable convertible preferred stock at a per share exercise price of $11.50 (the "Warrants"). The Warrants will terminate, if not earlier exercised, on February 18, 2026. The fair value of the warrants was recorded as a redeemable convertible preferred stock warrant liability upon issuance. The fair value of the warrants on the date of issuance of $0.3 million was determined using the Black-Scholes option-pricing model. The fair value of the warrants was recorded as a debt discount upon issuance and will be amortized to interest expense over the term of the loan based on the effective interest method.

As of December 31, 2018, there were unaccreted debt discounts and issuance costs of $0.2 million, which were recorded as a direct deduction from note payable on the accompanying balance sheets.

NOTE 8. LICENSEE AGREEMENTS

The Company enters into licensing agreements with universities and other research related entities for the exclusive right to commercially develop, produce, manufacture, use, and sell certain products and methods of use

thereof (the "Inventions"). Typically, the license agreements are effective through the later of (i) the end of the term of the last-to-expire of licensor's patent rights licensed under the license agreements, or (ii) ten years after the first sale of the first licensed product if no patent has issued from the patent rights.

In April 2011, the Company executed a license agreement with the University of Manchester ("UM") for a worldwide, exclusive license to manufacture, market, sell and sublicense BBI-2000 based upon certain patents, with a field of use, limited to all dermatological indications.

In June 2012, the Company executed a license agreement with the UAB Research Foundation ("UABRF") for a worldwide, exclusive license to manufacture, market, sell and sublicense BBI-3000 based upon certain patents, with a field of use limited to all dermatological indications.

In December 2012, the Company entered into a license agreement with Bodor Laboratories, Inc. ("Bodor") for a worldwide, exclusive license to manufacture, market, sell and sublicense sofpironium bromide based upon certain patents, with a field of use, limited to the treatment of hyperhidrosis and excessive sweating.

In November 2015, the Company entered into a license agreement with NYU for a worldwide, exclusive world-wide license to manufacture, market, sell and sublicense BBI-6000, a series of novel RORγ inhibitors, initially targeting the topical treatment of psoriasis.

Under the license agreements, the Company is required to make royalty payments based upon a percentage of net sales of any product developed from the Inventions.

The Company is required to make milestone payments under the license agreements upon the occurrence of certain events related to the licensed products:

Milestone	Range
Initiation of Phase I, II and/or III clinical trials in Dermatology Field	$25,000 - $500,000
Filings of NDA or European equivalents in Dermatology Field	$150,000 - $1,000,000
Receipt of NDA approval or European equivalent in Dermatology Field	$250,000 - $2,000,000
Receipt of NDA approval or European or Japanese equivalent Non-Dermatology Field	$1,000,000 - $5,000,000

As of December 31, 2018, contractual milestone payments set forth in the license agreements to which the Company was party aggregated to $10.8 million.

NOTE 9. COMMITMENTS AND CONTINGENCIES

Operating Leases

In August 2016, the Company entered into a five-year lease for office space in Boulder, Colorado that expires on October 31, 2021 (the "Boulder Lease") subject to the Company's option to renew the Boulder Lease for two additional terms of three years each. Pursuant to the Boulder Lease, the Company leased 3,038 square feet of space in a multi-suite building. Rent payments under the Boulder Lease included base rent of $4,430 per month during the first year of the Boulder Lease with an annual increase of 3.5%, and additional monthly fees to cover the Company's share of certain facility expenses, including utilities, property taxes, insurance and maintenance, which were $2,160 per month during the first year of the Boulder Lease.

The terms of the Boulder Lease provide for rental payments on a monthly basis on a graduated scale. The Company recognizes rent expense on a straight-line basis over the lease period and has accrued for rent expense incurred but not paid. Rent expense for the years ended December 31, 2018 and 2017 was $0.1 million.

The following is a schedule of approximate future minimum rental commitments required under operating leases for years subsequent to December 31, 2018 (in thousands):

Year Ending December 31,	
2019	$ 57
2020	59
2021	51
Total future minimum rental commitments	$167

The table above excludes approximately $0.1 million of additional rent due over the period of the operating lease to cover the Company's share of facility expenses, including utilities, property taxes, insurance and maintenance.

NOTE 10. REDEEMABLE CONVERTIBLE PREFERRED STOCK

As of December 31, 2018 and 2017, the Company had authorized 4,182,943 shares of redeemable convertible preferred stock, par value of $0.0001, of which 1,162,505 are designated Series A redeemable convertible preferred stock ("Preferred Stock A"), 882,216 are designated Series B redeemable convertible preferred stock ("Preferred Stock B"), 869,565 are designated Series C redeemable convertible preferred stock ("Preferred Stock C") and 1,268,657 are designated Series C-1 redeemable convertible preferred stock ("Preferred Stock C-1")

From October 2016 through October 2017, the Company issued 905,076 shares of Preferred Stock C-1 to investors at a price of $13.40 per share for net proceeds of $12.0 million.

In connection with the issuance of the Preferred Stock A, B, C and C-1 (the "Preferred Stock"), the Company incurred approximately $0.5 million of issuance costs. The unaccreted discount as of December 31, 2018 and 2017 amounted to approximately $0.1 million.

Redeemable convertible preferred stock consisted of the following (in thousands, except share data):

	December 31, 2018					
	Preferred Shares Authorized	Preferred Shares Issued and Outstanding	Par Value	Fair Value	Liquidation Preference	Common Stock Issuable Upon Conversion
Series A	1,162,505	1,162,505	$ 1,163	$ 16,098	$ 11,898	1,162,505
Series B	882,216	828,998	829	13,011	9,803	828,998
Series C	869,565	743,326	743	13,018	11,418	743,326
Series C-1	1,268,657	905,076	905	16,163	13,866	905,076
	4,182,943	3,639,905	$ 3,640	$ 58,290	$ 46,985	3,639,905

	December 31, 2017					
	Preferred Shares Authorized	Preferred Shares Issued and Outstanding	Par Value	Fair Value	Liquidation Preference	Common Stock Issuable Upon Conversion
Series A	1,162,505	1,162,505	$ 1,163	$ 14,689	$ 11,017	1,162,505
Series B	882,216	828,998	829	11,305	9,077	828,998
Series C	869,565	743,326	743	11,938	10,571	743,326
Series C-1	1,268,657	905,076	905	14,422	12,828	905,076
	4,182,943	3,639,905	$ 3,640	$ 52,354	$ 43,493	3,639,905

The rights, preferences and privileges of the Preferred Stock are as follows:

Dividends

The Company recognizes certain dividend rights for the holders of the Preferred Stock, in that these holders will receive preference to any declaration or payment of dividends at the rate of 8% of the original issue price of $5.3333 of Preferred Stock A, $8.14 of Preferred Stock B, $11.50 of Preferred Stock C, and $13.40 of Preferred Stock C-1 per share per annum, compounded annually, on each outstanding share. Holders of Preferred Stock A, B, C and C-1 rank pari passu with respect to the payment of accrued dividends. Accrued dividends at December 31, 2018 amounted to $5.7 million ($4.90 per share), $3.1 million ($3.68 per share), $2.9 million ($3.86 per share), and $1.7 million ($1.92 per share) on Preferred Stock A, B, C and C-1, respectively. Accrued dividends at December 31, 2017 amounted to $4.8 million ($4.14 per share), $2.3 million ($2.81 per share), $2.0 million ($2.72 per share), and $0.7 million ($0.77 per share) on Preferred Stock A, B, C and C-1, respectively. Accrued dividends are included as a component of redeemable convertible preferred stock in the accompanying balance sheets.

Liquidation Preference

Preferred Stock carries certain liquidation rights upon the liquidation, dissolution, or winding up of the Company, whether voluntary or involuntary (including a change in control), whereas before any distribution or payment shall be made to the holders of any common stock, the holders of the Preferred Stock shall be entitled to be paid an amount equal to the original purchase price plus any accrued but unpaid dividends out of the assets of the Company legally available for distribution for each share. If the assets of the Company available for distribution upon liquidation are not sufficient to pay the preferred stock preference amount, the assets will be distributed ratably among the holders of the Preferred Stock in proportion to the full amount of the preference amount such holder is otherwise entitled to receive.

Any proceeds remaining after the distribution of the preference amount shall be distributed pro rata to the holders of the Preferred Stock (on as-if-converted to Common Stock basis) and the holders of Common Stock.

Conversion

Preferred Stock may be converted into common stock at the initial conversion ratio of 1:1, which ratio shall be altered in accordance with stock dividends, splits, combinations and other similar events, including the sale of additional shares of common or preferred stock at an effective price per common share lower than the conversion price then in effect. Each share of the Preferred Stock will automatically convert into shares of common stock, at the applicable conversion ratio of each series of redeemable convertible preferred stock then in effect, upon (i) a qualified public offering with net proceeds of not less than $30 million and a price of not less than $57.50 per share, subject to appropriate adjustment for any stock dividend, stock split, combination or other similar recapitalization, or (ii) the date specified by written consent or agreement of the holders of at least two-thirds of the then outstanding shares of Preferred Stock voting together as a single class on an as-if-converted to Common Stock basis.

Redemption

At any time after July 16, 2021, the holders of the Company's Preferred Stock will have the right to require the Company to redeem all or a portion of their shares for cash at a redemption price equal to the greater of: (i) the purchase price of such shares plus all accrued and unpaid dividends thereon, or the (ii) fair market value of the shares.

Voting Rights

The holders of Preferred Stock are entitled to vote, together with the holders of common stock, on all matters submitted to stockholders for a vote. Holders of Preferred Stock have the right to vote the number of shares equal

to the number of shares of common stock into which such Preferred Stock could convert on the record date for determination of stockholders entitled to vote. The holders of the majority of Preferred Stock, voting separately as a single class, are entitled to elect two directors of the Company.

NOTE 11. STOCK-BASED COMPENSATION

The Company's 2009 Equity Incentive Plan, as amended and restated (the "2009 Plan"), provides for the Company to sell or issue common stock or restricted common stock, or to grant incentive stock options or nonqualified stock options for the purchase of common stock, to employees, members of the Board of Directors and consultants of the Company. At December 31, 2018, the total shares authorized under the 2009 Plan were 2,872,986 shares. The Board of Directors or a designated Committee of the Board is responsible for the administration of the 2009 Plan and determines the term, exercise price, and vesting terms of each option. Under the terms of existing awards, all stock option grants expire ten years from grant date.

A summary of all stock option activity under the 2009 Plan is presented below:

Outstanding Options	Shares	Weighted Average Exercise Price	Total Intrinsic Value	Weighted Average Remaining Contractual Life (In Years)
Outstanding at December 31, 2017	1,354,166	$ 3.91	$ 2,511,589	7.74
Granted	775,967	5.68		
Exercised	(10,833)	4.20		
Forfeited	(100,625)	4.39		
Outstanding at December 31, 2018	2,018,675	4.56	2,265,118	7.96
Options vested and exercisable at December 31, 2018	1,090,045	$ 3.75	$ 2,103,832	6.51
Options vested at December 31, 2018 and expected to vest	1,953,675	$ 4.53	$ 2,253,829	7.91

At December 31, 2018 and 2017, a total of 538,060 shares and 416 shares, respectively, were available for grant under the 2009 Plan. The total estimated grant date fair value of stock options vested during the years ended December 31, 2018 and 2017 was $0.8 million and $0.9 million, respectively. The total intrinsic value of options exercised during the years ended December 31, 2018 and 2017 amounted to $0.1 million.

Total stock-based compensation expense related to stock options granted under the 2009 Plan was allocated as follows:

	Year Ended December 31,	
	2018	2017
Research and development	$ 340	$ 343
General and administrative	371	538
Total stock-based compensation expense	$ 711	$ 881

The Company uses the Black-Scholes option-pricing model to estimate the fair value of stock-based awards. The determination of the fair value of stock-based awards on the date of grant using an option-pricing model is affected by the value of the Company's stock price, as well as assumptions regarding subjective variables. These variables include expected stock price volatility over the term of the awards, actual and projected employee stock option exercise behaviors, risk-free interest rate and expected dividends.

The Company estimates the "simplified method" in accordance with Staff Accounting Bulletin ("SAB") No. 107, "Share-Based Payment", and SAB No. 110, "Simplified Method for Plain Vanilla Share Options", to develop the

expected term of stock option awards that qualify as “plain-vanilla” options. Under this approach, the expected term of the option grant is presumed to be the midpoint between the vesting date and the contractual end of the option grant. The expected term of all other stock options granted is based on the Company’s historical share option exercise experience, which approximates the midpoint between the vesting date and the contractual end of the option grant. The Company estimates volatility of the common stock by using the average share fluctuations of companies similar in size, operations, and life cycle. The risk-free interest rates used in the valuation model are based on U.S. Treasury issues with remaining terms similar to the expected term on the options. The Company does not anticipate paying any dividends in the foreseeable future and therefore used an expected dividend yield of zero.

Management has estimated the forfeiture rate at 7% based on past experience, forfeiture rates and the individuals receiving the options. The Company will monitor actual forfeiture experience and will periodically update forfeiture estimates based on actual experience. As of December 31, 2018, there was total unrecognized compensation expense of approximately $3.7 million, which is expected to be recognized over a period of approximately 3.96 years.

Stock Options Granted to Employees

During the years ended December 31, 2018 and 2017, the Company granted 731,967 stock options and 108,500 stock options, respectively, to employees and non-employee directors to purchase shares of common stock with a weighted-average grant date fair value of $4.16 and $4.02 per share, respectively, and a weighted-average exercise price of $5.68 and $5.45 per share, respectively.

The assumptions used to calculate the fair value of stock options granted to employees andnon-employee directors under the 2009 Plan are as follows, presented on a weighted average basis:

	2018	2017
Expected term (in years)	6.1	6.1
Expected volatility	85.43%	88.19%
Risk free interest rate	2.77%	2.16%
Expected dividend yield	— %	— %

The stock-based compensation expense related to employee stock options was approximately $0.6 million for the years ended December 31, 2018 and 2017.

Stock Options Granted to Non-employees

During the years ended December 31, 2018 and 2017, the Company granted 44,000 stock options and 25,000 stock options, respectively, to persons other than employees and non-employee members of the Company’s Board of Directors with a weighted-average exercise price of $5.68 and $5.34 per share, respectively.

The assumptions used to calculate the fair value of stock options granted tonon-employees under the 2009 Plan are as follows, presented on a weighted average basis:

	2018	2017
Expected term (in years)	9.96	9.85
Expected volatility	86.17%	84.39%
Risk free interest rate	2.69%	2.35%
Expected dividend yield	— %	— %

The stock-based compensation expense related to non-employee stock options was approximately $0.1 million and $0.2 million for the years ended December 31, 2018 and 2017, respectively.

NOTE 12. STOCKHOLDERS' DEFICIT

Common Stock

As of December 31, 2018, the Company had authorized 8,000,000 shares of common stock, par value $0.0001 per share.

The Company has reserved authorized shares of common stock, on anas-converted basis, for future issuance at December 31, 2018 as follows:

	2018
Conversion of Preferred Stock A	1,162,505
Conversion of Preferred Stock B	828,998
Conversion of Preferred Stock C	743,326
Conversion of Preferred Stock C-1	905,076
Preferred Stock C warrants issued with note payable	26,087
Common stock warrants	160,365
Common stock options outstanding	2,018,675
Options available for grant under the 2009 Plan	538,060
	6,383,092

NOTE 13. SUBSEQUENT EVENTS

Bridge Financing—Convertible Promissory Notes with Warrants

In March 2019, the Company initiated a convertible promissory notes offering pursuant to which the Company issued unsecured convertible promissory notes (the "Prom Notes"), bearing interest at 12.00% and maturing in one year and can be converted into shares of Series C-1 redeemable convertible preferred stock or the most senior preferred equity outstanding at the time of conversion at the option of the holder at a conversion price of $10.72 per share. In addition, the Prom Notes will automatically convert at maturity or if a qualified financing of at least $15.0 million occurs before maturity, such mandatory conversion price will equal 80% of the effective price per share paid in the qualified financing, but not to exceed $13.40 per share.

The Prom Notes also provide for the issuance of warrants at 50% coverage, which are exercisable into common stock for a term of five years at an exercise price of $14.74 or, upon the occurrence of a qualified financing, 10% premium to the effective price per share paid in the qualified financing.

From March to April 2019, the Company issued Prom Notes and warrants for gross proceeds of $3.6 million.

Evaluation Date

The Company has evaluated events that have occurred after the balance sheet date through April 30, 2019, which is when these financial statements were issued.

Appendix A

EXECUTION VERSION

AGREEMENT AND PLAN OF MERGER AND REORGANIZATION

among:

VICAL INCORPORATED,
a Delaware corporation;

VICTORY SUBSIDIARY, INC.
a Delaware corporation; and

BRICKELL BIOTECH, INC.,
a Delaware corporation

Dated as of June 2, 2019

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THIS AGREEMENT AND PLAN OF MERGER AND REORGANIZATION(this "***Agreement***") is made and entered into as of June 2, 2019, by and among **VICAL INCORPORATED**, a Delaware corporation ("***Parent***"), **VICTORY SUBSIDIARY, INC.**, a Delaware corporation and wholly owned subsidiary of Parent ("***Merger Sub***"), and **BRICKELL BIOTECH, INC.**, a Delaware corporation (the "***Company***"). Certain capitalized terms used in this Agreement are defined in **Exhibit A**.

RECITALS

A. Parent and the Company intend to effect a merger of Merger Sub with and into the Company (the "***Merger***") in accordance with this Agreement and the DGCL. Upon consummation of the Merger, Merger Sub will cease to exist and the Company will become a wholly owned subsidiary of Parent.

B. The Parties intend that the Merger qualify as a "reorganization" within the meaning of Section 368(a) of the Code, and by executing this Agreement, the Parties intend to adopt a plan of reorganization within the meaning of Treasury Regulations Sections 1.368-2(g) and 1.368-3.

C. The Parent Board has (i) determined that the Contemplated Transactions are fair to, advisable and in the best interests of Parent and its stockholders, (ii) approved and declared advisable this Agreement and the Contemplated Transactions, including the authorization and issuance of shares of Parent Common Stock to the stockholders of the Company pursuant to the terms of this Agreement and (iii) determined to recommend, upon the terms and subject to the conditions set forth in this Agreement, that the stockholders of Parent vote to approve the Parent Stockholder Matters.

D. The Merger Sub Board has (i) determined that the Contemplated Transactions are fair to, advisable, and in the best interests of Merger Sub and its sole stockholder, (ii) approved and declared advisable this Agreement and the Contemplated Transactions and (iii) determined to recommend, upon the terms and subject to the conditions set forth in this Agreement, that the stockholder of Merger Sub votes to adopt this Agreement and thereby approve the Contemplated Transactions.

E. The Company Board has (i) determined that the Contemplated Transactions are fair to, advisable and in the best interests of the Company and its stockholders, (ii) approved and declared advisable this Agreement and the Contemplated Transactions and (iii) determined to recommend, upon the terms and subject to the conditions set forth in this Agreement, that the stockholders of the Company vote to approve the Company Stockholder Matters.

F. Concurrent with the execution and delivery of this Agreement and as a condition and inducement to Parent's willingness to enter into this Agreement, the officers, directors and at holders of at least two-thirds (2/3) of the Company Capital Stock (the "***Company Signatories***") (solely in their capacity as stockholders of the Company) are each executing (a) a support agreement in favor of Parent in substantially the form attached hereto as **Exhibit B** (the "***Company Stockholder Support Agreement***"), pursuant to which the Company Signatories have, subject to the terms and conditions set forth therein, agreed to vote all of their shares of Company Capital Stock in favor of the Company Stockholder Matters and against any proposals that compete with the Contemplated Transactions, (b) an action by written consent in substantially the form attached hereto as Exhibit H (each, a "***Company Stockholder Written Consent***" and collectively, the "***Company Stockholder Written Consents***") and (c) a lock-up agreement in substantially the form attached hereto as **Exhibit C** (the "***Company Lock-Up Agreement***").

G. Concurrent with the execution and delivery of this Agreement and as a condition and inducement to Parent's willingness to enter into this Agreement, the stockholders of the Company listed on Section A of the Company Disclosure Schedule are each executing an investor questionnaire in substantially the form attached as **Exhibit D** (the "***Accredited Investor Questionnaire***") provided that all such Company Signatories represent that they are "accredited investors" as defined in Regulation D under the Securities Act ("***Regulation D***").

H. Concurrent with the execution and delivery of this Agreement, the Company has entered into that certain Funding Agreement with NovaQuest Co-Investment Fund X, L.P. ("***NovaQuest***") pursuant to which NovaQuest will provide an aggregate of $25,000,000 in the form of near-term research and development funding (the "***Funding Agreement***"), and which Funding Agreement will provide for the consummation of the transactions contemplated thereby immediately following the Closing (the financing contemplated by the Funding Agreement, the "***Concurrent Financing***").

AGREEMENT

The Parties, intending to be legally bound, agree as follows:

Section 1. DESCRIPTION OF TRANSACTION

1.1 **The Merger**. Upon the terms and subject to the conditions set forth in this Agreement, at the Effective Time, Merger Sub shall be merged with and into the Company, and the separate existence of Merger Sub shall cease. The Company will continue 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, the Certificate of Merger and in the applicable provisions of the DGCL. As a result of the Merger, the Company will become a wholly owned subsidiary of Parent.

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 Sections 6, 7 and 8, the consummation of the Merger (the "***Closing***") shall take place remotely 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 Sections 6, 7 and 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 Parent and the Company may mutually agree in writing. The date on which the Closing actually takes place is referred to as the "***Closing Date***." At the Closing, the Parties shall cause the Merger to be consummated by executing and filing with the Secretary of State of the State of Delaware a certificate of merger with respect to the Merger, satisfying the applicable requirements of the DGCL and in a form reasonably acceptable to Parent and the Company (the "***Certificate of Merger***"). The Merger shall become effective at the time of the filing of such Certificate of Merger 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 Parent and the Company (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 identically to the certificate of incorporation of Merger Sub as in effect 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, the Surviving Corporation shall file an amendment to its certificate of incorporation to change the name of the Surviving Corporation to "Brickell Subsidiary, Inc.";

(b) the certificate of incorporation of Parent shall be identical to the certificate of incorporation of Parent 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, Parent shall file an amendment to its certificate of incorporation to (i) change the name of Parent to "Brickell Biotech, Inc.", (ii) as contemplated by Section 5.3(a)(i), increase the number of authorized shares of Parent Common Stock and effect the Reverse Split, and (iii) make such other changes as are mutually agreeable to Parent and the Company;

(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 as provided by the DGCL and such bylaws;

(d) the directors and officers of Parent, each to hold office in accordance with the certificate of incorporation and bylaws of Parent, shall be as set forth in Section 5.14 after giving effect to the provisions of Section 5.14, or such other persons as shall be mutually agreed upon by Parent and the Company; 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 the directors and officers of Parent as set forth in Section 5.14, after giving effect to the provisions of Section 5.14, or such other persons as shall be mutually agreed upon by Parent and the Company.

1.5 **Conversion of Shares**.

(a) At the Effective Time, by virtue of the Merger and without any further action on the part of Parent, Merger Sub, the Company or any stockholder of the Company or Parent:

(i) any shares of Company Capital Stock held as treasury stock or held or owned by the Company 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 Company Capital Stock outstanding immediately prior to the Effective Time (excluding shares to be canceled pursuant to Section 1.5(a)(i) and excluding Dissenting Shares) shall be automatically converted solely into the right to receive a number of shares of Parent Common Stock equal to the Exchange Ratio (the "***Merger Consideration***").

(b) If any shares of Company Capital Stock outstanding immediately prior to the Effective Time are unvested or are subject to a repurchase option or a risk of forfeiture under any applicable restricted stock purchase agreement or other similar agreement with the Company, then the shares of Parent Common Stock issued in exchange for such shares of Company Capital Stock will to the same extent be unvested and subject to the same repurchase option or risk of forfeiture, and such shares of Parent Common Stock shall accordingly be marked with appropriate legends. The Company shall take all actions that may be necessary to ensure that, from and after the Effective Time, Parent is entitled to exercise any such repurchase option or other right set forth in any such restricted stock purchase agreement or other agreement in accordance with its terms.

(c) No fractional shares of Parent 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 Company Capital Stock who would otherwise be entitled to receive a fraction of a share of Parent Common Stock (after aggregating all fractional shares of Parent 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 any 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 Parent Closing Price.

(d) All Company Options outstanding immediately prior to the Effective Time under the Company Plan shall be treated in accordance with Section 5.5(a).

(e) All Company Warrants outstanding immediately prior to the Effective Time shall be treated in accordance with Section 5.5(c).

(f) Each share of common stock, $0.01 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 Exchange Ratio and the Effective Time, the outstanding shares of Company Capital Stock or Parent Common Stock shall 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 Split), combination or exchange of shares or other like change, the Exchange Ratio shall, to the extent necessary, be equitably adjusted to reflect such change to the extent necessary to provide the holders of Company Capital Stock, Parent Common Stock, Company Options and Company Warrants with the same economic effect as contemplated by this Agreement prior to such stock dividend, subdivision, reclassification, recapitalization, split (including the Reverse Split), combination or exchange of shares or other like change; *provided, however*, that nothing herein will be construed to permit the Company or Parent to take any action with respect to Company Capital Stock or Parent Common Stock, respectively, that is prohibited or not expressly permitted by the terms of this Agreement.

1.6 **Closing of the Company's Transfer Books**. At the Effective Time: (a) all shares of Company Capital Stock outstanding immediately prior to the Effective Time shall be treated in accordance with Section 1.5, and all holders of certificates representing shares of Company Capital Stock that were outstanding immediately prior to the Effective Time shall cease to have any rights as stockholders of the Company; and (b) the stock transfer books of the Company shall be closed with respect to all shares of Company Capital Stock outstanding immediately prior to the Effective Time. No further transfer of any such shares of Company 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 Company Capital Stock outstanding immediately prior to the Effective Time (a "***Company Stock Certificate***") is presented to the Exchange Agent or to the Surviving Corporation, such Company Stock Certificate shall be canceled and shall be exchanged as provided in Sections 1.5 and 1.7.

1.7 **Surrender of Certificates**.

(a) On or prior to the Closing Date, Parent and the Company 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, Parent shall deposit with the Exchange Agent: (i) certificates or evidence of book-entry shares representing the Parent Common Stock issuable pursuant to Section 1.5 and (ii) cash sufficient to make payments in lieu of fractional shares in accordance with Section 1.5(c). The Parent Common Stock 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 shares of Company Capital Stock that were converted into the right to receive the Merger Consideration: (i) a letter of transmittal in customary form and containing such provisions as Parent may reasonably specify (including a provision confirming that delivery of Company Stock Certificates shall be effected, and risk of loss and title to Company Stock Certificates shall pass, only upon proper delivery of such Company Stock Certificates to the Exchange Agent); and (ii) instructions for effecting the surrender of Company Stock Certificates in exchange for shares of Parent Common Stock. Upon surrender of a Company 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 or Parent: (A) the holder of such Company Stock Certificate shall be entitled to receive in exchange therefor a certificate or certificates or book-entry shares representing the Merger Consideration (in a number of whole shares of Parent Common Stock) that such holder has the right to receive pursuant to the provisions of Section 1.5 (and cash in lieu of any fractional share of Parent Common Stock pursuant to the provisions of Section 1.5(c)); and (B) the Company Stock Certificate so surrendered shall be canceled. Until surrendered as contemplated by this Section 1.7(b), each

Company Stock Certificate shall be deemed, from and after the Effective Time, to represent only the right to receive a certificate or certificates or book-entry shares of Parent Common Stock representing the Merger Consideration (and cash in lieu of any fractional share of Parent Common Stock). If any Company Stock Certificate shall have been lost, stolen or destroyed, Parent may, in its discretion and as a condition precedent to the delivery of any shares of Parent Common Stock, require the owner of such lost, stolen or destroyed Company Stock Certificate to provide an applicable affidavit with respect to such Company Stock Certificate and post a bond indemnifying Parent against any claim suffered by Parent related to the lost, stolen or destroyed Company Stock Certificate as Parent may reasonably request. In the event of a transfer of ownership of a Company Stock Certificate that is not registered in the transfer records of the Company, payment of the Merger Consideration may be made to a Person other than the Person in whose name such Company Stock Certificate so surrendered is registered if such Company Stock Certificate shall be properly endorsed or otherwise be in proper form for transfer and the Person requesting such payment shall pay any transfer or other Taxes required by reason of the transfer or establish to the reasonable satisfaction of Parent that such Taxes have been paid or are not applicable. The Merger Consideration and any dividends or other distributions as are payable pursuant to Section 1.7(c) shall be deemed to have been in full satisfaction of all rights pertaining to Company Capital Stock formerly represented by such Company Stock Certificates.

(c) No dividends or other distributions declared or made with respect to Parent Common Stock with a record date on or after the Effective Time shall be paid to the holder of any unsurrendered Company Stock Certificate with respect to the shares of Parent Common Stock that such holder has the right to receive in the Merger until such holder surrenders such Company Stock Certificate or provides an affidavit of loss or destruction in lieu thereof in accordance with this Section 1.7 (at which time (or, if later, on the applicable payment date) 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 Company Stock Certificates as of the date that is one year after the Closing Date shall be delivered to Parent upon demand, and any holders of Company Stock Certificates who have not theretofore surrendered their Company Stock Certificates in accordance with this Section 1.7 shall thereafter look only to Parent for satisfaction of their claims for Parent Common Stock, cash in lieu of fractional shares of Parent Common Stock and any dividends or distributions with respect to shares of Parent Common Stock.

(e) Each of the Exchange Agent, Parent and the Surviving Corporation shall be entitled to deduct and withhold from any consideration deliverable pursuant to this Agreement to any holder of any Company Stock Certificate such amounts as are required to be deducted or withheld from such consideration under the Code or under any other applicable Law. To the extent such amounts are so deducted or withheld, and remitted to the appropriate taxing 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 Company Stock Certificate or to any other Person with respect to any shares of Parent 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 Law.

(g) All shares of Parent Common Stock issued pursuant to this Agreement shall bear a legend (and Parent will make a notation on its transfer books to such effect) prominently stamped or printed thereon or the substance of which will otherwise be reflected on the books and records of the transfer agent for Parent Common Stock with respect to book-entry shares, in each case reading substantially as follows:

> "THE SECURITIES REPRESENTED HEREBY HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED, OR APPLICABLE STATE SECURITIES LAWS. THESE SECURITIES HAVE BEEN ACQUIRED FOR INVESTMENT PURPOSES

AND NOT WITH A VIEW TO RESALE IN CONNECTION WITH A DISTRIBUTION AND MAY NOT BE SOLD OR OTHERWISE TRANSFERRED EXCEPT PURSUANT TO AN EFFECTIVE REGISTRATION STATEMENT FOR SUCH SECURITIES UNDER THE SECURITIES ACT OF 1933, AS AMENDED, AND APPLICABLE STATE SECURITIES LAWS, OR AN EXEMPTION FROM REGISTRATION UNDER SUCH ACT."

1.8 **Appraisal Rights**.

(a) Notwithstanding any provision of this Agreement to the contrary, shares of Company Capital Stock that are outstanding immediately prior to the Effective Time and which are held by stockholders who have exercised and perfected appraisal rights for such shares of Company Capital Stock in accordance with the DGCL (collectively, the "***Dissenting Shares***") shall not be converted into or represent the right to receive the Merger Consideration described in Section 1.5 attributable to such Dissenting Shares. Such stockholders shall be entitled to receive payment of the appraised value of such shares of Company Capital Stock held by them in accordance with the DGCL, unless and until such stockholders fail to perfect or effectively withdraw or otherwise lose their appraisal rights under the DGCL. All Dissenting Shares held by stockholders who shall have failed to perfect or shall have effectively withdrawn or lost their right to appraisal of such shares of Company Capital Stock under the DGCL (whether occurring before, at or after the Effective Time) shall thereupon be deemed to be converted into and to have become exchangeable for, as of the Effective Time, the right to receive the Merger Consideration, without interest, attributable to such Dissenting Shares upon their surrender in the manner provided in Sections 1.5 and 1.7.

(b) The Company shall give Parent prompt written notice of any demands by dissenting stockholders received by the Company, withdrawals of such demands and any other instruments served on the Company and any material correspondence received by the Company in connection with such demands. The Company shall not, except with Parent's prior written consent, voluntarily make any payment with respect to, or settle or offer to settle, any such demands, or approve any withdrawal of any such demands or agree to do any of the foregoing.

