CONTANGO OIL & GAS CO
Form DEF 14A
April 26, 2019
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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

CONTANGO OIL & GAS COMPANY

(Name of Registrant as Specified In Its Charter)

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

Payment of Filing Fee (Check the appropriate box):

No fee required.

Fee computed on table below per Exchange Act Rules 14a-6(i)(1) and 0-11.

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

(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:

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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:

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CONTANGO OIL & GAS COMPANY

717 TEXAS AVENUE, SUITE 2900

HOUSTON, TEXAS 77002

(713) 236-7400

ANNUAL MEETING OF STOCKHOLDERS

TO BE HELD JUNE 14, 2019

Dear Contango Stockholder:

April 26, 2019

We are pleased to invite you to attend the 2019 Annual Meeting of Stockholders of Contango Oil & Gas Company. The Annual Meeting will be held on June 14, 2019, at 9:30 a.m., Central Daylight Time, at the Chase Center Auditorium, located at 601 Travis St., Houston, Texas 77002.

The enclosed Notice of Annual Meeting and the accompanying proxy statement describe the various matters to be acted upon during the Annual Meeting. In addition, there will be a report on the state of our business and an opportunity for you to ask questions of our management.

You may vote your shares by submitting a proxy by Internet, by telephone, by completing, signing, dating and returning the enclosed proxy card or by voting your shares in person at the Annual Meeting. The enclosed proxy card describes your voting options in more detail. Our report to the stockholders, including our Annual Report on Form 10-K for the year ended December 31, 2018, also accompanies the enclosed proxy statement.

The Annual Meeting gives us an opportunity to review our business results and discuss the steps we have taken to position our company for the future. We appreciate your ownership of Contango s common stock, and I hope you will be able to join us at the Annual Meeting.

Sincerely,

Wilkie S. Colyer, Jr.

President and Chief Executive Officer

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CONTANGO OIL & GAS COMPANY

717 TEXAS AVENUE, SUITE 2900

HOUSTON, TEXAS 77002

(713) 236-7400

NOTICE OF ANNUAL MEETING OF STOCKHOLDERS TO BE HELD JUNE 14, 2019

The 2019 Annual Meeting of Stockholders (the Annual Meeting) of Contango Oil & Gas Company, a Delaware corporation (the Company), will be held on June 14, 2019, at 9:30 a.m., Central Daylight Time, at the Chase Center Auditorium, located at 601 Travis St., Houston, Texas 77002 for the following purposes:

(1) the election of the six directors named in the proxy statement to our Board until the 2020 Annual Meeting of Stockholders;

(2) the ratifying of the appointment of Grant Thornton LLP as our independent registered public accounting firm for the fiscal year ending December 31, 2019;

(3) the holding of an advisory vote on named executive officer compensation;

(4) the approval of an amendment of the Company s Certificate of Incorporation, as amended, to increase the number of authorized shares of the Company s common stock;

(5) the approval of the reincorporation of the Company from the State of Delaware to the State of Texas; and

(6) the transacting of such other business as may arise that can properly be conducted at the Annual Meeting or any adjournment or postponement thereof.

Our Board has fixed the close of business on May 7, 2019 as the record date (the Record Date) for the determination of stockholders entitled to notice of and to vote at the Annual Meeting or any adjournment(s) or postponement(s) thereof. Only stockholders of record at the close of business on the Record Date are entitled to notice of and to vote at the Annual Meeting. A list of stockholders entitled to vote at the Annual Meeting will be available for examination at our offices for 10 calendar days prior to the Annual Meeting. The list will also be available during the Annual Meeting for inspection by stockholders.

EVEN IF YOU PLAN TO ATTEND THE ANNUAL MEETING, PLEASE COMPLETE, SIGN AND MAIL THE ENCLOSED PROXY CARD AS PROMPTLY AS POSSIBLE IN THE ACCOMPANYING ENVELOPE OR USE THE TELEPHONE OR INTERNET VOTING.

By Order of the Board of Directors,

Sergio Castro

Vice President, Treasurer and Assistant Secretary

Houston, Texas

April 26, 2019

IMPORTANT NOTICE REGARDING THE AVAILABILITY OF PROXY MATERIALS

FOR THE STOCKHOLDER MEETING TO BE HELD ON JUNE 14, 2019

The Notice of Annual Meeting of Stockholders, the Proxy Statement for the 2019 Annual Meeting of Stockholders and the Annual Report to Stockholders for the year ended December 31, 2018 are available at

www.proxyvote.com

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CONTANGO OIL & GAS COMPANY

PROXY STATEMENT

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CONTANGO OIL & GAS COMPANY

717 TEXAS AVENUE, SUITE 2900

HOUSTON, TEXAS 77002

(713) 236-7400

PROXY STATEMENT

FOR

THE 2019 ANNUAL MEETING OF STOCKHOLDERS

Unless the context requires otherwise, references in this proxy statement to Contango, we, us and our are to Contan Oil & Gas Company, a Delaware corporation, and its consolidated subsidiaries. Unless the context otherwise requires, references to the stockholders are to the holders of shares of our common stock, par value $0.04 per share (Common Stock).

The accompanying proxy is solicited by the Board of Directors of Contango (our Board) to be voted at our 2019 Annual Meeting of Stockholders (the Annual Meeting) to be held on June 14, 2019, at the time and place and for the purposes set forth in the accompanying Notice of Annual Meeting of Stockholders (the Notice) and at any adjournment(s) or postponement(s) thereof.

This proxy statement and accompanying form of proxy are being mailed to our stockholders on or about May 9, 2019. Our Annual Report on Form 10-K (the Annual Report) covering the year ended December 31, 2018 is enclosed but does not form any part of the materials for solicitation of proxies.

QUESTIONS AND ANSWERS ABOUT THE ANNUAL MEETING

What is the purpose of the Annual Meeting?

At the Annual Meeting, our stockholders will act upon the matters outlined in the Notice, including (1) the election of the six directors named herein to our Board, each for a term ending on the date of the 2020 Annual Meeting of Stockholders (this proposal is referred to as the Election of Directors), (2) the ratification of the appointment of Grant Thornton LLP as our independent registered public accounting firm for the fiscal year ending December 31, 2019 (this proposal is referred to as the Ratification of Grant Thornton), (3) holding an advisory vote on named executive officer compensation (this proposal is referred to as the Compensation Advisory Vote), (4) the approval of an amendment of the Company s Certificate of Incorporation, as amended (the Certificate of Incorporation), to increase the number of authorized shares of Common Stock (this proposal is referred to as the Amendment to the Certificate of

Incorporation), (5) the approval of the reincorporation of the Company from the State of Delaware to the State of Texas (this proposal is referred to as the Reincorporation Proposal), and (6) the transaction of such other business as may arise that can properly be conducted at the Annual Meeting or any adjournment or postponement thereof. Also, management will report on our performance during the last fiscal year and respond to questions from our stockholders.

What is a proxy?

A proxy is another person that you legally designate to vote your stock. If you designate someone as your proxy in a written document, that document is also called a proxy or a proxy card.

What is a proxy statement?

It is a document that regulations of the Securities and Exchange Commission (the SEC) require that we give to you when we ask you to sign a proxy card to vote your stock at the Annual Meeting.

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What is householding and how does it affect me?

One copy of the Notice, this proxy statement and the Annual Report (collectively, the Proxy Materials) will be sent to stockholders who share an address, unless they have notified us or, if applicable, their bank or broker that they want to continue receiving multiple packages. This practice, known as householding, is designed to reduce duplicate mailings and save significant printing and postage costs. If you received a householded mailing this year and you would like to have additional copies of the Proxy Materials mailed to you or you would like to opt out of this practice for future mailings, we will promptly deliver such additional copies to you if you submit your request in writing to our Investor Relations Department, at 717 Texas Avenue, Suite 2900, Houston, Texas 77002, or call at (713) 236-7400. You may also contact us in the same manner if you received multiple copies of the Annual Meeting materials and would prefer to receive a single copy in the future. The Proxy Materials are also available at *www.proxyvote.com*.

If you own shares of stock through a bank, broker or other nominee, please notify that entity if you no longer wish to participate in householding and would prefer to receive a separate copy of these materials, or if you are receiving duplicate copies of these materials and wish to have householding apply.

What should I do if I receive more than one set of voting materials?

Despite our efforts related to householding, you may receive more than one set of voting materials, including multiple copies of the proxy statement and multiple proxy cards or voting instruction cards. For example, if you hold your shares in more than one brokerage account, you will receive a separate voting instruction card for each brokerage account in which you hold shares. Similarly, if you are a stockholder of record and hold shares in a brokerage account, you will receive a proxy card and a voting instruction card. Please complete, sign, date and return each proxy card and voting instruction card that you receive to ensure that all your shares are voted at the Annual Meeting.

What is the record date and what does it mean?

The record date for the determination of stockholders entitled to notice of and to vote at the Annual Meeting is the close of business on May 7, 2019 (the Record Date). The Record Date is established by our Board as required by Delaware law. On the Record Date, we expect there will be approximately 34,401,865 shares of Common Stock issued and outstanding.

What is a quorum?

A quorum is the presence at the Annual Meeting, in person or by proxy, of the holders of a majority of the shares of our Common Stock outstanding and entitled to vote as of the Record Date. There must be a quorum for the Annual Meeting to be held. If a quorum is not present, the Annual Meeting may be adjourned from time to time until a quorum is reached. Proxies received but marked as abstentions or broker non-votes will be included in the calculation of votes considered to be present at the Annual Meeting.

Who is entitled to vote at the Annual Meeting?

Subject to the limitations set forth below, stockholders at the close of business on the Record Date may vote at the Annual Meeting.

What are the voting rights of the stockholders?

Each holder of Common Stock is entitled to one vote per common share on all matters to be acted upon at the Annual Meeting. Neither our Certificate of Incorporation, as amended, nor our bylaws allow for cumulative voting rights.

What is the difference between a stockholder of record and a street name holder?

Most stockholders hold their shares through a broker, bank or other nominee rather than directly in their own name. As summarized below, there are some distinctions between shares held of record and those owned in street name.

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Stockholder of Record. If your shares are registered directly in your name with Continental Stock Transfer & Trust Company, our transfer agent, you are considered, with respect to those shares, the stockholder of record. As the stockholder of record, you have the right to grant your voting proxy directly or to vote in person at the Annual Meeting.

Street Name Stockholder. If your shares are held in a stock brokerage account or by a bank or other nominee, you are considered the beneficial owner of shares held in street name. As the beneficial owner, you have the right to direct your broker or nominee how to vote and are also invited to attend the Annual Meeting. However, since you are not the stockholder of record, you may not vote these shares in person at the Annual Meeting unless you obtain a signed proxy from the record holder giving you the right to vote the shares.

How do I vote my shares?

Stockholders of Record: Stockholders of record may vote their shares or submit a proxy to have their shares voted by one of the following methods:

By Internet. You may submit a proxy electronically on the Internet by following the instructions provided on the enclosed proxy card. Please have the proxy card in hand when you log onto the website. Internet voting facilities will be available 24 hours a day and will close at 11:59 p.m., Eastern Daylight Time, on June 13, 2019.

By Telephone. You may submit a proxy by telephone (from U.S. and Canada only) using the toll-free number listed on the proxy card. Please have your proxy card in hand when you call. Telephone voting facilities will be available 24 hours a day and will close at 11:59 p.m., Eastern Daylight Time, on June 13, 2019.

By Mail. You may indicate your vote by completing, signing and dating your proxy card and returning it in the enclosed reply envelope.

In Person. You may vote in person at the Annual Meeting by completing a ballot; however, attending the Annual Meeting without completing a ballot will not count as a vote.

Street Name Stockholders: Street name stockholders may generally vote their shares or submit a proxy to have their shares voted by one of the following methods:

By Mail. You may indicate your vote by completing, signing and dating your proxy card or other information forwarded by your bank, broker or other holder of record and returning it in the enclosed reply envelope.

By Methods Listed on Proxy Card. Please refer to your proxy card or other information forwarded by your bank, broker or other holder of record to determine whether you may submit a proxy by telephone or electronically on the Internet, following the instructions on the proxy card or other information provided by the record holder.

In Person with a Proxy from the Record Holder. You may vote in person at the Annual Meeting if you obtain a legal proxy from your bank, broker or other nominee. Please consult the voting form or other information sent to you by your bank, broker or other nominee to determine how to obtain a legal proxy in order to vote in person at the Annual Meeting.

How can I attend the Annual Meeting in person?

You are entitled to attend the Annual Meeting only if you are a stockholder as of the close of business on the Record Date, or hold a valid proxy for the meeting. In order to be admitted to the Annual Meeting, you must present proof of ownership of Contango Common Stock on the Record Date. Stockholders and proxy holders must also present a form of photo identification such as a driver s license. We will be unable to admit anyone who does not

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present identification or refuses to comply with our security procedures. No cameras, recording equipment, electronic devices, large bags, briefcases or packages will be permitted in the Annual Meeting.

For directions to the Annual Meeting, you may contact our Investor Relations Department, at 717 Texas Avenue, Suite 2900, Houston, Texas 77002, or call at (713) 236-7400.

Can I revoke my proxy?

Yes. If you are a stockholder of record, you can revoke your proxy at any time before it is exercised by:

- submitting written notice of revocation to our company, Attn: Corporate Secretary, 717 Texas Avenue, Suite 2900, Houston, Texas, 77002, no later than June 13, 2019;
- submitting another proxy with new voting instructions by mail, telephone or the Internet voting system; or
- attending the Annual Meeting and voting your shares in person.

If you are a street name stockholder and you vote by proxy, you may change your vote by submitting new voting instructions to your bank, broker or nominee in accordance with that entity s procedures.

May I vote confidentially?

Yes. We treat all stockholder meeting proxies, ballots and voting tabulations confidentially if the stockholder has requested confidentiality on the proxy or ballot.

If you so request, your proxy will not be available for examination nor will your vote be disclosed prior to the tabulation of the final vote at the Annual Meeting except (1) to meet applicable legal requirements or (2) to allow the independent election inspectors to count and certify the results of the vote. The independent election inspectors may, however, at any time inform us whether or not a stockholder has voted.

What is the effect of broker non-votes and abstentions and what vote is required to approve each proposal?

If you hold your shares in street name, you will receive instructions from your broker or other nominee describing how to vote your shares. If you do not instruct your broker or nominee how to vote your shares, they may vote your shares as they decide as to each matter for which they have discretionary authority under the rules of the NYSE American exchange (the NYSE American).