1.9 **Calculation of Parent Net Cash and Company Net Working Capital** Within five Business Days prior to the date of the Parent's Stockholder Meeting, (a) Parent shall deliver to the Company a net cash schedule (the "***Net Cash Schedule***") setting forth Parent's good faith estimate of its expected Parent Net Cash (the "***Net Cash Calculation***") as prepared by Parent's chief financial officer, together with the work papers andback-up materials used in preparing the Net Cash Schedule and (b) the Company shall deliver to Parent a net working capital schedule (the "***Net Working Capital Schedule***") setting forth the Company's good faith estimate of its expected Company Net Working Capital (the "***Net Working Capital Calculation***") as prepared by the Company's chief financial officer, together with the work papers and back-up materials used in preparing the Net Working Capital Schedule. The calculations and assumptions used in the Net Cash Schedule and the Net Working Capital Schedule shall be consistent with the presentation and methodologies used in preparing the Parent Net Cash and Company Net Working Capital calculation, as applicable, attached to this Agreement as **Exhibit I-1** or **Exhibit I-2**, which calculations have been prepared for illustrative purposes. Within two Business Days after Parent delivers the Net Cash Schedule to the Company and the Company delivers the Net Working Capital Schedule to Parent (the "***Response Date***"), the receiving party shall have the right to dispute any part of such Net Cash Schedule or Net Working Capital Schedule, as applicable, by delivering a written notice (the "***Dispute Notice***") to that effect to the other party. Any Dispute Notice shall identify in reasonable detail the nature of any proposed revisions to the Net Cash Calculation or Net Working Capital Calculation, as applicable, and will be accompanied by reasonably detailed materials supporting the basis for such proposed revisions. If either party delivers a Dispute Notice on or prior to the Response Date as provided above, then the parties shall attempt to resolve the underlying dispute in good faith for a period of two Business Days (the "***Dispute Resolution Period***"). If the parties agree on the amount of any of the deviations from the Net Cash Schedule or Net Working Capital Schedule, as applicable, during the Dispute Resolution Period, the Parent Net Cash or Company Net Working Capital amount, as applicable, they agree upon shall be final. If the parties,

notwithstanding such good faith effort, fail to resolve such dispute within the Dispute Resolution Period, then the parties shall jointly engage an independent accountant of national standing to make a written determination of Parent Net Cash or Company Net Working Capital, as applicable, as promptly as practicable, and such independent accountant's determination shall be final, absent manifest error or fraud.

1.10 **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 the Company, then the officers and directors of the Surviving Corporation shall be fully authorized, and shall use their and its commercially reasonable efforts (in the name of the Company, in the name of Merger Sub, in the name of the Surviving Corporation and otherwise) to take such action.

1.11 **Withholding**. The Parties and the Exchange Agent shall be entitled to deduct and withhold from the consideration otherwise payable pursuant to this Agreement to any holder of Company Capital Stock or any other Person such amounts as such Party or the Exchange Agent may be required to deduct and withhold under the Code or any other Law with respect to the making of such payment. To the extent that amounts are so deducted or withheld and paid to the appropriate Governmental Body, such deducted or withheld amounts shall be treated for all purposes of this Agreement as having been paid to the Person in respect of whom such deduction and withholding was made.

Section 2. REPRESENTATIONS AND WARRANTIES OF THE COMPANY

Except as set forth in the disclosure schedule delivered by the Company to Parent (the "***Company Disclosure Schedule***"), the Company represents and warrants to Parent and Merger Sub as follows:

2.1 **Due Organization; No Subsidiaries**.

(a) The Company is a corporation duly incorporated, validly existing and in good standing under the Laws of Delaware and has all necessary corporate power and authority: (i) to conduct its business in the manner in which its business is currently being conducted; (ii) to own or lease and use its property and assets in the manner in which its property and assets are currently owned or leased and used; and (iii) to perform its obligations under all Contracts by which it is bound.

(b) The Company is duly licensed and qualified to do business, and is in good standing (to the extent applicable in such jurisdiction), under the Laws of all jurisdictions where the nature of its business requires such licensing or qualification other than in jurisdictions where the failure to be so qualified individually or in the aggregate would not be reasonably expected to have a Company Material Adverse Effect.

(c) The Company has no Subsidiaries and the Company does not own any capital stock of, or any equity, ownership or profit sharing interest of any nature in, or controls directly or indirectly, any other Entity.

(d) The Company is not and has not otherwise been, directly or indirectly, a party to, member of or participant in any partnership, joint venture or similar business entity. The Company has not agreed, is not obligated to make, and is not bound by any Contract under which it may become obligated to make, any future investment in or capital contribution to any other Entity. The Company 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.

2.2 **Organizational Documents**. The Company has made available to Parent accurate and complete copies of the Organizational Documents of the Company in effect as of the date of this Agreement. The Company is not in breach or violation of its Organizational Documents.

2.3 **Authority; Binding Nature of Agreement**. The Company has all necessary corporate power and authority to enter into and to perform its obligations under this Agreement and to consummate the Contemplated Transactions. The Company Board (at meetings duly called and held) has (i) determined that the Contemplated Transactions are fair to, advisable and in the best interests of the Company and its stockholders, (ii) approved and declared advisable this Agreement and the Contemplated Transactions and (iii) determined to recommend, upon the terms and subject to the conditions set forth in this Agreement, that the stockholders of the Company vote to adopt this Agreement and thereby approve the Contemplated Transactions.

This Agreement has been duly executed and delivered by the Company and assuming the due authorization, execution and delivery by Parent and Merger Sub, constitutes the legal, valid and binding obligation of the Company, enforceable against the Company in accordance with its terms, subject to the Enforceability Exceptions. Prior to the execution of the Company Stockholder Support Agreements, the Company Board approved the Company Stockholder Support Agreements and the transactions contemplated thereby.

2.4 **Vote Required**. The affirmative vote (or written consent) of (a) a majority of the votes represented by the outstanding shares of the Company Capital Stock (on an as-converted to Company Common Stock basis) and (b) two-thirds of the votes represented by the outstanding shares of the Company Preferred Stock voting together as a single class (on an as-converted to Company Common Stock basis) (collectively, the "***Required Company Stockholder Vote***"), is the only vote (or written consent) of the holders of any class or series of Company Capital Stock necessary to adopt and approve this Agreement and approve the Contemplated Transactions.

2.5 **Non-Contravention; Consents**. Except as set forth in Section 2.5 of the Company Disclosure Schedule, and subject to obtaining the Required Company Stockholder Vote, the filing of the Certificate of Merger required by the DGCL, neither (x) the execution, delivery or performance of this Agreement by the Company, nor (y) the consummation of the Contemplated Transactions, will directly or indirectly (with or without notice or lapse of time):

(a) contravene, conflict with or result in a violation of any of the provisions of the Company's Organizational Documents;

(b) contravene, conflict with or result in a violation of, or give any Governmental Body the right to challenge the Contemplated Transactions or to exercise any remedy or obtain any relief under, any Law or any order, writ, injunction, judgment or decree to which the Company, or any of the assets owned or used by the Company, is subject, except as would not reasonably be expected to be material to the Company or its business;

(c) contravene, conflict with or result in a violation of any of the terms or requirements of, or give any Governmental Body the right to revoke, withdraw, suspend, cancel, terminate or modify, any Governmental Authorization that is held by the Company, except as would not reasonably be expected to be material to the Company or its business;

(d) contravene, conflict with or result in a violation or breach of, or result in a default under, any provision of any Company Material Contract, or give any Person the right to: (i) declare a default or exercise any remedy under any Company Material Contract; (ii) any material payment, rebate, chargeback, penalty or change in delivery schedule under any Company Material Contract; (iii) accelerate the maturity or performance of any Company Material Contract; or (iv) cancel, terminate or modify any term of any Company Material Contract, except in the case of any non-material breach, default, penalty or modification; or

(e) result in the imposition or creation of any Encumbrance upon or with respect to any asset owned or used by the Company (except for Permitted Encumbrances).

Except for (i) any Consent set forth on Section 2.5 of the Company Disclosure Schedule under any Company Contract, (ii) the Required Company Stockholder Vote, (iii) the filing of the Certificate of Merger with

the Secretary of State of the State of Delaware pursuant to the DGCL, and (iv) such consents, waivers, approvals, orders, authorizations, registrations, declarations and filings as may be required under applicable federal and state securities Laws, the Company is not and will not be required to make any filing with or give any notice to, or to obtain any Consent from, any Person in connection with (x) the execution, delivery or performance of this Agreement, or (y) the consummation of the Contemplated Transactions (in each case, other than pursuant to Company Contracts that are not Company Material Contracts). The Company Board 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, the Company Stockholder Support Agreements, the Company Lock-Up Agreements and to the consummation of the Contemplated Transactions. No other state takeover statute or similar Law applies or purports to apply to the Merger, this Agreement, the Company Stockholder Support Agreements, the Company Lock-Up Agreements or any of the Contemplated Transactions.

2.6 **Capitalization**.

(a) The authorized Company Capital Stock as of the date of this Agreement consists of (i) 10,000,000 shares of Company Common Stock, par value $0.0001 per share, of which 1,706,251 shares have been issued and are outstanding as of the date of this Agreement, and (ii) 4,446,228 shares of preferred stock, par value $0.0001 per share (the "***Company Preferred Stock***"), of which 1,162,505 have been designated as Series A Preferred Stock, 1,162,505 of which are issued and outstanding, 882,216 shares are designated as Series B Preferred Stock, 828,998 of which are issued and outstanding, 869,565 shares are designated as Series C Preferred Stock, 743,326 of which are issued and outstanding and 1,531,942 are designated as Series C-1 Preferred Stock, 905,076 of which are issued and outstanding. All Company Capital Stock is authorized, validly issued and fully paid and is in compliance with all applicable legal requirements. Section 2.6(a) of the Company Disclosure Schedule lists, as of the date of this Agreement (A) each record holder of issued and outstanding Company Capital Stock and the number and type of shares of Company Capital Stock held by such holder; (B)(1) each holder of issued and outstanding Company Warrants, (2) the number and type of shares subject to each Company Warrant, (3) the exercise price of each Company Warrant and (4) the termination date of each Company Warrant; and (C)(1) each holder of issued and outstanding Company Convertible Notes, (2) the principal amount of each Company Convertible Note and (3) the interest applicable to each Company Convertible Note and (4) the date of issuance of each Company Convertible Note.

(b) All of the outstanding shares of Company Common Stock and Company Preferred Stock have been duly authorized and validly issued, and are fully paid and nonassessable. Except as set forth in the Investor Agreements, none of the outstanding shares of Company Capital Stock is entitled or subject to any preemptive right, right of participation, right of maintenance, right of repurchase or forfeiture, subscription right or any similar right and none of the outstanding shares of Company Capital Stock is subject to any right of first refusal in favor of the Company. Except as contemplated herein and in the Investor Agreements, there is no Company Contract relating to the voting or registration of, or restricting any Person from purchasing, selling, pledging or otherwise disposing of (or granting any option or similar right with respect to), any shares of Company Capital Stock. The Company is not under any obligation, nor is it bound by any Contract pursuant to which it may become obligated, to repurchase, redeem or otherwise acquire any outstanding shares of Company Capital Stock or other securities. Section 2.6(b) of the Company Disclosure Schedule accurately and completely lists all repurchase rights held by the Company with respect to shares of Company Capital Stock (including shares issued pursuant to the exercise of stock options) and specifies which of those repurchase rights are currently exercisable and whether the holder of such shares of Company Capital Stock timely filed an election with the relevant Governmental Bodies under Section 83(b) of the Code with respect to such shares. Each share of Company Preferred Stock is convertible into one share of Company Common Stock.

(c) Except for the 2009 Equity Incentive Plan of Brickell Biotech, Inc., as amended (the "***Company Plan***"), the Company does not have any stock option plan or any other plan, program, agreement or arrangement providing for any equity-based compensation for any Person. As of the date of this Agreement, the

Company has reserved 2,872,986 shares of Company Common Stock for issuance under the Company Plan, of which 316,251 shares have been issued and are currently outstanding, 1,811,800 shares have been reserved for issuance upon exercise of Company Options previously granted and currently outstanding under the Company Plan, and 744,935 shares of Company Common Stock remain available for future issuance of awards pursuant to the Company Plan. Section 2.6(c) of the Company Disclosure Schedule sets forth the following information with respect to each Company Option outstanding as of the date of this Agreement: (i) the name of the optionee; (ii) the number of shares of Company Common Stock subject to such Company Option at the time of grant; (iii) the number of shares of Company Common Stock subject to such Company Option as of the date of this Agreement; (iv) the exercise price of such Company Option; (v) the date on which such Company Option was granted; (vi) the applicable vesting schedule, including the number of vested and unvested shares as of the date of this Agreement and any acceleration provisions; (vii) the date on which such Company Option expires; and (viii) whether such Company Option is intended to constitute an "incentive stock option" (as defined in the Code) or a non-qualified stock option. The Company has made available to Parent an accurate and complete copy of the Company Plan and all stock option agreements evidencing outstanding options granted thereunder. No vesting of Company Options will accelerate in connection with the closing of the Contemplated Transactions.

(d) Except as set forth on Section 2.6(d) of the Company 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 the Company; (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 the Company; or (iii) condition or circumstance that could be reasonably likely to 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 the Company. There are no outstanding or authorized stock appreciation, phantom stock, profit participation or other similar rights with respect to the Company.

(e) All outstanding shares of Company Common Stock, Company Preferred Stock, Company Options, Company Warrants and other securities of the Company have been issued and granted in material compliance with (i) all applicable securities Laws and other applicable Law, and (ii) all requirements set forth in applicable Contracts.

2.7 **Financial Statements**.

(a) Concurrently with the execution hereof, the Company has provided to Parent true and complete copies of (i) the Company's audited consolidated balance sheets at December 31, 2018, 2017 and 2016, together with related audited consolidated statements of income, stockholders' equity and cash flows, and notes thereto, of the Company for the fiscal years then ended and (ii) the Company Unaudited Interim Balance Sheet, together with the unaudited consolidated statements of income, stockholders' equity and cash flows of the Company for the period reflected in the Company Unaudited Interim Balance Sheet (collectively, the "***Company Financials***"). The Company Financials were prepared in accordance with GAAP (except as may be indicated in the notes to such financial statements and except that the unaudited financial statements may not contain footnotes and are subject to normal and recurring year-end adjustments, none of which are material) and fairly present, in all material respects, the financial position and operating results of the Company as of the dates and for the periods indicated therein.

(b) The Company maintains accurate books and records reflecting its assets and liabilities and 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 the financial statements of the Company and to maintain accountability of the Company's assets; (iii) access to the Company's assets is permitted only in accordance with management's general or specific authorization; (iv) the recorded accountability for the Company's assets is compared with the existing assets at regular intervals and appropriate action is taken with respect to any differences; and (v) accounts, notes and other receivables and inventory are recorded accurately, and proper and adequate

procedures are implemented to effect the collection thereof on a current and timely basis. The Company maintains internal control over financial reporting that provides reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes.

(c) The Company has not engaged in any securitization transactions or"off-balance sheet arrangements" (as defined in Item 303(c) of Regulation S-K under the Exchange Act) since January 1, 2017.

(d) Since January 1, 2017, there have been no 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 the Company, the Company Board or any committee thereof. Since January 1, 2017, neither the Company nor its independent auditors have identified (i) any significant deficiency or material weakness in the design or operation of the system of internal accounting controls utilized by the Company, (ii) any fraud, whether or not material, that involves the Company, the Company's management or other employees who have a role in the preparation of financial statements or the internal accounting controls utilized by the Company or (iii) any claim or allegation regarding any of the foregoing.

2.8 **Absence of Changes**. Except as set forth on Section 2.8 of the Company Disclosure Schedule, between the date of the Company Unaudited Interim Balance Sheet and the date of this Agreement, the Company has conducted its business only in the Ordinary Course of Business (except for the execution and performance of this Agreement and the discussions, negotiations and transactions related thereto) and there has not been any (a) Company Material Adverse Effect or (b) action, event or occurrence that would have required the consent of Parent pursuant to Section 4.2(b) had such action, event or occurrence taken place after the execution and delivery of this Agreement.

2.9 **Absence of Undisclosed Liabilities**. As of the date hereof, the Company does not have any liability, indebtedness, obligation or expense of any kind, whether accrued, absolute, contingent, matured, unmatured or otherwise (whether or not required to be reflected in the financial statements in accordance with GAAP) (each a "***Liability***"), individually or in the aggregate, of a type required to be recorded or reflected on a balance sheet or disclosed in the footnotes thereto under GAAP except for: (a) Liabilities disclosed, reflected or reserved against in the Company Unaudited Interim Balance Sheet; (b) Liabilities that have been incurred by the Company since the date of the Company Unaudited Interim Balance Sheet in the Ordinary Course of Business; (c) Liabilities for performance of obligations of the Company under Company Contracts; (d) Liabilities incurred in connection with the Contemplated Transactions; (e) Liabilities which would not, individually or in the aggregate, reasonably be expected to be material to the Company; and (f) Liabilities described in Section 2.9 of the Company Disclosure Schedule.

2.10 **Title to Assets**. The Company 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 tangible assets and equipment used or held for use in its business or operations or purported to be owned by it, including: (a) all tangible assets reflected on the Company Unaudited Interim Balance Sheet; and (b) all other tangible assets reflected in the books and records of the Company as being owned by the Company. All of such assets are owned or, in the case of leased assets, leased by the Company free and clear of any Encumbrances, other than Permitted Encumbrances.

2.11 **Real Property; Leasehold**. The Company does not own and has never owned any real property. The Company has made available to Parent (a) an accurate and complete list of all real properties with respect to which the Company directly or indirectly holds a valid leasehold interest as well as any other real estate that is in the possession of or leased by the Company, and (b) copies of all leases under which any such real property is possessed (the "***Company Real Estate Leases***"), each of which is in full force and effect, with no existing material default thereunder. The Company's use and operation of each such leased property conforms to all applicable Laws in all material respects, and the Company has exclusive possession of each such leased property and has not granted any occupancy rights to tenants or licensees with respect to such leased property. In addition, each such leased property is free and clear of all Encumbrances other than Permitted Encumbrances.

2.12 **Intellectual Property**.

(a) Section 2.12 of the Company Disclosure Schedule identifies (i) the name of the applicant/registrant, (ii) the jurisdiction of application/registration, (iii) the application or registration number and (iv) any other co-owners, for each item of material Registered IP owned in whole or in part by the Company. To the Knowledge of the Company, each of the patents and patent applications included in the material Registered IP properly identifies by name each and every inventor of the inventions claimed therein as determined in accordance with applicable Laws of the United States. As of the date of this Agreement, no interference, opposition, reissue, reexamination or other proceeding of any nature (other than initial examination proceedings) is pending or, to the Knowledge of the Company, threatened in writing, in which the scope, validity, enforceability or ownership of any Registered IP listed on Section 2.12 of the Company Disclosure Schedule is being or has been contested or challenged.

(b) The Company owns all right, title and interest in and to all material Company IP (other than as disclosed on Section 2.12 of the Company Disclosure Schedule), free and clear of all Encumbrances other than Permitted Encumbrances. To the Knowledge of the Company, each Company Associate involved in the creation or development of any material Company IP, pursuant to such Company Associate's activities on behalf of the Company, has signed a written agreement containing an assignment of such Company Associate's rights in such Company IP to the Company and confidentiality provisions protecting the Company IP.

(c) Except as set forth in Section 2.12(c) of the Company Disclosure Schedule, to the Knowledge of the Company, no funding, facilities or personnel of any Governmental Body or any university, college, research institute or other educational institution has been used to create Company IP, except for any such funding or use of facilities or personnel that does not result in such Governmental Body or institution obtaining ownership rights to such Company IP or the right to receive royalties for the practice of such Company IP.

(d) Section 2.12(d) of the Company Disclosure Schedule sets forth each license agreement pursuant to which the Company (i) is granted a license under any material Intellectual Property Right owned by any third party that is used by the Company in its business as currently conducted (each a "***Company In-bound License***") or (ii) grants to any third party a license under any material Company IP or material Intellectual Property Right licensed to the Company under a Company In-bound License (each a "***Company Out-bound License***") (*provided*, that, Company In-bound Licenses shall not include material transfer agreements, clinical trial agreements, services agreements, non-disclosure agreements, commercially available Software-as-a-Service offerings, off-the-shelf software licenses or generally available patent license agreements entered into in the ordinary course of business; and Company Out-bound Licenses shall not include material transfer agreements, clinical trial agreements, services agreements,non-disclosure agreements, or non-exclusive outbound licenses entered into in the ordinary course of business).

(e) To the Knowledge of the Company, (i) the operation of the businesses of the Company as currently conducted does not infringe any valid and enforceable Registered IP or misappropriate or otherwise violate any other Intellectual Property Right owned by any other Person; and (ii) no other Person is infringing, misappropriating or otherwise violating any Company IP or any Intellectual Property Rights exclusively licensed to the Company. As of the date of this Agreement, no Legal Proceeding is pending (or, to the Knowledge of the Company, is threatened in writing) (A) against the Company alleging that the operation of the businesses of the Company infringes or constitutes the misappropriation or other violation of any Intellectual Property Rights of another Person or (B) by the Company alleging that another Person has infringed, misappropriated or otherwise violated any of the Company IP or any Intellectual Property Rights exclusively licensed to the Company. Since January 1, 2017, the Company has not received any written notice or other written communication alleging that the operation of the business of the Company infringes or constitutes the misappropriation or other violation of any Intellectual Property Right of another Person.

(f) None of the Company IP or, to the Knowledge of the Company, any material Intellectual Property Rights exclusively licensed to the Company is subject to any pending or outstanding injunction,

directive, order, judgment or other disposition of dispute that adversely and materially restricts the use, transfer, registration or licensing by the Company of any such Company IP or material Intellectual Property Rights exclusively licensed to the Company.

(g) To the Knowledge of the Company, the Company and the operation of the Company's business are in substantial compliance with all Laws pertaining to data privacy and data security of any personally identifiable information and sensitive business information (collectively, "***Sensitive Data***") except to the extent that such noncompliance has not and would not reasonably be expected to have a Company Material Adverse Effect. To the Knowledge of the Company, since January 1, 2017, there have been (i) no material losses or thefts of data or security breaches relating to Sensitive Data used in the business of the Company, (ii) no violations of any security policy of the Company regarding any such Sensitive Data, (iii) no unauthorized access or unauthorized use of any Sensitive Data used in the business of the Company and (iv) no unintended or improper disclosure of any personally identifiable information in the possession, custody or control of the Company, or a contractor or agent acting on behalf of the Company, in each case of (i) through (iv), except as would not reasonably be expected to, individually or in the aggregate, have a Company Material Adverse Effect.

2.13 **Agreements, Contracts and Commitments**.

(a) Section 2.13 of the Company Disclosure Schedule lists the following Company Contracts in effect as of the date of this Agreement other than any Company Benefit Plans or non-disclosure agreements entered into in the ordinary course of business or in connection with a potential strategic transaction (each, a "***Company Material Contract***" and collectively, the "***Company Material Contracts***"):

(i) each Company Contract relating to any agreement of indemnification or guaranty not entered into in the Ordinary Course of Business;

(ii) each Company Contract containing (A) any covenant limiting the freedom of the Company 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;

(iii) each Company Contract, to the Company's Knowledge based on the express terms of the Company Contract relating to capital expenditures and requiring payments after the date of this Agreement in excess of $50,000 pursuant to its express terms and not cancelable without penalty;

(iv) each Company Contract relating to the disposition or acquisition of material assets or any ownership interest in any Entity;

(v) each Company 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 or creating any Encumbrances, in each case, in an amount in excess of $100,000, with respect to any assets of the Company or any loans or debt obligations with officers or directors of the Company;

(vi) each Company Contract requiring payment by or to the Company after the date of this Agreement in excess of $100,000 pursuant to its express terms 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 the Company; (C) any dealer, distributor, joint marketing, alliance, joint venture, cooperation, development or other agreement currently in force under which the Company has continuing obligations to develop or market any product, technology or service, or any agreement pursuant to which the Company has continuing obligations to develop any Intellectual Property Rights that will not be owned, in whole or in part, by the Company; or (D) any Contract to license any third party to manufacture or produce any product, service or technology of the Company or any Contract to sell, distribute or commercialize any products or service of the Company, in each case, except for Company Contracts entered into in the Ordinary Course of Business;

(vii) each Company Contract with any Person, including any financial advisor, broker, finder, investment banker or other Person, providing advisory services to the Company in connection with the Contemplated Transactions;

(viii) each Company Real Estate Lease;

(ix) each Company Contract with any Governmental Body;

(x) each Company Out-bound License and Company In-bound License;

(xi) each Company Contract containing any royalty, dividend or similar arrangement based on the revenues or profits of the Company; or

(xii) any other Company Contract that is not terminable at will (with no penalty or payment) by the Company, and (A) which involves payment or receipt by the Company 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 (B) that is material to the business or operations of the Company.

(b) The Company has delivered or made available to Parent accurate and complete copies of all Company Material Contracts, including all amendments thereto, as of the date of this Agreement. Except as set forth in Section 2.13(b) of the Company Disclosure Schedule, there are no Company Material Contracts that are not in written form. Except as set forth in Section 2.13(b) of the Company Disclosure Schedule, the Company does not have, nor to the Company's Knowledge, as of the date of this Agreement has any other party to a Company Material Contract, breached, violated or defaulted under, or received notice that it breached, violated or defaulted under, any of the terms or conditions of any Company Material Contract in such manner as would permit any other party to cancel or terminate any such Company Material Contract, or would permit any other party to seek damages which would reasonably be expected to be material to the Company or its business. As to the Company, as of the date of this Agreement, each Company Material Contract is valid, binding, enforceable and in full force and effect, subject to the Enforceability Exceptions. No Person is renegotiating, or has a right pursuant to the terms of any Company Material Contract to change, any material amount paid or payable to the Company under any Company Material Contract or any other material term or provision of any Company Material Contract.

2.14 **Compliance; Permits; Restrictions**.

(a) The Company is, and since January 1, 2017 has been, in compliance in all material respects with all applicable Laws, including the Federal Food, Drug, and Cosmetic Act ("***FDCA***"), the Food and Drug Administration ("***FDA***") regulations adopted thereunder, the Public Health Service Act and any other similar Law administered or 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 and biopharmaceutical products (each, a "***Drug Regulatory Agency***"), except for any noncompliance, either individually or in the aggregate, which would not be material to the Company. No investigation, claim, suit, proceeding, audit or other action by any Governmental Body is pending or, to the Knowledge of the Company, threatened against the Company. There is no agreement, judgment, injunction, order or decree binding upon the Company which (i) has or would reasonably be expected to have the effect of prohibiting or materially impairing any business practice of the Company, any acquisition of material property by the Company or the conduct of business by the Company as currently conducted, (ii) is reasonably likely to have an adverse effect on the Company's ability to comply with or perform any covenant or obligation under this Agreement, or (iii) is reasonably likely to have the effect of preventing, delaying, making illegal or otherwise interfering with the Contemplated Transactions. To the Knowledge of the Company, no condition or state of facts exists that is reasonably likely to give rise to a violation of, or a material liability or default under any applicable Laws relating to the Company.

(b) The Company holds all required Governmental Authorizations which are material to the operation of the business of the Company as currently conducted (the "***Company Permits***"). Section 2.14(b) of the Company Disclosure Schedule identifies each Company Permit. The Company is in material compliance with the terms of the Company Permits. No Legal Proceeding is pending or, to the Knowledge of the Company, threatened, which seeks to revoke, limit, suspend, or materially modify any Company Permit.

(c) There are no proceedings pending or, to the Knowledge of the Company, threatened with respect to an alleged material violation by the Company of the FDCA, FDA regulations adopted thereunder, the Public Health Service Act or any other similar Law administered or promulgated by any Drug Regulatory Agency.

(d) All clinical, pre-clinical and other studies and tests conducted by or on behalf of, or sponsored by, the Company, or in which the Company or their current products or product candidates have participated, were and, if still pending, are being conducted in all material respects in accordance with standard medical and scientific research procedures and in compliance in all material respects with the applicable regulations of any applicable Drug Regulatory Agency and other applicable Law, including 21 C.F.R. Parts 50, 54, 56, 58 and 312. No preclinical or clinical trial conducted by or on behalf of the Company has been terminated or suspended prior to completion for safety or non-compliance reasons. Since January 1, 2017, the Company has not received any notices, correspondence, or other communications from any Drug Regulatory Agency requiring, or to the Knowledge of the Company threatening to initiate, the termination or suspension of any clinical studies conducted by or on behalf of, or sponsored by, the Company or in which the Company or their current products or product candidates have participated.

(e) The Company is not the subject of any pending or, to the Knowledge of the Company, 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 the Company, the Company has not committed any acts, made any statement, or failed to make any statement, in each case in respect of its business or products that would violate the FDA's "Fraud, Untrue Statements of Material Facts, Bribery, and Illegal Gratuities" Final Policy, and any amendments thereto. None of the Company, or any of its officers, employees or agents has been convicted of any crime or engaged in any conduct that could result in a debarment or exclusion (i) under 21 U.S.C. Section 335a or (ii) any similar applicable Law. No debarment or exclusionary claims, actions, proceedings or investigations in respect of their business or products are pending or, to the Knowledge of the Company, threatened against the Company or any of its officers, employees or agents.

2.15 **Legal Proceedings; Orders**.

(a) Except as set forth in Section 2.15(a) of the Company Disclosure Schedule, as of the date of this Agreement, there is no pending Legal Proceeding and, to the Knowledge of the Company, no Person has threatened in writing to commence any Legal Proceeding: (i) that involves (A) the Company, (B) any Company Associate (in his or her capacity as such) or (C) any of the material assets owned or used by the Company; or (ii) that may have the effect of preventing, delaying, making illegal or otherwise materially interfering with, the Contemplated Transactions.

(b) Except as set forth in Section 2.15(b) of the Company Disclosure Schedule, since January 1, 2017, no Legal Proceeding has been pending against the Company that resulted in material liability to the Company.

(c) There is no order, writ, injunction, judgment or decree to which the Company, or any of the material assets owned or used by the Company, is subject. To the Knowledge of the Company, no officer of the Company or is subject to any order, writ, injunction, judgment or decree that prohibits such officer or employee from engaging in or continuing any conduct, activity or practice relating to the business of the Company or to any material assets owned or used by the Company.

(d) Since January 1, 2017 through the date of this Agreement, the Company has not settled or compromised any proceeding or claim, whether filed or threatened.

2.16 **Tax Matters**.

(a) The Company has timely filed all income Tax Returns and other material Tax Returns that they were required to file under applicable Law. All such Tax Returns are correct and complete in all material respects and have been prepared in compliance with all applicable Law. No claim has ever been made by any Governmental Body in any jurisdiction where the Company does not file a particular Tax Return or pay a particular Tax that the Company is subject to taxation by that jurisdiction.

(b) All income and other material Taxes due and owing by the Company on or before the date hereof (whether or not shown on any Tax Return) have been fully paid. The unpaid Taxes of the Company did not, as of the date of the Company Unaudited Interim Balance Sheet, materially exceed the reserve for Tax liability (excluding any reserve for deferred Taxes established to reflect timing differences between book and Tax items) set forth on the face of the Company Unaudited Interim Balance Sheet. Since the date of the Company Unaudited Interim Balance Sheet, the Company has not incurred any material Liability for Taxes outside the Ordinary Course of Business.

(c) All Taxes that the Company are or were required by Law to withhold or collect have been duly and timely withheld or collected in all material respects on behalf of its employees, independent contractors, stockholders, lenders, customers or other third parties and, have been timely paid to the proper Governmental Body or other Person or properly set aside in accounts for this purpose.

(d) There are no Encumbrances for Taxes (other than Taxes not yet due and payable) upon any of the assets of the Company.

(e) No deficiencies for income or other material Taxes with respect to the Company have been claimed, proposed or assessed by any Governmental Body in writing. There are no pending or ongoing, and to the Knowledge of the Company, threatened audits, assessments or other actions for or relating to any liability in respect of a material amount of Taxes of the Company. Neither the Company nor any of its predecessors has waived any statute of limitations in respect of any income or other material Taxes or agreed to any extension of time with respect to any income or other material Tax assessment or deficiency.

(f) The Company 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.

(g) The Company is not a party to any Tax allocation agreement, Tax sharing agreement, Tax indemnity agreement, or similar agreement or arrangement, other than customary commercial contracts entered into in the Ordinary Course of Business the principal subject matter of which is not Taxes.

(h) The Company will not be required to include any material item of income in, or exclude any material item of deduction from, taxable income for any Tax period (or portion thereof) ending after the Closing Date as a result of any: (i) change in method of accounting by the Company for Tax purposes; (ii) use of an improper method of accounting by the Company for a Tax period ending on or prior to the Closing Date; (iii) "closing agreement" as described in Section 7121 of the Code (or any similar provision of state, local or foreign Law) executed by the Company on or prior to the Closing Date; (iv) intercompany transaction or excess loss account described in Treasury Regulations under Section 1502 of the Code (or any similar provision of state, local or foreign Law) of the Company; (v) installment sale or open transaction disposition made by the Company on or prior to the Closing Date; (vi) prepaid amount received or deferred revenue accrued by the Company on or prior to the Closing Date; (vii) application of Section 367(d) of the Code to any transfer of intangible property by the Company on or prior to the Closing Date; (viii) application of Sections 951 or 951A of the Code (or any

similar provision of state, local or foreign Law) to any income received or accrued by the Company on or prior to the Closing Date; or (ix) election under Section 108(i) of the Code (or any similar provision of state, local or foreign Law) made by the Company on or prior to the Closing Date. The Company has not made any election under Section 965(h) of the Code.

(i) The Company has never been (i) a member of a consolidated, combined or unitary Tax group (other than such a group the common parent of which is the Company) or (ii) a party to any joint venture, partnership, or other arrangement that is treated as a partnership for U.S. federal income Tax purposes. The Company does not have any Liability for any material Taxes of any Person (other than the Company) under Treasury Regulations Section 1.1502-6 (or any similar provision of state, local, or foreign Law), or as a transferee or successor.

(j) The Company has not distributed stock of another Person, or 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 (or any similar provisions of state, local or foreign Law).

(k) The Company (i) is not a "controlled foreign corporation" as defined in Section 957 of the Code, (ii) is not a "passive foreign investment company" within the meaning of Section 1297 of the Code, and (iii) has never had a permanent establishment (within the meaning of an applicable Tax treaty) or otherwise had an office or fixed place of business in a country other than the country in which it is organized.

(l) The Company has not participated in or been a party to a transaction that, as of the date of this Agreement, constitutes a "listed transaction" that is required to be reported to the IRS pursuant to Section 6011 of the Code and applicable Treasury Regulations thereunder.

(m) The Company has not taken any action and does not know of any fact that would reasonably be expected to prevent the Merger from qualifying for the Intended Tax Treatment.

For purposes of this Section 2.16, each reference to the Company shall be deemed to include any Person that was liquidated into, merged with, or is otherwise a predecessor to, the Company.

2.17 **Employee and Labor Matters; Benefit Plans**.

(a) Section 2.17(a) of the Company Disclosure Schedule is a list of all material Company Benefit Plans, including, without limitation, each Company Benefit Plan that provides for retirement, change in control, stay or retention, deferred compensation, incentive compensation, severance or retiree medical or life insurance benefits. "***Company Benefit Plan***" means each (i) "employee benefit plan" as defined in Section 3(3) of ERISA and (ii) other pension, retirement, deferred compensation, excess benefit, profit sharing, bonus, incentive, equity or equity-based, phantom equity, employment (other than at-will employment offer letters on the Company's standard form and other than individual Company Options or other compensatory equity award agreements made pursuant to the Company's standard forms, in which case only representative standard forms of such agreements shall be scheduled), consulting, severance, change-of-control, retention, health, life, disability, group insurance, paid-time off, holiday, welfare and fringe benefit plan, program, agreement, contract, or arrangement (whether written or unwritten, qualified or nonqualified, funded or unfunded and including any that have been frozen or terminated), in any case, maintained, contributed to, or required to be contributed to, by the Company or Company ERISA Affiliates for the benefit of any current or former employee, director, officer or independent contractor of the Company or under which the Company has any actual or contingent liability (including, without limitation, as to the result of it being treated as a single employer under Code Section 414 with any other person).

(b) As applicable with respect to each material Company Benefit Plan, the Company has made available to Parent, true and complete copies of (i) each material Company Benefit Plan, including all amendments thereto, and in the case of an unwritten material Company Benefit Plan, a written description

thereof, (ii) all current trust documents, investment management contracts, custodial agreements, administrative services agreements and insurance and annuity contracts relating thereto, (iii) the current summary plan description and each summary of material modifications thereto, (iv) the most recently filed annual reports with any Governmental Body (*e.g.*, Form 5500 and all schedules thereto), (v) the most recent IRS determination, opinion or advisory letter, (vi) the most recent summary annual reports, nondiscrimination testing reports, actuarial reports, financial statements and trustee reports, (vii) all records, notices and filings concerning IRS or Department of Labor or other Governmental Body audits or investigations, "prohibited transactions" within the meaning of Section 406 of ERISA or Section 4975 of the Code, (viii) all policies and procedures established to comply with the privacy and security rules of HIPAA and (ix) any written reports constituting a valuation of the Company's capital stock for purposes of Sections 409A or 422 of the Code, whether prepared internally by the Company or by an outside, third-party valuation firm.

(c) Each Company Benefit Plan has been maintained, operated and administered in compliance in all material respects with its terms and any related documents or agreements and the applicable provisions of ERISA, the Code and all other Laws, and no event has occurred which will or could cause any such Company Benefit Plan to fail to comply with such requirements and no notice has been issued by any governmental authority questioning or challenging such compliance.

(d) The Company Benefit Plans which are "employee pension benefit plans" within the meaning of Section 3(2) of ERISA and which are intended to meet the qualification requirements of Section 401(a) of the Code have received determination or opinion letters from the IRS on which they may currently rely to the effect that such plans are qualified under Section 401(a) of the Code and the related trusts are exempt from federal income Taxes under Section 501(a) of the Code, respectively, and to the Knowledge of the Company, nothing has occurred that would reasonably be expected to materially adversely affect the qualification of such Company Benefit Plan or the tax exempt status of the related trust.

(e) Neither the Company nor any Company ERISA Affiliate maintains, contributes to, is required to contribute to, or has or has had any actual or contingent liability with respect to, (i) any "employee pension benefit plan" (within the meaning of Section 3(2) of ERISA) that is subject to Title IV or Section 302 of ERISA or Section 412 of the Code, (ii) any "multiemployer plan" (within the meaning of Section 3(37) of ERISA), (iii) any "multiple employer plan" (within the meaning of Section 413 of the Code) or (iv) any "multiple employer welfare arrangement" (within the meaning of Section 3(40) of ERISA). None of the assets of any Company Benefit Plan are invested in employer securities or employer real property.

(f) There are no pending audits or investigations by any Governmental Body involving any Company Benefit Plan, and no pending or, to the Knowledge of the Company, threatened claims (except for individual claims for benefits payable in the normal operation of the Company Benefit Plans), suits or proceedings involving any Company Benefit Plan, any fiduciary thereof or service provider thereto, in any case except as would not be reasonably expected to result in material liability to the Company. All contributions and premium payments required to have been made under any of the Company Benefit Plans or by applicable Law (without regard to any waivers granted under Section 412 of the Code), have been timely made and neither the Company nor any Company ERISA Affiliate has any liability for any unpaid contributions with respect to any Company Benefit Plan.

(g) Neither the Company nor any Company ERISA Affiliate, nor to the Knowledge of the Company, any fiduciary, trustee or administrator of any Company Benefit Plan, has engaged in, or in connection with the Contemplated Transactions will engage in, any transaction with respect to any Company Benefit Plan which would subject any such Company Benefit Plan, the Company or Company ERISA Affiliates or Parent to a material Tax, material penalty or material liability for a "prohibited transaction" under Section 406 of ERISA or Section 4975 of the Code.

(h) No Company Benefit Plan provides death, medical, dental, vision, life insurance or other welfare benefits beyond termination of service or retirement other than coverage mandated by Law and neither the Company nor Company ERISA Affiliates has made a written or oral representation promising the same.

(i) Neither the execution of, nor the performance of the Contemplated Transactions will either alone or in connection with any other event(s) (i) result in any payment becoming due to any current or former employee, director, officer, or independent contractor of the Company, (ii) increase any amount of compensation or benefits otherwise payable under any Company Benefit Plan, (iii) result in the acceleration of the time of payment, funding or vesting of any benefits under any Company Benefit Plan, (iv) require any contribution or payment to fund any obligation under any Company Benefit Plan or (v) limit the right to merge, amend or terminate any Company Benefit Plan.

(j) Neither the execution of, nor the consummation of the Contemplated Transactions (either alone or when combined with the occurrence of any other event, including without limitation, a termination of employment) will result in the receipt or retention by any person who is a "disqualified individual" (within the meaning of Code Section 280G) with respect to the Company of any payment or benefit that is or could be characterized as a "parachute payment" (within the meaning of Code Section 280G), determined without regard to the application of Code Section 280G(b)(5).

(k) The exercise price of each Company Option is not, never has been and can never be less than the fair market value of one share of Company Common Stock as of the grant date of such Company Option.

(l) Each Company Benefit Plan providing for deferred compensation that constitutes a "nonqualified deferred compensation plan" (as defined in Section 409A(d)(1) of the Code and the regulations promulgated thereunder) is, and has been, established, administered and maintained in compliance with the requirements of Section 409A of the Code and the regulations promulgated thereunder in all material respects.

(m) No current or former employee, officer, director or independent contractor of the Company has any "gross up" agreements with the Company or other assurance of reimbursement by the Company for any Taxes imposed under Code Section 409A or Code Section 4999.

(n) The Company does not have any Company Benefit Plan that is maintained outside of the United States.

(o) There have been no acts or omissions by the Company or any Company ERISA Affiliates which have given rise to or may give rise to interest, fines, penalties, taxes or related charges under section 502 of ERISA or Chapters 43, 47, 68 or 100 of the Code for which the Company or any Company ERISA Affiliates may be liable or under Section 409A of the Code for which the Company, any Company ERISA Affiliates or any participant in any Company Benefit Plan that is a nonqualified deferred compensation plan (within the meaning of section 409A of the Code) may be liable. The Company, and each Company Benefit Plan that is a "group health plan" as defined in Section 733(a)(1) of ERISA (a "***Health Plan***") (i) is currently in compliance in all material respects with the Patient Protection and Affordable Care Act, Pub. L. No. 111-148 ("***PPACA***"), the Health Care and Education Reconciliation Act of 2010, Pub. L. No. 111-152 ("***HCERA***"), and the regulations and guidance issued thereunder (collectively, with PPACA and HCERA, the "***Healthcare Reform Laws***"), and (ii) has been in compliance in all material respects with all applicable Healthcare Reform Laws since March 23, 2010. No event has occurred, and no conditions or circumstance exists, that would reasonably be expected to subject the Company, or any Health Plan, to material penalties or excise taxes under Sections 4980D, 4980H, or 4980I of the Code or any other provision of the Healthcare Reform Laws.

(p) The Company is not a party to, bound by, and does not have a duty to bargain under, any collective bargaining agreement or other Contract with a labor union, labor organization, or similar Person representing any of its employees, and there is no labor union, labor organization, or similar Person representing or, to the Knowledge of the Company, purporting to represent or seeking to represent any employees of the Company, including through the filing of a petition for representation election.

(q) The Company is, and since January 1, 2017 has been, in material compliance with all applicable Laws respecting labor, employment, employment practices, and terms and conditions of employment, including worker classification, discrimination, harassment and retaliation, equal employment opportunities, fair employment practices, meal and rest periods, immigration, employee safety and health, wages (including overtime wages), unemployment and workers' compensation, leaves of absence, and hours of work. Except as would not be reasonably likely to result in a material liability to the Company, with respect its employees, the Company, since January 1, 2017: (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, benefits, or compensation to employees, (ii) is not liable for any arrears of wages (including overtime wages), severance pay or any Taxes or any penalty 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, disability, social security or other benefits or obligations for employees (other than routine payments to be made in the Ordinary Course of Business). There are no actions, suits, claims, charges, lawsuits, investigations, audits or administrative matters pending or, to the Knowledge of the Company, threatened or reasonably anticipated against the Company relating to any employee, applicant for employment, consultant, employment agreement or Company Benefit Plan (other than routine claims for benefits).

(r) Except as would not be reasonably likely to result in a material liability to the Company, with respect to each individual who currently renders services to the Company, the Company has accurately classified each such individual as an employee, independent contractor, or otherwise under all applicable Laws and, for each individual classified as an employee, the Company has accurately classified him or her as overtime eligible or overtime ineligible under all applicable Laws. The Company does not have any 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.

(s) There is not and has not been in the past three years, nor is there or has there been in the past three years any threat of, any strike, slowdown, work stoppage, lockout, union election petition, demand for recognition, or any similar activity or dispute, or, to the Knowledge of the Company, any union organizing activity, against the Company. No event has occurred, and no condition or circumstance exists, that might directly or indirectly be likely to give rise to or provide a basis for the commencement of any such strike, slowdown, work stoppage, lockout, union election petition, demand for recognition, any similar activity or dispute, or, to the Knowledge of the Company, any union organizing activity.

(t) There is no Legal Proceeding, claim, unfair labor practice charge or complaint, labor dispute or grievance pending or, to the Knowledge of the Company, threatened against the Company relating to labor, employment, employment practices, or terms and conditions of employment.

(u) There is no contract, agreement, plan or arrangement to which the Company or any Company Affiliate is a party or by which it is bound to compensate any of its employees for excise taxes paid pursuant to Section 4999 of the Code.

2.18 **Environmental Matters**. The Company is, and since January 1, 2013 has been, in compliance with all applicable Environmental Laws, which compliance includes the possession by the Company of all permits and other Governmental Authorizations required under applicable Environmental Laws and compliance with the terms and conditions thereof, except for any failure to be in such compliance that, either individually or in the aggregate, would not reasonably be expected to be material to the Company or its business. Since January 1, 2013, the Company has not received (or prior to that time, which is pending and unresolved), any written notice or other communication (in writing or otherwise), whether from a Governmental Body or other Person, that alleges that the Company is not in compliance with or has liability pursuant to any Environmental Law and, to the Knowledge of the Company, there are no circumstances that would reasonably be expected to prevent or interfere with the Company's compliance in any material respects with any Environmental Law,

except where such failure to comply would not reasonably be expected to be material to the Company or its business. The Company is not aware of any fact or circumstance which could involve the Company in any environmental litigation or impose any environmental liability upon the Company. No current or (during the time a prior property was leased or controlled by the Company) prior property leased or controlled by the Company has had a release of or exposure to Hazardous Materials in material violation of or as would reasonably be expected to result in any material liability of the Company pursuant to Environmental Law. No consent, approval or Governmental Authorization of or registration or filing with any Governmental Body is required by Environmental Laws in connection with the execution and delivery of this Agreement or the Contemplated Transactions. Prior to the date hereof, the Company has provided or otherwise made available to Parent true and correct copies of all material environmental reports, assessments, studies and audits in the possession or control of the Company with respect to any property leased or controlled by the Company or any business it operates.

2.19 **Insurance**. The Company maintains insurance policies, including insurance covering directors and officers for securities law and other customary liabilities, with reputable insurance carriers against all risks of a character and in such amounts as are usually insured against by similarly situated companies in the same or similar business and in such amounts and against such risks as the Company has reasonably determined is prudent, sufficient and adequate to cover the claims disclosed on Section 2.15(b) of the Company Disclosure Schedule. The Company has delivered or made available to Parent 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 the Company. Each of such insurance policies is in full force and effect and the Company is in compliance in all material respects with the terms thereof. Other than customary end of policy notifications from insurance carriers, since January 1, 2017, the Company has not received any notice or other communication regarding any actual or possible: (i) cancellation or invalidation of any insurance policy; or (ii) refusal or denial of any coverage, reservation of rights or rejection of any material claim under any insurance policy. The Company has provided timely written notice to the appropriate insurance carrier(s) of each Legal Proceeding that is currently pending against the Company for which the Company has insurance coverage, and no such carrier has issued a denial of coverage or a reservation of rights with respect to any such Legal Proceeding, or informed the Company of its intent to do so.

2.20 **No Financial Advisors**. Except as set forth on Section 2.20 of the Company 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 the Company.

2.21 **Disclosure**. The information supplied by the Company for inclusion in the Proxy Statement (including any of the Company Financials) will not, as of the date of the Proxy Statement or as of the date such information is prepared or presented, (i) contain any statement that is inaccurate or misleading with respect to any material facts, or (ii) omit to state any material fact necessary in order to make such information, in light of the circumstances under which such information will be provided, not false or misleading.

2.22 **Transactions with Affiliates**.

(a) Section 2.22(a) of the Company Disclosure Schedule describes any material transactions or relationships, since January 1, 2017, between, on one hand, the Company and, on the other hand, any (i) executive officer or director of the Company or, to the Knowledge of the Company, or any of such executive officer's or director's immediate family members, (ii) owner of more than 5% of the voting power of the outstanding Company Capital Stock or (iii) to the Knowledge of the Company, any "related person" (within the meaning of Item 404 of Regulation S-K under the Securities Act) of any such officer, director or owner (other than the Company) in the case of each of (i), (ii) or (iii) that is of the type that would be required to be disclosed under Item 404 of Regulation S-K under the Securities Act.

(b) Section 2.22(b) of the Company Disclosure Schedule lists each stockholders agreement, voting agreement, registration rights agreement, co-sale agreement or other similar Contract between the Company and

any holders of Company Capital Stock, including any such Contract granting any Person investor rights, rights of first refusal, rights of first offer, registration rights, director designation rights or similar rights (collectively, the "***Investor Agreements***").

2.23 **Anti-Bribery**. Neither the Company nor any of its directors, officers, employees, agents or any other Person acting on its behalf has directly or indirectly (i) used any funds for unlawful contributions, gifts, entertainment or other unlawful expenses relating to political activity or (ii) made any bribes, rebates, payoffs, influence payments, kickbacks, illegal payments, illegal political contributions, or other payments, in the form of cash, gifts, or otherwise, or taken any other action, in violation of the Foreign Corrupt Practices Act of 1977, the UK Bribery Act of 2010 or any other anti-bribery or anti-corruption Law (collectively, the "***Anti-Bribery Laws***"). The Company has not and has not been the subject of any investigation or inquiry by any Governmental Body with respect to potential violations of Anti-Bribery Laws.

2.24 **Disclaimer of Other Representations or Warranties**. Except as previously set forth in this Section 2 or in any certificate delivered by the Company to Parent and/or Merger Sub pursuant to this Agreement, the Company makes no representation or warranty, express or implied, at law or in equity, with respect to it or any of its assets, liabilities or operations, and any such other representations or warranties are hereby expressly disclaimed.

Section 3. REPRESENTATIONS AND WARRANTIES OF PARENT AND MERGER SUB

Except (a) as set forth in the disclosure schedule delivered by Parent to the Company (the "***Parent Disclosure Schedule***") or (b) as disclosed in the Parent SEC Documents filed with the SEC prior to the date hereof and publicly available on the SEC's Electronic Data Gathering Analysis and Retrieval system (but (i) without giving effect to any amendment thereof filed with, or furnished to the SEC on or after the date hereof and (ii) excluding any disclosures contained under the heading "Risk Factors" and any disclosure of risks included in any "forward-looking statements" disclaimer or in any other section to the extent they are forward-looking statements or cautionary, predictive or forward-looking in nature), Parent and Merger Sub represent and warrant to the Company as follows:

3.1 **Due Organization; No Subsidiaries**.

(a) Each of Parent and Merger Sub is a corporation duly incorporated, validly existing and in good standing under the Laws of the jurisdiction of its incorporation, and has all necessary corporate power and authority to conduct its business in the manner in which its business is currently being conducted and to own or lease and use its property and assets in the manner in which its property and assets are currently owned or leased and used, except where the failure to have such power or authority would not reasonably be expected to prevent or materially delay the ability of Parent and Merger Sub to consummate the Contemplated Transactions. Since the date of its incorporation, Merger Sub has not engaged in any activities other than activities incident to its formation or in connection with or as contemplated by this Agreement.

(b) Parent is duly licensed and qualified to do business, and is in good standing (to the extent applicable in such jurisdiction), under the Laws of all jurisdictions where the nature of its business requires such licensing or qualification other than in jurisdictions where the failure to be so qualified individually or in the aggregate would not be reasonably expected to have a Parent Material Adverse Effect.

(c) Other than Merger Sub, Parent does not have any Subsidiary.

(d) Parent is not and has not otherwise been, directly or indirectly, a party to, member of or participant in any partnership, joint venture or similar business entity. Parent has not agreed and is not obligated to make, and is not bound by any Contract under which it may become obligated to make, any future investment in or capital contribution to any other Entity. Parent has not, at any time, been a general partner of, and has not otherwise been liable for any of the debts or other obligations of, any general partnership, limited partnership or other Entity.

3.2 **Organizational Documents**. Parent has made available to the Company accurate and complete copies of Parent and Merger Sub's Organizational Documents in effect as of the date of this Agreement. Neither Parent nor Merger Sub is in material breach or violation of its respective Organizational Documents.

3.3 **Authority; Binding Nature of Agreement**. Each of Parent and Merger Sub has all necessary corporate power and authority to enter into and to perform its obligations under this Agreement and, subject, with respect to Parent, to receipt of the Required Parent Stockholder Vote and, with respect to Merger Sub, the adoption of this Agreement by Parent in its capacity as sole stockholder of Merger Sub, to perform its obligations hereunder and to consummate the Contemplated Transactions. The Parent Board (at meetings duly called and held) has: (a) determined that the Contemplated Transactions are fair to, advisable and in the best interests of Parent and its stockholders; (b) authorized, approved and declared advisable this Agreement and the Contemplated Transactions, including the issuance of shares of Parent Common Stock to the stockholders of the Company pursuant to the terms of this Agreement and the treatment of the Company Options pursuant to this Agreement; and (c) determined to recommend, upon the terms and subject to the conditions set forth in this Agreement, that the stockholders of Parent vote to approve this Agreement and the Contemplated Transactions, including the issuance of shares of Parent Common Stock to the stockholders of the Company pursuant to the terms of this Agreement. The Merger Sub Board (by unanimous written consent) has: (x) determined that the Contemplated Transactions are fair to, advisable, and in the best interests of Merger Sub and its sole stockholder; (y) deemed advisable and approved this Agreement and the Contemplated Transactions; and (z) determined to recommend, upon the terms and subject to the conditions set forth in this Agreement, that the stockholder of Merger Sub vote to adopt this Agreement and thereby approve the Contemplated Transactions. This Agreement has been duly executed and delivered by Parent and Merger Sub and, assuming the due authorization, execution and delivery by the Company, constitutes the legal, valid and binding obligation of Parent and Merger Sub, enforceable against each of Parent and Merger Sub in accordance with its terms, subject to the Enforceability Exceptions.

3.4 **Vote Required**. (a) The affirmative vote of the holders of a majority of the outstanding shares of Parent Common Stock is the only vote of the holders of any class or series of Parent's capital stock necessary to approve the proposals in Section 5.3(a)(i)(B), (b) the affirmative vote of a majority of the votes cast at the Parent Stockholders' Meeting is the only vote of the holders of any class or series of Parent's capital stock necessary to approval the proposals in Section 5.3(a)(ii) ((a) and (b), the "***Closing Parent Stockholder Vote***") and (c) the affirmative vote of the holders of a majority of the outstanding shares of Parent Common Stock is the only vote of the holders of any class or series of Parent's capital stock necessary to approve the proposals in Section 5.3(a)(i)(A) (the "***Required Parent Stockholder Vote")***.

3.5 **Non-Contravention; Consents**. Subject to obtaining the Required Parent Stockholder Vote and the filing of the Certificate of Merger required by the DGCL, neither (x) the execution, delivery or performance of this Agreement by Parent or Merger Sub, nor (y) the consummation of the Contemplated Transactions, will directly or indirectly (with or without notice or lapse of time):

(a) contravene, conflict with or result in a violation of any of the provisions of the Organizational Documents of Parent or Merger Sub;

(b) contravene, conflict with or result in a violation of, or give any Governmental Body the right to challenge the Contemplated Transactions or to exercise any remedy or obtain any relief under, any Law or any order, writ, injunction, judgment or decree to which Parent or Merger Sub, or any of the assets owned or used by Parent or Merger Sub, is subject, except as would not reasonably be expected to be material to Parent or its business;

(c) contravene, conflict with or result in a violation of any of the terms or requirements of, or give any Governmental Body the right to revoke, withdraw, suspend, cancel, terminate or modify, any Governmental Authorization that is held by Parent, except as would not reasonably be expected to be material to Parent or its business;

(d) contravene, conflict with or result in a violation or breach of, or result in a default under, any provision of any Parent Material Contract, or give any Person the right to: (i) declare a default or exercise any remedy under any Parent Material Contract; (ii) any material payment, rebate, chargeback, penalty or change in delivery schedule under any Parent Material Contract; (iii) accelerate the maturity or performance of any Parent Material Contract; or (iv) cancel, terminate or modify any term of any Parent Material Contract, except in the case of any non-material breach, default, penalty or modification; or

(e) result in the imposition or creation of any Encumbrance upon or with respect to any asset owned or used by Parent (except for Permitted Encumbrances).

Except for (i) any Consent set forth on Section 3.5 of the Parent Disclosure Schedule under any Parent Contract, (ii) the Required Parent Stockholder Vote, (iii) the filing of the Certificate of Merger with the Secretary of State of the State of Delaware pursuant to the DGCL, and (iv) such consents, waivers, approvals, orders, authorizations, registrations, declarations and filings as may be required under applicable federal and state securities Laws, Parent is not and will not be required to make any filing with or give any notice to, or to obtain any Consent from, any Person in connection with (x) the execution, delivery or performance of this Agreement, or (y) the consummation of the Contemplated Transactions (in each case other than pursuant to Parent Contracts that are not Parent Material Contracts). The Parent Board and the Merger Sub Board 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 to the consummation of the Contemplated Transactions. No other state takeover statute or similar Law applies or purports to apply to the Merger, this Agreement or any of the Contemplated Transactions.

3.6 **Capitalization**.

(a) The authorized capital stock of Parent as of the date of this Agreement consists of (i) 50,000,000 shares of Parent Common Stock, par value $0.01 per share, of which 22,822,716 shares have been issued and are outstanding as of the close of business on the Reference Date and (ii) 5,000,000 shares of preferred stock of Parent, par value $0.01 per share, of which no shares have been issued and are outstanding as of the date of this Agreement. Parent does not hold any shares of its capital stock in its treasury. As of the close of business on the Reference Date, there are outstanding Parent Warrants to purchase 6,241,074 shares of Parent Common Stock.

(b) All of the outstanding shares of Parent Common Stock have been duly authorized and validly issued, and are fully paid and nonassessable. None of the outstanding shares of Parent Common Stock is entitled or subject to any preemptive right, right of participation, right of maintenance, right of repurchase or forfeiture, subscription right or any similar right and none of the outstanding shares of Parent Common Stock is subject to any right of first refusal in favor of Parent. Except as contemplated herein, there is no Parent Contract relating to the voting or registration of, or restricting any Person from purchasing, selling, pledging or otherwise disposing of (or granting any option or similar right with respect to), any shares of Parent Common Stock. Parent is not under any obligation, nor is it bound by any Contract pursuant to which it may become obligated, to repurchase, redeem or otherwise acquire any outstanding shares of Parent Common Stock or other securities.

(c) Except for the Parent Stock Plan, and except as set forth on Section 3.6(c) of the Parent Disclosure Schedule, Parent does not have any stock option plan or any other plan, program, agreement or arrangement providing for any equity-based compensation for any Person. As of the close of business on the Reference Date, 1,533,724 shares have been reserved for issuance upon exercise of Parent Options granted under the Parent Stock Plan that are outstanding as of the date of this Agreement, 18,686 shares have been reserved for issuance upon the settlement of Parent RSUs granted under the Parent Stock Plan that are outstanding as of the date of this Agreement and 1,362,240 shares remain available for future issuance pursuant to the Parent Stock Plan.

(d) Except for the Parent Warrants, the Parent Stock Plan, including the Parent Options and the Parent RSUs, and as otherwise set forth on Section 3.6(d) of the Parent 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 Parent or any of its 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 Parent or any of its Subsidiaries; or (iii) condition or circumstance that is reasonably likely to 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 Parent or any of its Subsidiaries. There are no outstanding or authorized stock appreciation, phantom stock, profit participation or other similar rights with respect to Parent or any of its Subsidiaries.

(e) All outstanding shares of Parent Common Stock, Parent Options, Parent RSUs, Parent Warrants and other securities of Parent have been issued and granted in material compliance with (i) all applicable securities Laws and other applicable Law, and (ii) all requirements set forth in applicable Contracts.

(f) Section 3.6(f) of the Parent Disclosure Schedule sets forth the following information with respect to each Parent Option and Parent RSUs outstanding as of the date of this Agreement, as applicable: (i) the name of the holder of the Parent Option or Parent RSU; (ii) the number of shares of Parent Common Stock subject to such Parent Option or Parent RSU at the time of grant; (iii) the number of shares of Parent Common Stock subject to such Parent Option or Parent RSU as of the date of this Agreement; (iv) the exercise price of each Parent Option; (v) the date on which such Parent Option or Parent RSU was granted; (vi) the applicable vesting schedule, including the number of vested and unvested shares as of the date of this Agreement and any acceleration provisions; (vii) the date on which each Parent Option expires; and (viii) whether any Parent Option is intended to constitute an "incentive stock option" (as defined in the Code) or a non-qualified stock option.

3.7 **SEC Filings; Financial Statements**.

(a) Parent has delivered or made available to the Company 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 Parent with the SEC since January 1, 2017 (the "***Parent SEC Documents***"), other than such documents that can be obtained on the SEC's website atwww.sec.gov. All material statements, reports, schedules, forms and other documents required to have been filed by Parent 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 Parent 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 Parent 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 light of the circumstances under which they were made, not misleading. The certifications and statements required by (i) Rule 13a-14 under the Exchange Act and (ii) 18 U.S.C. §1350 (Section 906 of the Sarbanes-Oxley Act) relating to the Parent SEC Documents (collectively, the "***Certifications***") are accurate and complete and comply as to form and content with all applicable Laws. As used in this Section 3.7, 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 Parent 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, except 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) applied on a consistent basis unless otherwise noted therein throughout the periods indicated; and (iii) fairly present, in all material respects, the financial position of Parent as of the respective dates thereof and the results of operations and cash flows of

Parent for the periods covered thereby. Other than as expressly disclosed in the Parent SEC Documents filed prior to the date hereof, there has been no material change in Parent's accounting methods or principles that would be required to be disclosed in Parent's financial statements in accordance with GAAP.

(c) Parent is in compliance in all material respects with the applicable current listing and governance rules and regulations of Nasdaq.

(d) Parent 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 designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with GAAP and to provide reasonable assurance (i) that transactions are recorded as necessary to permit preparation of financial statements in accordance with GAAP, (ii) that receipts and expenditures are made only in accordance with authorizations of management and the Parent Board and (iii) regarding prevention or timely detection of the unauthorized acquisition, use or disposition of Parent's assets that could have a material effect on Parent's financial statements. Parent has evaluated the effectiveness of Parent's internal control over financial reporting as of December 31, 2018, and, to the extent required by applicable Law, presented in any applicable Parent 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. Parent has disclosed, based on its most recent evaluation of internal control over financial reporting, to Parent's auditors and audit committee (and made available to the Company a summary of the significant aspects of such disclosure) (A) all significant deficiencies, if any, in the design or operation of internal control over financial reporting that are reasonably likely to adversely affect Parent's ability to record, process, summarize and report financial information and (B) any known fraud that involves management or other employees who have a significant role in Parent's internal control over financial reporting. Parent has not identified, based on its most recent evaluation of internal control over financial reporting, any material weaknesses in the design or operation of Parent's internal control over financial reporting.

(e) Parent maintains "disclosure controls and procedures" (as defined in Rules 13a-15(e) and 15d-15(e) of the Exchange Act) that are reasonably designed to ensure that information required to be disclosed by Parent in the periodic reports that it files or submits under the Exchange Act is recorded, processed, summarized and reported within the required time periods, and that all such information is accumulated and communicated to Parent's management as appropriate to allow timely decisions regarding required disclosure and to make the Certifications.

(f) Since January 1, 2017, there have been no 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 Parent, Parent Board or any committee thereof. Since January 1, 2017, neither Parent nor its independent auditors have identified (i) any significant deficiency or material weakness in the design or operation of the system of internal accounting controls utilized by Parent, (ii) any fraud, whether or not material, that involves Parent, Parent's management or other employees who have a role in the preparation of financial statements or the internal accounting controls utilized by Parent, or (iii) any claim or allegation regarding any of the foregoing.

(g) Section 3.7(g) of the Parent Disclosure Schedule lists, and Parent has delivered to the Company 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 Parent or any of its Subsidiaries since January 1, 2017.