There are also non-discretionary matters for which brokers and other nominees do not have discretionary authority to vote unless they receive timely instructions from you. When a broker or other nominee does not have discretion to vote on a particular matter, you have not given timely instructions on how the broker or other nominee should vote your shares and the broker or other nominee indicates it does not have authority to vote such shares on its proxy, a broker non-vote results. Although any broker non-vote would be counted as present at the Annual Meeting for purposes of determining a quorum, it would be treated as not entitled to vote with respect to non-discretionary matters.

Abstentions occur when stockholders are present at the Annual Meeting but fail to vote or voluntarily withhold their vote for any of the matters upon which the stockholders are voting, or when stockholders mark their proxy to abstain from a vote on a particular proposal.

If your shares are held in street name and you do not give voting instructions, the record holder will not be permitted to vote your shares with respect to Proposal 1 (*Election of Directors*), Proposal 3 (*The Compensation Advisory Vote*) or Proposal 5 (*The Reincorporation Proposal*). If your shares are held in street name and you do not give voting instructions, the record holder will nevertheless be entitled to vote your shares with respect to Proposal 2 (*Ratification of Grant Thornton*) and Proposal 4 (*Amendment to the Certificate of Incorporation*) in the discretion of the record holder.

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You may vote FOR, AGAINST or ABSTAIN with respect to each of the proposals presented.

Proposal 1 (Election of Directors): To be elected, each nominee for election as a director must receive the affirmative vote of a majority of the votes cast by the holders of our Common Stock, present in person or represented by proxy at the Annual Meeting and entitled to vote on the proposal. Votes may be cast in favor of or against the election of each nominee. Broker non-votes and abstentions will not be counted as votes cast, and, accordingly, will have no effect on the outcome of the vote for directors.

Proposal 2 (Ratification of Grant Thornton): Ratification of the appointment of Grant Thornton LLP as our independent registered public accounting firm for the fiscal year ending December 31, 2019 requires the affirmative vote of a majority of the voting power of the outstanding Common Stock present in person or represented by proxy at the Annual Meeting and entitled to vote thereon. Abstentions will be counted as a vote AGAINST this proposal. Broker non-votes will not affect the outcome of this proposal.

Proposal 3 (The Compensation Advisory Vote): Approval of the Compensation Advisory Vote requires the affirmative vote of a majority of the voting power of the outstanding Common Stock present in person or represented by proxy at the Annual Meeting and entitled to vote thereon. Abstentions will be counted as a vote AGAINST this proposal. Broker non-votes will not affect the outcome of this proposal. While this vote is required by law, it will neither be binding on our company or the Board nor will it create or imply any change in the fiduciary duties of, or impose any additional fiduciary duty on, our company or the Board. However, the views of our stockholders are important to us, and our Compensation Committee will take into account the outcome of the vote when considering future executive compensation decisions. We urge you to read the section entitled *Executive Compensation*, which discusses how our executive compensation program is structured.

Proposal 4 (*Amendment to Certificate of Incorporation*): Approval of the Amendment to the Certificate of Incorporation requires the affirmative vote of a majority of the voting power of the outstanding Common Stock entitled to vote thereon. Abstentions and broker non-votes will be counted as a vote AGAINST this proposal.

Proposal 5 (The Reincorporation Proposal): Approval of the Reincorporation Proposal requires the affirmative vote of a majority of the voting power of the outstanding Common Stock entitled to vote thereon. Abstentions and broker non-votes will be counted as a vote AGAINST this proposal.

Our Board has appointed Wilkie S. Colyer, Jr. and E. Joseph Grady as the management proxy holders for the Annual Meeting. If you are a stockholder of record, your shares will be voted by the management proxy holders in accordance with the instructions on the proxy card you submit by mail, or the instructions provided for any proxy submitted by telephone or Internet, as applicable. For stockholders who have their shares voted by duly submitting a proxy by mail, telephone or Internet, the management proxy holders will vote all shares represented by such valid proxies as our Board recommends, unless a stockholder appropriately specifies otherwise.

Our Board recommends a vote:

FOR each of the nominees for director;

FOR the ratification of the appointment of Grant Thornton LLP as our independent registered public accounting firm for the fiscal year ending December 31, 2019;

FOR the advisory vote to approve named executive officer compensation;

FOR the amendment to the Certificate of Incorporation; and

FOR the reincorporation of the Company from the State of Delaware to the State of Texas.

What happens if additional proposals are presented at the Annual Meeting?

Other than the matters specified in the Notice, we do not expect any matters to be presented for a vote at the Annual Meeting. If you grant a proxy, the management proxy holders will have the discretion to vote your shares on any additional matters properly presented for a vote at the Annual Meeting. Under our bylaws, the deadline for notifying us of any additional proposals to be presented at the Annual Meeting has passed and, accordingly, stockholders may not present proposals at the Annual Meeting.

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Who will bear the cost of soliciting votes for the Annual Meeting?

We will bear all expenses of soliciting proxies. We have engaged Broadridge Financial Solutions to aid in the distribution of proxy materials and to provide voting and tabulation services for the Annual Meeting for a fee of approximately $20,000, plus reimbursement for reasonable out-of-pocket expenses. Our directors, officers and employees may also solicit proxies in person or by other means of communication. Such directors, officers and employees will not be additionally compensated but may be reimbursed for reasonable out-of-pocket expenses in connection with such solicitation. In addition, we may reimburse brokerage firms, custodians, nominees, fiduciaries and other persons representing beneficial owners of our Common Stock for their reasonable expenses in forwarding solicitation material to such beneficial owners.

May I propose actions for consideration at the 2020 Annual Meeting of Stockholders or nominate individuals to serve as directors?

You may submit proposals for consideration at future stockholder meetings, including director nominations. Please read Stockholder Proposals and Director Nominations for the 2020 Annual Meeting for information regarding the submission of stockholder proposals and director nominations for consideration at next year s annual meeting.

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CORPORATE GOVERNANCE AND OUR BOARD

General

The Company s Certificate of Incorporation and bylaws provide for the annual election of directors. At each annual meeting of stockholders, our directors will be elected for a one-year term and serve until their respective successors have been elected and qualified.

Our Board held nine meetings during 2018. During 2018, our directors attended 100% of the total number of meetings of our Board and committees on which that director served.

We encourage, but do not require, our directors to attend annual meetings of stockholders. At our 2018 Annual Meeting of Stockholders, all of the serving members of our Board attended.

Board Independence

As required under the listing standards of the NYSE American, a majority of the members of our Board must qualify as independent, as affirmatively determined by our Board. Our Nominating Committee evaluated all relevant transactions and relationships between each director nominated for election at the Annual Meeting, or any of his or her family members, and our company, senior management and independent registered accounting firm. Based on this evaluation and the recommendation of our Nominating Committee, our Board has determined that B.A. Berilgen, B. James Ford, John C. Goff, Lon McCain and Joseph J. Romano are each an independent director, as that term is defined in the listing standards of the NYSE American.

Board Committees

Our Board has the authority to appoint committees to perform certain management and administrative functions. Our Board has established a Compensation Committee, Audit Committee, Nominating Committee and Investment Committee. Our Board, in its business judgment, has determined that the Compensation Committee, Audit Committee and Nomination Committee are comprised entirely of independent directors as currently required under the listing standards of the NYSE American and applicable rules and requirements of the SEC. The Board may also delegate certain duties and responsibilities to the committees it establishes; for example, the Board may delegate the duty of determining appropriate salaries for our executive officers from time to time.

Audit Committee

The Audit Committee was established to oversee and appraise the audit efforts of our independent registered public accounting firm, and monitor our accounts, procedures and internal controls. During 2018, the Audit Committee consisted of Messrs. McCain (Committee Chairman), Berilgen and Ford. Following the Annual Meeting, it is expected that the Audit Committee will consist of Messrs. McCain (Committee Chairman), Berilgen and Ford. Each member of our Audit Committee is considered independent as described above, as financially literate and can read and understand financial statements, as required by Section 803B(2) of the NYSE American company guide. The Audit Committee met four times during 2018. Upon review by and recommendation of our Nominating Committee, our Board has determined that Mr. McCain was an audit committee financial expert as defined under applicable rules and regulations of the SEC. Our Audit Committee has adopted a charter, which is posted on our website *www.contango.com* under *Corporate Charters for Board Committees*.

Compensation Committee

The responsibilities of the Compensation Committee, which are discussed in detail in the Compensation Committee Charter that is posted on our website at *www.contango.com* under Corporate Charters for Board Committees, include among other things, the responsibility to:

- Periodically review the compensation, employee benefit plans and fringe benefits paid to, or provided for, executive officers of the Company;

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Review, recommend to the full Board for approval or approve, as applicable, the annual salaries, bonuses and share-based awards paid to the Company s executive officers;

Periodically review and recommend to the full Board total compensation for each non-employee director for services as a member of the Board and its committees; and

Exercise oversight of all matters of executive compensation policy.

The Compensation Committee is delegated all authority of the Board as may be required or advisable to fulfill the purposes of the Compensation Committee. The Compensation Committee may form and delegate some or all of its authority to subcommittees when it deems appropriate. Meetings may, at the discretion of the Compensation Committee, include members of the Company s management, other members of the Board, consultants or advisors, and such other persons as the Compensation Committee or its chairperson may determine.

The Compensation Committee has the sole authority to retain, amend the engagement with, and terminate any compensation consultant to be used to assist in the evaluation of director, CEO or executive officer compensation, including employment contracts and change in control provisions. The Compensation Committee has sole authority to approve the consultant s fees and other retention terms and has authority to cause the Company to pay the fees and expenses of such consultants.

From time to time the Compensation Committee engages the services of compensation consulting firms. With respect to the 2018 year, the Compensation Committee engaged Meridian Compensation Partners, LLC (Meridian), an experienced compensation consulting firm with significant energy industry experience, to provide compensation-related services to the Compensation Committee. In selecting Meridian as its independent compensation consultant, the Compensation Committee assessed the independence of Meridian pursuant to SEC rules and considered, among other things, whether Meridian provides any other services to us, the policies of Meridian that are designed to prevent any conflict of interest between Meridian, the Compensation Committee and us, any personal or business relationship between Meridian and a member of the Compensation Committee or one of our executive officers and whether Meridian owns any shares of our common stock. Meridian is engaged by, and reports only to, the Compensation Committee and will perform the compensation advisory services requested by the Compensation Committee. Meridian does not provide any other services to the Company, and the Compensation Committee has concluded that we do not have any conflicts of interest with Meridian. Meridian reviewed the Company s compensation against other comparable companies. Furthermore, the services that Meridian performed for the Compensation Committee with respect to the 2018 year are described in more detail below following the Summary Compensation Table.

The Compensation Committee also annually compares our executive compensation program to those of other companies within the oil and gas industry through the use of energy industry compensation surveys from Effective Compensation Inc. (ECI). ECI surveys are utilized as they are industry-specific and derive their data from direct contributions from a large number of participating companies. The ECI surveys compile data from many companies that we currently consider to be in our peer group, as well as companies somewhat larger than us but with which we compete for talent. The surveys were used to compare our executive compensation program against companies (the Peer Group) that have comparable market capitalization, revenues, capital expenditure budgets, geographic focus and number of employees. The Compensation Committee regularly reviews and refines the Peer Group as appropriate. When we refer to peers, Peer Group or peer companies or similar phrases, we are referring to this list of companies, as it may be updated by the Compensation Committee from time to time. Our 2018 peer group consisted of the following companies:

Abraxas Petroleum Corporation
Amplify Energy Corp.
Comstock Resources, Inc.
Gastar Exploration Inc.
Goodrich Petroleum Corporation
Jones Energy, Inc.
Lonestar Resources US Inc.
PetroQuest Energy, Inc.
SilverBow Resources, Inc.
Vanguard Natural Resources, Inc.
W&T Offshore, Inc.

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During 2018, the members of the Compensation Committee were Messrs. Ford (Committee Chairman), Berilgen and Reimer. Each member of the Compensation Committee during 2018 was an outside director as defined under section 162(m) of the Code and was independent as defined in the applicable rules of the NYSE American and the SEC. The Compensation Committee held two meetings during 2018. For the year ending December 31, 2019, Mr. Romano, assuming reelection to the Board, is expected to assume the Compensation Committee role previously held by Mr. Reimer.

Nominating Committee

The principal function of the Nominating Committee, which is discussed in detail in the Nominating Committee Charter that is posted on our website at *www.contango.com* under *Corporate Charters for Board Committees*, is to oversee, identify, evaluation and select qualified candidates for election to the Board. The Nominating Committee identifies individuals qualified to become Board members and recommends to the Board nominees for election as directors of the Company, taking into account that the Board as a whole shall have competency in industry knowledge, accounting and finance, and business judgment. While the Company does not have a formal diversity policy, when considering candidates for election to the Board, the Nominating Committee seeks members from diverse backgrounds so that the Board consists of members with a broad spectrum of experience and expertise and with a reputation for integrity. Directors should have experience in positions with a high degree of responsibility, be leaders in the companies or institutions with which they are affiliated, and be selected based upon contributions that they can make to the Company. The Nominating Committee shall give the same consideration to candidates for director nominees recommended by Company stockholders as those candidates recommended by others.

During 2018, the members of the Nominating Committee were Messrs. Berilgen (Committee Chairman), Reimer and McCain. Each member of the Nominating Committee during 2018 was independent as defined in the applicable rules of the NYSE American and the SEC. The Nominating Committee held one meeting during 2018. For the year ending December 31, 2019, Mr. Goff, assuming reelection to the Board, is expected to assume the Nominating Committee role previously held by Mr. Reimer.

In identifying prospective director candidates, the Nominating Committee may seek referrals from its members, management, stockholders and other sources. The Nominating Committee also may, but need not, retain a search firm in order to assist it in identifying candidates to serve as directors of the Company. Because the Nominating Committee believes that director nominees should be considered on a case-by-case basis on each nominee s merits, regardless of who recommended the nominee, it has not adopted a formal policy with regard to the consideration of any director candidates recommended by stockholders. For a description of the procedures that stockholders must follow in order to timely nominate director candidates, please see *Stockholder Proposals and Director Nominations for the 2020 Annual Meeting*.

Investment Committee

The Investment Committee was created by the Board on October 1, 2013 in connection with the closing of the Company s merger (the Merger) with Crimson Exploration Inc. (Crimson). The purpose of the Investment Committee, which is discussed in detail in the Investment Committee Charter that is posted on our website at *www.contango.com* under *Corporate Charters for Board Committees*, is to allocate, subject to Board approval, the amount and nature of all capital expenditures of the Company and its subsidiaries, and review and discuss the plan for such capital expenditures with Company management. The members of the Investment Committee are Messrs. Romano (Chairman) and Colyer. The Investment Committee did not hold any formal meetings during 2018 although the members of the Investment Committee met frequently on an informal basis and the full Board was active in the evaluation and approval of potential capital expenditures by the Company.