3.8 **Absence of Changes**. Except as set forth on Section 3.8 of the Parent Disclosure Schedule, between the date of the Parent Balance Sheet and the date of this Agreement, Parent and its Subsidiaries have conducted its business only in the Ordinary Course of Business (except for the execution and performance of this Agreement and the discussions, negotiations and transactions related thereto) and there has not been any

(a) Parent Material Adverse Effect or (b) action, event or occurrence that would have required the consent of the Company pursuant to Section 4.1(b) had such action, event or occurrence taken place after the execution and delivery of this Agreement.

3.9 **Absence of Undisclosed Liabilities**. As of the date hereof, Parent does not have any Liability, individually or in the aggregate, of a type required to be recorded or reflected on a balance sheet or disclosed in the footnotes thereto under GAAP except for: (a) Liabilities disclosed, reflected or reserved against in the Parent Balance Sheet; (b) Liabilities that have been incurred by Parent since the date of the Parent Balance Sheet in the Ordinary Course of Business; (c) Liabilities for performance of obligations of Parent under Parent Contracts; (d) Liabilities incurred in connection with the Contemplated Transactions; (e) Liabilities which would not, individually or in the aggregate, reasonably be expected to be material to Parent; and (f) Liabilities described in Section 3.9 of the Parent Disclosure Schedule.

3.10 **Title to Assets**. Parent 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 tangible assets and equipment used or held for use in its business or operations or purported to be owned by it, including: (a) all tangible assets reflected on the Parent Balance Sheet; and (b) all other tangible assets reflected in the books and records of Parent as being owned by Parent. All of such assets are owned or, in the case of leased assets, leased by Parent free and clear of any Encumbrances, other than Permitted Encumbrances.

3.11 **Real Property; Leasehold**. Parent does not own any real property. Parent has made available to the Company (a) an accurate and complete list of all real properties with respect to which Parent directly or indirectly holds a valid leasehold interest as well as any other real estate that is in the possession of or leased by Parent, and (b) copies of all leases under which any such real property is possessed (the "***Parent Real Estate Leases***"), each of which is in full force and effect, with no existing material default thereunder. Parent's use and operation of each such leased property conforms to all applicable Laws in all material respects, and Parent has exclusive possession of each such leased property and has not granted any occupancy rights to tenants or licensees with respect to such leased property. In addition, each such leased property is free and clear of all Encumbrances other than Permitted Encumbrances.

3.12 **Intellectual Property**.

(a) Section 3.12(a) of the Parent Disclosure Schedule identifies (i) the name of the applicant/registrant, (ii) the jurisdiction of application/registration, (iii) the application or registration number and (iv) any other co-owners, for each item of material Registered IP owned in whole or in part by Parent. To the Knowledge of Parent, each of the patents and patent applications included in the material Registered IP properly identifies by name each and every inventor of the inventions claimed therein as determined in accordance with applicable Laws of the United States. As of the date of this Agreement, no interference, opposition, reissue, reexamination or other proceeding of any nature (other than initial examination proceedings) is pending or, to the Knowledge of Parent, threatened in writing, in which the scope, validity, enforceability or ownership of any Registered IP listed on Section 3.12(a) of the Parent Disclosure Schedule is being or has been contested or challenged.

(b) Parent owns all right, title and interest in and to all material Parent IP (other than as disclosed on Section 3.12(a) of the Parent Disclosure Schedule), free and clear of all Encumbrances other than Permitted Encumbrances. To the Knowledge of Parent, each Parent Associate involved in the creation or development of any material Parent IP, pursuant to such Parent Associate's activities on behalf of Parent, has signed a written agreement containing an assignment of such Parent Associate's rights in such Parent IP to Parent and confidentiality provisions protecting the Parent IP.

(c) To the Knowledge of Parent, no funding, facilities or personnel of any Governmental Body or any university, college, research institute or other educational institution has been used to create Parent IP, except for any such funding or use of facilities or personnel that does not result in such Governmental Body or

institution obtaining ownership rights to such Parent IP or the right to receive royalties for the practice of such Parent IP.

(d) Section 3.12(d) of Parent Disclosure Schedule sets forth each license agreement pursuant to which Parent (i) is granted a license under any material Intellectual Property Right owned by any third party that is used by Parent in its business as currently conducted (each a "***Parent In-bound License***") or (ii) grants to any third party a license under any material Parent IP or material Intellectual Property Right licensed to Parent under a Parent In-bound License (each a "***Parent Out-bound License***") (provided, that, Parent In-bound Licenses shall not include material transfer agreements, services agreements, clinical trial agreements, non-disclosure agreements, commercially available Software-as-a-Service offerings, off-the-shelf software licenses or generally available patent license agreements entered into in the ordinary course of business; and Parent Out-bound Licenses shall not include material transfer agreements, clinical trial agreements, services agreements, non-disclosure agreements, or non-exclusive outbound licenses entered into in the ordinary course of business).

(e) To the Knowledge of Parent, (i) the operation of the business of Parent as currently conducted does not infringe any valid and enforceable Registered IP or misappropriate or otherwise violate any other Intellectual Property Right owned by any other Person; and (ii) no other Person is infringing, misappropriating or otherwise violating any Parent IP or any Intellectual Property Rights exclusively licensed to Parent. As of the date of this Agreement, no Legal Proceeding is pending (or, to the Knowledge of Parent, is threatened in writing) (A) against Parent alleging that the operation of the business of Parent infringes or constitutes the misappropriation or other violation of any Intellectual Property Rights of another Person or (B) by Parent alleging that another Person has infringed, misappropriated or otherwise violated any of Parent IP or any Intellectual Property Rights exclusively licensed to Parent. Since January 1, 2017, Parent has not received any written notice or other written communication alleging that the operation of the business of Parent infringes or constitutes the misappropriation or other violation of any Intellectual Property Right of another Person.

(f) None of Parent IP or, to the Knowledge of Parent, any material Intellectual Property Rights exclusively licensed to Parent is subject to any pending or outstanding injunction, directive, order, judgment or other disposition of dispute that adversely and materially restricts the use, transfer, registration or licensing by Parent of any such Parent IP or material Intellectual Property Rights exclusively licensed to Parent or its Subsidiaries.

(g) To the Knowledge of Parent, the operation of Parent's business are in substantial compliance with all Laws pertaining to data privacy and data security of Sensitive Data, except to the extent that such noncompliance has not and would not reasonably be expected to have a Parent Material Adverse Effect. To the Knowledge of Parent, since January 1, 2017, there have been (i) no material losses or thefts of data or security breaches relating to Sensitive Data used in the business of Parent, (ii) no violations of any security policy of Parent regarding any such Sensitive Data, (iii) no unauthorized access or unauthorized use of any Sensitive Data used in the business of Parent and (iv) no unintended or improper disclosure of any personally identifiable information in the possession, custody or control of Parent or a contractor or agent acting on behalf of Parent, in each case of (i) through (iv), except as would not reasonably be expected to, individually or in the aggregate, have a Parent Material Adverse Effect.

3.13 **Agreements, Contracts and Commitments**.

(a) Section 3.13 of the Parent Disclosure Schedule lists the following Parent Contracts in effect as of the date of this Agreement other than any Parent Benefit Plans or non-disclosure agreements entered into in the ordinary course of business or in connection with a potential strategic transaction (each, a "***Parent Material Contract***" and collectively, the "***Parent Material Contracts***"):

(i) a material contract as defined in Item 601(b)(10) of Regulation S-K as promulgated under the Securities Act;

(ii) each Contract relating to any agreement of indemnification or guaranty not entered into in the Ordinary Course of Business;

(iii) each Contract containing (A) any covenant limiting the freedom of Parent 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;

(iv) each Contract, to Parent's Knowledge based on the express terms of the Contract, relating to capital expenditures and requiring payments after the date of this Agreement in excess of $50,000 pursuant to its express terms and not cancelable without penalty;

(v) each Contract relating to the disposition or acquisition of material assets or any ownership interest in any Entity;

(vi) each 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 or creating any Encumbrances, in each case, in an amount in excess of $100,000, with respect to any assets of Parent or any loans or debt obligations with officers or directors of Parent;

(vii) each Contract requiring payment by or to Parent after the date of this Agreement in excess of $100,000 pursuant to its express terms 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 Parent; (C) any dealer, distributor, joint marketing, alliance, joint venture, cooperation, development or other agreement currently in force under which Parent has continuing obligations to develop or market any product, technology or service, or any agreement pursuant to which Parent has continuing obligations to develop any Intellectual Property Rights that will not be owned, in whole or in part, by Parent; or (D) any Contract to license any third party to manufacture or produce any product, service or technology of Parent or any Contract to sell, distribute or commercialize any products or service of Parent, in each case, except for Contracts entered into in the Ordinary Course of Business;

(viii) each Contract with any Person, including any financial advisor, broker, finder, investment banker or other Person, providing advisory services to Parent in connection with the Contemplated Transactions;

(ix) each Parent Real Estate Lease;

(x) each Contract with any Governmental Body;

(xi) each Parent Out-bound License and Parent In-bound License;

(xii) each Contract containing any royalty, dividend or similar arrangement based on the revenues or profits of Parent; or

(xiii) any other Contract that is not terminable at will (with no penalty or payment) by Parent and (A) which involves payment or receipt by Parent 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 (B) that is material to the business or operations of Parent.

(b) Parent has delivered or made available to the Company accurate and complete copies of all Parent Material Contracts. There are no Parent Material Contracts that are not in written form. Except as set forth on Section 3.13 of the Parent Disclosure Schedule, Parent has not nor, to Parent's Knowledge, as of the date of this Agreement, has any other party to a Parent Material Contract, breached, violated or defaulted under, or received notice that it breached, violated or defaulted under, any of the terms or conditions of any Parent Material

Contract in such manner as would permit any other party to cancel or terminate any such Parent Material Contract, or would permit any other party to seek damages which would reasonably be expected to be material to Parent or its business. As to Parent, as of the date of this Agreement, each Parent Material Contract is valid, binding, enforceable and in full force and effect, subject to the Enforceability Exceptions. No Person is renegotiating, or has a right pursuant to the terms of any Parent Material Contract to change, any material amount paid or payable to Parent under any Parent Material Contract or any other material term or provision of any Parent Material Contract.

3.14 **Compliance; Permits**.

(a) Parent is, and since January 1, 2017 has been, in compliance in all material respects with all applicable Laws, including the FDCA, the FDA regulations adopted thereunder, the Public Health Service Act and any other similar Law administered or promulgated by the FDA or other Drug Regulatory Agency, except for any noncompliance, either individually or in the aggregate, which would not be material to Parent. No investigation, claim, suit, proceeding, audit or other action by any Governmental Body is pending or, to the Knowledge of Parent, threatened against Parent. There is no agreement, judgment, injunction, order or decree binding upon Parent which (i) has or would reasonably be expected to have the effect of prohibiting or materially impairing any business practice of Parent, any acquisition of material property by Parent or the conduct of business by Parent as currently conducted, (ii) is reasonably likely to have an adverse effect on Parent's ability to comply with or perform any covenant or obligation under this Agreement, or (iii) is reasonably likely to have the effect of preventing, delaying, making illegal or otherwise interfering with the Contemplated Transactions. To the Knowledge of Parent, no condition or state of facts exists that is reasonably likely to give rise to a violation of, or a material liability or default under any applicable laws relating to Parent.

(b) Parent holds all required Governmental Authorizations which are material to the operation of the business of Parent as currently conducted (the "***Parent Permits***"). Section 3.14(b) of the Parent Disclosure Schedule identifies each Parent Permit. Parent is in material compliance with the terms of the Parent Permits. No Legal Proceeding is pending or, to the Knowledge of Parent, threatened, which seeks to revoke, limit, suspend, or materially modify any Parent Permit.

(c) There are no proceedings pending or, to the Knowledge of Parent, threatened with respect to an alleged material violation by Parent of the FDCA, FDA regulations adopted thereunder, the Public Health Service Act or any other similar Law administered or promulgated by any Drug Regulatory Agency.

(d) All clinical, pre-clinical and other studies and tests conducted by or on behalf of, or sponsored by, Parent, or in which Parent or its respective current products or product candidates have participated, were and, if still pending, are being conducted in all material respects in accordance with standard medical and scientific research procedures and in compliance in all material respects with the applicable regulations of any applicable Drug Regulatory Agency and other applicable Law, including 21 C.F.R. Parts 50, 54, 56, 58 and 312. No preclinical or clinical trial conducted by or on behalf of Parent has been terminated or suspended prior to completion for safety or non-compliance reasons. Since January 1, 2017, Parent has not received any notices, correspondence, or other communications from any Drug Regulatory Agency requiring, or to the Knowledge of Parent threatening to initiate, the termination or suspension of any clinical studies conducted by or on behalf of, or sponsored by, Parent or in which Parent or its current products or product candidates have participated.

(e) Parent is not the subject of any pending or, to the Knowledge of Parent, 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 Parent, Parent has not committed any acts, made any statement, or has not failed to make any statement, in each case in respect of its business or products that would violate the FDA's "Fraud, Untrue Statements of Material Facts, Bribery, and Illegal Gratuities" Final Policy, and any amendments thereto. Parent or any of its officers, employees or agents has not been convicted of any crime

or engaged in any conduct that could result in a debarment or exclusion (i) under 21 U.S.C. Section 335a or (ii) any similar applicable Law. No debarment or exclusionary claims, actions, proceedings or investigations in respect of their business or products are pending or, to the Knowledge of Parent, threatened against Parent or any of its officers, employees or agents.

3.15 **Legal Proceedings; Orders**.

(a) As of the date of this Agreement, there is no material pending Legal Proceeding and, to the Knowledge of Parent, no Person has threatened in writing to commence any Legal Proceeding: (i) that involves (A) Parent, (B) any Parent Associate (in his or her capacity as such) or (C) any of the material assets owned or used by Parent; or (ii) that may have the effect of preventing, delaying, making illegal or otherwise materially interfering with, the Contemplated Transactions.

(b) Except as set forth in Section 3.15(b) of the Parent Disclosure Schedule, since January 1, 2017 through the date of this Agreement, no Legal Proceeding has been pending against Parent that resulted in material liability to Parent.

(c) There is no order, writ, injunction, judgment or decree to which Parent, or any of the material assets owned or used by Parent, is subject. To the Knowledge of Parent, no officer of Parent is subject to any order, writ, injunction, judgment or decree that prohibits such officer or employee from engaging in or continuing any conduct, activity or practice relating to the business of Parent or to any material assets owned or used by Parent.

(d) Since January 1, 2017 through the date of this Agreement, Parent has not settled or compromised any proceeding or claim, whether filed or threatened.

3.16 **Tax Matters**.

(a) Parent has timely filed all income Tax Returns and other material Tax Returns that they were required to file under applicable Law. All such Tax Returns are correct and complete in all material respects and have been prepared in compliance with all applicable Law. No claim has ever been made by any Governmental Body in any jurisdiction where Parent does not file a particular Tax Return or pay a particular Tax that Parent is subject to taxation by that jurisdiction.

(b) All income and other material Taxes due and owing by Parent on or before the date hereof (whether or not shown on any Tax Return) have been fully paid. The unpaid Taxes of Parent did not, as of the date of the Parent Balance Sheet, materially exceed the reserve for Tax liability (excluding any reserve for deferred Taxes established to reflect timing differences between book and Tax items) set forth on the face of the Parent Balance Sheet. Since the Parent Balance Sheet Date, Parent has not incurred any material Liability for Taxes outside the Ordinary Course of Business.

(c) All Taxes that Parent is or was required by Law to withhold or collect have been duly and timely withheld or collected in all material respects on behalf of its employees, independent contractors, stockholders, lenders, customers or other third parties and, have been timely paid to the proper Governmental Body or other Person or properly set aside in accounts for this purpose.

(d) There are no Encumbrances for Taxes (other than Taxes not yet due and payable) upon any of the assets of Parent.

(e) No deficiencies for income or other material Taxes with respect to Parent have been claimed, proposed or assessed by any Governmental Body in writing. There are no pending or ongoing, and to the Knowledge of Parent, threatened audits, assessments or other actions for or relating to any liability in respect of a

material amount of Taxes of Parent. Neither Parent nor any of its predecessors has waived any statute of limitations in respect of any income or other material Taxes or agreed to any extension of time with respect to any income or other material Tax assessment or deficiency.

(f) Parent 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.

(g) Parent is not a party to any Tax allocation agreement, Tax sharing agreement, Tax indemnity agreement, or similar agreement or arrangement, other than customary commercial contracts entered into in the Ordinary Course of Business the principal subject matter of which is not Taxes.

(h) Parent will not be required to include any material item of income in, or exclude any material item of deduction from, taxable income for any Tax period (or portion thereof) ending after the Closing Date as a result of any: (i) change in method of accounting by Parent for Tax purposes; (ii) use of an improper method of accounting by Parent for a Tax period ending on or prior to the Closing Date; (iii) "closing agreement" as described in Section 7121 of the Code (or any similar provision of state, local or foreign Law) executed by Parent on or prior to the Closing Date; (iv) intercompany transaction or excess loss account described in Treasury Regulations under Section 1502 of the Code (or any similar provision of state, local or foreign Law) of Parent; (v) installment sale or open transaction disposition made by Parent on or prior to the Closing Date; (vi) prepaid amount received or deferred revenue accrued by Parent on or prior to the Closing Date; (vii) application of Section 367(d) of the Code to any transfer of intangible property by Parent on or prior to the Closing Date; (viii) application of Sections 951 or 951A of the Code (or any similar provision of state, local or foreign Law) to any income received or accrued by Parent on or prior to the Closing Date; or (ix) election under Section 108(i) of the Code (or any similar provision of state, local or foreign Law) made by Parent on or prior to the Closing Date. Parent has not made any election under Section 965(h) of the Code.

(i) Parent has never been (i) a member of a consolidated, combined or unitary Tax group (other than such a group the common parent of which is Parent) or (ii) a party to any joint venture, partnership, or other arrangement that is treated as a partnership for U.S. federal income Tax purposes. Parent has no Liability for any material Taxes of any Person (other than Parent and any of its Subsidiaries) under Treasury Regulations Section 1.1502-6 (or any similar provision of state, local, or foreign Law), or as a transferee or successor.

(j) Parent has not distributed stock of another Person, or 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 (or any similar provisions of state, local or foreign Law).

(k) Parent (i) is not a "controlled foreign corporation" as defined in Section 957 of the Code; (ii) is not a "passive foreign investment company" within the meaning of Section 1297 of the Code; or (iii) has ever had a permanent establishment (within the meaning of an applicable Tax treaty) or otherwise had an office or fixed place of business in a country other than the country in which it is organized.

(l) Parent has not participated in or been a party to a transaction that, as of the date of this Agreement, constitutes a "listed transaction" that is required to be reported to the IRS pursuant to Section 6011 of the Code and applicable Treasury Regulations thereunder.

(m) Parent has not taken any action and does not know of any fact that would reasonably be expected to prevent the Merger from qualifying for the Intended Tax Treatment.

For purposes of this Section 3.16, each reference to Parent shall be deemed to include any Person that was liquidated into, merged with, or is otherwise a predecessor to, Parent.

3.17 **Employee and Labor Matters; Benefit Plans**.

(a) Section 3.17(a) of the Parent Disclosure Schedule is a list of all material Parent Benefit Plans, including, without limitation, each Parent Benefit Plan that provides for retirement, change in control, stay or retention deferred compensation, incentive compensation, severance or retiree medical or life insurance benefits. "***Parent Benefit Plan***" means each (i) "employee benefit plan" as defined in Section 3(3) of ERISA and (ii) other pension, retirement, deferred compensation, excess benefit, profit sharing, bonus, incentive, equity or equity-based, phantom equity, employment (other than at-will employment offer letters on Parent's standard form and other than individual Parent Options, Parent RSUs or other compensatory equity award agreements made pursuant to Parent's standard forms, in which case only representative standard forms of such agreements shall be scheduled), consulting, severance, change-of-control, retention, health, life, disability, group insurance, paid-time off, holiday, welfare and fringe benefit plan, program, contract, or arrangement (whether written or unwritten, qualified or nonqualified, funded or unfunded and including any that have been frozen or terminated), in any case, maintained, contributed to, or required to be contributed to, by Parent or Parent ERISA Affiliates for the benefit of any current or former employee, director, officer or independent contractor of Parent or under which Parent has any actual or contingent liability (including, without limitation, as to the result of it being treated as a single employer under Code Section 414 with any other person).

(b) As applicable with respect to each material Parent Benefit Plan, Parent has made available to the Company, true and complete copies of (i) each material Parent Benefit Plan, including all amendments thereto, and in the case of an unwritten material Parent Benefit Plan, a written description thereof, (ii) all current trust documents, investment management contracts, custodial agreements, administrative services agreements and insurance and annuity contracts relating thereto, (iii) the current summary plan description and each summary of material modifications thereto, (iv) the most recently filed annual reports with any Governmental Body (*e.g.*, Form 5500 and all schedules thereto), (v) the most recent IRS determination, opinion or advisory letter, (vi) the most recent summary annual reports, nondiscrimination testing reports, actuarial reports, financial statements and trustee reports, (vii) all records, notices and filings concerning IRS or Department of Labor or other Governmental Body audits or investigations, "prohibited transactions" within the meaning of Section 406 of ERISA or Section 4975 of the Code and (viii) all policies and procedures established to comply with the privacy and security rules of HIPAA.

(c) Each Parent Benefit Plan has been maintained, operated and administered in compliance in all material respects with its terms and any related documents or agreements and the applicable provisions of ERISA, the Code and all other Laws, and no event has occurred which will or could cause any such Parent Benefit Plan to fail to comply with such requirements and no notice has been issued by any governmental authority questioning or challenging such compliance.

(d) The Parent Benefit Plans which are "employee pension benefit plans" within the meaning of Section 3(2) of ERISA and which are intended to meet the qualification requirements of Section 401(a) of the Code have received determination or opinion letters from the IRS on which they may currently rely to the effect that such plans are qualified under Section 401(a) of the Code and the related trusts are exempt from federal income Taxes under Section 501(a) of the Code, respectively, and to the Knowledge of Parent nothing has occurred that would reasonably be expected to materially adversely affect the qualification of such Parent Benefit Plan or the tax exempt status of the related trust.

(e) Neither Parent nor any Parent ERISA Affiliate maintains, contributes to, is required to contribute to, or has or has had any actual or contingent liability with respect to, (i) any "employee pension benefit plan" (within the meaning of Section 3(2) of ERISA) that is subject to Title IV or Section 302 of ERISA or Section 412 of the Code, (ii) any "multiemployer plan" (within the meaning of Section 3(37) of ERISA), (iii) any "multiple employer plan" (within the meaning of Section 413 of the Code) or (iv) any "multiple employer welfare arrangement" (within the meaning of Section 3(40) of ERISA). None of the assets of any Parent Benefit Plan are invested in employer securities or employer real property.

(f) There are no pending audits or investigations by any Governmental Body involving any Parent Benefit Plan, and no pending or, to the Knowledge of Parent, threatened claims (except for individual claims for benefits payable in the normal operation of the Parent Benefit Plans), suits or proceedings involving any Parent Benefit Plan, any fiduciary thereof or service provider thereto, in any case except as would not be reasonably expected to result in material liability to Parent. All contributions and premium payments required to have been made under any of the Parent Benefit Plans or by applicable Law (without regard to any waivers granted under Section 412 of the Code), have been timely made and neither Parent nor any Parent ERISA Affiliate has any liability for any unpaid contributions with respect to any Parent Benefit Plan.

(g) Neither Parent or any Parent ERISA Affiliates, nor to the Knowledge of Parent, any fiduciary, trustee or administrator of any Parent Benefit Plan, has engaged in, or in connection with the transactions contemplated by this Agreement will engage in, any transaction with respect to any Parent Benefit Plan which would subject any such Parent Benefit Plan, Parent or Parent ERISA Affiliates to a material Tax, material penalty or material liability for a "prohibited transaction" under Section 406 of ERISA or Section 4975 of the Code.

(h) No Parent Benefit Plan provides death, medical, dental, vision, life insurance or other welfare benefits beyond termination of service or retirement other than coverage mandated by Law and neither Parent nor any Parent ERISA Affiliates has made a written or oral representation promising the same.

(i) Except as set forth in Section 3.17(i) of the Parent Disclosure Schedule, neither the execution of, nor the performance of the transactions contemplated by, this Agreement will either alone or in connection with any other event(s) (i) result in any payment becoming due to any current or former employee, director, officer, or independent contractor of Parent, (ii) increase any amount of compensation or benefits otherwise payable under any Parent Benefit Plan, (iii) result in the acceleration of the time of payment, funding or vesting of any benefits under any Parent Benefit Plan, (iv) require any contribution or payment to fund any obligation under any Parent Benefit Plan or (v) limit the right to merge, amend or terminate any Parent Benefit Plan.

(j) Neither the execution of, nor the consummation of the transactions contemplated by this Agreement (either alone or when combined with the occurrence of any other event, including without limitation, a termination of employment) will result in the receipt or retention by any person who is a "disqualified individual" (within the meaning of Code Section 280G) with respect to Parent of any payment or benefit that is or could be characterized as a "parachute payment" (within the meaning of Code Section 280G), determined without regard to the application of Code Section 280G(b)(5).

(k) The exercise price of each Parent Option is not, never has been and can never be less than the fair market value of one share of Parent Common Stock as of the grant date of such Parent Option.

(l) Each Parent Benefit Plan providing for deferred compensation that constitutes a "nonqualified deferred compensation plan" (as defined in Section 409A(d)(1) of the Code and the regulations promulgated thereunder) is, and has been, established, administered and maintained in compliance with the requirements of Section 409A of the Code and the regulations promulgated thereunder in all material respects.

(m) No current or former employee, officer, director or independent contractor of Parent has any "gross up" agreements with Parent or other assurance of reimbursement by Parent for any Taxes imposed under Code Section 409A or Code Section 4999.

(n) Parent does not have any Parent Benefit Plan that is maintained outside of the United States.

(o) There have been no acts or omissions by Parent or any Parent ERISA Affiliates which have given rise to or may give rise to interest, fines, penalties, taxes or related charges under section 502 of ERISA or Chapters 43, 47, 68 or 100 of the Code for which Parent or any Parent ERISA Affiliates may be liable or under Section 409A of the Code for which Parent, any Parent ERISA Affiliates or any participant in any Parent Benefit Plan that is a nonqualified deferred compensation plan (within the meaning of section 409A of the Code) may be liable. Parent, and each Parent Benefit Plan that is a Health Plan (i) is currently in compliance in all material

respects with the Healthcare Reform Laws, and (ii) has been in compliance in all material respects with all applicable Healthcare Reform Laws since March 23, 2010. No event has occurred, and no conditions or circumstance exists, that would reasonably be expected to subject Parent, or any Health Plan, to material penalties or excise taxes under Sections 4980D, 4980H, or 4980I of the Code or any other provision of the Healthcare Reform Laws.

(p) Parent is not a party to, bound by, and does not have a duty to bargain under, any collective bargaining agreement or other Contract with a labor union, labor organization, or similar Person representing any of its employees, and there is no labor union, labor organization, or similar Person representing or, to the Knowledge of Parent, purporting to represent or seeking to represent any employees of Parent, including through the filing of a petition for representation election.

(q) Parent is, and since January 1, 2017 has been, in material compliance with all applicable Laws respecting labor, employment, employment practices, and terms and conditions of employment, including worker classification, discrimination, harassment and retaliation, equal employment opportunities, fair employment practices, meal and rest periods, immigration, employee safety and health, wages (including overtime wages), unemployment and workers' compensation, leaves of absence, and hours of work. Except as would not be reasonably likely to result in a material liability to Parent, with respect to employees of Parent, Parent, since January 1, 2017: (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, benefits, or compensation to employees, (ii) is not liable for any arrears of wages (including overtime wages), severance pay or any Taxes or any penalty 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, disability, social security or other benefits or obligations for employees (other than routine payments to be made in the Ordinary Course of Business). There are no actions, suits, claims, charges, lawsuits, investigations, audits or administrative matters pending or, to the Knowledge of Parent, threatened or reasonably anticipated against Parent relating to any employee, applicant for employment, consultant, employment agreement or Parent Benefit Plan (other than routine claims for benefits).

(r) Except as would not be reasonably likely to result in a material liability to Parent, with respect to each individual who currently renders services to Parent, Parent has accurately classified each such individual as an employee, independent contractor, or otherwise under all applicable Laws and, for each individual classified as an employee, Parent has accurately classified him or her as overtime eligible or overtime ineligible under all applicable Laws. Parent does not have any 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.

(s) There is not and has not been in the past three years, nor is there or has there been in the past three years any threat of, any strike, slowdown, work stoppage, lockout, union election petition, demand for recognition, or any similar activity or dispute, or, to the Knowledge of Parent, any union organizing activity, against Parent. No event has occurred, and no condition or circumstance exists, that might directly or indirectly be likely to give rise to or provide a basis for the commencement of any such strike, slowdown, work stoppage, lockout, union election petition, demand for recognition, any similar activity or dispute, or, to the Knowledge of Parent, any union organizing activity.

(t) There is no Legal Proceeding, claim, unfair labor practice charge or complaint, labor dispute or grievance pending or, to the Knowledge of Parent, threatened against Parent relating to labor, employment, employment practices, or terms and conditions of employment.

3.18 **Environmental Matters**. Parent is, and since January 1, 2013 has been, in compliance with all applicable Environmental Laws, which compliance includes the possession by Parent of all permits and other Governmental Authorizations required under applicable Environmental Laws and compliance with the terms and

conditions thereof, except for any failure to be in such compliance that, either individually or in the aggregate, would not reasonably be expected to be material to Parent or its business. Parent has not received since January 1, 2013 (or prior to that time, which is pending and unresolved), any written notice or other communication (in writing or otherwise), whether from a Governmental Body or other Person, that alleges that Parent is not in compliance with or has liability pursuant to any Environmental Law and, to the Knowledge of Parent, there are no circumstances that would reasonably be expected to prevent or interfere with Parent's compliance in any material respects with any Environmental Law, except where such failure to comply would not reasonably be expected to be material to Parent or its business. Parent is not aware of any fact or circumstance which could involve Parent in any environmental litigation or impose any environmental liability upon Parent. No current or (during the time a prior property was leased or controlled by Parent) prior property leased or controlled by Parent has had a release of or exposure to Hazardous Materials in material violation of or as would reasonably be expected to result in any material liability of Parent pursuant to Environmental Law. No consent, approval or Governmental Authorization of or registration or filing with any Governmental Body is required by Environmental Laws in connection with the execution and delivery of this Agreement or the consummation of Contemplated Transactions. Prior to the date hereof, Parent has provided or otherwise made available to the Company true and correct copies of all material environmental reports, assessments, studies and audits in the possession or control of Parent with respect to any property leased or controlled by Parent or any business operated by it.

3.19 **Transactions with Affiliates**. Except as set forth in Section 3.19 of the Parent Disclosure Schedule, no event has occurred that would be required to be reported by Parent pursuant to Item 404 of Regulation S-K.

3.20 **Insurance**. Parent maintains insurance policies, including insurance covering directors and officers for securities law and other customary liabilities, with reputable insurance carriers against all risks of a character and in such amounts as are usually insured against by similarly situated companies in the same or similar business and in such amounts and against such risks as Parent has reasonably determined is prudent, sufficient and adequate to cover the claims disclosed on Section 3.15(b) of the Parent Disclosure Schedule. Parent has delivered or made available to the Company 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 Parent. Each of such insurance policies is in full force and effect and Parent is in compliance in all material respects with the terms thereof. Other than customary end of policy notifications from insurance carriers, since January 1, 2017, Parent has not received any notice or other communication regarding any actual or possible: (i) cancellation or invalidation of any insurance policy; or (ii) refusal or denial of any coverage, reservation of rights or rejection of any material claim under any insurance policy. Parent has provided timely written notice to the appropriate insurance carrier(s) of each Legal Proceeding that is currently pending against Parent for which Parent has insurance coverage, and no such carrier has issued a denial of coverage or a reservation of rights with respect to any such Legal Proceeding, or informed Parent of its intent to do so. Section 3.20 of the Parent Disclosure Schedule contains a complete and accurate list of all policies of fire, liability, workers' compensation, title and other forms of insurance owned, held by or otherwise applicable, as of the date of this Agreement, to the assets, properties or operations of Parent. Such policies are sufficient for compliance by Parent with (i) all requirements of applicable Law and (ii) all Contracts to which Parent is a party. There exists no event, occurrence, condition or act which, with the giving of notice, the lapse of time or the happening of any other event or condition would become a default thereunder. Parent has not been refused any insurance or suffered the cancelation of any insurance with respect to the assets, properties or operations of Parent, by any insurance carrier to which it has applied for any such insurance or with which it has carried insurance. There are no pending or, to the Knowledge of Parent, threatened material claims under any insurance policy except as described on Section 3.20 of the Parent Disclosure Schedule.