Code of Ethics

We have adopted a code of ethics as defined by the applicable rules of the SEC, and it is posted on our website: *www.contango.com* under *Corporate Code of Business Conduct*. If the Board grants any waivers from our code of ethics to any of our directors or executive officers, or if we amend our code of ethics, we will, if required, disclose these matters through our website within four business days of such waiver or amendment.

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Board Leadership Structure

The Chairman of the Board is selected by the members of the Board. The positions of Chairman and CEO were separated at the closing of the Merger. The Board has determined that the current structure is appropriate at this time in that it enables Mr. Colyer to focus on his role as CEO of the Company, while enabling Mr. Romano, the Chairman of our Board, to continue to provide leadership on policy at the Board level. Although the roles of CEO and Chairman are currently separated, the Board has not adopted a formal policy requiring such separation. The Board believes that the right Board leadership structure should, among other things, be informed by the needs and circumstances of the Company and the then current membership of the Board, and that the Board should remain adaptable to shaping the leadership structure as those needs and circumstances change.

Board Risk Assessment and Control

Our risk management program is overseen by our Board and its committees, with support from our management. Our Board oversees an enterprise-wide approach to oil and gas industry risk management, designed to support the achievement of organizational objectives, including strategic objectives, to improve long-term organizational performance and enhance stockholder value. A fundamental part of risk management is a thorough understanding of the risks a company faces, understanding of the level of risk appropriate for our company and the steps needed to manage those risks effectively. The involvement of the full Board in setting our business strategy is a key part of its overall responsibilities and together with management determines what constitutes an appropriate level of risk for our company. Our Board believes that the practice of including all members of our management team in our risk assessments allows the Board to more directly and effectively evaluate management capabilities and performance, allows the Board to more effectively and efficiently communicate its concerns and wishes to the entire management team and provides all members of management with a direct communication avenue to the Board.

While our Board has the ultimate oversight responsibility for the risk management process, other committees of our Board also have responsibility for specific risk management activities. In particular, the Audit Committee focuses on financial risk, including internal controls, and oversees compliance with regulatory requirements. In setting compensation, the Compensation Committee approves compensation programs for the officers and other key employees to encourage an appropriate level of risk-taking behavior consistent with our business strategy.

More information about the Company s corporate governance practices and procedures is available on the Company s website at *www.contango.com.*

Communications with our Board

Stockholders desiring to communicate with our Board, or any director in particular, may do so by mail addressed as follows: Attn: Board of Directors, Contango Oil & Gas Company, 717 Texas Avenue, Suite 2900, Houston, Texas 77002. Our Chief Executive Officer, Chief Financial Officer or Corporate Secretary review each such communication received from stockholders and other interested parties and will forward the communication, as expeditiously as reasonably practicable, to the Board (or individual director) for consideration should the communication fall within the scope of matters generally considered by our Board.

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EXECUTIVE OFFICERS

The following table sets forth the names, ages and titles, as of April 8, 2019, of each of our executive officers.

Name	Age	Position
Wilkie S. Colyer, Jr.	34	President, Chief Executive Officer and Director
E. Joseph Grady	66	Senior Vice President and Chief Financial Officer
Michael J. Autin	60	Vice President of Operations

The following provides summary information regarding the experiences of our President and Chief Executive Officer, our Senior Vice President and Chief Financial Officer and our Vice President of Operations. The executive officer profiles exclude Thomas H. Atkins who served as Senior Vice President Exploration until his resignation from such position on February 4, 2019.

Wilkie S. Colyer, Jr. Mr. Colyer s biographical information may be found on page 25 of this proxy statement.

E. Joseph Grady Mr. Grady was appointed Senior Vice President and Chief Financial Officer on October 1, 2013 following the closing of the Merger. Mr. Grady had previously served as Senior Vice President and Chief Financial Officer of Crimson from March 2005 until the closing of the Merger. Mr. Grady has over 40 years of financial, operational and administrative experience, including over 30 years in the oil and gas industry. Prior to joining Crimson, Mr. Grady was managing director of Vision Fund Advisors, Inc., a financial advisory firm which he co-founded in 2001, until its dissolution in June 2008. He was formerly Senior Vice President-Finance and Chief Financial Officer of Texas Petrochemicals Holdings, Inc. from April 2003 to July 2004, Vice President-Chief Financial Officer and Treasurer of Forcenergy Inc. from 1995 to 2001, and he held various financial management positions with Pelto Oil Company from 1980 to 1990, including Vice President-Finance from 1988 to 1990. Mr. Grady is a CPA and received a Bachelor of Science degree in Accounting from Louisiana State University.

Michael J. Autin Mr. Autin joined us in May 2012 as Vice President of Production and was named Vice President of Operations in March 2019. Mr. Autin has over 33 years of experience in the petroleum industry including the Gulf of Mexico and U.S onshore shale. He has held various positions including Production Manager, HSE Manager and Offshore Installation Manager. Prior to joining Contango, Mr. Autin was employed by BHP Billiton since October 2000, where most recently he was Gulf of Mexico Operations Manager, Field Manager and Operations Advisor. Mr. Autin attended Nicholls State University where he studied petroleum, safety and business. He received a Bachelor of Science degree in 1986.

Our executive officers are elected annually by our Board and serve one-year terms or until their death, resignation or removal by our Board. There are no family relationships between any of our directors and executive officers. In addition, there are no arrangements or understandings between any of our executive officers and any other person pursuant to which any person was selected as an executive officer.

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EXECUTIVE COMPENSATION

The following disclosures may contain statements regarding future individual and company performance targets and goals. These targets and goals are disclosed in the limited context of our executive compensation program and should not be understood to be statements of management s expectations or estimates of results or other guidance. We specifically caution stockholders not to apply these statements to other contexts.

Introduction

We are currently considered a smaller reporting company for purposes of the SEC s executive compensation disclosure rules. In accordance with such rules, we are required to provide a Summary Compensation Table and an Outstanding Equity Awards at Fiscal Year End Table, as well as limited narrative disclosures. Further, our reporting obligations extend only to the individuals serving as our chief executive officer and our two other most highly compensated executive officers. With respect to the 2018 year, we had two individuals serving as our chief executive officer, upon the resignation of Mr. Keel and the appointment of Mr. Colyer as our Chief Executive Officer in August 2018. We refer to the four individuals below as our named executive officers for the year ended December 31, 2018.

Name	Principal Position in 2018
Wilkie S. Colyer, Jr.	President and Chief Executive Officer
Allan D. Keel	Former President and Chief Executive Officer
E. Joseph Grady	Senior Vice President and Chief Financial Officer
Thomas H. Atkins	Senior Vice President Exploration

Mr. Keel announced his resignation in August 2018, and his last day as an employee was September 13, 2018. Mr. Atkins departed on February 4, 2019. Although no longer employed by us at the time of this filing, the former executive officers are still considered to be named executive officers for the 2018 year pursuant to SEC disclosure rules and will be included in the compensation disclosures below.

Summary Compensation Table

The following table sets forth the compensation and benefits that were paid to or earned by our named executive officers for years 2017 and 2018, as applicable to years that they were serving in the capacity as a named executive officer.

		Salary ($)	Bonus ($)	Stock Award ($)(1)
		114,807		
		420,768		975,3

600,000 1,437,4

pgn regulatory approval processes generally include all of the risks associated with the FDA approval lures described above. There can be no assurance that we will receive the approvals necessary to ercialize our product candidates for sale outside the United States.

roduct candidates are in early stages of development.

se our product candidates are in early stages of development they will require extensive preclinical and clinical . Although certain of our product candidates have commenced Phase 1b and Phase 2 clinical trials, we cannot t with any certainty if or when we might submit a BLA for regulatory approval for any of our product ates or whether any such BLA will be accepted for review by the FDA, or whether any BLA will be approved eview.

f our clinical trials are completed as planned, we cannot be certain that their results will support our proposed tions. Success in preclinical testing and early clinical trials does not ensure that later clinical trials will be sful, and we cannot be sure that the results of later clinical trials will replicate the results of prior clinical trials eclinical testing. For example, the only clinical study of HS-410 completed to date showed evidence of an ne response in NMIBC patients exposed to HS-410. However, our current Phase 2 clinical trial of HS-410 is doses and dosing regimens which have not previously been tested, and combinations with other notherapy agents will be conducted which may result in different responses. In addition, immune response is acceptable regulatory endpoint for approval, and the HS-410 Phase 1 trial involved a small sample size and ot randomized or blinded. The clinical trial process may fail to demonstrate that our product candidates are nd effective for their proposed uses. This failure could cause us to abandon a product candidate and may delay pment of other product candidates. Any delay in, or termination of, our clinical trials will delay and possibly de the filing of any BLAs with the FDA and, ultimately, our ability to commercialize our product candidates nerate product revenues.

al trials are very expensive, time-consuming and difficult to design and implement.

t of the regulatory process, we must conduct clinical trials for each product candidate to demonstrate safety ficacy to the satisfaction of the FDA and other regulatory authorities. The number and design of the clinical hat will be required varies depending upon product candidate, the condition being evaluated and the trial themselves. Therefore, it is difficult to accurately estimate the cost of the clinical trials. Clinical trials are very sive and difficult to design and implement, in part because they are subject to rigorous regulatory ements. The clinical trial process is also time consuming. We estimate that clinical trials of our product ates will take at least several years to complete. Furthermore, failure can occur at any stage of the trials, and uld encounter problems that cause us to abandon or repeat clinical trials. The commencement and completion ical trials may be delayed or prevented by several factors, including:

seen safety issues;

to determine appropriate dosing;

than anticipated cost of our clinical trials;

to demonstrate effectiveness during clinical trials;

than expected rates of patient recruitment or difficulty obtaining investigators;

drop-out or discontinuation;

ty to monitor patients adequately during or after treatment;

arty contractors failing to comply with regulatory requirements or meet their contractual obligations to us in a manner;

cient or inadequate supply or quality of product candidates or other necessary materials to conduct our trials;

ial additional safety monitoring, or other conditions required by FDA or comparable foreign regulatory ities regarding the scope or design of our clinical trials, or other studies requested by regulatory agencies;

ms engaging IRBs to oversee trials or in obtaining and maintaining IRB approval of studies;

tion of clinical hold or suspension of our clinical trials by regulatory authorities; and

ty or unwillingness of medical investigators to follow our clinical protocols.

ition, we or the FDA may suspend or terminate our clinical trials at any time if it appears that we are exposing pants to unacceptable health risks or if the FDA finds deficiencies in our Investigational New Drug, or IND, ssions or the conduct of these trials. Therefore, we cannot predict with any certainty when, if ever, future l trials will commence or be completed.

e at risk of a clinical hold at any time based on the evaluation of the data and information submitted to the ing regulatory authorities. On February 2, 2016, we received notice from the FDA of a partial clinical hold Phase 2 HS-410 clinical trial despite the fact that we did not have a safety concern. The partial clinical hold after we concluded that the cell line on which HS-410 is based had been previously misidentified. The partial

l hold was lifted on February 10, 2016. However, if in the future we are delayed in addressing, or unable to s, any FDA concerns, we could be delayed, or prevented, from conducting our clinical trials.

ntification of cell lines could impact our clinical development and intellectual property rights ..

oduct candidates are based on human cell lines produced by third parties and licensed by us. Cell line terization and contamination is a known issue in biomedical research. For example, despite standard lures to identify the origins and characteristics of our cell lines we recently discovered that the origin of the e used in HS-410 was misidentified. The misidentification resulted in the FDA placing our HS-410 Phase 2 l trial on partial clinical hold while the FDA reviewed certain updated documentation provided by us related misidentification. In the event we were to use a cell line in the future that is also misidentified, the clinical pment of the product candidate utilizing the mischaracterized cell line could be materially and adversely d, we could lose the right to use the cell line and our intellectual property rights relating to our development of t candidates based on that cell line could be materially and adversely affected. Although we have mented certain additional procedures to properly identify our cell lines, we may not be able to detect that a cell s been mischaracterized or mislabeled by a third party.

is uncertainty as to market acceptance of our technology and product candidates.

f the FDA approves one or more of our product candidates, the products may not gain broad market ance among physicians, healthcare payers, patients, and the medical community. We have conducted our own ch into the markets for our product candidates; however we cannot guarantee market acceptance of our product ates, if approved, and have somewhat limited information on which to estimate our anticipated level of sales. oduct candidates, if approved, will require patients, healthcare providers and doctors to adopt our technology. dustry is susceptible to rapid technological developments and there can be no assurance that we will be able to any new technological advances. If we are unable to match the technological changes in the needs of our ners the demand for our products will be reduced. Acceptance and use of any products we market will depend number of factors including:

tions by members of the health care community, including physicians, about the safety and effectiveness of oducts;

ion on use or warnings required by FDA in our product labeling;

ffectiveness of our products relative to competing products;

nience and ease of administration;

ial advantages of alternative treatment methods;

bility of reimbursement for our products from government or other healthcare payers; and

veness of marketing and distribution efforts by us and our licensees and distributors, if any.

se we expect virtually all of our product revenues for the foreseeable future to be generated from sales of our t product candidates, if approved, the failure of these therapeutics to find market acceptance would ntially harm our business and would adversely affect our revenue.

evelopment program partially depends upon third-party researchers who are outside our control.

e dependent upon independent investigators and collaborators, such as universities and medical institutions, to ct our clinical trials under agreements with us. These collaborators are not our employees and we cannot l the amount or timing of resources that they devote to our programs. These investigators may not assign as priority to our programs or pursue them as diligently as we would if we were undertaking such programs ves. If outside collaborators fail to devote sufficient time and resources to our development programs, or if erformance is substandard, the approval of our FDA applications, if any, and our introduction of new product ates, if any, will be delayed if obtained at all. These collaborators may also have relationships with other ercial entities, some of whom may compete with us. If our collaborators assist our competitors at our expense, mpetitive position would be harmed.

ll rely significantly on third parties to formulate and manufacture our product candidates.

ve developed certain experience in the formulation, development and/or manufacturing of biologics but do not to establish our own manufacturing facilities. To date, the selection and initial replication of our biological nes used in our trials has been performed by individuals working at third party laboratories over which we have rocess or quality control and therefore the process and replication could be subject to human error. We lack ources and expertise to formulate or manufacture our own product candidates. The investigational products r clinical trials are manufactured by our contractors under current good manufacturing practices, (cGMPs) and ve entered into agreements with commercial-scale manufacturers for the production and supply of gational product for additional Phase 2 and Phase 3 clinical trials as well as commercialization. We must also p and validate a potency assay prior to submission of a license application. Such assays have traditionally n difficult to develop for cell-based products and must be established prior to initiating any Phase 3 clinical If any of our current product candidates, or any product candidates we may develop or acquire in the future, e FDA approval, we will rely on one or more third-party contractors for manufacturing. Our anticipated future ce on a limited number of third-party manufacturers exposes us to the following risks:

ay be unable to identify manufacturers on acceptable terms or at all because the number of potential acturers with appropriate expertise and facilities is limited.

change manufacturers at any point during the development process or after approval, we will be required to strate comparability between the products made by the old and new manufacturers. If we are unable to do so, y need to conduct additional clinical trials with product manufactured by the new manufacturer. Accordingly, be necessary to evaluate the comparability of the HS-110 produced by the two different manufacturers at point during the clinical development process.

change the manufacturer of a product subsequent to the approval of the product, we will need to obtain val from the FDA of the change in manufacturer. Any such approval would likely require significant testing pense, and the new manufacturer may be subject to a cGMP inspection prior to approval.

ird-party manufacturers might be unable to formulate and manufacture our product candidates in the volume th the quality required to meet our clinical needs and commercial needs, if any.

ntract manufacturers may not perform as agreed or may not remain in the contract manufacturing business for e required to supply our clinical trials or to successfully produce, store and distribute our product candidates.

manufacturers are subject to ongoing periodic unannounced inspection by the FDA, and corresponding state es to ensure compliance with cGMPs and other government regulations and corresponding foreign standards. not have control over third-party manufacturers compliance with these regulations and standards.

third-party manufacturer makes improvements in the manufacturing process for our products, we may not r may have to share, the intellectual property rights to the innovation.

ntract manufacturers have in the past and may in the future encounter difficulties in achieving quality control ality assurance and may experience shortages in qualified personnel. Our contract manufacturers are subject ections by the FDA and comparable agencies in other jurisdictions to assess compliance with applicable tory requirements. Any failure to follow cGMP or other regulatory requirements or delay, interruption or other that arise in the manufacture, packaging, or storage of our products as a result of a failure of the facilities or ions of third parties to comply with regulatory requirements or pass any regulatory authority inspection could cantly impair our ability to develop and commercialize our products, including leading to significant delays in ailability of products for our clinical studies or the termination or hold on a clinical study, or the delay or tion of a filing or approval of marketing applications for our product candidates. Significant noncompliance also result in the imposition of sanctions, including fines, injunctions, civil penalties, failure of regulatory ities to grant marketing approvals for our product candidates, delays, suspension or withdrawal of approvals, revocation, seizures or recalls of products, operating restrictions and criminal prosecutions, any of which damage our reputation. If we or our contract manufacturers are not able to maintain regulatory compliance, we ot be permitted to market our products and/or may be subject to product recalls, seizures, injunctions, or al prosecution.

f these risks could delay our clinical trials, the approval, if any, of our product candidates by the FDA or the ercialization of our product candidates or could also result in higher costs or deprive us of potential product es.

ch of our product candidates, we rely upon a single third party to manufacture and supply our drug nce. Any problems experienced by either our third party manufacturers or their vendors could result in a or interruption in the supply of our product candidate to us until the third party manufacturer or its vendor he problem or until we locate and qualify an alternative source of manufacturing and supply.

ch of our product candidates we currently rely on third party manufacturers to purchase from their third party rs the materials necessary to produce our product candidates and manufacture our product candidates for our l studies. If either of our third party manufacturers were to experience any prolonged disruption for our acturing we could be forced to seek additional third party manufacturing contracts, thereby increasing our pment costs and negatively impacting our timeliness and any commercialization costs.

ch of our ongoing clinical trials, we are administering our product candidates, in combination with other notherapy agents. Any problems obtaining the other immunotherapy agents could result in a delay or ption in our clinical trials.

ch of our ongoing clinical trials we administer our product candidate in combination with other notherapy agents, such as BCG and nivolumab. If any of the immunotherapy agents that are used in our l trials are unavailable while the trials are continuing, our timeliness and commercialization costs could be ed. The recent shortage of BCG initially negatively impacted our timeliness of our Phase 2 trial of HS-410.

e effects resulting from other immunotherapy drugs or therapies could also negatively affect the tions by members of the health care community, including physicians, about the safety and effectiveness of oduct candidates.

are many other companies that have developed or are currently trying to develop immunology vaccines for the ent of cancer. If adverse effects were to result from any immunotherapy drugs or therapies being developed, actured and marketed by others it could be attributed to our products or immunotherapy protocols as a whole. uch attribution could negatively affect the perceptions by members of the health care community, including ians, about the safety and effectiveness of our product candidates and the future of immunotherapy for the ent of cancer. Our industry is susceptible to rapid technological changes and there can be no assurance that l be able to match any new technological challenges presented by the adverse effects resulting from

notherapy drugs or therapies developed, manufactured or marketed by others.

f we are able to obtain regulatory approval for our product candidates, we will continue to be subject to ng and extensive regulatory requirements, and our failure, or the failure of our contract manufacturers, to y with these requirements could substantially harm our business.

FDA approves any of our product candidates, the labeling, manufacturing, packaging, adverse event reporting, e, advertising, promotion and record-keeping for our products will be subject to ongoing FDA requirements ntinued regulatory oversight and review. We may also be subject to additional FDA post-marketing tions. If we are not able to maintain regulatory compliance, we may not be permitted to market our product ates and/or may be subject to product recalls or seizures. The subsequent discovery of previously unknown ms with any marketed product, including AEs of unanticipated severity or frequency, may result in restrictions marketing of the product, and could include withdrawal of the product from the market.

track designation by the FDA may not actually lead to a faster development or regulatory review or val process.

ve been granted fast track designation for HS-410 and may seek fast track designation for future product ates. The FDA has broad discretion whether to grant this designation, and even if we believe a particular ct candidate is eligible for this designation, we cannot assure you that the FDA would decide to grant it. over, we may not experience a faster development process, review or approval compared to conventional FDA lures for HS-410, and the FDA may withdraw fast track designation if it believes that the designation is no supported by data from our clinical development program.

ve no experience selling, marketing or distributing products and have no internal capability to do so.

rrently have no sales, marketing or distribution capabilities. We do not anticipate having the resources in the eable future to allocate to the sales and marketing of our proposed products, if approved. Our future success ds, in part, on our ability to enter into and maintain collaborative relationships for such capabilities, the orator s strategic interest in the products under development and such collaborator s ability to successfully t and sell any such products. We intend to pursue collaborative arrangements regarding the sales and ting of our products, however, there can be no assurance that we will be able to establish or maintain such orative arrangements, or if able to do so, that our collaborators will have effective sales forces. To the extent e decide not to, or are unable to, enter into collaborative arrangements with respect to the sales and marketing proposed products, significant capital expenditures, management resources and time will be required to sh and develop an in-house marketing and sales force with technical expertise. There can also be no assurance e will be able to establish or maintain relationships with third party collaborators or develop in-house sales and ution capabilities. To the extent that we depend on third parties for marketing and distribution, any revenues eive will depend upon the efforts of such third parties, and there can be no assurance that such efforts will be sful. In addition, there can also be no assurance that we will be able to successfully market and sell our cts in the United States or overseas on our own.

y not be successful in establishing and maintaining strategic partnerships, which could adversely affect ility to develop and commercialize products.

y seek to enter into strategic partnerships in the future, including alliances with other biotechnology or aceutical companies, to enhance and accelerate the development and commercialization of our products. We gnificant competition in seeking appropriate strategic partners and the negotiation process is time-consuming mplex. Moreover, we may not be successful in our efforts to establish a strategic partnership or other tive arrangements for any future product candidates and programs because our research and development e may be insufficient, our product candidates and programs may be deemed to be at too early of a stage of

pment for collaborative effort and/or third parties may not view our product candidates and programs as
the requisite potential to demonstrate safety and efficacy or return on investment. Even if we are successful in
forts to establish strategic partnerships, the terms that we agree upon may not be favorable to us and we may
able to maintain such strategic partnerships if, for example, development or approval of a product candidate is
d or sales of an approved product are disappointing.

ltimately determine that entering into strategic partnerships is in our best interest but either fail to enter into,
ayed in entering into or fail to maintain such strategic partnerships:

velopment of certain of our current or future product candidates may be terminated or delayed;

sh expenditures related to development of certain of our current or future product candidates may increase
cantly and we may need to seek additional financing;

y be required to hire additional employees or otherwise develop expertise, such as sales and marketing
ise, for which we have not budgeted;

l bear all of the risk related to the development of any such product candidates; and

mpetitiveness of any product candidate that is commercialized could be reduced.

extent we elect to enter into licensing or collaboration agreements to partner our product candidates, our dence on such relationships may adversely affect our business.

ommercialization strategy for certain of our product candidates may depend on our ability to enter into ments with collaborators to obtain assistance and funding for the development and potential commercialization e product candidates. Supporting diligence activities conducted by potential collaborators and negotiating the ial and other terms of a collaboration agreement are long and complex processes with uncertain results. Even re successful in entering into one or more collaboration agreements, collaborations may involve greater ainty for us, as we have less control over certain aspects of our collaborative programs than we do over our etary development and commercialization programs. We may determine that continuing a collaboration under ms provided is not in our best interest, and we may terminate the collaboration. Our collaborators could delay minate their agreements, and our product candidates subject to collaborative arrangements may never be sfully developed or commercialized.

r, our future collaborators may develop alternative products or pursue alternative technologies either on their r in collaboration with others, including our competitors, and the priorities or focus of our collaborators may uch that our programs receive less attention or fewer resources than we would like, or they may be terminated ther. Any such actions by our collaborators may adversely affect our business prospects and ability to earn es. In addition, we could have disputes with our future collaborators, such as the interpretation of terms in our ments. Any such disagreements could lead to delays in the development or commercialization of any potential cts or could result in time-consuming and expensive litigation or arbitration, which may not be resolved in our

annot compete successfully for market share against other drug companies, we may not achieve sufficient ct revenues and our business will suffer.

arket for our product candidates is characterized by intense competition and rapid technological advances. If our product candidates receives FDA approval, it will compete with a number of existing and future drugs erapies developed, manufactured and marketed by others. Existing or future competing products may provide r therapeutic convenience or clinical or other benefits for a specific indication than our products, or may offer rable performance at a lower cost. If our products fail to capture and maintain market share, we may not e sufficient product revenues and our business will suffer.

ll compete against fully integrated pharmaceutical companies and smaller companies that are collaborating arger pharmaceutical companies, academic institutions, government agencies and other public and private ch organizations. Many of these competitors have oncology compounds already approved or in development. ition, many of these competitors, either alone or together with their collaborative partners, operate larger

ch and development programs or have substantially greater financial resources than we do, as well as
cantly greater experience in:

ping drugs, biologics and other therapies;

aking preclinical testing and clinical trials;

ing FDA and other regulatory approvals of drugs, biologics and other therapies;

ating and manufacturing drugs, biologics and other therapies; and

ing, marketing and selling drugs, biologics and other therapies.

ve limited protection for our intellectual property.

tend to rely on a combination of common law copyright, patent, trademark, and trade secret laws and measures ect our proprietary information. We have obtained exclusive rights to license the technology for which patent tion has been obtained; however, certain patents expire in 2019 and such protection does not prevent horized use of such technology. In addition, certain cell lines used in our product candidates, including the one n HS-410, are not protected by patents and our licenses thereto are non-exclusive. Trademark and copyright tions may be limited, and enforcement could be too costly to be effective. It may also be possible for horized third parties to copy aspects of, or otherwise obtain and use, our proprietary information without ization, including, but not limited to, product design, software, customer and prospective customer lists, trade s, copyrights, patents and other proprietary rights and materials. Other parties can use and register confusingly r business, product and service names, as well as domain names, which could divert customers, resulting in a al adverse effect on our business, operating results and financial condition.

ail to successfully enforce our intellectual property rights, our competitive position could suffer, which could our operating results. Competitors may challenge the validity or scope of our patents or future patents we may . In addition, our licensed patents may not provide us with a meaningful competitive advantage. We may be ed to spend significant resources to monitor and police our licensed intellectual property rights. We may not be detect infringement and our competitive position may be harmed. In addition, competitors may design around chnology or develop competing technologies. Intellectual property rights may also be unavailable or limited in foreign countries, which could make it easier for competitors to capture market share.

chnology we license, our products or our development efforts may be found to infringe upon third-party ctual property rights.

parties may in the future assert claims or initiate litigation related to their patent, copyright, trademark and ntellectual property rights in technology that is important to us. The asserted claims and/or litigation could e claims against us, our licensors or our suppliers alleging infringement of intellectual property rights with t to our products or components of those products. Regardless of the merit of the claims, they could be time ming, result in costly litigation and diversion of technical and management personnel, or require us to develop infringing technology or enter into license agreements. We have not undertaken an exhaustive search to er any third party intellectual patent rights which might be infringed by commercialization of the product ates described herein. Although we are not currently aware of any such third party intellectual patent rights, it ible that such rights currently exist or might be obtained in the future. In the event that a third party controls ghts and we are unable to obtain a license to such rights on commercially reasonable terms, we may not be sell or continue to develop our products, and may be liable for damages for such infringement. We cannot you that licenses will be available on acceptable terms, if at all. Furthermore, because of the potential for cant damage awards, which are not necessarily predictable, it is not unusual to find even arguably itorious claims resulting in large settlements. If any infringement or other intellectual property claim made

t us by any third party is successful, or if we fail to develop non-infringing technology or license the etary rights on commercially reasonable terms and conditions, our business, operating results and financial ion could be materially adversely affected.

products, methods, processes and other technologies infringe the proprietary rights of other parties, we could ubstantial costs and we may have to:

licenses, which may not be available on commercially reasonable terms, if at all;

on an infringing drug or therapy candidate;

gn our products or processes to avoid infringement;

sing the subject matter claimed in the patents held by others;

mages; or

litigation or administrative proceedings which may be costly whether we win or lose, and which could result bstantial diversion of our financial and management resources.

ly on licenses to use various technologies that are material to our business and if the agreements were to be ated or if other rights that may be necessary or we deem advisable for commercializing our intended cts cannot be obtained, it would halt our ability to market our products and technology, as well as have an diate material adverse effect on our business, operating results and financial condition.