3.21 **No Financial Advisors**. Except as set forth on Section 3.21 of the Parent 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 Parent.

3.22 **Anti-Bribery**. Neither Parent nor any of its directors, officers, employees, agents or any other Person acting on its behalf has directly or indirectly (i) used any funds for unlawful contributions, gifts, entertainment or other unlawful expenses relating to political activity or (ii) made any bribes, rebates, payoffs, influence payments, kickbacks, illegal payments, illegal political contributions, or other payments, in the form of cash, gifts, or otherwise, or taken any other action, in violation of Anti-Bribery Laws. Parent is not or has not been the subject of any investigation or inquiry by any Governmental Body with respect to potential violations of Anti-Bribery Laws.

3.23 **Valid Issuance**. The Parent 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 **Opinion of Financial Advisor**. The Parent Board has received an opinion of MTS to the effect that, as of the date of this Agreement and subject to the assumptions, qualifications, limitations and other matters set forth therein, the Exchange Ratio is fair, from a financial point of view, to the stockholders of Parent. It is agreed and understood that such opinion is for the benefit of the Parent Board and may not be relied upon by the Company.

3.25 **Disclaimer of Other Representations or Warranties**. Except as previously set forth in this Section 3 or in any certificate delivered by Parent or Merger Sub to the Company pursuant to this Agreement, neither Parent nor Merger Sub makes any representation or warranty, express or implied, at law or in equity, with respect to it or any of its assets, liabilities or operations, and any such other representations or warranties are hereby expressly disclaimed.

Section 4. CERTAIN COVENANTS OF THE PARTIES

4.1 **Operation of Parent's Business**.

(a) Except as set forth on Section 4.1(a) of the Parent Disclosure Schedule, as expressly permitted by this Agreement, as required by applicable Law or unless the Company shall otherwise consent in writing (which consent shall not be unreasonably withheld, delayed or conditioned), during the period commencing on the date of this Agreement and continuing until the earlier to occur of the termination of this Agreement pursuant to Section 9 and the Effective Time (the "***Pre-Closing Period***"): Parent shall conduct its business and operations in the Ordinary Course of Business and in compliance in all material respects with all applicable Laws and the requirements of all Contracts that constitute Parent Material Contracts.

(b) Except (i) as expressly permitted by this Agreement, (ii) as set forth in Section 4.1(b) of the Parent Disclosure Schedule, (iii) as required by applicable Law or (iv) with the prior written consent of the Company (which consent shall not be unreasonably withheld, delayed or conditioned), at all times during the Pre-Closing Period, Parent shall not:

(i) declare, accrue, set aside or pay any dividend or make any other distribution in respect of any shares of its capital stock or repurchase, redeem or otherwise reacquire any shares of its capital stock or other securities (except in connection with the payment of the exercise price and/or withholding Taxes incurred upon the exercise, settlement or vesting of any award granted under the Parent Stock Plan);

(ii) sell, issue, grant, pledge or otherwise dispose of or encumber or authorize any of the foregoing with respect to: (A) any capital stock or other security of Parent (except for Parent Common Stock issued upon the valid exercise of outstanding Parent Options, Parent RSUs or Parent Warrants); (B) any option, warrant or right to acquire any capital stock or any other

security, other than option grants to employees and service providers in the Ordinary Course of Business; or (C) any instrument convertible into or exchangeable for any capital stock or other security of Parent;

(iii) except as required to give effect to anything in contemplation of the Closing, amend any of its Organizational Documents, 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 or enter into a joint venture with any other Entity;

(v) (A) lend money to any Person (except for the advance of expenses to employees, directors and consultants in the Ordinary Course of Business), (B) incur or guarantee any indebtedness for borrowed money, (C) guarantee any debt securities of others, or (D) make any capital expenditure in excess of the budgeted capital expenditure amounts set forth in the Parent operating budget delivered to the Company concurrently with the execution of this Agreement (the "***Parent Budget***"), in the case of (A) through (D) collectively, other than in an aggregate amount that does not exceed $50,000;

(vi) other than as required by applicable Law or the terms of any Parent Benefit Plan as in effect on the date of this: (A) adopt, terminate, establish or enter into any Parent Benefit Plan; (B) cause or permit any Parent Benefit Plan to be amended in any material respect; (C) pay any bonus or make any profit-sharing or similar payment to, or increase the amount of the wages, salary, commissions, benefits or other compensation or remuneration payable to, any of its directors, officers or employees, other than increases in base salary and annual cash bonus opportunities and payments made in the Ordinary Course of Business consistent with past practice; (D) increase the severance or change of control benefits offered to any current or new employees, directors or consultants or (E) hire, terminate or give notice of termination to any (x) officer or (y) employee whose annual base salary is or is expected to be more than $200,000 per year;

(vii) recognize any labor union, labor organization, or similar Person;

(viii) enter into any material transaction other than in the Ordinary Course of Business;

(ix) acquire any material asset or sell, lease or otherwise irrevocably dispose of any of its assets or properties, or grant any Encumbrance with respect to such assets or properties, except in the Ordinary Course of Business;

(x) sell, assign, transfer, license, sublicense or otherwise dispose of any material Parent IP (other than pursuant tonon-exclusive licenses in the Ordinary Course of Business);

(xi) make, change or revoke any material Tax election, fail to pay any income or other material Tax as such Tax becomes due and payable, file any amendment making any material change to any Tax Return, settle or compromise any income or other material Tax liability, enter into any Tax allocation, sharing, indemnification or other similar agreement or arrangement (other than customary commercial contracts entered into in the Ordinary Course of Business the principal subject matter of which is not Taxes), request or consent to any extension or waiver of any limitation period with respect to any claim or assessment for any income or other material Taxes (other than pursuant to an extension of time to file any Tax Return granted in the Ordinary Course of Business of not more than six months), or adopt or change any material accounting method in respect of Taxes;

(xii) enter into, materially amend or terminate any Parent Material Contract;

(xiii) other than as required by Law or GAAP, take any action to change accounting policies or procedures;

(xiv) initiate or settle any material Legal Proceeding;

(xv) enter into or amend a Contract that would reasonably be expected to prevent or materially impede, interfere with, hinder or delay the consummation of the Merger; or

(xvi) agree, resolve or commit to do any of the foregoing.

Nothing contained in this Agreement shall give the Company, directly or indirectly, the right to control or direct the operations of Parent prior to the Effective Time. Prior to the Effective Time, Parent shall exercise, consistent with the terms and conditions of this Agreement, complete unilateral control and supervision over its business operations.

4.2 **Operation of the Company's Business**.

(a) Except as set forth on Section 4.2(a) of the Company Disclosure Schedule, as expressly permitted by this Agreement, as required by applicable Law or unless Parent shall otherwise consent in writing (which consent shall not be unreasonably withheld, delayed or conditioned), during the Pre-Closing Period: the Company shall conduct its business and operations in the Ordinary Course of Business and in compliance in all material respects with all applicable Laws and the requirements of all Contracts that constitute Company Material Contracts.

(b) Except (i) as expressly permitted by this Agreement, (ii) as set forth in Section 4.2(b) of the Company Disclosure Schedule, (iii) as required by applicable Law or (iv) with the prior written consent of Parent (which consent shall not be unreasonably withheld, delayed or conditioned), at all times during the Pre-Closing Period, the Company shall not do any of the following:

(i) 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 its capital stock or other securities (except for shares of Company Common Stock from terminated employees, directors or consultants of the Company);

(ii) sell, issue, grant, pledge or otherwise dispose of or encumber or authorize any of the foregoing with respect to: (A) any capital stock or other security of the Company (except for shares of outstanding Company Common Stock issued upon the valid exercise of Company Options); (B) any option, warrant or right to acquire any capital stock or any other security, other than option grants to employees and service providers in the Ordinary Course of Business; or (C) any instrument convertible into or exchangeable for any capital stock or other security of the Company;

(iii) except as required to give effect to anything in contemplation of the Closing, amend any of its Organizational Documents, 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 or enter into a joint venture with any other Entity;

(v) (A) lend money to any Person (except for the advance of expenses to employees, directors and consultants in the Ordinary Course of Business), (B) incur or guarantee any indebtedness for borrowed money, (C) guarantee any debt securities of others, or (D) make any capital expenditure in excess of the budgeted capital expenditure amounts set forth in the Company operating budget delivered to Parent concurrently with the execution of this Agreement (the "***Company Budget***");

(vi) other than as required by applicable Law or the terms of any Company Benefit Plan as in effect on the date of this Agreement: (A) adopt, terminate, establish or enter into any Company Benefit Plan; (B) cause or permit any Company Benefit Plan to be amended in any material respect; (C) pay any bonus or make any profit-sharing or similar payment to, or increase the amount of the wages, salary, commissions, benefits or other compensation or remuneration payable to, any of its directors, officers or employees, other than increases in base salary and annual cash bonus opportunities and payments made in the Ordinary Course of Business consistent with past practice; (D) increase the severance or change of control benefits offered to any current or new employees, directors or consultants or (E) hire, terminate or give notice of termination to any (x) officer or (y) employee whose annual base salary is or is expected to be more than $200,000 per year;

(vii) recognize any labor union, labor organization, or similar Person;

(viii) enter into any material transaction other than in the Ordinary Course of Business;

(ix) acquire any material asset or sell, lease or otherwise irrevocably dispose of any of its assets or properties, or grant any Encumbrance with respect to such assets or properties, except in the Ordinary Course of Business;

(x) sell, assign, transfer, license, sublicense or otherwise dispose of any material Company IP (other than pursuant to non-exclusive licenses in the Ordinary Course of Business);

(xi) make, change or revoke any material Tax election, fail to pay any income or other material Tax as such Tax becomes due and payable, file any amendment making any material change to any Tax Return, settle or compromise any income or other material Tax liability, enter into any Tax allocation, sharing, indemnification or other similar agreement or arrangement (other than customary commercial contracts entered into in the Ordinary Course of Business the principal subject matter of which is not Taxes), request or consent to any extension or waiver of any limitation period with respect to any claim or assessment for any income or other material Taxes (other than pursuant to an extension of time to file any Tax Return granted in the Ordinary Course of Business of not more than six months), or adopt or change any material accounting method in respect of Taxes;

(xii) enter into, materially amend or terminate any Company Material Contract;

(xiii) other than as required by Law or GAAP, take any action to change accounting policies or procedures;

(xiv) initiate or settle any material Legal Proceeding;

(xv) enter into or amend a Contract that would reasonably be expected to prevent or materially impede, interfere with, hinder or delay the consummation of the Merger; or

(xvi) agree, resolve or commit to do any of the foregoing.

(c) Nothing contained in this Agreement shall give Parent, directly or indirectly, the right to control or direct the operations of the Company prior to the Effective Time. Prior to the Effective Time, the Company shall exercise, consistent with the terms and conditions of this Agreement, complete unilateral control and supervision over its business operations.

4.3 **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 Pre-Closing Period, upon reasonable notice, Parent, on the one hand, and the Company, on the other hand, 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, property 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; (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 and 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 appropriate and; (d) make available to the other Party copies of unaudited financial statements, material operating and financial reports prepared for senior management or the board of directors of such Party, and any material notice, report or other document filed with or sent to or received from any Governmental Body in connection with the Contemplated Transactions. Any investigation conducted by either Parent or the Company pursuant to this Section 4.3 shall be conducted in such manner as not to interfere unreasonably with the conduct of the business of the other Party. The Company shall provide Parent with unaudited cash balances and a statement of accounts payable of the Company as of the end of each calendar month, which shall be delivered within five Business Days after the end of such calendar month, or such longer period as Parent may agree to in writing.

Notwithstanding the foregoing, any Party may restrict the foregoing access to the extent that any Law applicable to such Party requires such Party to restrict or prohibit access to any such properties or information or as may be necessary to preserve the attorney-client privilege under any circumstances in which such privilege may be jeopardized by such disclosure or access.

4.4 **Parent Non-Solicitation**.

(a) Parent agrees that, during the Pre-Closing Period, it shall not, and shall not authorize any of its Representatives to, directly or indirectly: (i) solicit, initiate or knowingly encourage, induce or facilitate 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) furnish any non-public information regarding Parent to any Person in connection with or in response to an Acquisition Proposal or Acquisition Inquiry; (iii) engage in discussions (other than to inform any Person of the existence of the provisions in this Section 4.4) or negotiations with any Person with respect to any Acquisition Proposal or Acquisition Inquiry; (iv) approve, endorse or recommend any Acquisition Proposal (subject to Section 5.3); (v) execute or enter into any letter of intent or any Contract contemplating or otherwise relating to any Acquisition Transaction (other than a confidentiality agreement permitted under this Section 4.4); or (vi) publicly propose to do any of the foregoing; *provided*, *however*, that, notwithstanding anything contained in this Section 4.4 and subject to compliance with this Section 4.4, prior to obtaining the Required Parent Stockholder Vote, Parent may furnish non-public information regarding Parent to, and enter into discussions or negotiations with, any Person in response to a *bona fide* Acquisition Proposal by such Person, which the Parent Board determines in good faith, after consultation with Parent's outside financial advisors and outside legal counsel, constitutes, or could be reasonably likely to result in, a Superior Offer (and is not withdrawn) if: (A) neither Parent nor any of its Representatives shall have breached this Section 4.4 in any material respect, (B) the Parent Board concludes in good faith based on the advice of outside legal counsel, that the failure to take such action could be reasonably likely to be inconsistent with the fiduciary duties of the Parent Board under applicable Law; (C) Parent receives from such Person an executed confidentiality agreement containing provisions, in the aggregate, at least as favorable to Parent as those contained in the Confidentiality Agreement; and (D) substantially contemporaneously with furnishing any such nonpublic information to such Person, Parent furnishes such nonpublic information to the Company (to the extent such information has not been previously furnished by Parent to the Company). Without limiting the generality of the foregoing, Parent acknowledges and agrees that, in the event any Representative of Parent (whether or not such Representative is purporting to act on behalf of Parent) takes any action that, if taken by Parent, would constitute a breach of this Section 4.4, the taking of such action by such Representative shall be deemed to constitute a breach of this Section 4.4 by Parent for purposes of this Agreement.

(b) If Parent or any Representative of Parent receives an Acquisition Proposal or Acquisition Inquiry at any time during the Pre-Closing Period, then Parent shall promptly (and in no event later than one Business Day after Parent becomes aware of such Acquisition Proposal or Acquisition Inquiry) advise the Company 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 material terms thereof). Parent shall keep the Company reasonably informed with respect to the status and material terms of any such Acquisition Proposal or Acquisition Inquiry and any material modification or proposed material modification thereto.

(c) Parent shall immediately cease and cause to be terminated any existing discussions, negotiations and communications with any Person that relate to any Acquisition Proposal or Acquisition Inquiry that has not already been terminated as of the date of this Agreement and request the destruction or return of any nonpublic information of Parent provided to such Person.

4.5 **Company Non-Solicitation**.

(a) The Company agrees that, during the Pre-Closing Period, the Company shall not, nor shall it authorize any of its Representatives to, directly or indirectly: (i) solicit, initiate or knowingly encourage, induce or facilitate 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) furnish any non-public information regarding the Company to any Person in connection with or in response to an Acquisition Proposal or Acquisition Inquiry; (iii) engage in discussions (other than to inform any Person of the existence of the provisions in this Section 4.5) or negotiations with any Person with respect to any Acquisition Proposal or Acquisition Inquiry; (iv) approve, endorse or recommend any Acquisition Proposal; (v) execute or enter into any letter of intent or any Contract contemplating or otherwise relating to any Acquisition Transaction; or (vi) publicly propose to do any of the foregoing. The Company acknowledges and agrees that, in the event any Representative of the Company (whether or not such Representative is purporting to act on behalf of the Company) takes any action that, if taken by the Company, would constitute a breach of this Section 4.5, the taking of such action by such Representative shall be deemed to constitute a breach of this Section 4.5 by the Company for purposes of this Agreement.

(b) If the Company or any Representative of the Company receives an Acquisition Proposal or Acquisition Inquiry at any time during the Pre-Closing Period, then the Company shall promptly (and in no event later than one Business Day after the Company becomes aware of such Acquisition Proposal or Acquisition Inquiry) advise Parent 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 material terms thereof). The Company shall keep Parent reasonably informed with respect to the status and material terms of any such Acquisition Proposal or Acquisition Inquiry and any material modification or proposed material modification thereto.

(c) The Company shall immediately cease and cause to be terminated any existing discussions, negotiations and communications with any Person that relate to any Acquisition Proposal or Acquisition Inquiry that has not already been terminated as of the date of this Agreement and request the destruction or return of any nonpublic information of the Company provided to such Person.

4.6 **Notification of Certain Matters**.

(a) During the Pre-Closing Period the Company shall promptly notify Parent (and, if in writing, furnish copies of) if any of the following occurs: (i) any notice or other communication is received from any Person alleging that the Consent of such Person is or may be required in connection with any of the Contemplated Transactions; (ii) any Legal Proceeding against or involving or otherwise affecting the Company is commenced, or, to the Knowledge of the Company, threatened against the Company or, to the Knowledge of the

Company, any director or officer of the Company; (iii) the Company becomes aware of any inaccuracy in any representation or warranty made by it in this Agreement; or (iv) the failure of the Company to comply with any covenant or obligation of the Company; in the case of (iii) and (iv) that could reasonably be expected to make the timely satisfaction of any of the conditions set forth in Sections 6 or 7, as applicable, impossible or materially less likely. No notification given to Parent pursuant to this Section 4.6 shall change, limit or otherwise affect any of the representations, warranties, covenants or obligations of the Company contained in this Agreement or the Company Disclosure Schedule for purposes of Sections 6 and 7, as applicable.

(b) During the Pre-Closing Period Parent shall promptly notify the Company (and, if in writing, furnish copies of) if any of the following occurs: (i) any notice or other communication is received from any Person alleging that the Consent of such Person is or may be required in connection with any of the Contemplated Transactions; (ii) any Legal Proceeding against or involving or otherwise affecting Parent is commenced, or, to the Knowledge of Parent, threatened against Parent or, to the Knowledge of Parent, any director or officer of Parent; (iii) Parent becomes aware of any inaccuracy in any representation or warranty made by it in this Agreement; (iv) the failure of Parent to comply with any covenant or obligation of Parent or Merger Sub or (v) if Parent Net Cash is less than $30,000,000; in the case of (iii) and (iv) that could reasonably be expected to make the timely satisfaction of any of the conditions set forth in Section 6 or Section 8, as applicable, impossible or materially less likely. No notification given to the Company pursuant to this Section 4.6(b) shall change, limit or otherwise affect any of the representations, warranties, covenants or obligations of Parent contained in this Agreement or the Parent Disclosure Schedule for purposes of Section 6 and Section 8, as applicable.

Section 5. ADDITIONAL AGREEMENTS OF THE PARTIES

5.1 **Proxy Statement**.

(a) As promptly as practicable after the date of this Agreement, the Parties shall prepare, and Parent shall cause to be filed with the SEC, the Proxy Statement. Parent covenants and agrees that the Proxy Statement, including any pro forma financial statements included therein (and the letter to stockholders, notice of meeting and form of proxy included therewith), will not, at the time that the Proxy Statement or any amendment or supplement thereto is filed with the SEC or is first mailed to the Parent stockholders contain any untrue statement of a material fact or omit to state any material fact required to be stated therein or necessary in order to make the statements made therein, in light of the circumstances under which they were made, not misleading. The Company covenants and agrees that the information provided by the Company to Parent for inclusion in the Proxy Statement (including the Company Financials) will not contain any untrue statement of a material fact or omit to state any material fact required to be stated therein or necessary in order to make such information not misleading. Notwithstanding the foregoing, Parent makes no covenant, representation or warranty with respect to statements made in the Proxy Statement (and the letter to stockholders, notice of meeting and form of proxy included therewith), if any, based on information provided by the Company or any of its Representatives specifically for inclusion therein. The Company and its legal counsel shall be given reasonable opportunity to review and comment on the Proxy Statement, including all amendments and supplements thereto, prior to the filing thereof with the SEC, and on the response to any comments of the SEC on the Proxy Statement, prior to the filing thereof with the SEC. Parent 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. Parent shall use commercially reasonable efforts to cause the Proxy Statement to be mailed to Parent's stockholders as promptly as practicable after the resolution of SEC staff comments and the filing of the Definitive Proxy Statement on Schedule 14A. Each Party shall promptly furnish to the other Party all information concerning such Party and such Party's Affiliates and such Party's stockholders that may be required or reasonably requested in connection with any action contemplated by this Section 5.1. If Parent, Merger Sub or the Company become aware of any event or information that, pursuant to the Securities Act or the Exchange Act, should be disclosed in an amendment or supplement to the Proxy Statement, then such Party, as the case may be, shall promptly inform the other Parties thereof and shall cooperate with such other Parties in

filing such amendment or supplement with the SEC and, if appropriate, in mailing such amendment or supplement to the Parent stockholders.

(b) The Company shall reasonably cooperate with Parent and provide, and require its Representatives to provide, Parent and its Representatives, with all true, correct and complete information regarding the Company that is required by Law to be included in the Proxy Statement or reasonably requested by Parent to be included in the Proxy Statement.

5.2 **Stockholder Written Consent; Regulation D Requirements**.

(a) Promptly following the date hereof, the Company shall prepare and mail a notice (the "***Stockholder Notice***") to every stockholder of the Company that did not execute the Company Stockholder Written Consent. The Stockholder Notice shall (i) be a statement to the effect that the Company Board determined that the Merger is advisable in accordance with Section 251(b) of the DGCL and in the best interests of the stockholders of the Company and approved and adopted this Agreement, the Merger and the other Contemplated Transactions, (ii) provide the stockholders of the Company to whom it is sent with notice of the actions taken in the Company 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 the Company and (iii) include a description of the appraisal rights of the Company's 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 the Company in accordance with this Section 5.2(a) shall be subject to Parent's advance review and reasonable approval.

(b) The Company agrees that: (i) the Company Board has recommended that the Company's stockholders vote to approve the Company Stockholder Matters (the recommendation of the Company Board that the Company's stockholders vote to adopt and approve this Agreement being referred to as the "***Company Board Recommendation***"); and (ii) the Company Board Recommendation shall not be withdrawn or modified (and the Company Board shall not publicly propose to withdraw or modify the Company Board Recommendation) in a manner adverse to Parent, and no resolution by the Company Board or any committee thereof to withdraw or modify the Company Board Recommendation in a manner adverse to Parent or to adopt, approve or recommend (or publicly propose to adopt, approve or recommend) any Acquisition Proposal shall be adopted or proposed.

(c) Parent and the Company shall cooperate to cause to be mailed, distributed, or otherwise made available to those of its stockholders that do not qualify as "accredited investors" within the meaning of Regulation D, information meeting the requirements of Rule 502(b) of Regulation D.

(d) The Company's obligation to solicit the consent of its stockholders to sign the Company Stockholder Written Consent in accordance with Section 5.2 shall not be limited or otherwise affected by the commencement, disclosure, announcement or submission of any Superior Offer or other Acquisition Proposal.

5.3 **Parent Stockholders' Meeting**.

(a) As promptly as reasonably practicable after the resolution of SEC staff comments and the filing of the Definitive Proxy Statement on Schedule 14A, Parent shall take all action necessary under applicable Law to call, give notice of and hold a meeting of the holders of Parent Common Stock for the purpose of seeking approval of:

(i) the amendment of Parent's certificate of incorporation (A) to effect the Reverse Split and (B) for the authorization of shares of Parent Common Stock to be issued to the Company's stockholders and in respect of Company Options and Company Warrants in connection with the Contemplated Transactions; and

(ii) the change of control of Parent resulting from the Merger pursuant to the Nasdaq rules (the matters contemplated by clauses 5.3(a)(i) and (ii) are collectively referred to as the "***Parent Stockholder Matters***," and the matters contemplated by clauses 5.3(a)(i)(B) and (ii) are collectively referred to as the "***Closing Parent Stockholder Matters***", and such meeting, the "***Parent Stockholders' Meeting***").

(b) The Parent Stockholders' Meeting shall be held as promptly as practicable (but in any event not later than 60 days) after the filing of a Definitive Proxy Statement on Schedule 14A with the SEC. Parent shall take reasonable measures to ensure that all proxies solicited in connection with the Parent Stockholders' Meeting are solicited in compliance with all applicable Law. Notwithstanding anything to the contrary contained herein, if on the date of the Parent Stockholders' Meeting, or a date preceding the date on which the Parent Stockholders' Meeting is scheduled, Parent reasonably believes that (i) it will not receive proxies sufficient to obtain the Required Parent Stockholder Vote, whether or not a quorum would be present or (ii) it will not have sufficient shares of Parent Common Stock represented (whether in person or by proxy) to constitute a quorum necessary to conduct the business of the Parent Stockholders' Meeting, Parent may postpone or adjourn, or make one or more successive postponements or adjournments of, the Parent Stockholders' Meeting as long as the date of the Parent Stockholders' Meeting is not postponed or adjourned more than an aggregate of 60 calendar days in connection with any postponements or adjournments.

(c) Parent agrees that, subject to Section 5.3(d): (i) the Parent Board shall recommend that the holders of Parent Common Stock vote to approve the Parent Stockholder Matters; (ii) the Proxy Statement shall include a statement to the effect that the Parent Board recommends that Parent's stockholders vote to approve the Parent Stockholder Matters (the recommendation of the Parent Board with respect to the Parent Stockholder Matters being referred to as the "***Parent Board Recommendation***"); and (iii) the Parent Board Recommendation shall not be withheld, amended, withdrawn or modified (and the Parent Board shall not publicly propose to withhold, amend, withdraw or modify the Parent Board Recommendation) in a manner adverse to the Company (the actions set forth in the foregoing clause (iii), collectively, a "***Parent Board Adverse Recommendation Change***").

(d) Notwithstanding anything to the contrary contained in this Agreement, if at any time prior to the approval of Parent Stockholder Matters by the Required Parent Stockholder Vote:

(i) if Parent has received a written Acquisition Proposal (which Acquisition Proposal did not arise out of a material breach of Section 4.4) from any Person that has not been withdrawn and after consultation with outside legal counsel, the Parent Board shall have determined, in good faith, that such Acquisition Proposal is a Superior Offer, (x) the Parent Board may make a Parent Board Adverse Recommendation Change or (y) Parent may terminate this Agreement pursuant to Section 9.1(h) to enter into a Permitted Alternative Agreement with respect to such Superior Offer, if and only if: (A) the Parent Board determines in good faith, after consultation with Parent's outside legal counsel, that the failure to do so could be inconsistent with the fiduciary duties of the Parent Board to Parent's stockholders under applicable Law; (B) Parent shall have given the Company prior written notice of its intention to consider making a Parent Board Adverse Recommendation Change or terminate this Agreement pursuant to Section 9.1(h) at least three Business Days prior to making any such Parent Board Adverse Recommendation Change or termination (a "***Determination Notice***") (which notice shall not constitute a Parent Board Adverse Recommendation Change); and (C) (1) Parent shall have provided to the Company a summary of the material terms and conditions of the Acquisition Proposal in accordance with Section 4.4(b), (2) Parent shall have given the Company the three Business Days after the Determination Notice to propose revisions to the terms of this Agreement or make another proposal and shall have made its Representatives reasonably available to negotiate in good faith with the Company (to the extent the Company desires to negotiate) with respect to such proposed revisions or other proposal, if any, and (3) after considering the results of any such negotiations and giving effect to the

proposals made by the Company, if any, after consultation with outside legal counsel, the Parent Board shall have determined, in good faith, that such Acquisition Proposal is a Superior Offer and that the failure to make the Parent Board Adverse Recommendation Change or terminate this Agreement pursuant to Section 9.1(h) could be inconsistent with the fiduciary duties of the Parent Board to Parent's stockholders under applicable Law. For the avoidance of doubt, the provisions of this Section 5.3(d)(i) shall also apply to any material change to the facts and circumstances relating to such Acquisition Proposal and require a new Determination Notice, except that the references to three Business Days shall be deemed to be two Business Days.

(ii) other than in connection with an Acquisition Proposal, the Parent Board may make a Parent Board Adverse Recommendation Change in response to a Parent Change in Circumstance, if and only if: (A) the Parent Board determines in good faith, after consultation with Parent's outside legal counsel, that the failure to do so could be inconsistent with the fiduciary duties of the Parent Board to Parent's stockholders under applicable Law; (B) Parent shall have given the Company a Determination Notice at least three Business Days prior to making any such Parent Board Adverse Recommendation Change; and (C) (1) Parent shall have specified the Parent Change in Circumstance in reasonable detail, (2) Parent shall have given the Company the three Business Days after the Determination Notice to propose revisions to the terms of this Agreement or make another proposal, and shall have made its Representatives reasonably available to negotiate in good faith with the Company (to the extent the Company desires to do so) with respect to such proposed revisions or other proposal, if any, and (3) after considering the results of any such negotiations and giving effect to the proposals made by the Company, if any, after consultation with outside legal counsel, the Parent Board shall have determined, in good faith, that the failure to make the Parent Board Adverse Recommendation Change in response to such Parent Change in Circumstance could be inconsistent with the fiduciary duties of the Parent Board to Parent's stockholders under applicable Law. For the avoidance of doubt, the provisions of this Section 5.3(d)(ii) shall also apply to any material change to the facts and circumstances relating to such Parent Change in Circumstance and require a new Determination Notice, except that the references to three Business Days shall be deemed to be two Business Days.

(e) Nothing contained in this Agreement shall prohibit Parent or the Parent Board from (i) complying with Rules14d-9 and 14e-2(a) promulgated under the Exchange Act, (ii) issuing a "stop, look and listen" communication or similar communication of the type contemplated by Section 14d-9(f) under the Exchange Act or (iii) otherwise making any disclosure to the Parent stockholders; *provided however*, that in the case of the foregoing clause (iii) the Parent Board determines in good faith, after consultation with its outside legal counsel, that failure to make such disclosure could be reasonably likely to be inconsistent with applicable Law, including its fiduciary duties under applicable Law.

5.4 **Regulatory Approvals**.

(a) Each Party shall use reasonable best efforts to file or otherwise submit, as soon as practicable after the date of this Agreement, all applications, notices, reports, filings 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.

(b) Without limiting the generality of the foregoing, each of Parent and the Company shall make any filings ("***Merger Notification Filings***") required by any applicable Antitrust Laws. The parties hereto shall promptly supply one another with any information that may be required in order to make such filings or obtain such consents and approvals. Each party hereto shall (i) consult and cooperate with one another, and consider in good faith the views of one another, in connection with any analyses, appearances, presentations, memoranda, briefs, arguments, opinions and proposals made or submitted by or on behalf of any party hereto in connection

with proceedings under or relating to any Antitrust Law, (ii) coordinate with one another in preparing and exchanging such materials and (iii) promptly provide one another (and its counsel) with copies of all filings, presentations or submissions made by such party to any Governmental Body in connection with this Agreement. In addition, any party may, as it deems advisable and necessary, reasonably designate any confidential and competitively sensitive material provided to the other parties under this Section 5.4 as "Outside Counsel Only" or redact information regarding valuation or negotiation strategy. Materials identified as "Outside Counsel Only" and the information contained therein shall be given only to the outside legal counsel of the recipient and will not be disclosed by such outside counsel to employees, officers, or directors of the recipient, unless express written permission is obtained in advance from the source of the materials.

(c) Each of Parent and the Company shall use its respective reasonable best efforts to resolve objections, if any, as may be asserted by any Governmental Body with respect to the Contemplated Transactions under any applicable Antitrust Laws, including responding promptly to and complying with any requests for information relating to this Agreement or the Merger Notification Filings from any Governmental Body charged with enforcing, applying, administering or investigating any Antitrust Laws.

(d) Notwithstanding anything to the contrary herein (i) Parent shall not have any obligation to litigate or contest any such Legal Proceeding or order resulting therefrom and (ii) Parent shall be under no obligation to make proposals, execute or carry out agreements or submit to orders providing for (A) the sale, license, divestiture, or other disposition or holding separate of any assets of Parent or the Company or any of their respective Affiliates, (B) the imposition of any limitation or restriction on the ability of Parent or any of its Affiliates to freely conduct their business or, following the Closing, the business of the Company, or (C) any limitation or regulation on the ability of Parent or any of its Affiliates to exercise full rights of ownership of the Company.

5.5 **Company Options; Company Warrants and Company Convertible Notes**

(a) At the Effective Time, each Company Option that is outstanding and unexercised immediately prior to the Effective Time under the Company Plan, whether or not vested, shall be converted into and become an option to purchase Parent Common Stock, and Parent shall assume the Company Plan and each such Company Option in accordance with the terms (as in effect as of the date of this Agreement) of the Company Plan and the terms of the stock option agreement by which such Company Option is evidenced (but with changes to such documents as Parent in good faith determines are appropriate to reflect the substitution of the Company Options by Parent to purchase shares of Parent Common Stock). All rights with respect to Company Common Stock under Company Options assumed by Parent shall thereupon be converted into rights with respect to Parent Common Stock. Accordingly, from and after the Effective Time: (i) each Company Option assumed by Parent may be exercised solely for shares of Parent Common Stock; (ii) the number of shares of Parent Common Stock subject to each Company Option assumed by Parent shall be determined by multiplying (A) the number of shares of Company Common Stock that were subject to such Company Option, as in effect immediately prior to the Effective Time, by (B) the Exchange Ratio, and rounding the resulting number down to the nearest whole number of shares of Parent Common Stock; (iii) the per share exercise price for the Parent Common Stock issuable upon exercise of each Company Option assumed by Parent shall be determined by dividing (A) the per share exercise price of Company Common Stock subject to such Company Option, as in effect immediately prior to the Effective Time, by (B) the Exchange Ratio and rounding the resulting exercise price up to the nearest whole cent; and (iv) any restriction on the exercise of any Company Option assumed by Parent shall continue in full force and effect and the term, exercisability, vesting schedule and other provisions of such Company Option shall otherwise remain unchanged; *provided, however*, that: (A) Parent may amend the terms of the Company Options and the Company Plan to reflect Parent's substitution of the Company Options with options to purchase Parent Common Stock (such as by making any change in control or similar definition relate to Parent and having any provision that provides for the adjustment of Company Options upon the occurrence of certain corporate events relate to corporate events that relate to Parent and/or Parent Common Stock); and (B) the Parent Board or a committee thereof shall succeed to the authority and responsibility of the Company Board or any committee thereof with respect to each Company Option assumed by Parent.

(b) Parent shall file with the SEC, promptly after the Effective Time, a registration statement on FormS-8 (or any successor form), if available for use by Parent, relating to the shares of Parent Common Stock issuable with respect to Company Options assumed by Parent in accordance with Section 5.5(a).

(c) At the Effective Time, each Company Warrant that is outstanding and unexercised as of immediately prior to the Effective Time, if any, shall be converted into and become a warrant to purchase Parent Common Stock and Parent shall assume each such Company Warrant in accordance with its terms. All rights with respect to Company Capital Stock under Company Warrants assumed by Parent shall thereupon be converted into rights with respect to Parent Common Stock. Accordingly, from and after the Effective Time: (i) each Company Warrant assumed by Parent may be exercised solely for shares of Parent Common Stock; (ii) the number of shares of Parent Common Stock subject to each Company Warrant assumed by Parent shall be determined by multiplying (A) the number of shares of Company Common Stock, or the number of shares of Company Preferred Stock issuable upon exercise of the Company Warrant, as applicable, that were subject to such Company Warrant immediately prior to the Effective Time by (B) the Exchange Ratio and rounding the resulting number down to the nearest whole number of shares of Parent Common Stock; (iii) the per share exercise price for the Parent Common Stock issuable upon exercise of each Company Warrant assumed by Parent shall be determined by dividing the per share exercise price of Company Capital Stock subject to such Company Warrant, as in effect immediately prior to the Effective Time, by the Exchange Ratio and rounding the resulting exercise price up to the nearest whole cent; and (iv) any restriction on any Company Warrant assumed by Parent shall continue in full force and effect and the term and other provisions of such Company Warrant shall otherwise remain unchanged.

(d) Prior the Effective Time, the Company shall take all actions (including providing any required notices) that may be necessary to cause all of the outstanding Company Convertible Notes to be converted into shares of Company Capital Stock pursuant to the terms thereof.

(e) Prior to the Effective Time, the Company shall take all actions that may be necessary (under the Company Plan, the Company Warrants, the Company Convertible Notes and otherwise) to effectuate the provisions of this Section 5.5 and to ensure that, from and after the Effective Time, holders of Company Options, Company Warrants and Company Convertible Notes have no rights with respect thereto other than those specifically provided in this Section 5.5.

5.6 **Employee Benefits**.

(a) For purposes of vesting, eligibility to participate, and level of benefits under the benefit plans, programs, contracts or arrangements of Parent or any of its Subsidiaries (including, following the Closing, the Company) providing benefits to any Continuing Employee after the Closing (the "***Post-Closing Plans***"), each employee who continues to be employed by Parent, the Company or any of their respective Subsidiaries immediately following the Closing ("***Continuing Employees***") shall be credited with his or her years of service with Parent, the Company or any of their respective Subsidiaries and their respective predecessors; provided that the foregoing shall not apply to the extent that its application would result in a duplication of benefits. In addition, and without limiting the generality of the foregoing, for purposes of each Post-Closing Plan providing medical, dental, pharmaceutical and/or vision benefits to a Continuing Employee, Parent shall cause all pre-existing condition exclusions and actively-at-work requirements of such Post-Closing Plan to be waived for such Continuing Employee and his or her covered dependents to the extent and unless such conditions would have been waived or satisfied under the employee benefit plan whose coverage is being replaced under the Post-Closing Plan, and Parent shall use commercially reasonable efforts to cause any eligible expenses incurred by a Continuing Employee and his or her covered dependents during the portion of such plan year in which coverage is replaced with coverage under a Post-Closing Plan to be taken into account under such Post-Closing Plan with respect to the plan year in which participation in such Post-Closing Plan begins for purposes of satisfying all deductible, coinsurance and maximum out-of-pocket requirements applicable to such Continuing Employee and his or her covered dependents for such plan year as if such amounts had been paid in accordance with such Post-Closing Plan.

(b) The provisions of this Section 5.6 are for the sole benefit of Parent and the Company and no provision of this Agreement shall (i) create any third party beneficiary or other rights in any Person, including rights in respect of any benefits that may be provided, directly or indirectly, under any Company Benefit Plan, Parent Benefit Plan or Post-Closing Plan or rights to continued employment or service with the Company or Parent (or any Subsidiary thereof), (ii) be construed as an amendment, waiver or creation of or limitation on the ability to terminate any Company Benefit Plan, Parent Benefit Plan or Post-Closing Plan, or (iii) limit the ability of Parent to terminate the employment of any Continuing Employee.

5.7 **Parent Post-Closing Benefit Plan Obligations**.

(a) For a period of not less than 36 months following the Closing Parent shall continue to sponsor a group health insurance plan that: (i) is issued in California or otherwise provides California coverage, including Cal-COBRA or substantially similar continuing coverage election rights, (ii) provides for Pennsylvania coverage, including substantially similar continuing coverage election rights and (iii) provides medical and prescription drug benefits substantially similar to those provided under the group health insurance plan sponsored by Parent immediately prior to the Closing (a "***California and Pennsylvania Health Plan***"), such that any individuals employed by Parent prior to the Closing who will not be Continuing Employees (the "***COBRA Employees***") will be provided with the opportunity to elect and continue COBRA and Cal-COBRA coverage under the California and Pennsylvania Health Plan following the Closing. The COBRA Employees are intended third-party beneficiaries of this Section 5.7.

(b) For a period of not less than 90 days following the Closing, Parent shall not take any action to terminate Parent's 401(k) plan.

(c) From and following the Closing, Parent will continue to be a party to all Parent Benefit Plans and will honor its obligations under all Parent Benefit Plans in accordance with their terms.

5.8 **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 Parent and the Surviving Corporation, jointly and severally, shall 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, officer, fiduciary or agent of Parent or the Company and their respective Subsidiaries, respectively (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, officer, fiduciary or agent of Parent or of the Company, whether asserted or claimed prior to, at or after the Effective Time, in each case, to the fullest extent permitted under applicable Law. 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 Parent and the Surviving Corporation, jointly and severally, upon receipt by Parent or the Surviving Corporation from the D&O Indemnified Party of a request therefor; *provided* that any such person to whom expenses are advanced provides an undertaking to Parent, to the extent then required by the DGCL, to repay such advances if it is ultimately determined that such person is not entitled to indemnification.

(b) The provisions of the certificate of incorporation and bylaws of Parent with respect to indemnification, advancement of expenses and exculpation of present and former directors and officers of Parent that are presently set forth in the certificate of incorporation and bylaws of Parent shall not be amended, modified or repealed for a period of six years 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 Parent. The certificate of incorporation and bylaws of the Surviving Corporation shall contain, and Parent 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 as those presently set forth in the certificate of incorporation and bylaws of Parent.

(c) From and after the Effective Time, (i) the Surviving Corporation shall fulfill and honor in all respects the obligations of the Company to its D&O Indemnified Parties as of immediately prior to the Closing pursuant to any indemnification provisions under the Company's Organizational Documents and pursuant to any indemnification agreements between the Company and such D&O Indemnified Parties, with respect to claims arising out of matters occurring at or prior to the Effective Time and (ii) Parent shall fulfill and honor in all respects the obligations of Parent to its D&O Indemnified Parties as of immediately prior to the Closing pursuant to any indemnification provisions under Parent's Organizational Documents and pursuant to any indemnification agreements between Parent and such D&O Indemnified Parties, with respect to claims arising out of matters occurring at or prior to the Effective Time.

(d) From and after the Effective Time, Parent shall maintain directors' and officers' liability insurance policies, with an effective date as of the Closing Date, on commercially available terms and conditions and with coverage limits customary for U.S. public companies similarly situated to Parent. In addition, Parent shall purchase, prior to the Effective Time, a six-year prepaid, "tail policy" for thenon-cancellable extension of the directors' and officers' liability coverage of Parent's existing directors' and officers' insurance policies for a claims reporting or discovery period of at least six years from and after the Effective Time with respect to any claim related to any period of time at or prior to the Effective Time. During the term of the "tail" policy, Parent shall not take any action following the Effective Time to cause such "tail" policy to be cancelled or any provision therein to be amended or waived in any manner that would adversely affect in any material respect the rights of their former and current officers and directors.

(e) From and after the Effective Time, Parent shall pay all expenses, including reasonable attorneys' fees, that are incurred by the persons referred to in this Section 5.8 in connection with their successful enforcement of the rights provided to such persons in thisSection 5.8.

(f) All rights to exculpation, indemnification and advancement of expenses for acts or omissions occurring at or prior to the Effective Time, whether asserted or claimed prior to, at or after the Closing, now existing in favor of the current or former directors, officers or employees, as the case may be, of Parent or the Company as provided in their respective certificates of incorporation or by-laws or other organization documents or in any agreement shall survive the Merger and shall continue in full force and effect. The provisions of this Section 5.8 are intended to be in addition to the rights otherwise available to the current and former officers and directors of Parent and the Company by Law, charter, statute, bylaw or agreement, and shall operate for the benefit of, and shall be enforceable by, each of the D&O Indemnified Parties, their heirs and their representatives.

(g) In the event Parent 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 Parent or the Surviving Corporation, as the case may be, shall succeed to the obligations set forth in this Section 5.8. Parent shall cause the Surviving Corporation to perform all of the obligations of the Surviving Corporation under this Section 5.8. The obligations set forth in thisSection 5.8 shall not be terminated, amended or otherwise modified in any manner that adversely affects any D&O Indemnified Party, or any person who is a beneficiary under the policies referred to in this Section 5.8 and their heirs and representatives, without the prior written consent of such affected D&O Indemnified Party or other person.

5.9 **Additional Agreements**. The Parties shall use commercially reasonable efforts to cause to be taken all actions necessary to consummate the Contemplated Transactions. Without limiting the generality of the

foregoing, each Party to this Agreement: (a) 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; (b) shall use reasonable best 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 Contemplated Transactions or for such Contract (with respect to Contracts set forth in **Schedule 5.9**) to remain in full force and effect; (c) shall use commercially reasonable efforts to lift any injunction prohibiting, or any other legal bar to, the Contemplated Transactions; and (d) shall use commercially reasonable efforts to satisfy the conditions precedent to the consummation of this Agreement.

5.10 **Disclosure**. The initial press release relating to this Agreement shall be a joint press release issued by the Company and Parent and thereafter Parent and the Company shall consult with each other before issuing any further press release(s) or otherwise making any public statement or making any announcement to Parent Associates or Company Associates (to the extent not previously issued or made in accordance with this Agreement) with respect to the Contemplated Transactions and shall not issue any such press release, public statement or announcement to Parent Associates or Company Associates without the other Party's written consent (which shall not be unreasonably withheld, conditioned or delayed). Notwithstanding the foregoing: (a) a Party may, without the prior consent of the other Party hereto but subject to giving advance notice to the other Party, issue any such press release or make any such public announcement or statement as may be required by any Law (including required disclosures in Parent SEC Documents); and (b) Parent need not consult with the Company in connection with such portion of any press release, public statement or filing to be issued or made pursuant to Section 5.3(e) or with respect to any Acquisition Proposal or Parent Board Adverse Recommendation Change.

5.11 **Listing**. Parent shall use its commercially reasonable efforts, (a) to the extent required by the rules and regulations of Nasdaq, to prepare and submit to Nasdaq a notification form for the listing of the shares of Parent Common Stock to be issued in connection with the Contemplated Transactions, and to cause such shares to be approved for listing (subject to official notice of issuance); (b) effect the Reverse Split subject to receipt of the applicable Required Parent Stockholder Vote; and (c) to the extent required by Nasdaq Marketplace Rule 5110, to file an initial listing application for the Parent Common Stock on Nasdaq (the "***Nasdaq Listing Application***") and to cause such Nasdaq Listing Application to be conditionally approved prior to the Effective Time. The Parties will use commercially reasonable efforts to coordinate with respect to compliance with Nasdaq rules and regulations. The Company agrees to pay all Nasdaq fees associated with the Nasdaq Listing Application. The Company will cooperate with Parent as reasonably requested by Parent with respect to the Nasdaq Listing Application and promptly furnish to Parent all information concerning the Company and its stockholders that may be required or reasonably requested in connection with any action contemplated by this Section 5.11.

5.12 **Tax Matters**.

(a) For United States federal income Tax purposes, (i) the Parties intend that the Merger qualify as a "reorganization" within the meaning of Section 368(a) of the Code (the "***Intended Tax Treatment***"), and (ii) this Agreement is intended to be, and is hereby adopted as, a "plan of reorganization" for purposes of Section 354 and 361 of the Code and Treasury Regulations Section 1.368-2(g) and 1.368-3(a), to which Parent, Merger Sub and the Company are parties under Section 368(b) of the Code.

(b) The Parties shall use their respective reasonable best efforts to cause the Merger to qualify, and will not take any action or cause any action to be taken which action would reasonably be expected to prevent the Merger from qualifying, for the Intended Tax Treatment.

(c) The Company shall use reasonable best efforts to obtain an opinion of Mayer Brown LLP ("***Tax Counsel***") to the effect that it is more likely than not that the Merger qualifies for the Intended Tax Treatment (the "***Tax Opinion***"), dated as of the Closing and also dated as of any earlier date as may be required

by the SEC in connection with the Proxy Statement. In rendering the Tax Opinion, the Tax Counsel may require and rely upon (and may incorporate by reference) reasonable and customary representations and covenants, including those contained in certificates of officers of Parent and the Company.

5.13 **Legends**. Parent shall be entitled to place appropriate legends on the book entries and/or certificates evidencing any shares of Parent Common Stock to be received in the Merger by equity holders of the Company who may be considered "affiliates" of Parent 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 Parent Common Stock.

5.14 **Directors and Officers**. The Parties shall use reasonable best efforts and take all necessary action so that immediately after the Effective Time, (a) the Parent Board is comprised of seven members, with two such members designated by Parent and five such members designated by the Company, (b) the board of directors of the Surviving Corporation is comprised of seven (7) members, with two (2) such members designated by Parent and five (5) such members designated by the Company and (c) the Persons listed in **Exhibit G** under the heading "Officers" are elected or appointed, as applicable, to the positions of officers of Parent and the Surviving Corporation, as set forth therein, to serve in such positions effective as of the Effective Time until successors are duly appointed and qualified in accordance with applicable Law. If any Person listed in **Exhibit G** is unable or unwilling to serve as an officer of Parent or the Surviving Corporation, as set forth therein, as of the Effective Time, the Parties shall mutually agree upon a successor. The Persons listed in **Exhibit G** under the heading "Board Designees – Parent" shall be Parent's designees pursuant to clause (a) of this Section 5.14 (which list may be changed by Parent at any time prior to the Closing by written notice to the Company to include different board designees who are reasonably acceptable to the Company) (the "***Parent Designees***"). To the extent a Parent Designee is currently classified as a Class III director of Parent, Parent shall following the Closing and at an appropriate time prior to Parent's 2019 annual meeting of shareholders, nominate such Parent Designee for reelection at Parent's 2019 annual meeting of shareholders. To the extent a Parent Designee is currently classified as a Class I director of Parent, Parent shall following the Closing and at an appropriate time prior to Parent's 2020 annual meeting of shareholders, nominate such Parent Designee for reelection at Parent's 2020 annual meeting of shareholders. The Persons listed in **Exhibit G** under the heading "Board Designees – Company" shall be the Company's designees pursuant to clause (a) of this Section 5.14 (which list may be changed by the Company at any time prior to the Closing by written notice to Parent to include different board designees who are reasonably acceptable to Parent).

5.15 **Termination of Certain Agreements and Rights**. The Company shall cause any Investor Agreements (excluding the Company Stockholder Support Agreements) to be terminated immediately prior to the Effective Time, without any liability being imposed on the part of Parent or the Surviving Corporation.

5.16 **Section 16 Matters**. Prior to the Effective Time, Parent and the Company shall take all such steps as may be required (to the extent permitted under applicable Laws) to cause any acquisitions of Parent Common Stock, restricted stock awards to acquire Parent Common Stock and any options to purchase Parent Common Stock in connection with 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 Parent, to be exempt under Rule 16b-3 promulgated under the Exchange Act. Promptly following the date of this Agreement and at least 30 days prior to the Closing Date, the Company shall furnish the following information to Parent for each individual who, immediately after the Effective Time, will become subject to the reporting requirements of Section 16(a) of the Exchange Act with respect to Parent: (a) the number of shares of Company Capital Stock owned by such individual and expected to be exchanged for shares of Parent Common Stock pursuant to the Merger, and (b) the number of other derivative securities (if any) with respect to Company Capital Stock owned by such individual and expected to be converted into shares of Parent Common Stock, restricted stock awards to acquire Parent Common Stock or derivative securities with respect to Parent Common Stock in connection with the Merger.

5.17 **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 its respective obligations under this Agreement and to enable the combined entity to continue to meet its obligations following the Effective Time.

5.18 **Allocation Certificates**.

(a) The Company will prepare and deliver to Parent at least ten Business Days prior to the Closing Date a certificate signed by the Chief Financial Officer of the Company in a form reasonably acceptable to Parent setting forth (as of immediately prior to the Effective Time) (i) each holder of Company Capital Stock, Company Options and Company Warrants, (ii) such holder's name and address; (iii) the number and type of Company Capital Stock held and/or underlying the Company Options and Company Warrants as of the immediately prior to the Effective Time for each such holder; and (iv) the number of shares of Parent Common Stock to be issued to such holder, or to underlie any Parent Option or Company Warrant to be issued to such holder, pursuant to this Agreement in respect of the Company Capital Stock, Company Options or Company Warrants held by such holder as of immediately prior to the Effective Time (the "***Allocation Certificate***").

(b) Parent will prepare and deliver to the Company at least ten Business Days prior to the Closing Date a certificate signed by the Chief Financial Officer of Parent in a form reasonably acceptable to the Company, setting forth, as of immediately prior to the Effective Time (i) each record holder of Parent Common Stock, Parent Options or Parent Warrants, (ii) such record holder's name and address, (iii) the number of shares of Parent Common Stock held and/or underlying the Parent Options or Parent Warrants as of the Effective Time for such holder (the "***Parent Outstanding Shares Certificate***").

5.19 **Company Financial Statements**. As promptly as reasonably practicable following the date of this Agreement (i) and no later than 15 days after the date hereof, the Company will furnish to Parent audited financial statements for the fiscal years ended 2016, 2017 and 2018 for inclusion in the Proxy Statement (the "***Company Audited Financial Statements***") and (ii) the Company will furnish to Parent unaudited interim financial statements for each interim period completed prior to Closing that would be required to be included in the Proxy Statement (the "***Company Interim Financial Statements***"). Each of the Company Audited Financial Statements and the Company Interim Financial Statements will be suitable for inclusion in the Proxy Statement and prepared in accordance with GAAP as applied on a consistent basis during the periods involved (except in each case as described in the notes thereto) and on that basis will present fairly, in all material respects, the financial position and the results of operations, changes in stockholders' equity, and cash flows of the Company as of the dates of and for the periods referred to in the Company Audited Financial Statements or the Company Interim Financial Statements, as the case may be.

5.20 **Takeover Statutes**. If any Takeover Statute is or may become applicable to the Contemplated Transactions, each of the Company, the Company Board, Parent and the Parent Board, as applicable, 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 by this Agreement and otherwise act to eliminate or minimize the effects of such statute or regulation on the Contemplated Transactions.

5.21 **Stockholder Litigation**. Parent shall conduct and control the settlement and defense of any stockholder litigation against Parent or any of its directors relating to this Agreement or the Contemplated Transactions; *provided* that any settlement or other resolution of any such stockholder litigation agreed to by Parent after the Closing shall be approved in advance by a majority of the Parent Designees for so long as any Parent Designees are still members of the Parent Board. Without limiting the foregoing, prior to the Closing, Parent shall give the Company the opportunity to consult with Parent in connection with the defense and settlement of any such stockholder litigation, and Parent shall keep the Company reasonably apprised of any material developments in connection with any such stockholder litigation.

Section 6. CONDITIONS PRECEDENT TO OBLIGATIONS OF EACH PARTY

The obligations of each Party to effect the Merger and otherwise consummate the Contemplated Transactions to be consummated at the Closing are 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 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 Contemplated Transactions shall have 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 Law which has the effect of making the consummation of the Contemplated Transactions illegal.

6.2 **Stockholder Approval**. (a) Parent shall have obtained the Closing Parent Stockholder Vote and (b) the Company shall have obtained the Required Company Stockholder Vote.

6.3 **Listing**. The shares of Parent Common Stock to be issued in the Merger pursuant to this Agreement shall have been approved for listing (subject to official notice of issuance) on Nasdaq as of the Closing.

Section 7. ADDITIONAL CONDITIONS PRECEDENT TO OBLIGATIONS OF PARENT AND MERGER SUB

The obligations of Parent 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 Parent, at or prior to the Closing, of each of the following conditions:

7.1 **Accuracy of Representations**. The Company Fundamental Representations shall have been true and correct in all material respects as of the date of this Agreement and shall be true and correct in all material respects on and as of the Closing Date with the same force and effect as if made on and as of such date (except to the extent such representations and warranties are specifically made as of a particular date, in which case such representations and warranties shall be true and correct in all material respects as of such date). The representations and warranties of the Company contained in this Agreement (other than the Company Fundamental Representations) shall have been true and correct as of the date of this Agreement and shall be true and correct on and as of the Closing Date with the same force and effect as if made on the Closing Date except (a) in each case, or in the aggregate, where the failure to be true and correct would not reasonably be expected to have a Company Material Adverse Effect (without giving effect to any references therein to any Company Material Adverse Effect or other materiality qualifications), or (b) for those representations and warranties which address matters only as of a particular date (which representations shall have been true and correct, subject to the qualifications as set forth in the preceding clause (a), as of such particular date) (it being understood that, for purposes of determining the accuracy of such representations and warranties, any update of or modification to the Company Disclosure Schedule made or purported to have been made after the date of this Agreement shall be disregarded).

7.2 **Performance of Covenants**. The Company shall have performed or complied with in all material respects all agreements and covenants required to be performed or complied with by it under this Agreement at or prior to the Effective Time.

7.3 **Documents**. Parent shall have received the following documents, each of which shall be in full force and effect:

(a) a certificate executed by the Chief Executive Officer or Chief Financial Officer of the Company certifying (i) that the conditions set forth in Sections 7.1, 7.2, 7.5 and 7.6 have been duly satisfied and (ii) that the information set forth in the Allocation Certificate delivered by the Company in accordance with Section 5.18 is true and accurate in all respects as of the Closing Date;

(b) a written resignation, in a form reasonably satisfactory to Parent, dated as of the Closing Date and effective as of the Closing, executed by each of the officers and directors of the Company listed in Section 7.3(b) of the Company Disclosure Schedule; and

(c) the Allocation Certificate.

7.4 **FIRPTA Certificate**. Parent shall have received (i) an original signed statement from the Company that the Company is not, and has not been at any time during the applicable period specified in Section 897(c)(1)(A)(ii) of the Code, a "United States real property holding corporation," as defined in Section 897(c)(2) of the Code, conforming to the requirements of Treasury Regulations Section 1.1445-2(c)(3) and 1.897-2(h), and (ii) an original signed notice to be delivered to the IRS in accordance with the provisions of Treasury Regulations Section 1.897-2(h)(2), together with written authorization for Parent to deliver such notice to the IRS on behalf of the Company following the Closing, each dated as of the Closing Date, duly executed by an authorized officer of the Company, and in form and substance reasonably acceptable to Parent.

7.5 **No Company Material Adverse Effect**. Since the date of this Agreement, there shall not have occurred any Company Material Adverse Effect.

7.6 **Termination of Investor Agreements**. The Investor Agreements shall have been terminated.

7.7 **Company Lock-Up Agreements**. Parent shall have received the Company Lock-Up Agreements duly executed by holders of at least two-thirds (2/3) of the Company Capital Stock and each executive officer and director of the Company who is elected or appointed, as applicable, as an executive officer and director of Parent as of immediately following the Closing, each of which shall be in full force and effect.

7.8 **Accredited Investors**. No more than 10 stockholders of the Company shall have failed to certify in an Accredited Investor Questionnaire that such stockholder is an "accredited investor" pursuant to Regulation D.

7.9 **Funding Agreement**. The Funding Agreement shall be in full force and effect, and the terms of such Funding Agreement shall be reasonably satisfactory to Parent, and Parent shall have received a certificate executed by (a) the Chief Executive Officer or Chief Financial Officer of the Company certifying that the conditions set forth in Sections 2.4(a)(i) and (ii) of the Funding Agreement have been satisfied or waived and (b) an authorized officer of NovaQuest certifying that the conditions set forth in Sections 2.4(b)(i), (ii), (iii), (iv) and (vi) of the Funding Agreement have been satisfied or waived, such that the Concurrent Financing shall be consummated immediately following the Closing without the further satisfaction of any conditions.

7.10 **Company Net Working Capital**. The Company Net Working Capital as of the date of the Parent Stockholder Meeting is not less than -$11,500,000.

7.11 **Company Stockholder Written Consent**. The Company Stockholder Written Consent shall have been executed by holders of at least two-thirds (2/3) of the Company Capital Stock (on an as-converted basis) and shall be in full force and effect.

7.12 **Dissenting Shares**. No stockholders of the Company shall have exercised statutory appraisal rights pursuant to Section 262 of the DGCL with respect to their shares of Company Capital Stock.

7.13 **Charter Amendment**. The certificate of incorporation of the Company as of the date hereof shall have been amended to (a) allow the satisfaction and discharge of dividend rights that have accrued through May 31, 2019 in favor of holders of Company Preferred Stock with shares of Company Common Stock and (b) increase the number of authorized shares of Company Common Stock consistent with the authorization of the Company Board as of the date hereof and Section 4.2(b) of the Company Disclosure Schedule.

Section 8. ADDITIONAL CONDITIONS PRECEDENT TO OBLIGATION OF THE COMPANY

The obligations of the Company 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 the Company, at or prior to the Closing, of each of the following conditions:

8.1 **Accuracy of Representations**. The Parent Fundamental Representations shall have been true and correct in all material respects as of the date of this Agreement and shall be true and correct in all material respects on and as of the Closing Date with the same force and effect as if made on and as of such date (except to the extent such representations and warranties are specifically made as of a particular date, in which case such representations and warranties shall be true and correct in all material respects as of such date). The representations and warranties of Parent and Merger Sub contained in this Agreement (other than the Parent Fundamental Representations) shall have been true and correct as of the date of this Agreement and shall be true and correct on and as of the Closing Date with the same force and effect as if made on the Closing Date except (a) in each case, or in the aggregate, where the failure to be true and correct would not reasonably be expected to have a Parent Material Adverse Effect (without giving effect to any references therein to any Parent Material Adverse Effect or other materiality qualifications), or (b) for those representations and warranties which address matters only as of a particular date (which representations shall have been true and correct, subject to the qualifications as set forth in the preceding clause (a), as of such particular date) (it being understood that, for purposes of determining the accuracy of such representations and warranties, any update of or modification to the Parent Disclosure Schedule made or purported to have been made after the date of this Agreement shall be disregarded).

8.2 **Performance of Covenants**. Parent and Merger Sub shall have performed or complied with in all material respects all of their agreements and covenants required to be performed or complied with by each of them under this Agreement at or prior to the Effective Time.

8.3 **Documents**. The Company shall have received the following documents, each of which shall be in full force and effect:

(a) a certificate executed by the Chief Executive Officer or Chief Financial Officer of Parent confirming that the conditions set forth in Sections 8.1, 8.2, and 8.4 have been duly satisfied;

(b) the Parent Outstanding Shares Certificate; and

(c) a written resignation, in a form reasonably satisfactory to the Company, dated as of the Closing Date and effective as of the Closing, executed by each of the directors of Parent who are not to continue as directors of Parent after the Closing pursuant to Section 5.14 hereof.

8.4 **No Parent Material Adverse Effect**. Since the date of this Agreement, there shall not have occurred any Parent Material Adverse Effect.

8.5 **Parent Net Cash**. Parent Net Cash as of the date of the Parent Stockholder Meeting is not less than $30,000,000.

Section 9. TERMINATION

9.1 **Termination**. This Agreement may be terminated prior to the Effective Time (whether before or after approval of the Company Stockholder Matters by the Company's stockholders and whether before or after approval of the Parent Stockholder Matters by Parent's stockholders, unless otherwise specified below):

(a) by mutual written consent of Parent and the Company;

(b) by either Parent or the Company if the Contemplated Transactions shall not have been consummated by November 15, 2019 (the "***End Date***"); *provided*, *however*, that the right to terminate this

Agreement under this Section 9.1(b) shall not be available to the Company, on the one hand, or to Parent, on the other hand, if such Party's action or failure to act has been a principal cause of the failure of the Contemplated Transactions to occur on or before the End Date and such action or failure to act constitutes a breach of this Agreement;

(c) by either Parent or the Company if a court of competent jurisdiction or other Governmental Body shall have issued a final and nonappealable order, decree or ruling, or shall have taken any other action, having the effect of permanently restraining, enjoining or otherwise prohibiting the Contemplated Transactions;

(d) by either Parent or the Company if (i) the Parent Stockholders' Meeting (including any adjournments and postponements thereof) shall have been held and completed and Parent's stockholders shall have taken a final vote on the Parent Stockholder Matters and (ii) the Closing Parent Stockholder Matters shall not have been approved at the Parent Stockholders' Meeting (or at any adjournment or postponement thereof) by the Closing Parent Stockholder Vote;

(e) by the Company (at any time prior to the approval of the Closing Parent Stockholder Matters by the Closing Parent Stockholder Vote) if a Parent Triggering Event shall have occurred;

(f) by the Company, upon a breach of any representation, warranty, covenant or agreement set forth in Section 4.4 or Section 5.3(d) of this Agreement by Parent or Merger Sub or if any representation or warranty of Parent or Merger Sub shall have become inaccurate, in either case, such that the conditions set forth in Section 8.1 or Section 8.2 would not be satisfied as of the time of such breach or as of the time such representation or warranty shall have become inaccurate; *provided* that the Company is not then in material breach of any representation, warranty, covenant or agreement under this Agreement; *provided*, *further*, that if such inaccuracy in Parent's or Merger Sub's representations and warranties or breach by Parent or Merger Sub is curable by the End Date by Parent or Merger Sub, then this Agreement shall not terminate pursuant to this Section 9.1(f) as a result of such particular breach or inaccuracy until the expiration of a 30-day period commencing upon delivery of written notice from the Company to Parent or Merger Sub of such breach or inaccuracy and its intention to terminate pursuant to this Section 9.1(f) (it being understood that this Agreement shall not terminate pursuant to this Section 9.1(f) as a result of such particular breach or inaccuracy if such breach by Parent or Merger Sub is cured prior to such termination becoming effective);

(g) by Parent, upon a breach of any representation, warranty, covenant or agreement set forth in this Agreement by the Company or if any representation or warranty of the Company shall have become inaccurate, in either case, such that the conditions set forth in Section 7.1 or Section 7.2 would not be satisfied as of the time of such breach or as of the time such representation or warranty shall have become inaccurate; *provided* that Parent is not then in material breach of any representation, warranty, covenant or agreement under this Agreement; *provided*, *further*, that if such inaccuracy in the Company's representations and warranties or breach by the Company is curable by the End Date by the Company then this Agreement shall not terminate pursuant to this Section 9.1(g) as a result of such particular breach or inaccuracy until the expiration of a 30-day period commencing upon delivery of written notice from Parent to the Company of such breach or inaccuracy and its intention to terminate pursuant to this Section 9.1(g) (it being understood that this Agreement shall not terminate pursuant to this Section 9.1(g) as a result of such particular breach or inaccuracy if such breach by the Company is cured prior to such termination becoming effective);

(h) by Parent, at any time, if (i) Parent has received a Superior Offer, (ii) Parent has complied with its obligations under Section 5.3(d) in order to accept such Superior Offer, (iii) Parent concurrently terminates this Agreement and enters into a Permitted Alternative Agreement with respect to such Superior Offer and (iv) Parent pays to the Company the amount contemplated by Section 9.3(e);

(i) by Parent, if the Company Audited Financial Statements have not been provided by the Company to Parent within 15 days after the date hereof;

(j) by the Company if, at any time after the date hereof and prior to the Closing, Parent Net Cash has fallen below $30,000,000; *provided* that this Agreement shall not terminate pursuant to this Section 9.1(j) until the expiration of a 10-day period commencing upon delivery of written notice from the Company to Parent of its intention to terminate pursuant to this Section 9.1(j) (it being understood that this Agreement shall not terminate pursuant to this Section 9.1(j) if Parent Net Cash is more than $30,000,000 prior to such termination becoming effective);

(k) by Parent, if the Funding Agreement is terminated; or

(l) by Parent, if (i) the conditions set forth in Sections 6 and 8 (other than those conditions that by their nature are to be satisfied by actions taken at the Closing) have been satisfied, (ii) Parent has irrevocably confirmed by notice to the Company that all conditions set forth in Sections 6 and 8 have been satisfied as of the date of such notice (other than those conditions that by their nature are to be satisfied by actions taken at the Closing) and that it is willing to waive any unsatisfied conditions in Section 7 (other than the conditions set forth in Section 7.9 and those conditions that by their nature are to be satisfied by actions taken at the Closing) and (iii) the Merger shall not have been consummated within three Business Days after the delivery of such notice.