ve licensing agreements with certain universities granting us the right to use certain critical intellectual ty. The terms of the licensing agreements continue until the end of the life of the last patent to expire. If we the terms of these licensing agreements, including any failure to make minimum royalty payments required nder or failure to reach certain developmental milestones, using best efforts to introduce a licensed product in territories by certain dates, the licensor has the right to terminate the license. If we were to lose or otherwise ble to maintain these licenses on acceptable terms, or find that it is necessary or appropriate to secure new es from other third parties, it would halt our ability to market our products and technology, which would have mediate material adverse effect on our business, operating results and financial condition.

ay be unable to generate sufficient revenues to meet the minimum royalties or developmental milestones ed under our license agreements.

e years ended December 31, 2015, 2016, and 2017 our minimum royalty obligations under our licensing ments, required to be paid with the passage of time, are $33,000, $38,000 and $338,000, respectively. For the ended December 31, 2018, 2019 and 2020 our minimum royalty obligations under our licensing agreement, ed to be paid with the passage of time, are $38,000, $113,000 and $288,000, respectively. No assurance can be that we will generate sufficient revenue or raise additional financing to make these minimum royalty nts. The license agreements also provide for certain developmental milestones. No assurance can be given that l meet all of the required developmental milestones. Any failure to make the payments or reach the milestones ed by the license agreements would permit the licensor to terminate the license. If we were to lose or otherwise ble to maintain these licenses, it would halt our ability to market our products and technology, which would n immediate material adverse effect on our business, operating results and financial condition.

bility to generate product revenues will be diminished if our therapies sell for inadequate prices or patients able to obtain adequate levels of reimbursement.

bility to commercialize our therapies, alone or with collaborators, will depend in part on the extent to which ursement will be available from:

ment and health administration authorities;

health maintenance organizations and health insurers; and

healthcare payers.

cant uncertainty exists as to the reimbursement status of newly approved healthcare products. Healthcare , including Medicare, are challenging the prices charged for medical products and services. Cost control ves could decrease the price that we would receive for any products in the future, which would limit our e and profitability. Government and other healthcare payers increasingly attempt to contain healthcare costs iting both coverage and the level of reimbursement for drugs and therapeutics. We might need to conduct arketing studies in order to demonstrate the cost-effectiveness of any future products to such payers ction. Such studies might require us to commit a significant amount of management time and financial and esources. Our future products might not ultimately be considered cost-effective. Even if one of our product ates is approved by the FDA, insurance coverage may not be available, and reimbursement levels may be uate, to cover such therapies. If government and other healthcare payers do not provide adequate coverage and ursement levels for one of our products, once approved, market acceptance of such product could be reduced.

ative and regulatory changes affecting the health care industry could adversely affect our business.

al, economic and regulatory influences are subjecting the health care industry to potential fundamental es that could substantially affect our results of operations. In many countries, the government controls the g and profitability of prescription pharmaceuticals. In the United States, we expect that there will continue to eral and state proposals to implement similar governmental controls. In addition, recent changes in the are program and increasing emphasis on managed care in the United States will continue to put pressure on aceutical product pricing. It is uncertain whether or when any legislative proposals will be adopted or what s federal, state, or private payers for health care treatment and services may take in response to any health care proposal or legislation. We cannot predict the effect health care reforms may have on our business and we fer no assurances that any of these reforms will not have a material adverse effect on our business. These and potential changes are causing the marketplace to put increased emphasis on the delivery of more ffective treatments. In addition, uncertainly remains regarding proposed significant reforms to the U.S. health ystem.

y not successfully effect our intended expansion.

ccess will depend upon the expansion of our operations and the effective management of our growth, which ace a significant strain on our management and on our administrative, operational and financial resources. To e this growth, we must expand our facilities, augment our operational, financial and management systems and d train additional qualified personnel. If we are unable to manage our growth effectively, our business would med.

y be exposed to liability claims associated with the use of biological and hazardous materials and cals.

search and development activities may involve the controlled use of biological and hazardous materials and cals. Although we believe that our safety procedures for using, storing, handling and disposing of these als comply with federal, state and local laws and regulations, we cannot completely eliminate the risk of ntal injury or contamination from these materials. In the event of such an accident, we could be held liable for sulting damages and any liability could materially adversely affect our business, financial condition and results rations. In addition, the federal, state and local laws and regulations governing the use, manufacture, storage, ng and disposal of hazardous or radioactive materials and waste products may require us to incur substantial iance costs that could materially adversely affect our business, financial condition and results of operations.

***y on key executive officers and scientific and medical advisors, and their knowledge of our business and cal expertise would be difficult to replace*.**

e highly dependent on our principal scientific, regulatory and medical advisors and our chief executive officer. than a $2,000,000 insurance policy on the life of Jeffrey Wolf, we do not have key person life insurance s for any of our officers or advisors. The loss of the technical knowledge and management and industry ise of any of our key personnel could result in delays in product development, loss of customers and sales and on of management resources, which could adversely affect our operating results.

re unable to hire additional qualified personnel, our ability to grow our business may be harmed.

ll need to hire additional qualified personnel with expertise in preclinical and clinical research, government tion, formulation and manufacturing, sales and marketing and accounting and financing. In particular, over the 2 months, we expect to hire additional new employees. We compete for qualified individuals with numerous rmaceutical companies, universities and other research institutions. Competition for such individuals is e, and we cannot be certain that our search for such personnel will be successful. Attracting and retaining ed personnel will be critical to our success.

n of our officers may have a conflict of interest.

n of our officers are currently entitled to devote their time to other activities, which may result in a lack of bility when needed due to responsibilities at other jobs.

y incur substantial liabilities and may be required to limit commercialization of our products in response to ct liability lawsuits.

sting and marketing of drug and biological product candidates entail an inherent risk of product liability. ct liability claims might be brought against us by consumers, health care providers or others selling or vise coming into contact with our products. Clinical trial liability claims may be filed against us for damages ed by clinical trial subjects or their families. If we cannot successfully defend ourselves against product y claims, we may incur substantial liabilities or be required to limit commercialization of our products which mpact our ability to continue as a going concern. Our inability to obtain sufficient product liability insurance cceptable cost to protect against potential product liability claims could prevent or inhibit the ercialization of pharmaceutical products we develop, alone or with collaborators. In addition, regardless of or eventual outcome, product liability claims may result in:

sed demand for any approved product candidates;

ment of our business reputation;

awal of clinical trial participants;

f related litigation;

tion of management s attention;

ntial monetary awards to patients or other claimants;

revenues; and

bility to successfully commercialize any approved drug candidates.

ational expansion of our business exposes us to business, regulatory, political, operational, financial and mic risks associated with doing business outside of the United States.

siness strategy incorporates international expansion, including establishing and maintaining clinician ting and education capabilities outside of the United States and expanding our relationships with distributors anufacturers. Doing business internationally involves a number of risks, including:

le, conflicting and changing laws and regulations such as tax laws, export and import restrictions, employment egulatory requirements and other governmental approvals, permits and licenses;

by us or our distributors to obtain regulatory approvals for the sale or use of our product candidates in various ies;

lties in managing foreign operations;

exities associated with managing multiple payor-reimbursement regimes or self-pay systems;

on our ability to penetrate international markets if our product candidates cannot be processed by a acturer appropriately qualified in such markets;

ial risks, such as longer payment cycles, difficulty enforcing contracts and collecting accounts receivable and ure to foreign currency exchange rate fluctuations;

d protection for intellectual property rights;

l disasters, political and economic instability, including wars, terrorism and political unrest, outbreak of
e, boycotts, curtailment of trade and other business restrictions; and

to comply with the Foreign Corrupt Practices Act, including its books and records provisions and its
ibery provisions, by maintaining accurate information and control over sales and distributors activities.

f these risks, if encountered, could significantly harm our future international expansion and operations and,
quently, have a material adverse effect on our financial condition, results of operations and cash flows.

y acquire other businesses or form joint ventures or make investments in other companies or technologies ould harm our operating results, dilute our stockholders ownership, increase our debt or cause us to incur cant expense.

t of our business strategy, we may pursue acquisitions of businesses and assets. We also may pursue strategic es and joint ventures that leverage our core technology and industry experience to expand our offerings or ution. We have no experience with acquiring other companies and limited experience with forming strategic es and joint ventures. We may not be able to find suitable partners or acquisition candidates, and we may not e to complete such transactions on favorable terms, if at all. If we make any acquisitions, we may not be able grate these acquisitions successfully into our existing business, and we could assume unknown or contingent ies. Any future acquisitions also could result in significant write-offs or the incurrence of debt and contingent ies, any of which could have a material adverse effect on our financial condition, results of operations and ows. Integration of an acquired company also may disrupt ongoing operations and require management ces that would otherwise focus on developing our existing business. We may experience losses related to ments in other companies, which could have a material negative effect on our results of operations. We may ntify or complete these transactions in a timely manner, on a cost-effective basis, or at all, and we may not the anticipated benefits of any acquisition, technology license, strategic alliance or joint venture.

ance any acquisitions or joint ventures, we may choose to issue shares of our common stock as consideration, would dilute the ownership of our stockholders. If the price of our common stock is low or volatile, we may able to acquire other companies or fund a joint venture project using our stock as consideration. Alternatively, be necessary for us to raise additional funds for acquisitions through public or private financings. Additional may not be available on terms that are favorable to us, or at all.

ing general economic or business conditions may have a negative impact on our business.

uing concerns over U.S. health care reform legislation and energy costs, geopolitical issues, the availability st of credit and government stimulus programs in the United States and other countries have contributed to sed volatility and diminished expectations for the global economy. These factors, combined with low business nsumer confidence and high unemployment, precipitated an economic slowdown and recession. If the mic climate does not improve or continues to deteriorate, our business, as well as the financial condition of our ers and our third-party payors, could be adversely affected, resulting in a negative impact on our business, ial condition and results of operations.

.S. government may have march-in rights to certain of our intellectual property.

se federal grant monies were used in support of the research and development activities that resulted in certain issued pending U.S. patent applications, the federal government retains what are referred to as march-in rights nts that are granted on these applications.

icular, the National Institutes of Health, which administered grant monies to the primary inventor of the logy we license, technically retain the right to require us, under certain specific circumstances, to grant the overnment either a nonexclusive, partially exclusive or exclusive license to the patented invention in any field upon terms that are reasonable for a particular situation. Circumstances that trigger march-in rights include, ample, failure to take, within a reasonable time, effective steps to achieve practical application of the invention eld of use, failure to satisfy the health and safety needs of the public and failure to meet requirements of public ecified by federal regulations. The National Institutes of Health can elect to exercise these march-in rights on wn initiative or at the request of a third-party.

Related to Our Common Stock

n of our officers and directors have sufficient voting power to make corporate governance decisions that have a significant effect on us and the other stockholders.

January 1, 2016, our officers and directors together beneficially own approximately 28.9% of our outstanding on stock on a fully diluted basis. Mr. Wolf, our Chairman of the Board and Chief Executive Officer, alone h his direct and indirect holdings beneficially owns approximately 16.9% of our outstanding common stock on diluted basis. As a result, Mr. Wolf alone will be able to exert a significant degree of influence over our ement and affairs and over matters requiring stockholder approval, including the election of directors and val of significant corporate transactions. In addition, as reported in a Schedule 13G/A filed with the Securities xchange Commission on April 10, 2015, our largest shareholder, Franklin Resources, Inc. beneficially owns in of 17% of our outstanding common stock and can exert a significant degree of influence over matters ng stockholder approval. This concentration of ownership may delay or prevent a change in our control and affect the market price of our common stock, even when a change in control may be in the best interest of all olders. Furthermore, the interests of this concentration of ownership may not always coincide with our ts or the interests of other stockholders. Accordingly, these stockholders could cause us to enter into ctions or agreements that we would not otherwise consider.

ossible issuance of common stock subject to options and warrants may dilute the interest of stockholders.

9, we adopted a 2009 Stock Option and Restricted Stock Plan (the 2009 Plan). In 2014, we adopted a 2014 Incentive Plan (the 2014 Plan) and in 2015 we increased the number of shares of common stock that we have ity to grant under the 2014 Plan. As of December 31, 2015, awards for 1,818,673 shares of common stock een granted under the 2009 Plan and the 2014 Plan, and there were 453,297 shares of common stock ning available for grant under these plans. In addition, as of December 31, 2015, we have 17,392 shares le upon exercise of warrants granted to third parties in connection with prior private placements of our equity ies and debt which excludes 125,000 shares of common stock issuable at $12.50 per share upon exercise of nts issued to the underwriters in connection with our initial public offering. To the extent that outstanding stock s and warrants are exercised, or additional securities are issued, dilution to the interests of our stockholders ccur. Moreover, the terms upon which we will be able to obtain additional equity capital may be adversely d since the holders of the outstanding options can be expected to exercise them at a time when we would, in elihood, be able to obtain any needed capital on terms more favorable to us than those provided in such nding options.

ve additional securities available for issuance, which, if issued, could adversely affect the rights of the s of our common stock.

hird Amended and Restated Certificate of Incorporation authorizes the issuance of 50,000,000 shares of our on stock and 10,000,000 shares of Preferred Stock. In certain circumstances, the common stock and preferred as well as the awards available for issuance under the 2009 and 2014 Plans, can be issued by our board of rs, without stockholder approval. Any future issuances of such stock would further dilute the percentage ship of us held by holders of Preferred Stock and common stock. In addition, the issuance of Preferred Stock e used as an anti-takeover device without further action on the part of our stockholders, and may adversely the holders of the common stock.

ve never paid dividends and have no plans to pay dividends in the future.

rs of shares of our common stock are entitled to receive such dividends as may be declared by our board of rs. To date, we have paid no cash dividends on our shares of our preferred or common stock and we do not to pay cash dividends in the foreseeable future. We intend to retain future earnings, if any, to provide funds erations of our business. Therefore, any return investors in our preferred or common stock may have will be in m of appreciation, if any, in the market value of their shares of common stock.

e an emerging growth company, and any decision on our part to comply with certain reduced disclosure ements applicable to emerging growth companies could make our common stock less attractive to investors.

e an emerging growth company, as defined in the Jumpstart Our Business Startups Act enacted in April 2012, or as long as we continue to be an emerging growth company, we may choose to take advantage of exemptions various reporting requirements applicable to other public companies including, but not limited to, not being ed to comply with the auditor attestation requirements of Section 404 of the Sarbanes-Oxley Act of 2002, not required to comply with any new requirements adopted by the Public Company Accounting Oversight Board, PCAOB, requiring mandatory audit firm rotation or a supplement to the auditor's report in which the auditor be required to provide additional information about the audit and the financial statements of the issuer, not required to comply with any new audit rules adopted by the PCAOB after April 5, 2012 unless the SEC ines otherwise, reduced disclosure obligations regarding executive compensation in our periodic reports and statements, and exemptions from the requirements of holding a nonbinding advisory vote on executive nsation and stockholder approval of any golden parachute payments not previously approved. We could n an emerging growth company until the earliest of: (i) the last day of the fiscal year in which we have total gross revenues of $1 billion or more; (ii) the last day of our fiscal year following the fifth anniversary of the f our first sale of common equity securities pursuant to an effective registration statement; (iii) the date on we have issued more than $1 billion in nonconvertible debt during the previous three years; or (iv) the date on we are deemed to be a large accelerated filer. We cannot predict if investors will find our common stock less ive if we choose to rely on these exemptions. If some investors find our common stock less attractive as a of any choices to reduce future disclosure, there may be a less active trading market for our common stock and ock price may be more volatile. Further, as a result of these scaled regulatory requirements, our disclosure may re limited than that of other public companies and you may not have the same protections afforded to olders of such companies.

Section 107(b) of the Jumpstart Our Business Startups Act, emerging growth companies can delay adopting r revised accounting standards until such time as those standards apply to private companies. We have cably elected not to avail ourselves of this exemption from new or revised accounting standards and, therefore, l be subject to the same new or revised accounting standards as other public companies that are not emerging n companies.

esult of being a public company, we are subject to additional reporting and corporate governance ements that will require additional management time, resources and expense.

ublic company we are obligated to file with the SEC annual and quarterly information and other reports that ecified in the Exchange Act. We are also subject to other reporting and corporate governance requirements the Sarbanes-Oxley Act of 2002, as amended, and the rules and regulations promulgated thereunder, all of impose significant compliance and reporting obligations upon us and require us to incur additional expense in o fulfill such obligations.

e sales of our common stock by our existing stockholders could cause our stock price to decline.

February 17, 2016 we had 8,424,641 shares of our common stock outstanding, all of which are currently e for sale in the public market, subject, in certain circumstances to the volume, manner of sale and other ions under Rule 144 or 701 promulgated under the Securities Act. It is conceivable that stockholders may o sell some or all of their shares. If our stockholders sell substantial amounts of our common stock in the market at the same time, the market price of our common stock could decrease significantly due to an nce in the supply and demand of our common stock. Even if they do not actually sell the stock, the perception public market that our stockholders might sell significant shares of our common stock could also depress the t price of our common stock.

ine in the price of shares of our common stock might impede our ability to raise capital through the issuance itional shares of our common stock or other equity securities, and may cause stockholders to lose part or all of nvestment in our shares of common stock.

hares of common stock are from time to time thinly traded, so stockholders may be unable to sell at or near ices or at all if they need to sell shares to raise money or otherwise desire to liquidate their shares.

ommon stock has from time to time been thinly-traded, meaning that the number of persons interested in asing our common stock at or near ask prices at any given time may be relatively small or non-existent. This on is attributable to a number of factors, including the fact that we are a small company that is relatively wn to stock analysts, stock brokers, institutional investors and others in the investment community that te or influence sales volume, and that even if we came to the attention of such persons, they tend to be verse and would be reluctant to follow an unproven company such as ours or purchase or recommend the ase of our shares until such time as we became more seasoned and viable. As a consequence, there may be s of several days or more when trading activity in our shares is minimal or non-existent, as compared to a ed issuer that has a large and steady volume of trading activity that will generally support continuous sales ut an adverse effect on share price. We cannot give stockholders any assurance that a broader or more active trading market for our common shares will develop or be sustained, or that current trading levels will be ed.

mited trading market has in the past and may continue to cause volatility in our share price.

ock is thinly traded in part due to a limited number of shares available for trading thus causing large swings in As such, investors may find it difficult to obtain accurate stock price quotations and holders of our stock may ble to resell their stock at desirable prices. If an active market develops, our stock price may nevertheless volatile. Sales of substantial amounts of our common stock, or the perception that such sales might occur, adversely affect prevailing market prices of our common stock and our stock price may decline substantially in period of time. As a result, our stockholders could suffer losses or be unable to liquidate holdings.

n provisions of the General Corporation Law of the State of Delaware may have anti-takeover effects which ake an acquisition of our company by another company more difficult.

e subject to the provisions of Section 203 of the General Corporation Law of the State of Delaware, which its a Delaware corporation from engaging in any business combination, including mergers and asset sales, interested stockholder (generally, a 15% or greater stockholder) for a period of three years after the date of nsaction in which the person became an interested stockholder, unless the business combination is approved in cribed manner. The operation of Section 203 may have anti-takeover effects, which could delay, defer or t a takeover attempt that a holder of our common stock might consider in its best interest.

ailure to meet the continued listing requirements of the NASDAQ Capital Market could result in a de-listing common stock.

ares of common stock are currently listed on the NASDAQ Capital Market. If we fail to satisfy the continued requirements of the NASDAQ Capital Market, such as the corporate governance requirements, minimum bid equirement or the minimum stockholder s equity requirement, the NASDAQ Capital Market may take steps to our common stock. Such a de-listing would likely have a negative effect on the price of our common stock ould impair our stockholders ability to sell or purchase our common stock when they wish to do so. In the of a de-listing, we would take actions to restore our compliance with the NASDAQ Capital Market s listing ements, but we can provide no assurance that any action taken by us would result in our common stock ing listed again, or that any such action would stabilize the market price or improve the liquidity of our on stock.

ts published by securities or industry analysts, including projections in those reports that exceed our actual , could adversely affect our common stock price and trading volume.

ties research analysts, including those affiliated with our underwriters, establish and publish their own periodic tions for our business. These projections may vary widely from one another and may not accurately predict the we actually achieve. Our stock price may decline if our actual results do not match securities research ts projections. Similarly, if one or more of the analysts who writes reports on us downgrades our stock or nes inaccurate or unfavorable research about our business or if one or more of these analysts ceases coverage company or fails to publish reports on us regularly, our stock price or trading volume could decline. While we securities research analyst coverage following this offering, if no securities or industry analysts begin to cover trading price for our stock and the trading volume could be adversely affected.

Related to this Offering

ill experience immediate and substantial dilution in the book value per share of the common stock you ase.

ublic offering price per share of our common stock will be substantially higher than the net tangible book value are of our common stock immediately prior to the offering. After giving effect to the assumed sale of 635 shares of our common stock in this offering, at an assumed public offering price of $2.03 per share (the ported sale price of our common stock on the NASDAQ Capital Market on February 17, 2016), and after ing the estimated underwriting discount and estimated offering expenses payable by us, purchasers of our on stock in this offering will incur immediate dilution of $1.08 per share in the net tangible book value of the on stock they acquire. For a further description of the dilution that investors in this offering will experience, Dilution.

anagement will have broad discretion over the use of proceeds from this offering and may not use the ds effectively.

anagement will have broad discretion over the use of proceeds from this offering. The net proceeds from this g will be used to continue to fund our current Phase 2 trial of HS-410 for the treatment of NMIBC; to advance rrent Phase 1b trial evaluating HS-110 in combination with nivolumab, a Bristol-Myers Squibb PD-1 point inhibitor, for the treatment of NSCLC through the reporting of topline data; to fund manufacturing of *omPACT* products to support at least one new IND in NSCLC; and working capital and general corporate es. Our management will have considerable discretion in the application of the net proceeds, and you will not he opportunity, as part of your investment decision, to assess whether the proceeds are being used priately. The net proceeds may be used for corporate purposes that do not improve our operating results or ce the value of our common stock.

eed for future financing may result in the issuance of additional securities which will cause investors to ence dilution.

sh requirements may vary from those now planned depending upon numerous factors, including the result of research and development activities. We expect our expenses to increase in connection with our ongoing ies, particularly as we continue the research and development and initiate and conduct clinical trials of, and arketing approval for, our product candidates. In addition, if we obtain marketing approval for any of our t candidates, we expect to incur significant commercialization expenses related to product sales, marketing,

acturing and distribution. Accordingly, we will need to obtain substantial additional funding in connection ur continuing operations. There are no other commitments by any person for future financing. Our securities e offered to other investors at a price lower than the price per share offered to current stockholders, or upon which may be deemed more favorable than those offered to current stockholders. In addition, the issuance of ies in any future financing may dilute an investor's equity ownership and have the effect of depressing the t price for our securities. Moreover, we may issue derivative securities, including options and/or warrants, me to time, to procure qualified personnel or for other business reasons. The issuance of any such derivative ies, which is at the discretion of our board of directors, may further dilute the equity ownership of our olders. No assurance can be given as to our ability to procure additional financing, if required, and on terms d favorable to us. To the extent additional capital is required and cannot be raised successfully, we may then o limit our then current operations and/or may have to curtail certain, if not all, of our business objectives and

of additional shares of common stock, including by us or our directors and officers following expiration or release of the lock-up periods, could cause the price of our common stock to decline.

of substantial amounts of our common stock in the public market, or the availability of such shares for sale, by y others, including the issuance of shares of common stock upon the exercise of outstanding options and nts, could adversely affect the price of our common stock. In connection with this offering, we and our rs and officers have entered into lock-up agreements for a period of 90 days following this offering. We and rectors and officers may be released from the lock-up prior to its expiration period at the sole discretion of the entative of the underwriters. See Underwriting. Upon expiration or earlier release of the lock-up, we and our rs and officers may sell shares of our common stock into the market, which could adversely affect the market f our common stock.

SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS

rospectus contains forward-looking statements, including statements regarding the progress and timing of our
t development, the goals of our development activities, estimates of the potential markets for our product
ates, estimates of the capacity of manufacturing and other facilities to support our products, our expected
revenues, operations and expenditures and projected cash needs. The forward-looking statements are
ned principally in the sections entitled Prospectus Summary, Risk Factors, Management s Discussion and
sis of Financial Condition and Results of Operations and Business. These statements relate to future events of
ancial performance and involve known and unknown risks, uncertainties and other factors that could cause
tual results, levels of activity, performance or achievement to differ materially from those expressed or implied
se forward-looking statements. Those risks and uncertainties include, among others:

ility to implement our business plan;

ility to raise additional capital to meet our liquidity needs;

ility to generate product revenues;

ility to achieve profitability;

ility to comply with our loan covenants;

ility to satisfy U.S. (including FDA) and international regulatory requirements;

ility to obtain market acceptance of our technology and products;

ility to compete in the market;

ility to advance our clinical trials;

ility to fund, design and implement clinical trials;

ility to demonstrate that our product candidates are safe for human use and effective for indicated uses;

ility to gain acceptance of physicians and patients for use of our products;

pendency on third-party researchers and manufacturers and licensors;

ility to establish and maintain strategic partnerships, including for the distribution of products;

ility to attract and retain sufficient, qualified personnel;

ility to obtain or maintain patents or other appropriate protection for the intellectual property;

pendency on the intellectual property licensed to us or possessed by third parties;

ility to adequately support future growth; and

ial product liability or intellectual property infringement claims.

rd-looking statements include all statements that are not historical facts. In some cases, you can identify
d-looking statements by terms such as may, will, should, could, would, expects, plans, anticipates, believes,
nates, projects, predicts, potential, or the negative of those terms, and similar expressions and comparable
ology intended to identify forward-looking statements. These statements reflect our current views with respect
re events and are based on assumptions and subject to risks and uncertainties. Given these uncertainties, you
not place undue reliance on these forward-looking statements. These forward-looking statements represent
timates and assumptions only as of the date of this prospectus and, except as required by law, we undertake no
tion to update or review publicly any forward-looking statements, whether as a result of new information,
events or otherwise after the date of this prospectus. You should read this prospectus and the documents
nced in this prospectus and filed as exhibits to the registration statement, of which this prospectus is a part,
etely and with the understanding that our actual future results may be materially different from what we
. We qualify all of our forward-looking statements by these cautionary statements.

USE OF PROCEEDS

timate that the net proceeds of this offering will be approximately $11.3 million, assuming the sale of 635 shares of our common stock at an assumed public offering price of $2.03 per share (the last reported sale of our common stock on the NASDAQ Capital Market on February 17, 2016) (or approximately $13.0 million underwriters exercise their over-allotment option in full), after deducting the estimated underwriting discount timated offering expenses payable by us.

.5 increase (decrease) in the assumed public offering price of $2.03 per share would increase (decrease) the ed net proceeds of the offering to us by approximately $1.4 million, assuming that the number of shares sold remains the same. We may also increase or decrease the number of shares of our common stock we are g. An increase (decrease) of 1 million in the number of shares sold in this offering would increase (decrease) pected net proceeds of the offering to us by approximately $1.9 million, assuming that the assumed public g price per share remains the same.

tend to use the net proceeds from this offering as follows:

ximately $3.2 million for completion of Phase 2 clinical trials and preparation for Phase 3 clinical trials of 0 in bladder cancer;

ximately $4.4 million to advance our Phase 1b trial evaluating HS-110 in combination with a PD-1 checkpoint or for the treatment of non-small lung cancer through the reporting of topline data;

ximately $3.4 million to fund manufacturing of new *ComPACT*™ products to support at least one new IND in mall cell lung cancer; and

maining net proceeds will be used for working capital and general corporate purposes.

xpected use of the net proceeds from this offering represents our current intentions based on our present plans siness conditions. As of the date of this prospectus, we cannot specify with certainty all of the particular uses net proceeds to be received from this offering. The amounts and timing of our actual expenditures will d on numerous factors including the progress in, and costs of, our clinical trials and other preclinical pment programs and the amount of funding, if any, received from grants. Accordingly, our management will road discretion in the application of the net proceeds, and investors will be relying on the judgment of ement regarding the application of the net proceeds from the offering. We may find it necessary or advisable locate the net proceeds of this offering; however, any such reallocation would be substantially limited to the ries set forth above as we do not intend to use the net proceeds for other purposes. Pending such uses set forth we plan to invest the net proceeds in government securities and other short-term investment grade, table securities.

DIVIDEND POLICY

ve never declared or paid any cash dividends on our capital stock and we do not currently intend to pay any ividends on our common stock in the foreseeable future. We expect to retain all available funds and future gs, if any, to fund the development and growth of our business. Any future determination to pay dividends, if n our common stock will be at the discretion of our board of directors and will depend on, among other , our results of operations, financial condition, capital requirements and contractual restrictions.