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 (a) this Section 9.2, Section 5.10, Section 9.3, Section 10 and the definitions of the defined terms in such Sections shall survive the termination of this Agreement and shall remain in full force and effect, and (b) the termination of this Agreement and the provisions of Section 9.3 shall not relieve any Party of any liability for fraud or 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) Except as set forth in this Section 9.3, Section 5.8(d), and Section 5.11, 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 that (i) the Company shall pay up to and including $150,000 of the total usual and customary fees to file the Proxy Statement on this Merger with the SEC, and any amendments and supplements thereto, as well as any costs associated with printing these documents, with Parent being responsible for any and all such filing and printing expenses in excess of the amount paid by Company pursuant to this sub-section (a)(i) and (ii) Parent and Company shall each pay 50% of the fees and expenses incurred in relation to the drafting of the Proxy Statement and any amendments and supplements thereto. It is understood and agreed that all fees and expenses incurred or to be incurred by the Company in connection with the Contemplated Transactions and preparing, negotiating and entering into this Agreement and the performance of its obligations under this Agreement shall be paid by the Company in cash at or prior to the Closing.

(b) If (i) this Agreement is terminated by the Company pursuant to Section 9.1(e), (ii) an Acquisition Proposal with respect to Parent shall have been publicly announced or disclosed to Parent or the Parent Board after the date of this Agreement but prior to the termination of this Agreement and (iii) within 9 months after the date of such termination, Parent consummates a Subsequent Transaction in respect of the Acquisition Proposal referred to in clause (ii), then Parent shall pay to the Company an amount equal to $1,000,000 (the "***Company Termination Fee***") within ten Business Days of consummation of such Subsequent Transaction.

(c) If this Agreement is terminated (x) by Parent pursuant to Section 9.1(k) or (y) by the Company at a time at which Parent had the right to terminate the Agreement pursuant to Section 9.1(k), then the Company shall pay to Parent an amount equal to $1,000,000 (the "***Parent Termination Fee***") within ten Business Days of such termination.

(d) If (i) this Agreement is terminated (x) by Parent pursuant to Section 9.1(l) or (y) by the Company at a time at which Parent had the right to terminate the Agreement pursuant to Section 9.1(l), the Company shall pay to Parent within ten Business Days of such termination the Parent Termination Fee.

(e) If this Agreement is terminated by Parent pursuant to Section 9.1(h), Parent shall pay to the Company within ten Business Days of such termination the Company Termination Fee.

(f) Any Company Termination Fee or Parent Termination Fee due under this Section 9.3 shall be paid by wire transfer of same day funds. If a Party fails to pay when due any amount payable by it under this Section 9.3, then 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 Company in full) at a rate per annum equal to the "prime rate" (as published in *The Wall Street Journal* or any successor thereto) in effect on the date such overdue amount was originally required to be paid.

(g) The Parties agree that, (i) subject to Section 9.2, payment of the Company Termination Fee shall, in the circumstances in which it is owed in accordance with the terms of this Agreement, constitute the sole and exclusive remedy of the Company following the termination of this Agreement, it being understood that in no event shall Parent be required to pay the amounts payable pursuant to this Section 9.3 on more than one occasion and (ii) following payment of the Company Termination Fee (x) Parent shall have no further liability to the Company in connection with or arising out of this Agreement or the termination thereof, any breach of this Agreement by Parent giving rise to such termination, or the failure of the Contemplated Transactions to be consummated, (y) neither the Company nor any of its Affiliates shall be entitled to bring or maintain any other claim, action or proceeding against Parent or Merger Sub or seek to obtain any recovery, judgment or damages of any kind against such Parties (or any partner, member, stockholder, director, officer, employee, Subsidiary, Affiliate, agent or other Representative of such Parties) in connection with or arising out of this Agreement or the termination thereof, any breach by any such Parties giving rise to such termination or the failure of the Contemplated Transactions to be consummated and (z) the Company and its Affiliates shall be precluded from any other remedy against Parent, Merger Sub and their respective Affiliates, at law or in equity or otherwise, in connection with or arising out of this Agreement or the termination thereof, any breach by such Party giving rise to such termination or the failure of the Contemplated Transactions to be consummated; *provided*, *however*, that nothing in this Section 9.3(g) shall limit the rights of Parent and Merger Sub under Section 10.11.

(h) The Parties agree that, (i) subject to Section 9.2, payment of the Parent Termination Fee shall, in the circumstances in which it is owed in accordance with the terms of this Agreement, constitute the sole and exclusive remedy of Parent following the termination of this Agreement, it being understood that in no event shall the Company be required to pay the amounts payable pursuant to this Section 9.3 on more than one occasion and (ii) following payment of the Parent Termination Fee (x) the Company shall have no further liability to Parent in connection with or arising out of this Agreement or the termination thereof, any breach of this Agreement by the Company giving rise to such termination, or the failure of the Contemplated Transactions to be consummated, (y) neither Parent nor any of its Affiliates shall be entitled to bring or maintain any other claim, action or proceeding against the Company or seek to obtain any recovery, judgment or damages of any kind against such Parties (or any partner, member, stockholder, director, officer, employee, Subsidiary, Affiliate, agent or other Representative of such Parties) in connection with or arising out of this Agreement or the termination thereof, any breach by any such Parties giving rise to such termination or the failure of the Contemplated Transactions to be consummated and (z) Parent and its Affiliates shall be precluded from any other remedy against the Company and its Affiliates, at law or in equity or otherwise, in connection with or arising out of this Agreement or the termination thereof, any breach by such Party giving rise to such termination or the failure of the Contemplated Transactions to be consummated; *provided*, *however*, that nothing in this Section 9.3(h) shall limit the rights of the Company under Section 10.11.

(i) 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 Company in the circumstances in which such amount is payable.

Section 10. MISCELLANEOUS PROVISIONS

10.1 **Non-Survival of Representations and Warranties**. The representations and warranties of the Company, Parent and Merger Sub 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 shall survive the Effective Time.

10.2 **Amendment**. This Agreement may be amended with the approval of the respective boards of directors of the Company, Merger Sub and Parent at any time (whether before or after obtaining the Required Company Stockholder Vote or before or after obtaining the Required Parent Stockholder Vote); *provided*, *however*, that after any such approval of this Agreement by a Party's stockholders, no amendment shall be made which by Law requires further approval of such stockholders 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 the Company, Merger Sub and Parent.

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 Electronic Transmission**. This Agreement, the Company Disclosure Schedule, the Parent Disclosure Schedule 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 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 proceeding between any of the Parties arising out of or relating to this Agreement or any of the Contemplated Transactions, each of the Parties: (a) irrevocably and unconditionally consents and submits to the exclusive jurisdiction and venue of the Court of Chancery of the State of Delaware or, to the extent such court does not have subject matter jurisdiction, the United States District Court for the District of Delaware or, to the extent that neither of the foregoing courts has jurisdiction, the Superior Court of the State of Delaware; (b) agrees that all claims in respect of such action or proceeding shall be heard and determined exclusively in accordance with clause (a) of this Section 10.5; (c) waives any objection to laying venue in any such action or proceeding in such courts; (d) waives any objection that such courts are an

inconvenient forum or do not have jurisdiction over any Party; (e) agrees that service of process upon such Party in any such action or proceeding shall be effective if notice is given in accordance with Section 10.8 of this Agreement; and (f) irrevocably and unconditionally 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, the prevailing Party in such action or suit (as determined by a court of competent jurisdiction) shall be entitled to recover its reasonable out-of-pocket attorneys' fees and all other reasonable costs and expenses incurred in such action or suit.

10.7 **Assignability**. This Agreement shall be binding upon, and shall be enforceable by and inure solely to the benefit of, the Parties and their respective successors and permitted 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 the other Party, and any attempted assignment or delegation of this Agreement or any of such rights or obligations by such Party without the other Party's prior written consent shall be void and of no effect.

10.8 **Notices**. All notices and other communications hereunder shall be in writing and shall be deemed to have been duly delivered and received hereunder (a) one Business Day after being sent for next Business Day delivery, fees prepaid, via a reputable international overnight courier service, (b) upon delivery in the case of delivery by hand, or (c) on the date delivered in the place of delivery if sent by email (with a written or electronic confirmation of delivery) prior to 5:00 p.m. San Diego time, otherwise on the next succeeding Business Day, in each case to the intended recipient as set forth below:

if to Parent or Merger Sub:

Vical Incorporated
10390 Pacific Center Court
San Diego, CA 92121-4340
Attention: Vijay Samant
Email: vbsamant@vical.com

with a copy to (which shall not constitute notice):

Cooley LLP
4401 Eastgate Mall
San Diego, CA 92121
Attention: Rama Padmanabhan
Email: rama@cooley.com

if to the Company:

Brickell Biotech, Inc.
5777 Central Avenue, Suite 102
Boulder, CO 80301 Attention: Andrew Sklawer
Email: asklawer@brickellbio.com

with a copy to (which shall not constitute notice):

Mayer Brown LLP
1221 Avenue of the Americas
New York, NY 10020
Attention: Anna T. Pinedo
Email: apinedo@mayerbrown.com

10.9 **Cooperation**. Each Party agrees to cooperate fully with the other Party and to execute and deliver such further documents, certificates, agreements and instruments and to take such other actions as may be

reasonably requested by the other Party to evidence or reflect the Contemplated Transactions and to carry out the intent and purposes of this Agreement.

10.10 **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 agree that the court making such determination shall 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 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.

10.11 **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 agree that irreparable damage for which monetary damages, even if available, would not be an adequate remedy, would occur in the event that any Party does not perform the provisions of this Agreement (including failing to take such actions as are required of it hereunder to consummate this Agreement) in accordance with its specified terms or otherwise breaches such provisions. Accordingly, the Parties acknowledge and agree that the Parties shall be entitled to an injunction, specific performance and other equitable relief to prevent breaches of this Agreement and to enforce specifically the terms and provisions hereof, in addition to any other remedy to which they are entitled at law or in equity. Each of the Parties agrees that it will not oppose the granting of an injunction, specific performance or other equitable relief on the basis that any other Party has an adequate remedy at law or that any award of specific performance is not an appropriate remedy for any reason at law or in equity. Any Party seeking an injunction or injunctions to prevent breaches of this Agreement shall not be required to provide any bond or other security in connection with any such order or injunction.

10.12 **No Third Party Beneficiaries**. Nothing in this Agreement, express or implied, is intended to or shall confer upon any Person (other than the Parties, the COBRA Employees to the extent of their respective rights in Section 5.7 and the D&O Indemnified Parties to the extent of their respective rights pursuant to Section 5.8) any right, benefit or remedy of any nature whatsoever under or by reason of this Agreement.

10.13 **Construction**.

(a) References to “cash,” “dollars” or “$” are to U.S. dollars.

(b) 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.

(c) The Parties have participated jointly in the negotiating and drafting of this Agreement and 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, and no presumption or burden of proof shall arise favoring or disfavoring any Party by virtue of the authorship of any provision of this Agreement.

(d) 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.”

(e) Except as otherwise indicated, all references in this Agreement to "Sections," "Exhibits" and "Schedules" are intended to refer to Sections of this Agreement and Exhibits and Schedules to this Agreement, respectively.

(f) Any reference to legislation or to any provision of any legislation shall include any modification, amendment,re-enactment thereof, any legislative provision substituted therefore and all rules, regulations, and statutory instruments issued or related to such legislations.

(g) The bold-faced headings and table of contents 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.

(h) Each of "delivered" or "made available" means, with respect to any documentation, that prior to 11:59 p.m. (San Diego time) on the date that is two calendar days prior to the date of this Agreement (i) a copy of such material has been posted to and made available by a Party to the other Party and its Representatives in the electronic data room maintained by such disclosing Party or (ii) such material is disclosed in the Parent SEC Documents filed with the SEC prior to the date hereof and publicly made available on the SEC's Electronic Data Gathering Analysis and Retrieval system.

(i) Whenever the last day for the exercise of any privilege or the discharge of any duty hereunder shall fall upon a Saturday, Sunday, or any date on which banks in San Diego, California are authorized or obligated by Law to be closed, the Party having such privilege or duty may exercise such privilege or discharge such duty on the next succeeding day which is a regular Business Day.

(*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.

VICAL INCORPORATED

By: /s/ Vijay Samant
Name: Vijay Samant
Title: President and CEO

[***Signature Page to Merger Agreement***]

IN WITNESS WHEREOF, the Parties have caused this Agreement to be executed as of the date first above written.

VICTORY SUBSIDIARY, INC.

By: /s/ Anthony Ramos
Name: Anthony Ramos
Title: Chief Financial Officer

[***Signature Page to Merger Agreement***]

IN WITNESS WHEREOF, the Parties have caused this Agreement to be executed as of the date first above written.

BRICKELL BIOTECH, INC.

By: /s/ Robert Brown
Name: Robert Brown
Title: CEO

[***Signature Page to Merger Agreement***]

EXHIBIT A

CERTAIN DEFINITIONS

(a) For purposes of this Agreement (including this Exhibit 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 the Company, on the one hand, or Parent, on the other hand, to the other Party) that would reasonably be expected to lead to an Acquisition Proposal.

"***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 the Company or any of its Affiliates, on the one hand, or by or on behalf of Parent or any of its Affiliates, on the other hand, to the other Party) contemplating or otherwise relating to any Acquisition Transaction with such Party.

"***Acquisition Transaction***" means any transaction or series of related transactions involving:

(i) 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 entity; (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; or

(ii) 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.

Notwithstanding the foregoing, the Concurrent Financing will not be considered an "Acquisition Transaction" with respect to the Company.

"***Affiliate***" of a Person means any other Person that directly or indirectly, through one or more intermediaries, controls, is controlled by, or is under common control with, such Person. The term "control" (including the terms "controlled by" and "under common control with") means the possession, directly or indirectly, of the power 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.

"***Agreement***" means the Agreement and Plan of Merger and Reorganization to which this Exhibit A is attached, as it may be amended from time to time.

"***Antitrust Laws***" shall mean all applicable Laws and regulations (including non-U.S. laws and regulations) issued by a Governmental Body that are designed or intended to preserve or protect competition, prohibit and restrict agreements in restraint of trade or monopolization, attempted monopolization, restraints of trade and abuse of a dominant position, or to prevent acquisitions, mergers or other business combinations and similar transactions, the effect of which may be to lessen or impede competition or to tend to create or strengthen a dominant position or to create a monopoly.

"***Business Day***" means any day other than a Saturday, Sunday or other day on which banks in San Diego, California are authorized or obligated by Law to be closed.

"***Code***" means the Internal Revenue Code of 1986, as amended.

"***Company Associate***" means any current or former employee, independent contractor, officer or director of the Company.

"***Company Board***" means the board of directors of the Company.

"***Company Capital Stock***" means the Company Common Stock and the Company Preferred Stock.

"***Company Common Stock***" means the Common Stock, $0.0001 par value per share, of the Company.

"***Company Contract***" means any Contract: (a) to which the Company is a Party; (b) by which the Company or any Company IP or any other asset of the Company is or may become bound or under which the Company has, or may become subject to, any obligation; or (c) under which the Company has or may acquire any right or interest.

"***Company Convertible Notes***" means the unsecured convertible promissory notes of the Company, including those listed on **Exhibit J**.

"***Company ERISA Affiliate***" means any corporation or trade or business (whether or not incorporated) which is (or at any relevant time was) treated with the Company as a single employer within the meaning of Section 414 of the Code.

"***Company Fundamental Representations***" means the representations and warranties of the Company set forth in Sections 2.1 (Due Organization; No Subsidiaries), 2.3 (Authority; Binding Nature of Agreement), 2.4 (Vote Required), 2.6 (Capitalization) and 2.20 (No Financial Advisors).

"***Company IP***" means all Intellectual Property Rights that are owned or purported to be owned by the Company.

"***Company 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 a Company Material Adverse Effect, has or would reasonably be expected to have a material adverse effect on the business, condition (financial or otherwise), assets, liabilities or results of operations of the Company; *provided*, *however*, that Effects arising or resulting from the following shall not be taken into account in determining whether there has been a Company Material Adverse Effect: (a) general business or economic conditions affecting the industry in which the Company operates, (b) acts of war, armed hostilities or terrorism, (c) changes in financial, banking or securities markets, (d) any change in, or any compliance with or action taken for the purpose of complying with, any Law or GAAP (or interpretations of any Law or GAAP) or (e) resulting from the taking of any action required to be taken by this Agreement; except in each case with respect to clauses (a) through (c), to the extent disproportionately affecting the Company, taken as a whole, relative to other similarly situated companies in the industries in which the Company operates.

"***Company Net Working Capital***" means the sum of (a) the Company's cash, cash equivalents and marketable securities (other than the proceeds of the Concurrent Financing), in each case as of the date of the Parent Stockholder Meeting, determined in a manner consistent with the manner in which such items were historically determined and in accordance with the Company Financials and GAAP, plus (b) the Company's accounts receivable as of the date of the Parent Stockholder Meeting determined in a manner consistent with the manner in which such items were historically determined and in accordance with the Company Financials and GAAP, minus (c) the sum of the Company's accounts payable and accrued expenses as of the date of the Parent Stockholder Meeting determined in a manner consistent with the manner in which such items were historically determined and in accordance with the Company Financials and GAAP or as otherwise designated on **Exhibit I-2**, minus (d) the aggregate amount of all future payments under the Company's notes payable and indebtedness for borrowed money outstanding as of the date of the Parent Stockholder Meeting.

"***Company Options***" means options or other rights to purchase shares of Company Capital Stock issued by the Company.

"***Company Stockholder Matters***" means (i) adopting and approving this Agreement and the Contemplated Transactions, (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 true and correct 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.

"***Company Unaudited Interim Balance Sheet***" means the unaudited consolidated balance sheet of the Company for the period ended March 31, 2019 provided to Parent prior to the date of this Agreement.

"***Company Warrant***" means the warrants to purchase capital stock of the Company, including those listed on**Exhibit E**.

"***Confidentiality Agreement***" means the Confidentiality Agreement, dated as of January 31, 2019, between the Company and Parent.

"***Consent***" means any approval, consent, ratification, permission, waiver or authorization (including any Governmental Authorization).

"***Contemplated Transactions***" means the Merger and the other transactions and actions contemplated by this Agreement, including the Concurrent Financing and the Reverse Split.

"***Contract***" means, with respect to any Person, any agreement, contract, subcontract, lease (whether for real or personal property), mortgage, license, sublicense or other 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.

"***DGCL***" means the General Corporation Law of the State of Delaware.

"***Effect***" means any effect, change, event, circumstance, or development.

"***Encumbrance***" means any lien, pledge, hypothecation, charge, mortgage, security interest, lease, license, option, easement, reservation, servitude, adverse title, claim, infringement, interference, option, right of first refusal, preemptive right, community property interest or restriction or encumbrance 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).

"*Enforceability Exceptions*" means the (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.

"***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 Law 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.

"***Exchange Ratio***" means, subject to Section 1.5(g), the following ratio (rounded to four decimal places): the quotient obtained by dividing (a) the Company Merger Shares by (b) the Company Outstanding Shares, in which:

- "***Aggregate Valuation***" means the sum of (a) the Company Valuation, plus (b) the Parent Valuation.
- "***Company Valuation***" means $60,000,000; *provided*, that (a) if the Company Net Working Capital as determined pursuant to Section 1.9 is less than -$10,200,000, then the Company Valuation shall be reduced by one dollar for each dollar that the Company Net Working Capital is less than -$10,200,000 and (b) if the Company Net Working Capital as determined pursuant to Section 1.9 is more than -$9,200,000, then the Company Valuation shall be increased by one dollar for each dollar that the Company Net Working Capital is more than -$9,200,000. For purposes of this definition, Company Net Working Capital shall be rounded down to the nearest whole dollar.
- "***Company Allocation Fraction***" the quotient (rounded to two decimal places) determined by dividing (i) the Company Valuation*by* (ii) the Aggregate Valuation.
- "***Company Merger Shares***" means the product determined by multiplying (i) the Post-Closing Parent Shares*by* (ii) the Company Allocation Fraction.
- "***Company Outstanding Shares***" means the total number of shares of Company Capital Stock outstanding immediately prior to the Effective Time expressed on a fully-diluted and as-converted to Company Common Stock basis, assuming, without limitation or duplication, (i) calculated in the case of clause (i) based on the treasury stock method, the issuance of shares of Company Capital Stock in respect of all Company Options, Company Warrants, Company Convertible Notes and other outstanding options, restricted stock awards, warrants, convertible notes or rights to receive such shares, in each case, outstanding as of immediately prior to the Effective Time (assuming cashless exercise using the implied share price based on proposed equity value in this transaction for purposes of the treasury stock method calculation) whether conditional or unconditional and including any outstanding options, warrants or rights triggered by or associated with the consummation of the Merger (but excluding any shares of Company Capital Stock reserved for issuance other than with respect to outstanding Company Warrants, Company Options or Company Convertible Notes (for the avoidance of doubt including any Company Convertible Notes issued following the date hereof pursuant to the Note Purchase Agreement up to an aggregate amount of $7.5 million) as of immediately prior to the Effective Time); and (ii) without applying the treasury stock method, (A) the issuance of shares of Parent Common Stock in respect of the Parent Warrants to be issued in connection with the Concurrent Financing and (B) unless otherwise consented to by Parent or pursuant to the Note Purchase Agreement (up to an aggregate amount of $7.5 million), the issuance of shares of Company Capital Stock or Parent Common Stock in respect of (1) 75% of any Company Options and (2) any convertible debt, warrants or other equity securities of Company or Parent, in the case of (1) and (2), that the Company, during the Pre-Closing Period, issues or commits to issue (which shall, with respect to Company Options, be in accordance with Section 4.2(b) of the Company Disclosure Schedule). The definition of "Company Outstanding Shares" and the definition of "Parent Outstanding

Shares" should be read with, and interpreted in a manner consistent with, the schedule attached hereto as **Schedule 1**.

- "***Parent Allocation Fraction***" means the quotient (rounded to two decimal places) determined by dividing (i) the Parent Valuation *by* (ii) the Aggregate Valuation.
- "***Parent Outstanding Shares***" means the total number of shares of Parent Common Stock outstanding immediately prior to the Effective Time expressed on a fully-diluted basis and using the treasury stock method, but assuming, without limitation or duplication, (i) the issuance of shares of Parent Common Stock pursuant to that certain Letter Agreement dated July 16, 2018, by and between Parent and MTS (to the extent authorized by Parent) and (ii) the issuance of shares of Parent Common Stock in respect of all Parent Options, Parent Warrants and other outstanding options, restricted stock awards, warrants or rights to receive such shares, in each case, outstanding as of immediately prior to the Effective Time (assuming cashless exercise using the Parent Closing Price for purposes of the treasury stock method calculation), whether conditional or unconditional and including any outstanding options, warrants or rights triggered by or associated with the consummation of the Merger, (but excluding any shares of Parent Common Stock reserved for issuance other than with respect to outstanding Parent Options and Parent Warrants as of immediately prior to the Effective Time). No out-of-the-money Parent Options or Parent Warrants shall be included in the total number of shares of Parent Common Stock outstanding for purposes of determining the Parent Outstanding Shares. The definition of "Company Outstanding Shares" and the definition of "Parent Outstanding Shares" should be read with, and interpreted in a manner consistent with, the schedule attached hereto as **Schedule 1**.
- "***Parent Valuation***" means $40,000,000; *provided*, that (a) if the Parent Net Cash as determined pursuant to Section 1.9 is less than $34,200,000, then the Parent Valuation shall be reduced by one dollar for each dollar that the Parent Net Cash is less than $34,200,000 and (b) if the Parent Net Cash as determined pursuant to Section 1.9 is more than $35,200,000, then the Parent Valuation shall be increased by one dollar for each dollar that the Parent Net Cash is more than $35,200,000. For purposes of this definition, Parent Net Cash shall be rounded down to the nearest whole dollar.
- "***Post-Closing Parent Shares***" means the quotient determined by dividing (i) the Parent Outstanding Shares *by* (ii) the Parent Allocation Fraction.

"***GAAP***" means generally accepted accounting principles and practices in effect from time to time within the United States applied consistently throughout the period involved.

"***Governmental Authorization***" means any: (a) permit, license, certificate, franchise, permission, variance, exception, order, 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 Law; 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 quasi-governmental authority of any nature (including any governmental division, department, agency, commission, bureau, instrumentality, official, ministry, fund, foundation, center, organization, unit, body or Entity and any court or other tribunal, and for the avoidance of doubt, any taxing authority); or (d) self-regulatory organization (including Nasdaq).

"***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 without limitation, crude oil or any fraction thereof, and petroleum products or by-products.

"***Intellectual Property Rights***" means and includes all past, present, and future rights of the following types: (a) rights associated with works of authorship, including exclusive exploitation rights, copyrights, moral rights, software, databases, and mask works; (b) trademarks, service marks, trade dress, trade names and other source identifiers, domain names and URLs and similar rights and any goodwill associated therewith; (c) rights associated with trade secrets, know how, inventions, invention disclosures, methods, processes, protocols, specifications, techniques and other forms of technology; (d) patents and industrial property rights; (e) other similar proprietary rights in intellectual property of every kind and nature; (f) rights of privacy and publicity; and (g) all registrations, renewals, extensions, statutory invention registrations, provisionals, continuations, continuations-in-part, provisionals, divisions, or reissues of, and applications for, any of the rights referred to in clauses "(a)" through "(f)" above (whether or not in tangible form and including all tangible embodiments of any of the foregoing, such as samples, studies and summaries), along with all rights to prosecute and perfect the same through administrative prosecution, registration, recordation or other administrative proceeding, and all causes of action and rights to sue or seek other remedies arising from or relating to the foregoing.

"***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 such individual's employment responsibilities. 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.

"***Law***" means any federal, state, national, 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 (including under the authority of Nasdaq or the Financial Industry Regulatory Authority).

"***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.

"***Merger Sub Board***" means the board of directors of Merger Sub.

"***MTS***" means MTS Partners, L.P.

"***Nasdaq***" means the Nasdaq Stock Market, including the Nasdaq Global Select Market or such other Nasdaq market on which shares of Parent Common Stock are then listed.

"***Note Purchase Agreement***" means the Note and Warrant Purchase Agreement, dated March 18, 2019, among to the Company and the persons listed on Exhibit A thereto, as in effect on the date hereof (other than any additions to Exhibit A thereto during the Pre-Closing Period).

"***Ordinary Course of Business***" means, in the case of each of the Company and Parent, such actions taken in the ordinary course of its normal operations and consistent with its past practices.

"***Organizational Documents***" means, with respect to any Person (other than an individual), (a) the certificate or articles of association or incorporation or organization or limited partnership or limited liability company, and any joint venture, limited liability company, operating or partnership agreement and other similar documents adopted or filed in connection with the creation, formation or organization of such Person, and (b) all bylaws, regulations and similar documents or agreements relating to the organization or governance of such Person, in each case, as amended or supplemented.

"***Parent Associate***" means any current or former employee, independent contractor, officer or director of Parent.

"***Parent Balance Sheet***" means the audited balance sheet of Parent as of December 31, 2018 (the "***Parent Balance Sheet Date***"), included in Parent's Report on Form 10-K for the year ended December 31, 2018, as filed with the SEC.

"***Parent Board***" means the board of directors of Parent.

"***Parent Change in Circumstance***" means a change in circumstances (other than an Acquisition Proposal) that affects the business, assets or operations of Parent that occurs or arises after the date of this Agreement and that was neither known to Parent or Parent Board nor reasonably foreseeable as of date of this Agreement.

"***Parent Closing Price***" means the volume weighted average closing trading price of a share of Parent Common Stock on Nasdaq for the five consecutive trading days ending five trading days immediately prior to the date upon which the Merger becomes effective.

"***Parent Common Stock***" means the Common Stock, $0.01 par value per share, of Parent.

"***Parent Contract***" means any Contract: (a) to which Parent is a party; (b) by which Parent or any Parent IP or any other asset of Parent is or may become bound or under which Parent has, or may become subject to, any obligation; or (c) under which Parent has or may acquire any right or interest.

"***Parent ERISA Affiliate***" means any corporation or trade or business (whether or not incorporated) which is (or at any relevant time was) treated with Parent or any of its Subsidiaries as a single employer within the meaning of Section 414 of the Code.

"***Parent Fundamental Representations***" means the representations and warranties of Parent and Merger Sub set forth inSections 3.1 (Due Organization; Subsidiaries), 3.3 (Authority; Binding Nature of Agreement),3.4 (Vote Required), 3.6 (Capitalization) and 3.21 (No Financial Advisors).

"***Parent IP***" means all Intellectual Property Rights that are owned or purported to be owned by Parent or its Subsidiaries.

"***Parent 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 a Parent Material Adverse Effect, has or would reasonably be expected to have a material adverse effect on the business, condition (financial or otherwise), assets, liabilities or results of operations of Parent; *provided*, *however*, that Effects arising or resulting from the following shall not be taken into account in determining whether there has been a Parent Material Adverse Effect: (a) general business or economic conditions affecting the industry in which Parent operates, (b) acts of war, armed hostilities or terrorism, (c) changes in financial, banking or securities markets, (d) the taking of any action required to be taken by this Agreement, (e) any change in the stock price or trading volume of Parent Common Stock (it being understood, however, that any Effect causing or contributing to any change in stock price or trading volume of Parent Common Stock may be taken into account in determining whether a Parent Material Adverse Effect has occurred, unless such Effects are otherwise excepted from this definition), (f) the failure of Parent to meet internal or analysts' expectations or projections or the results of operations of Parent; (g) any clinical trial programs or studies, including any adverse data, event or outcome arising out of or related to any such programs or studies, (h) any change in, or any compliance with or action taken for the purpose of complying with, any Law or GAAP (or interpretations of any Law or GAAP), (i) resulting from the announcement of this Agreement or the pendency of the Contemplated Transactions, or (j) resulting from the taking of any action required to be taken by this Agreement, except in each case with respect to clauses (a) through (c), to the extent disproportionately affecting Parent relative to other similarly situated companies in the industries in which Parent operates.

"***Parent Net Cash***" means, without duplication, (a) Parent's cash, cash equivalents and marketable securities as of as of the date of the Parent Stockholder Meeting determined in a manner consistent with the manner in which such items were historically determined and in accordance with the financial statements contained or incorporated by reference in the Parent SEC Documents and GAAP; plus (b) Parent's accounts receivable as of the date of the Parent Stockholder Meeting determined in a manner consistent with the manner in which such items were historically determined and in accordance with the financial statements contained or incorporated by reference in the Parent SEC Documents and GAAP; minus (c) the sum of Parent's accounts payable and accrued expenses (without duplication of any expenses otherwise accounted for in the definition of Parent Net Cash) as of the date of the Parent Stockholder Meeting determined in a manner consistent with the manner in which such items were historically determined and in accordance with the financial statements contained or incorporated by reference in the Parent SEC Documents and GAAP; minus (d) Parent Transaction Costs (unless paid prior to the Effective Time or otherwise accounted for in the definition of Parent Net Cash); plus (e) unless otherwise accounted for in Company Net Working Capital, the portion of the costs and expenses payable by the Company pursuant to Section 9.3(a)(i) and (ii) that are paid by Parent (and not reimbursed by the Company) prior to the date of the Parent Stockholders' Meeting.

"***Parent Options***" means options or other rights to purchase shares of Parent Common Stock issued by Parent.

"***Parent RSUs***" means any restricted stock unit award granted pursuant to the Parent Stock Plan or otherwise.

"***Parent Stock Plan***" means, as amended, the Amended and Restated Stock Incentive Plan of Parent.

"***Parent Transaction Costs***" means, without duplication, the aggregate amount of costs and expenses of Parent incurred in connection with the negotiation, preparation and execution of this Agreement and the consummation of the Contemplated Transactions, including: (a) any brokerage fees and commissions, finders' fees or financial advisory fees, any fees and expenses of counsel or accountants payable by Parent and any transaction bonuses or similar items in connection with the Contemplated Transactions; (b) any bonus, severance, change-in-control payments or similar payment obligations (including payments with "single-trigger" provisions triggered at and as of the consummation of the Contemplated Transactions) that become due or payable to any director, officer, employee or consultant of Parent in connection with the consummation of the Contemplated Transactions; (c) the out of pocket costs of any insurance tail policies that may be purchased by Parent relating to insurance policies held by it prior to the Closing (including all premiums payable in connection therewith) and, for clarity, shall not include the deductible under any such policy, the cost of any insurance tail policies of the Company or the costs of Parent after the Effective Time for coverage of Parent's then-serving directors or other insurance policies of Parent on or after the Effective Time; and (d) the costs and expenses payable by Parent pursuant to Section 9.3(a)(ii), in each case with respect to the foregoing matters (a)-(d), to the extent unpaid and not otherwise accounted for in the definition of Parent Net Cash.

"***Parent Triggering Event***" shall be deemed to have occurred if: (a) Parent shall have failed to include in the Proxy Statement the Parent Board Recommendation or shall have made a Parent Board Adverse Recommendation Change; (b) the Parent Board or any committee thereof shall have publicly approved, endorsed or recommended any Acquisition Proposal; or (c) Parent shall have entered into any letter of intent or similar document relating to any Acquisition Proposal (other than a confidentiality agreement permitted pursuant to Section 4.4).

"***Parent Warrants***" means the warrants to purchase capital stock of Parent listed on **Exhibit F**.

"***Party***" or "***Parties***" means the Company, Merger Sub and Parent.

"***Permitted Alternative Agreement***" means a definitive agreement that contemplates or otherwise relates to an Acquisition 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 Company Unaudited Interim Balance Sheet or the Parent 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 Company or Parent, 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 Rights granted by the Company or Parent, 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 Rights 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.

"***Proxy Statement***" means the proxy statement to be sent to Parent's stockholders in connection with the Parent Stockholders' Meeting.

"***Reference Date***" means May 31, 2019.

"***Registered IP***" means all Intellectual Property Rights that are registered or issued under the authority of any Governmental Body, including all patents, registered copyrights, registered mask works, and registered trademarks, service marks and trade dress, registered domain names, and all applications for any of the foregoing.

"***Representatives***" means directors, officers, employees, agents, attorneys, accountants, investment bankers, advisors and representatives.

Reverse Split" means a reverse stock split of all outstanding shares of Parent Common Stock at a reverse stock split ratio to be mutually agreed prior to filing the Proxy Statement by Parent and the Company that is effected by Parent.

"***Sarbanes-Oxley Act***" means the Sarbanes-Oxley Act of 2002.

"***SEC***" means the United States Securities and Exchange Commission.

"***Securities Act***" means the Securities Act of 1933, as amended.

"***Subsequent Transaction***" means any Acquisition Transaction (with all references to 20% in the definition of Acquisition Transaction being treated as references to 85% for these purposes).

An entity shall be deemed to be a "***Subsidiary***" of a Person if such Person directly or indirectly owns or purports to own, beneficially or of record, (a) an amount of voting securities or 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 greater than 80% for these purposes) 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 Parent Board or the Company Board, as applicable, determines in good faith, based on such matters that it deems relevant (including the likelihood of consummation

thereof), as well as any written offer by the other Party to this Agreement to amend the terms of this Agreement, and following consultation with its outside legal counsel and outside financial advisors, if any, are more favorable, from a financial point of view, to Parent's stockholders or the Company's stockholders, as applicable, than the terms of the Contemplated Transactions.

"***Takeover Statute***" means any "fair price," "moratorium," "control share acquisition" or other similar anti-takeover Law.

"***Tax***" means any federal, state, local, foreign or other tax, including any income, capital gain, gross receipts, capital stock, profits, transfer, estimated, registration, stamp, premium, escheat, unclaimed property, customs duty, ad valorem, occupancy, occupation, alternative, add-on, windfall profits, value added, severance, property, business, production, sales, use, license, excise, franchise, escheat, unclaimed property, employment, payroll, social security, disability, unemployment, workers' compensation, national health insurance, withholding or other taxes, duties, fees, assessments or governmental charges, surtaxes or deficiencies thereof of any kind whatsoever, however denominated, and including any fine, penalty, addition to tax or interest (and any interest in respect of such deficiencies, assessments, additions to tax, penalties and fines) imposed by a Governmental Body with respect thereto.

"***Tax Return***" means any return (including any information return or attachment), report, statement, declaration, estimate, schedule, notice, notification, form, election, certificate or other document, 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 Law relating to any Tax.

"***Treasury Regulations***" means the United States Treasury regulations promulgated under the Code.

(b) Each of the following terms is defined in the Section set forth opposite such term:

Term	Section
Accredited Investor Questionnaire	Recitals
Agreement	Preamble
Allocation Certificate	5.18(a)
Anti-Bribery Laws	2.23
California and Pennsylvania Health Plan	5.7(a)
Certificate of Merger	1.3
Certifications	3.7(a)
Closing	1.3
Closing Date	1.3
Closing Parent Stockholder Matters	5.3(a)(ii)
Closing Parent Stockholder Vote	3.4
COBRA Employees	5.7(a)
Company	Preamble
Company Audited Financial Statements	5.19
Company Benefit Plan	2.17(a)
Company Board Recommendation	5.2(b)
Company Budget	4.2(b)(v)
Company Disclosure Schedule	2
Company Financials	2.7(a)
Company In-bound License	2.12(d)
Company Interim Financial Statements	5.19
Company Lock-Up Agreement	Recitals
Company Material Contract	2.13(a)

Term	Section
Company Material Contracts	2.13(a)
Company Out-bound License	2.12(d)
Company Permits	2.14(b)
Company Plan	2.6(c)
Company Preferred Stock	2.6(a)
Company Real Estate Leases	2.11
Company Signatories	Recitals
Company Stock Certificate	1.6
Company Stockholder Support Agreement	Recitals
Company Stockholder Written Consents	Recitals
Company Termination Fee	9.3(b)
Concurrent Financing	Recitals
Continuing Employees	5.6(a)
Costs	5.8(a)
Determination Notice	5.3(d)(i)
Dispute Notice	1.9
Dispute Resolution Period	1.9
Dissenting Shares	1.8(a)
D&O Indemnified Parties	5.8(a)
Drug Regulatory Agency	2.14(a)
Effective Time	1.3
End Date	9.1(b)
Exchange Agent	1.7(a)
Exchange Fund	1.7(a)
FDA	2.14(a)
FDCA	2.14(a)
Funding Agreement	Recitals
HCERA	2.17(o)
Healthcare Reform Laws	2.17(o)
Health Plan	2.17(o)
Intended Tax Treatment	5.12(a)
Investor Agreements	2.22(b)
Liability	2.9
Merger	Recitals
Merger Consideration	1.5(a)(ii)
Merger Notification Filings	5.4(b)
Merger Sub	Preamble
Nasdaq Listing Application	5.11
Net Cash Calculation	1.9
Net Cash Schedule	1.9
Net Working Capital Calculation	1.9
Net Working Capital Schedule	1.9
NovaQuest	Recitals
Parent	Preamble
Parent Benefit Plan	3.17(a)
Parent Board Adverse Recommendation Change	5.3(c)
Parent Board Recommendation	5.3(c)
Parent Budget	4.1(b)(v)
Parent Designees	5.14
Parent Disclosure Schedule	3
Parent In-bound License	3.12(d)

Term	Section
Parent Material Contract	3.13(a)
Parent Out-bound License	3.12(d)
Parent Outstanding Shares Certificate	5.18(b)
Parent Permits	3.14(b)
Parent Real Estate Leases	3.11
Parent SEC Documents	3.7(a)
Parent Stockholder Matters	5.3(a)(ii)
Parent Stockholders' Meeting	5.3(a)(ii)
Parent Termination Fee	9.3(c)
Post-Closing Plans	5.6(a)
PPACA	2.17(o)
Pre-Closing Period	4.1(a)
Regulation D	Recitals
Required Company Stockholder Vote	2.4
Closing Parent Stockholder Vote	3.4
Response Date	1.9
Sensitive Data	2.12(g)
Stockholder Notice	5.2(a)
Surviving Corporation	1.1
Tax Counsel	5.12(c)
Tax Opinion	5.12(c)

Exhibit G

Officers

Name	Title
Robert Brown	Chief Executive Officer
Andrew Sklawer	Co-Founder, Chief Operating Officer and Secretary
Deepak Chadha	Chief R&D Officer
Robert M. Carruthers	Chief Financial Officer
David McAvoy	General Counsel

Board Designees – Parent

Name	Title
[ ][1]	Director
[ ][1]	Director

Board Designees – Company

Name	Title
Reginald Hardy	Chairman of the Board
Robert Brown	Director
Dennison Veru	Director
Dr. William Ju	Director
George Abercrombie	Director

1 To be designated by Parent during the Pre-Closing Period.

Appendix B

CONFIDENTIAL

June 2, 2019

Board of Directors
Vical Incorporated
10390 Pacific Center Court
San Diego, California

Members of the Board of Directors:

We understand that Vical Incorporated, a Delaware corporation ("Vical" or "Parent"), proposes to enter into an Agreement and Plan of Merger, expected to be dated as of June 2, 2019 (the "Merger Agreement"), by and among Vical, Victory Subsidiary, Inc., a Delaware corporation and wholly-owned subsidiary of Vical ("Merger Sub"), and Brickell Biotech, Inc., a Delaware corporation ("Brickell" or "Company"), which provides, among other things, for the merger of Merger Sub with and into Brickell (the "Merger") with Brickell continuing as the surviving entity in the Merger as a wholly-owned subsidiary of Vical. As a result of the Merger, (i) each outstanding share of Company Capital Stock (as defined in the Merger Agreement), other than Excluded Shares (as defined below), shall be converted solely into the right to receive a number of shares of Vical's common stock, par value $0.01 per share ("Vical Common Stock"), equal to the Exchange Ratio, (ii) all outstanding Company Options and Company Warrants (as such terms are defined in the Merger Agreement) shall, upon exercise or conversion, as the case may be, be converted into an option or warrant to purchase a number of shares of Vical Common Stock, at an exercise price, based upon the Exchange Ratio, and (iii) all outstanding Company Convertible Notes (as defined in the Merger Agreement) shall be converted into shares of Company Capital Stock prior to the Effective Time of the Merger (as defined in the Merger Agreement). As used herein, (a) the "Exchange Ratio" is the number of shares of Vical Common Stock to be received by holders of Company Outstanding Shares (as defined in the Merger Agreement) that is derived from the agreed relative percentage ownership of the combined company by holders of Company Outstanding Shares (referred to in the Merger Agreement as the "Company Allocation Fraction") and Parent Outstanding Shares (as defined in the Merger Agreement; such percentage ownership is referred to in the Merger Agreement as the "Parent Allocation Fraction") following the consummation of the Merger, which are, subject to certain adjustments set forth in the Merger Agreement (as to which adjustments we express no opinion), equal to 60% and 40%, respectively; and (b) "Excluded Shares" means (1) shares of Company Capital Stock that are held in treasury or by Brickell or Merger Sub immediately prior to the Effective Time and (2) any shares of Company Capital Stock held by a holder who is entitled to and properly demands appraisal rights in accordance with Section 262 of the Delaware General Corporation Law. The terms and conditions of the Merger are more fully set forth in the Merger Agreement and capitalized terms used but not defined herein shall have the meanings ascribed to such terms in the Merger Agreement.

The Board of Directors of Vical (in its capacity as such) has requested our opinion, as investment bankers, as to the fairness, from a financial point of view and as of the date hereof, of the Exchange Ratio to holders of Vical Common Stock.

In the course of performing our review and analyses for rendering the opinion set forth below, we have:

i. reviewed the financial terms of a draft copy of the Merger Agreement, dated as of May 31, 2019, which was the most recent draft made available to us (the "Draft Merger Agreement");

ii. reviewed certain publicly available financial and other information concerning Vical and Brickell and the industries in which they operate;

iii. reviewed certain internal financial analyses and forecasts prepared by and provided to us by the management of Vical relating to Vical's and Brickell's business (the "Projections"), and utilized per instruction of Vical;

iv. conducted discussions with members of senior management and representatives of Vical and Brickell, respectively, concerning the matters described in clauses (ii)-(iii) above;

v. reviewed and analyzed the reported prices and trading history of shares of Vical Common Stock;

vi. reviewed and analyzed, based on the Projections, the projected cash flows to be generated by Brickell to determine the present value of Brickell's discounted cash flows;

vii. compared certain publicly available financial and other information of certain publicly traded companies that we deemed relevant;

viii. reviewed and analyzed certain financial terms of completed initial public offerings for certain companies that we deemed relevant; and

ix. performed such other financial studies, analyses and investigations and considered such other information as we deemed appropriate for the purposes of the opinion set forth below.

In arriving at the opinion set forth below, we have assumed and relied upon, without assuming liability or responsibility for independent verification, the accuracy and completeness of all of the financial, legal, regulatory, tax, accounting and other information that was publicly available or was provided to, discussed with or reviewed by us and upon the assurances of the management of Vical and Brickell, respectively, that they are not aware of any material relevant developments or matters related to Vical or Brickell or that may affect the Merger that have been omitted or that remain undisclosed to us. The opinion set forth below does not address any legal, regulatory, tax, accounting or financial reporting matters, as to which we understand that Vical has obtained such advice as it deemed necessary from other advisors, and we have relied with your consent on such assessments made by such other advisors to the Company with respect to such matters. We have not conducted any independent verification of the Projections. Without limiting the generality of the foregoing, with respect to the Projections, we have assumed, with your consent, and based upon discussions with the management of Vical that they have been reasonably prepared in good faith, that the Projections reflect the best currently available estimates and judgments of the management of Vical of the future results of operations and financial performance of Brickell. We express no view as to the Projections or the assumptions on which they are based and we assume no responsibility for the accuracy or completeness thereof.

In arriving at our opinion set forth below, we have made no analysis of, and express no opinion as to, the adequacy of the reserves of Vical or Brickell. In addition, we have not made any independent evaluations or appraisals of the assets or liabilities of Vical or Brickell or any of their respective subsidiaries, and we have not been furnished with any such evaluations or appraisals, nor have we evaluated the solvency of Vical, Brickell or any other entity under any state or federal law relating to bankruptcy, insolvency or similar matters. We have assumed that there has been no material change in the assets, financial condition, business or prospects of Vical or Brickell since the date of the most recent relevant financial information made available to us. Without limiting the generality of the foregoing, we have undertaken no independent analysis of any pending or threatened litigation, regulatory action, possible unasserted claims or other contingent liabilities to which Vical, Brickell or any of their respective affiliates is a party or may be subject, and, at your direction and with your consent, our

opinion makes no assumption concerning, and therefore does not consider, the possible assertion of claims, outcomes or damages arising out of any such matters. We have also assumed that neither Vical nor Brickell is party to any material pending transaction that has not been disclosed to us, including, without limitation, any financing, recapitalization, acquisition or merger, divestiture or spin-off, other than the Merger, the Concurrent Financing (as defined in the Merger Agreement), and transactions contemplated by the Note Purchase Agreement (as defined in the Merger Agreement). In addition, we have not conducted, nor have assumed any obligation to conduct, any physical inspection of the properties or facilities of Vical or Brickell. We have assumed, at your direction and with your consent, that the only material asset of Vical is the Parent Net Cash (as defined in the Merger Agreement), that no other assets of Vical, including, without limitation, any net operating losses of Vical, have any material value and that Vical does not, and does not intend to, engage in any activity that may result in the generation of any revenue. We have also been instructed by Vical, and have assumed, at your direction and with your consent, that (i) (a) Parent Net Cash at the closing of the Merger is expected to be $34.7 million but in no case less than $30 million, (b) if Parent Net Cash is between $34.2 million and $35.2 million at the closing of the Merger, then no adjustment will be made, and (c) outside of such range, Vical's valuation will be adjusted on a dollar-for-dollar basis; and (ii) (a) the Company Net Working Capital (as defined in the Merger Agreement) is expected to be between –$9,200,000 and –$10,200,000, and (b) outside of such range, Brickell's valuation will be adjusted on a dollar-for-dollar basis.

We have assumed that the representations and warranties of each party contained in the Merger Agreement and in all other related documents and instruments that are referred to therein are and will be true and correct as of the date or the dates made or deemed made, that each party thereto will fully and timely perform all of the covenants and agreements required to be performed by it under the Merger Agreement and any other agreement contemplated thereby, that the transactions contemplated by the Merger Agreement, including, without limitation, the Merger, will be consummated in accordance with the terms of the Merger Agreement without waiver, modification or amendment of any term, condition or agreement. We have assumed that the final form of the Merger Agreement will be in all material respects identical to the Draft Merger Agreement. We have, with your consent, further assumed that any adjustment to the Exchange Ratio pursuant to the terms of the Merger Agreement will not result in any adjustment to the Exchange Ratio that is material to our analysis. We have also assumed that any governmental, regulatory and other consents and approvals contemplated in connection with the Merger will be obtained and that, in the course of obtaining any of those consents and approvals, no restrictions will be imposed or waivers made that would have an adverse effect on Vical, Brickell or the contemplated benefits of the Merger.

Our opinion set forth below is necessarily based on economic, market, financial and other conditions as they exist, and on the information made available to us, as of the date of this letter. We have not considered any potential legislative or regulatory changes currently being considered by the United States Congress, the Securities and Exchange Commission (the "SEC"), or any other governmental or regulatory bodies, or any changes in accounting methods or generally accepted accounting principles that may be adopted by the SEC or the Financial Accounting Standards Board. It should be understood that, although subsequent developments may affect the conclusion reached in such opinion, we do not have any obligation to update, revise or reaffirm the opinion set forth below. Our opinion set forth below addresses solely the fairness, from a financial point of view and as of the date hereof, of the Exchange Ratio to the holders of Vical Common Stock and does not address any other terms in the Merger Agreement, or any other agreement contemplated by the Merger Agreement or relating to the Merger or any other aspect or implication of the Merger, including, without limitation, the form or structure of the Merger or the fairness of the Merger or the Exchange Ratio to any other securityholders or creditors or any other constituency of Vical. Our opinion set forth below does not address Vical's underlying business decision to proceed with the Merger or the relative merits of the Merger compared to other alternatives

available to Vical. We express no opinion as to the prices or ranges of prices at which shares of securities of any person, including Vical or Brickell, will trade at any time, including following the announcement or consummation of the Merger. We have not been requested to opine as to, and our opinion does not in any manner address, the amount or nature of compensation to any of the officers, directors or employees of any party to the Merger, or any class of such persons, relative to the compensation to be paid to the holders of Vical Common Stock in connection with the Merger or with respect to the fairness of any such compensation.

It is understood that this letter and the opinion set forth below are provided to the Board of Directors of Vical (in its capacity as such) for its information in connection with its consideration of the Merger and may not be used for any other purpose or disclosed, referred to, or communicated (in whole or in part) to any third party for any purpose whatsoever without our prior written consent, except that a copy of this letter may be included in its entirety in any filing Vical or Brickell is required to make with the SEC in connection with the Merger if such inclusion is required by applicable law. The opinion set forth below does not constitute a recommendation to the Board of Directors of Vical or Brickell, or any stakeholder or stockholder of Vical or Brickell, as to how to vote on or to take any other action in connection with the Merger (including, without limitation, whether or not any holder of Vical Common Stock should enter into any voting, stockholders' or affiliates' agreement with respect to the Merger).

As part of our investment banking services, we are regularly engaged in the valuation of businesses and securities in connection with mergers and acquisitions, and for other purposes. We have acted as Vical's financial advisor in connection with the Merger and will receive a fee for our services, a significant portion of which is contingent upon consummation of the Merger. In addition, Vical has agreed to reimburse our expenses and indemnify us for certain liabilities that may arise out of our engagement. We will also receive an additional fee for rendering the opinion set forth below which is not contingent upon consummation of the Merger. We or our affiliates may also seek to provide financial advisory, financing and other investment banking services to Vical and Brickell and/or certain of their respective affiliates in the future and expect to receive fees for the rendering of any such services. In the ordinary course of business, we and our clients may transact in the equity and debt securities of Vical and may at any time hold a long or short position in such securities.

The opinion set forth below was reviewed and approved by a fairness committee of MTS Securities, LLC.

Based upon and subject to the foregoing, it is our opinion that, as of the date hereof, the Exchange Ratio is fair, from a financial point of view, to holders of Vical Common Stock.

Very truly yours,

/s/ MTS SECURITIES, LLC

MTS SECURITIES, LLC

Appendix C

CERTIFICATE OF AMENDMENT OF THE RESTATED CERTIFICATE OF INCORPORATION OF VICAL INCORPORATED

Vical Incorporated (the "Corporation"), a corporation organized and existing under and by virtue of the provisions of the General Corporation Law of the State of Delaware (the "General Corporation Law"), does hereby certify as follows:

1. The current name of the Corporation is Vical Incorporated.

2. The original certificate of incorporation of the Corporation was filed with the Secretary of State of the State of Delaware on April 30, 1987.

3. The Board of Directors of the Corporation duly adopted resolutions pursuant to Section 242 of the General Corporation Law approving an amendment of the Corporation's Restated Certificate of Incorporation, as amended, as follows:

Paragraph A of Article IV of the Restated Certificate of Incorporation of the Corporation, as amended, is hereby amended to add the following paragraph immediately following the second paragraph of Paragraph A of Article IV, as follows:

"Effective as of 12:01 a.m. on [●], 2019 (the "Effective Time"), each [five, six, seven, eight, nine, ten, eleven, twelve, thirteen, fourteen, fifteen][1] shares of Common Stock issued or outstanding (including treasury shares) immediately prior to the Effective Time shall be reclassified and combined into one validly issued, fully paid and nonassessable share of Common Stock automatically and without any action by the holder thereof upon the Effective Time and shall represent one share of Common Stock from and after the Effective Time (such reclassification and combination of shares, the "Second Reverse Stock Split"). The par value of the Common Stock following the Second Reverse Stock Split shall remain at $0.01 par value per share. No fractional shares of Common Stock shall be issued as a result of the Second Reverse Stock Split and, in lieu thereof, upon surrender after the Effective Time of a certificate which formerly represented shares of Common Stock that were issued and outstanding immediately prior to the Effective Time, any person who would otherwise be entitled to a fractional share of Common Stock as a result of the Second Reverse Stock Split, following the Effective Time, shall be entitled to receive, with respect to each such fractional share, a cash payment equal to the fraction of a share of Common Stock to which such holder would otherwise be entitled multiplied by the fair value per share of the Common Stock immediately prior to the Effective Time as determined by the Board of Directors of the Corporation.

Each stock certificate that, immediately prior to the Effective Time, represented shares of Common Stock that were issued and outstanding immediately prior to the Effective Time shall, from and after the Effective Time, automatically and without the necessity of presenting the same for exchange, represent that number of whole shares of Common Stock after the Effective Time into which the shares formerly represented by such certificate have been reclassified (as well as the right to receive cash in lieu of fractional shares of Common Stock after the Effective Time); provided, however, that each person of record holding a certificate that represented shares of Common Stock that were issued and outstanding immediately prior to the Effective Time shall receive, upon surrender of such certificate, a new certificate evidencing and representing the number of whole shares of Common Stock after the Effective Time into which the shares of Common Stock formerly represented by such certificate shall have been reclassified."

4. Thereafter, pursuant to a resolution of the Board of Directors of the Corporation, the amendment was submitted to the stockholders of the Corporation for their approval at a special meeting of stockholders which was duly called

[1] These amendments approve the combination of any whole number of shares of Common Stock between and including five and fifteen into one share of Common Stock, as proposed and approved by the Corporation's Board of Directors.

and held upon notice in accordance with Section 222 of the General Corporation Law, at which meeting the necessary number of shares required by statute were voted in favor of the amendment. Accordingly, said amendment was duly adopted in accordance with the provisions of Section 242 of the General Corporation Law.

5. On [●], 2019, the Board of Directors of the Corporation determined that each [●] shares of the Corporation's Common Stock, par value $0.01 per share ("Common Stock"), issued and outstanding immediately prior to the Effective Time shall automatically be combined into one validly issued, fully paid and non-assessable share of Common Stock. The Corporation publicly announced this ratio on [●], 2019.

IN WITNESS WHEREOF, this Corporation has caused this Certificate of Amendment of the Restated Certificate of Incorporation, as amended to be signed by its President and Chief Executive Officer this [day of], 2019.

Vijay Samant
President and Chief Executive Officer

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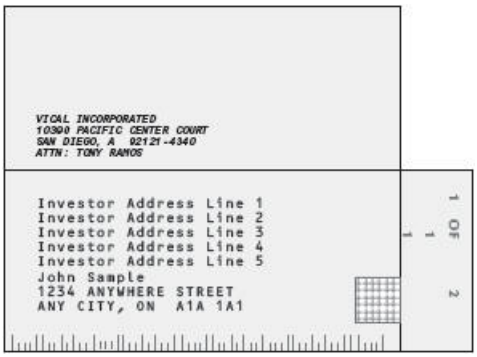

VOTE BY INTERNET - www.proxyvote.com

Use the Internet to transmit your voting instructions and for electronic delivery of information. Vote by 11:59 P.M. ET on 08/29/2019. Have your proxy card in hand when you access the web site and follow the instructions to obtain your records and to create an electronic voting instruction form.

ELECTRONIC DELIVERY OF FUTURE PROXY MATERIALS

If you would like to reduce the costs incurred by our company in mailing proxy materials, you can consent to receiving all future proxy statements, proxy cards and annual reports electronically via e-mail or the Internet. To sign up for electronic delivery, please follow the instructions above to vote using the Internet and, when prompted, indicate that you agree to receive or access proxy materials electronically in future years.

VOTE BY PHONE - 1-800-690-6903

Use any touch-tone telephone to transmit your voting instructions. Vote by 11:59 P.M. ET on 08/29/2019. Have your proxy card in hand when you call and then follow the instructions.

VOTE BY MAIL

Mark, sign and date your proxy card and return it in the postage-paid envelope we have provided or return it to Vote Processing, c/o Broadridge, 51 Mercedes Way, Edgewood, NY 11717.

NAME

THE COMPANY NAME INC. - COMMON
THE COMPANY NAME INC. - CLASS A
THE COMPANY NAME INC. - CLASS B
THE COMPANY NAME INC. - CLASS C
THE COMPANY NAME INC. - CLASS D
THE COMPANY NAME INC. - CLASS E
THE COMPANY NAME INC. - CLASS F
THE COMPANY NAME INC. - 401 K

CONTROL # → 0000000000000000

SHARES	123,456,789,012.12345
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	123,456,789,012.12345

PAGE 1 OF 2

TO VOTE, MARK BLOCKS BELOW IN BLUE OR BLACK INK AS FOLLOWS: ☒

KEEP THIS PORTION FOR YOUR RECORDS

THIS PROXY CARD IS VALID ONLY WHEN SIGNED AND DATED.

DETACH AND RETURN THIS PORTION ONLY

The Board of Directors recommends you vote FOR proposals 1, 2 and 3.

	For	Against	Abstain
1 To amend Vical's restated certificate of incorporation, as amended, to effect a reverse split of Vical's common stock at a ratio in the range of between 1-for-5 to 1-for-15 (the "Reverse Split"), inclusive, with such ratio to be mutually agreed by Vical and Brickell Biotech, Inc. ("Brickell") to be effected by Vical immediately prior to the effective time of the Merger, as contemplated by that certain Agreement and Plan of Merger and Reorganization, dated June 2, 2019, by and among Vical, Victory Subsidiary, Inc. and Brickell (the "Merger Agreement").	☐	☐	☐
2 To approve the consummation of a change of control of Vical resulting from the Merger and the other transactions and actions contemplated by the Merger Agreement, including the Reverse Split and the financing contemplated by that certain Funding Agreement between Brickell and NovaQuest Co-Investment Fund X, L.P., pursuant to the Nasdaq rules, as contemplated by the Merger Agreement.	☐	☐	☐
3 To approve a postponement or an adjournment of the Special Meeting, if necessary, to solicit additional proxies if there are not sufficient votes in favor of Proposal Nos. 1 or 2 described above at the time of the Special Meeting.	☐	☐	☐

NOTE: Such other business as may properly come before the meeting or any postponement or adjournment thereof.

For address change/comments, mark here. (see reverse for instructions) ☐

	Yes	No
Please indicate if you plan to attend this meeting	☐	☐

Please sign exactly as your name(s) appear(s) hereon. When signing as attorney, executor, administrator, or other fiduciary, please give full title as such. Joint owners should each sign personally. All holders must sign. If a corporation or partnership, please sign in full corporate or partnership name, by authorized officer.

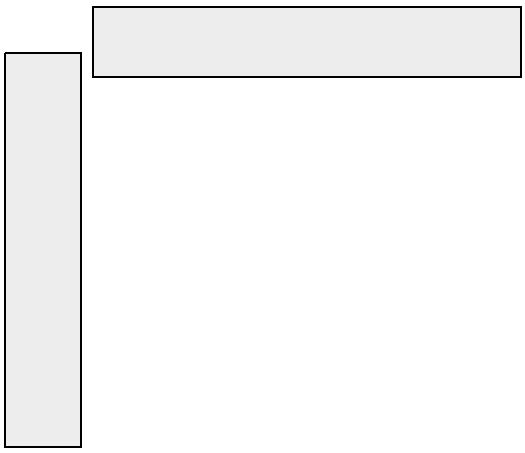
Investor Address Line 1
Investor Address Line 2
Investor Address Line 3
Investor Address Line 4
Investor Address Line 5
John Sample
1234 ANYWHERE STREET
ANY CITY, ON A1A 1A1

Signature [PLEASE SIGN WITHIN BOX] Date

JOB #

Signature (Joint Owners) Date

SHARES
CUSIP #
SEQUENCE #



Important Notice Regarding the Availability of Proxy Materials for the Special Meeting: The Proxy Statement is available at www.proxyvote.com

VICAL INCORPORATED
Special Meeting of Stockholders
August 30, 2019 8:00 AM
This proxy is solicited by the Board of Directors

The shareholder(s) hereby appoint(s) Vijay B. Samant and Anthony A. Ramos, or either of them, as proxies, each with the power to appoint his substitute, and hereby authorizes them to represent and to vote, as designated on the reverse side of this ballot, all of the shares of common stock of VICAL INCORPORATED that the stockholder(s) is/are entitled to vote at the Special Meeting of stockholder(s) to be held at 4401 Eastgate Mall, San Diego, California, 92121, at 8:00 AM, PST on 8/30/2019, or any adjournment or postponement thereof and instructs said proxies to vote as indicated on the reverse side.

This proxy, when properly executed, will be voted in the manner directed herein. If no such direction is made, this proxy will be voted in accordance with the Board of Directors' recommendations.

Address change/comments:

(If you noted any Address Changes and/or Comments above, please mark corresponding box on the reverse side.)

Continued and to be signed on reverse side