CAPITALIZATION

llowing table sets forth our cash and cash equivalents as well as capitalization as of December 31 , 2015:

actual basis; and

as-adjusted basis to give effect to the assumed sale of 6,157,635 shares of our common stock at an assumed offering price of $2.03 per share (the last reported sale price of our common stock on the NASDAQ Capital t on February 17, 2016), after deducting the expected underwriting discount and estimated offering expenses e by us.

formation below is illustrative only and our capitalization following the completion of this offering will be ed based on the actual public price. You should read this table together with the sections entitled Use of eds and Management s Discussion and Analysis of Financial Condition and Results of Operations as well as our ial statements and the related notes, which appear elsewhere in this prospectus.

	As of December 31, 2015 (unaudited) (in thousands)	
	Actual	As Adjusted(1)
nd cash equivalents	$ 4,940	16,240
t portion of long term debt	3,134	3,134
erm debt, net of discount and t portion	3,612	3,612
on stock, 50,000,000 shares ized, 8,424,641 shares issued tstanding, actual; 50,000,000 authorized, 14,582,276 issued and outstanding, as ed	1	2

onal paid in capital		48,567	59,866
nulated deficit		(44,430)	(44,430)
nulated other comprehensive			
		(87)	(87)
ontrolling Interest		(1,556)	(1,556)
stockholders equity		2,495	13,795
capitalization	$	9,241	20,541

.5 increase (decrease) in the assumed public offering price of $2.03 per share would increase (decrease) each
n, total stockholders equity and total capitalization by approximately $1.4 million, assuming the number of
sold by us remains the same. We may also increase or decrease the number of shares of our common stock we
ering. An increase (decrease) of 1 million in the number of shares sold in this offering would increase
ase) each of cash total stockholders equity and total capitalization by approximately $1.9 million, assuming
e assumed public offering price per share remains the same.

mber of shares of our common stock to be outstanding after the offering is based on 8,424,641 shares of our
on stock outstanding as of December 31, 2015, and excludes as of such date:

686 shares of our common stock issuable upon the exercise of stock options with a weighted average exercise
f $4.93 per share;

92 additional shares of our common stock issuable upon the exercise of outstanding warrants at a weighted
e exercise price of $11.03 per share; and

97 additional shares of our common stock reserved for future issuance under our equity incentive plans.

DILUTION

purchase shares of our common stock in this offering, you will experience dilution to the extent of the nce between the public offering price per share of our common stock in this offering and our as adjusted net le book value per share immediately after this offering. Net tangible book value per share is equal to the t of our total tangible assets, less total liabilities, divided by the number of outstanding shares of our common As of December 31, 2015, our net tangible book value was approximately $2,495,000, or approximately $0.30 are.

giving effect to the assumed sale by us of 6,157,635 shares of our common stock in this offering at an assumed offering price of $2.03 per share (the last reported sale price of our common stock on the NASDAQ Capital t on February 17, 2016), and after deducting the estimated underwriting discount and estimated offering ses payable by us, our as adjusted net tangible book value as of December 31, 2015 would have been ximately $13.8 million, or approximately $0.95 per share. This represents an immediate increase in net le book value of $0.65 per share to existing stockholders and an immediate dilution of $1.08 per share to new ors purchasing shares of our common stock in this offering. The following table illustrates this per share n:

ed public offering price per share		$ 2.03
ngible book value per share as of December 31, 2015	$ 0.30	
se in net tangible book value per share after this offering	$ 0.65	
usted net tangible book value per share after this offering		0.95
on per share to new investors		$ 1.08

underwriters exercise in full its option to purchase $923,645 of additional shares of our common stock at the ed public offering price of $2.03 per share, the as adjusted net tangible book value of our common stock after fering would be $1.00 per share, representing an immediate increase in net tangible book value of $0.70 per o existing stockholders and an immediate dilution of $1.03 per share to the investors in this offering, after ing the estimated underwriting discount and estimated offering expenses payable by us.

5 increase (decrease) in the assumed public offering price of $2.03 per share would result in an incremental se (decrease) in our as adjusted net tangible book value of approximately $1.4 million or approximately $0.10 are, and would result in an incremental increase (decrease)in the dilution to new investors of approximately per share, assuming that the number of shares of our common stock sold by us remains the same and after ing the underwriting discounts and commissions and estimated offering expenses payable by us.

ay also increase or decrease the number of shares of common stock we are offering. An increase of 1.0 million assumed number of shares of common stock sold by us in this offering would result in an incremental increase as adjusted net tangible book value of approximately $1.9 million or approximately $0.06 per share, and result in an incremental increase in the dilution to new investors of approximately $0.06 per share, assuming e assumed public offering price remains the same and after deducting the estimated underwriting discount and ted offering expenses payable by us. A decrease of 1.0 million in the assumed number of shares of common sold by us in this offering would result in an incremental decrease in our as adjusted net tangible book value of ximately $1.9 million or approximately $0.07 per share, and would result in an incremental decrease in the n to new investors of approximately $0.07 per share, assuming that the assumed public offering price remains me and after deducting the estimated underwriting discount and estimated offering expenses payable by us. nformation discussed above is illustrative only and will adjust based on the actual public offering price, the number of shares sold in this offering and other terms of this offering determined at pricing.

regoing discussion and table do not take into account further dilution to new investors that could occur upon ercise of outstanding options or warrants having a per share exercise price less than the per share offering price public in this offering. In addition, we may choose to raise additional capital due to market conditions or ic considerations even if we believe we have sufficient funds for our current or future operating plans. To the that additional capital is raised through the sale of equity or convertible debt securities, the issuance of these ies could result in further dilution to our stockholders.

ble and discussion above are based on 8,424,641 shares of common stock issued and outstanding as of
nber 31, 2015 and excludes as of that date:

686 shares of our common stock issuable upon the exercise of outstanding stock options with a weighted
e exercise price of $4.93 per share;

92 additional shares of our common stock issuable upon the exercise of outstanding warrants at a weighted
e exercise price of $11.03 per share; and

97 additional shares of our common stock reserved for future issuance under our equity incentive plans.

MANAGEMENT S DISCUSSION AND ANALYSIS OF

FINANCIAL CONDITION AND RESULTS OF OPERATIONS

llowing discussion and analysis should be read in conjunction with our audited and unaudited consolidated ial statements and the related notes that appear elsewhere in this prospectus. This discussion contains d-looking statements reflecting our current expectations that involve risks and uncertainties. Actual results ffer materially from those discussed in these forward-looking statements due to a number of factors, including set forth in the section entitled Risk Factors , Special Note Regarding Forward-Looking Statements and ere in this prospectus.

any Overview

e an immuno-oncology company developing novel therapies intended to activate a patient s immune system to ancer. Using our T cell-stimulating platform technologies, *ImPACT*® (Immune Pan-Antigen Cytotoxic py) and *ComPACT* (Combination Pan-Antigen Cytotoxic Therapy), we have generated several product ates that we believe may be effective in treating certain forms of cancer. Our platform technologies address nergistic mechanisms of action: activation of CD8+ T cells, or killer T cells; and T cell co-stimulation. We e the use of these technologies has the potential to enhance patients' natural immune response against certain s.

our *ImPACT*® platform technology, we have developed product candidates that consist of live, cally-modified, irradiated human cancer cells which secrete a broad spectrum of tumor-associated antigens As) together with a potent immune response stimulator called gp96. The secreted antigen-gp96/TAA complexes e a patient s immune system to recognize and kill cancer cells that express the TAAs included in the product ates, which we have engineered to address the most prevalent TAAs present in the tumor signature of a c cancer.

omPACT platform technology enables us to combine a pan-antigen T cell activating vaccine and a T cell mulator in a single product, offering the potential benefits of combination immunotherapy without the need for le independent biologic products. Using *ComPACT* , we have engineered new product candidates that orate various ligand fusion proteins targeting co-stimulatory receptors (OX40, ICOS, 4-1BB) into the gp96-Ig sion vector, resulting in a single product candidate that includes both a pan-antigen T cell priming vaccine and l co-stimulator.

our platform technologies, we produce product candidates from allogeneic cell lines selected to express the
st array of commonly shared tumor antigens for a specified type of cancer. Unlike autologous or personalized
eutic vaccine approaches that require the extraction of blood or tumor tissue from each patient and the creation
ndividualized treatment, our product candidates are fully allogeneic, do not require extraction of individual
s material or custom manufacturing. As a result, our product candidates can be mass-produced and readily
le for immediate patient use. Because each patient receives the same treatment, we believe that our
otherapy approach offers logistical, manufacturing and other cost benefits compared to one-off,
-specific approaches.

our *ImPACT* platform technology, we have developed HS-410 (vesigenurtacel-L) as a product candidate to
on-muscle invasive bladder cancer (NMIBC) and HS-110 (viagenpumatucel-L), intended for use in
nation with an anti-PD-1 checkpoint inhibitor, as a potential treatment for patients with non-small cell lung
(NSCLC). To-date, we have administered in excess of 1,000 doses of HS-410 and HS-110 collectively in
ximately 200 patients. We are currently conducting a Phase 2 trial of HS-410 in patients with NMIBC and a
1b trial of HS-110, in combination with nivolumab (Opdivo®), a Bristol-Myers Squibb s PD-1 checkpoint
or, to treat patients with NSCLC. Using our *ComPACT* platform technology, we have developed HS-120 as a
ial treatment for NSCLC. We expect to file an Investigational New Drug, or IND, submission for our first
ACT product candidate for NSCLC (HS-120) in the second half of 2016.

ad product candidates are HS-410 and HS-110. Currently, we have completed enrollment in the blinded, mized arms of our Phase 2 trial with HS-410 in patients with NMIBC, and are conducting a Phase 1b trial of 0 in combination with nivolumab (Opdivo®), a Bristol-Myers Squibb PD-1 checkpoint inhibitor, to treat ts with NSCLC. We are devoting substantially all of our resources to developing HS-410 and HS-110/HS-120 ing conducting clinical trials, providing general and administrative support for these operations and protecting ellectual property. We currently do not have any products approved for sale and we have not generated any cant revenue from product sales since our inception. We expect to continue to incur significant expenses and r increasing operating losses for at least the next several years. We anticipate that our expenses will increase ntially as we:

ete the ongoing clinical trials of our lead product candidates;

in, expand and protect our intellectual property portfolio;

obtain regulatory approvals for our product candidates;

ue our research and development efforts;

erational, financial and management information systems and personnel, including personnel to support our t development and commercialization efforts; and

e as a public company.

mmenced active operations in June 2008. Our operations to date have been primarily limited to organizing and g our company, business planning, raising capital, acquiring and developing our technology, identifying ial product candidates and undertaking preclinical and clinical studies of our most advanced product ates. To date, we have not generated any revenues and have financed our operations with net proceeds from vate placement of our preferred stock, our initial public offering in which we received gross proceeds of illion, our last public offering that was completed on March 16, 2015 (the Offering) of 1,886,000 shares of our on stock at a closing price of $6.50 per share for gross proceeds of $12.3 million and net proceeds to us of ximately $11.1 million and $7.5 million received from our debt facility with Square 1 Bank. Our consolidated

ial statements for the years ended December 31, 2015 and 2014 have been prepared on a going concern basis. December 31, 2015, we had an accumulated deficit of $44.4 million. We had net losses of $21.1 million and million for the years ended December 31, 2015 and 2014, respectively. We expect to incur significant ses and increasing operating losses for the foreseeable future. We expect our expenses to increase in ction with our ongoing activities, particularly as we continue the research and development and initiate and ct clinical trials of, and seek marketing approval for, our product candidates. In addition, if we obtain ting approval for any of our product candidates, we expect to incur significant commercialization expenses l to product sales, marketing, manufacturing and distribution. These factors raise substantial doubt about our to continue as a going concern. Accordingly, we will need to obtain substantial additional funding in ction with our continuing operations. Adequate additional financing may not be available to us on acceptable or at all. If we are unable to raise capital when needed or on attractive terms, we would be forced to delay, or eliminate our research and development programs or any future commercialization efforts. To meet our needs, we are considering multiple alternatives, including but not limited to, additional equity financings, nancings and/or funding from partnerships and collaborations. This is based on our current estimates, and we use our available capital resources sooner than we currently expect. We will need to generate significant es to achieve profitability, and we may never do so.

0

0 (vesigenurtacel-L) is a biologic product candidate comprising a cancer cell line genetically modified using *PACT*® technology platform to secrete a wide range of cancer antigens related to bladder cancer bound to molecules. We believe that HS-410 has the potential to activate a T cell mediated pan-antigen immune se that could be an effective treatment for patients with NMBIC.

e currently conducting a Phase 2 trial evaluating HS-410 either alone or in combination with intravesical rd of care, Bacillus Calmette-Guérin (BCG), for the treatment of high-risk, NMIBC. The primary endpoint is ear disease free survival. Heat completed enrollment for the Phase 2 trial s three randomized, combination nd anticipates reporting topline efficacy, immune-response and safety data in the fourth quarter of 2016.

bruary 10, 2016, we announced that the U.S. FDA had lifted the partial clinical hold on our HS-410 Phase 2
l trial and that patient enrollment had resumed; clinical timelines were materially unchanged. On February 3,
we announced that we had concluded that the cell line on which HS-410 is based, which is a prostate cancer
e, had been previously misidentified as a bladder cancer cell line, that we had advised the U.S. FDA of this
sion and that the U.S. FDA had placed our HS-410 Phase 2 clinical trial on partial clinical hold while they
ed certain updated documentation provided by us related to the misidentification. The misidentification
to the origin of the cell line and not to the antigen profile or other characteristics of the cell line, which have
ccurately characterized throughout the clinical development of HS-410. The partial clinical hold did not relate
cerns regarding the safety and efficacy of HS-410. All data generated and reported remained unchanged,
ing HS-410 s positive safety profile, immune response and shared antigenic profile with patient tumors. Upon
ing aware of the misidentification, we amended all of the documentation necessary to correct the error,
ing the related investigator brochure, study protocol and informed consent form. Due to the short duration of
nical hold, we do not expect any material change in our clinical timelines. In addition, we do not expect that
sidentification will have any adverse effect on the future clinical development of HS-410. While our rights to
state cancer cell line are non-exclusive, we believe that our intellectual property portfolio, which we expect to
ffected by the misidentification, will provide us with appropriate protection for the development and potential
ercialization of HS-410.

uary 2016, we reported three-month interim data from the unblinded, monotherapy cohort of our ongoing
2 trial of HS-410 for the treatment of NMIBC at the Phacilitate Immunotherapy World Conference. In the
herapy arm, a series of weekly intradermal injections of HS-410 is being dosed as an alternative to BCG.
s of the bladder taken from several treated patients showed changes that resemble lymphoid (T cell rich)
res that we have observed in biopsy samples, which we believe indicates that HS-410 is generating an
e response as expected. Six out of seven patients in the 25-patient arm, who had reached the 3-month
int after treatment with HS-410 alone, remained recurrence free. One of those patients had *carcinoma in situ*
the patient population believed to be least responsive to BCG and that patient experienced complete
se.

vember 2015, we announced the results from our Phase 1 trial, evaluating the safety and immune response of
0, after surgery and treatment with BCG, in patients with high-risk NMIBC. In that trial, HS-410 exhibited a
e safety profile and was well-tolerated with no serious adverse events (SAEs) and no patients discontinuing
l due to adverse events (AEs). 7 out of the 10 patients had no documented recurrence of cancer >1 year after
ent. 3 out of 4 patients with *CIS did not* experience a recurrence one year after treatment. In the study
ts, HS-410 elicited a broad-based (polyclonal) expansion of patient T cells and a high level of CD8+
-infiltrating lymphocytes (TILs). Additionally, based on tissue samples taken from each patient, HS-410
15 or more tumor antigens in common with those expressed on the patients' cancer cells, which we believe
rts our belief that HS-410 has the ability to target a broad range of tumor antigens. These data confirm
us preclinical findings regarding the unique mechanism of action for HS-410. Moreover, third-party analysis
ded samples from the trial demonstrated a strong correlation between baseline characteristics of TILs by T cell
or (TCR) sequencing and clinical outcome. Specifically, the 7 patients who remained disease free after one
xhibited the greatest clonal expansion of intratumoral T cells (p-value 0.0126).

ober 2015, we completed enrollment of our 75-patient, blinded, randomized, placebo-controlled arms of our ng Phase 2 clinical trial evaluating HS-410 in combination with BCG in patients with high risk NMIBC. We rolling an additional 25 patients to evaluate HS-410 as a monotherapy in an unblinded, open-label arm of this rial, and we anticipate completing enrollment of this arm in the first half of 2016. Our Phase 2 trial will he safety, tolerability, immune response and preliminary clinical activity of HS-410. The primary endpoint is ear disease free survival. We expect to report topline efficacy, immune-response and safety results in the quarter of 2016.

rch 2015, the U.S. Food and Drug Administration (FDA) granted Fast Track designation for HS-410 for the ent of NMIBC. The Fast Track program is designed to facilitate the development and expedite the review of ies intended to treat serious or life-threatening conditions and that demonstrate the potential to address unmet al needs. The advantages of Fast Track designation include actions to expedite development, including unities for frequent interactions with the FDA review team to discuss all aspects of developments to support val and eligibility for priority review depending on clinical data at the time of Biologics License Application A) submission. We believe that this designation will expedite our development of HS-410.

0

0 (viagenpumatucel-L) is a biologic product candidate comprising a cancer cell line that has been genetically ed using our *ImPACT*® technology platform to secrete a wide range of cancer associated antigens related to ancer bound to gp96 proteins. We believe that HS-110 has the potential to activate a T-cell mediated tigen immune response that could be an effective treatment for patients with NSCLC.

e conducting a Phase 1b clinical trial evaluating HS-110 nivolumab (Opdivo®), a Bristol-Myers Squibb PD-1 oint inhibitor, to treat patients with NSCLC. The multicenter, open label trial is expected to initially enroll 18 ts and is designed to accommodate cohort expansion up to 30 patients in total. The purpose of the trial is to te the safety and efficacy of HS-110 in combination with nivolumab, an FDA approved anti-PD-1 checkpoint or, in patients with NSCLC whose cancers have progressed after first-line therapy. Primary and secondary dpoints include safety and tolerability, immune response, overall response rate and progression-free survival. ne objective response rate and 6-month progression free survival (PFS) data are expected by the end of 2016 se first 18 patients.

so are conducting a Phase 2 clinical trial evaluating HS-110 in combination with low dose cyclophosphamide chemotherapy alone as a potential third-line or fourth-line treatment in patients with NSCLC. We completed ment of 66 patients in this study in September 2015. These patients will be followed for immune response and l survival with data expected to be reported in the fourth quarter of 2016.

ventor of the *ImPACT*® technology that we licensed in February 2013 reported results from a Phase 1 abel, single center clinical trial of HS-110 in patients with advanced NSCLC. We believe the results provide l evidence that HS-110 is capable of generating anti-cancer immune responses. In the study, 18 patients were ated and 15 of the 18 treated patients completed the first course of three planned courses of therapy. Two ts completed all three planned courses of therapy (defined as three, six week treatment cycles). In that trial, 0 showed no overt toxicity. There were no SAEs that were considered by the trial investigator to be treatment- l. Most of the AEs were reported as mild or moderate (grade 1 or 2) with the most frequent being injection site ns and rashes that were transitory and usually resolved in one to two weeks. Eleven of the fifteen patients who completed the first course of therapy with HS-110, exhibited a two-fold or greater increase in CD8+ cells ng interferon gamma (CD8-CTL IFN-). The estimated median survival of these eleven patients was 16.5 s (95% CI:7.1-20.0). In comparison, the 4 patients who failed to show increased CD8-CTL IFN- responses ed 2.1, 2.3, 6.7, and 6.7 months, or a median survival of 4.5 months, which is consistent with the expected al times in this patient population. In 7 of 18 treated patients, tumor growth was stabilized, however no partial plete tumor responses (e.g., reduction or disappearance of tumors) were observed in any of the 18 patients. edian one-year overall survival rate of patients in the study was 44% (95% CI:21.6-65.1), comparing bly to a 5.5% rate based on published historical data from an unrelated 43-patient advanced lung cancer tion. One of the late-stage lung cancer patients survived over four years since starting therapy and another survived over three years since starting therapy. These findings were consistent with multiple preclinical

ned studies on *ImPACT*® therapy ..

ional Indications

ntinue to evaluate other potential indications for our *ImPACT*® and *ComPACT* platform technologies. fically, using *ComPACT* , we have developed cell lines for several other cancers with the first product ate being a second-generation therapy for non-small cell lung cancer (HS-120). Our decision to further pursue product candidates or any additional product candidates other than our two lead product candidates will be in part upon available funding and partnering opportunities. On February 18, 2015, we announced a oration with OncoSec Medical Inc. to evaluate the feasibility of OncoSec s ImmunoPulse *in vivo* poration technology for intra-tumoral delivery of gp96-Ig encoding DNA plasmids to activate specific ne responses against private, mutation-derived tumor neo-antigens. This collaboration is ongoing, and we will nce data demonstrating that intratumoral electroporation of *ComPACT* plasmid DNA leads to release of tumor c neo antigens in the first half of 2016.

ICAL ACCOUNTING POLICIES AND SIGNIFICANT JUDGMENTS AND ESTIMATES

lieve that several accounting policies are important to understanding our historical and future performance. fer to these policies as "critical" because these specific areas generally require us to make judgments and tes about matters that are uncertain at the time we make the estimate, and different estimates which also would een reasonable could have been used, which would have resulted in different financial results.

anagement s discussion and analysis of financial condition and results of operations is based on our idated financial statements, which have been prepared in accordance with U.S. GAAP. The preparation of our idated financial statements requires us to make estimates and judgments that affect the reported amounts of liabilities, revenue and expenses and related disclosure of contingent assets and liabilities. On an ongoing we evaluate our estimates based on historical experience and make various assumptions, which management es to be reasonable under the circumstances, which form the basis for judgments about the carrying values of and liabilities that are not readily apparent from other sources. Actual results may differ from these estimates different assumptions or conditions.

otes to our audited consolidated financial statements contain a summary of our significant accounting policies. nsider the following accounting policies critical to the understanding of the results of our operations:

based compensation;

al and regulatory cost; and

rch and development costs.

Based Compensation

ating stock-based compensation expense requires the input of highly subjective assumptions. We apply the Scholes-Merton option pricing model to determine the fair value of our stock options. Inherent in this model

umptions related to expected stock-price volatility, expected option life, risk-free interest rate and dividend As a newly public company we do not have sufficient history to estimate the volatility of our common stock, ore we have elected to utilize a peer group of similar publicly traded companies for which the historical nation is available. We estimate the expected life of our options using the simplified method. The risk-free t rate is based on the U.S. Treasury zero-coupon yield curve on the grant date for a maturity similar to the ed life of the options. The dividend rate is based on our historical rate, which we anticipate to remain at zero. sumptions used in calculating the fair value of stock options represent our best estimates, however these tes involve inherent uncertainties and the application of management judgment. As a result, if factors change fferent assumptions are used, the stock-based compensation expense could be materially different in the future. ition, we are required to estimate the expected forfeiture rate and only recognize expense for those stock s expected to vest over the service period.

rch and Development Costs

pense research and development costs associated with developmental products not yet approved by the FDA arch and development expense as incurred. Research and development costs consist primarily of license fees ling upfront payments), milestone payments, pre-manufacturing costs, salaries, stock-based compensation and personnel costs, fees paid to consultants and outside service providers for legal expenses resulting from ctual property prosecution and other expenses relating to the design, development, and testing and cement of our product candidates.

al and Regulatory Costs

pense clinical and regulatory costs associated with bringing our developmental products into advanced phase l trials as incurred. Clinical and regulatory costs consist of clinical trial execution, investigator payments, manufacturing, testing, storage, packaging, shipping, regulatory activities, salaries, stock-based compensation ated personnel costs, fees paid to consultants and outside service providers related to the development of our ct candidates.

t Accounting Pronouncements

gust 2014, Financial Accounting Standards Board (FASB) issued Accounting Standards Update (ASU) 5, *Presentation of Financial Statements Going Concern* (Subtopic 205-40): *Disclosure of Uncertainties about ity s Ability to Continue as a Going Concern* (ASU 2014-15). The amendments in ASU 2014-15 are intended ne management s responsibility to evaluate whether there is substantial doubt about an organization s ability to ue as a going concern and to provide related footnote disclosures if there is substantial doubt about its ability tinue as a going concern. The pronouncement is effective for annual periods ending after December 15, 2016 arly adoption permitted. The adoption of this guidance is not expected to have a material impact on our idated financial statements.

uary 2015, the FASB issued ASU No. 2015-1, *Income Statement - Extraordinary and Unusual Items*. ASU 01 will eliminate from U.S. GAAP the concept of extraordinary items and will no longer require an entity to tely classify, present, and disclose extraordinary events and transactions. ASU 2015-01 is effective for fiscal and interim periods within those fiscal years, beginning after December 15, 2015, and early adoption is ted provided that the guidance is applied from the beginning of the fiscal year of adoption. We do not believe option of this guidance will have a material impact on our consolidated financial statements or related footnote sures.

il 2015, the FASB issued ASU 2015-03, Interest - *Imputation of Interest (Subtopic 835-30): Simplifying the ntation of Debt Issuance Costs,* ASU 2015-03 revises Subtopic 835-30 to require that debt issuance costs be ed in the balance sheet as a direct deduction from the face amount of the related liability, consistent with the tation of debt discounts. Prior to the amendments, debt issuance costs were presented as a deferred charge n asset) on the balance sheet. The ASU provides examples illustrating the balance sheet presentation of notes their related discounts and debt issuance costs. Further, the amendments require the amortization of debt ce costs to be reported as interest expense. Similarly, debt issuance costs and any discount or premium are ered in the aggregate when determining the effective interest rate on the debt. The amendments are effective blic business entities for fiscal years beginning after December 15, 2015, and interim periods within those years. The amendments are effective for all other entities for fiscal years beginning after December 15, 2015, terim periods within fiscal years beginning after December 15, 2016. The amendments must be applied pectively. All entities have the option of adopting the new requirements as of an earlier date for financial ents that have not been previously issued. The Company does not expect this ASU to have a material impact consolidated financial statements.

uary 2016, the FASB issued ASU 2016-01, *Recognition and Measurement of Financial Assets and Financial ties*. ASU 2016-01 requires equity investments to be measured at fair value with changes in fair value ized in net income; simplifies the impairment assessment of equity investments without readily determinable lues by requiring a qualitative assessment to identify impairment; eliminates the requirement for public ss entities to disclose the method(s) and significant assumptions used to estimate the fair value that is required

isclosed for financial instruments measured at amortized cost on the balance sheet; requires public business s to use the exit price notion when measuring the fair value of financial instruments for disclosure purposes; es an entity to present separately in other comprehensive income the portion of the total change in the fair of a liability resulting from a change in the instrument-specific credit risk when the entity has elected to re the liability at fair value in accordance with the fair value option for financial instruments; requires separate tation of financial assets and financial liabilities by measurement category and form of financial assets on the e sheet or the accompanying notes to the financial statements and clarifies that an entity should evaluate the or a valuation allowance on a deferred tax asset related to available-for-sale securities in combination with the s other deferred tax assets. ASU 2016-01 is effective for financial statements issued for fiscal years beginning December 15, 2017, and interim periods within those fiscal years. The adoption of this guidance is not expected e a material impact on its consolidated financial statements.

LTS OF OPERATIONS

Ended December 31, 2015 and 2014

ues

e, our revenues have been entirely comprised of grant awards. There were no grant awards or related revenues 5 and 2014. We will continue our efforts to secure future grant funding to subsidize ongoing research and pments costs.

ting Expenses

operating expenses for the year ended December 31, 2015 increased 72% to $21.0 million compared to $12.2 n for the year ended December 31, 2014. Operating expenses are primarily comprised of research and pment, clinical and regulatory and general and administrative expenses. For the year ended December 31, research and development expenses were $2.6 million, clinical and regulatory expenses were $14.1 million neral and administrative expenses were $4.4 million as compared to research and development expenses of illion, clinical and regulatory expenses of $5.3 million and general and administrative expenses of $4.0 n for the year ended December 31, 2014. For the year ended December 31, 2015, research and development ses represented approximately 12% of operating expenses, clinical and regulatory expenses represented ximately 67% of operating expenses, and general and administrative expenses represented approximately 21% rating expenses. For the year ended December 31, 2014, research and development expenses represented ximately 23% of operating expenses, clinical and regulatory expenses represented approximately 44% of ing expenses, and general and administrative expenses represented approximately 33% of operating expenses.

rch and development expense

rch and development expenses decreased by 9% to $2.6 million for the year ended December 31, 2015 red to $2.9 million for the year ended December 31, 2014. The $0.3 million decrease was attributable to the ing:

ease of $1.1 million in pre-manufacturing costs associated with preparing to produce vaccines for use in our
l trials (costs of vaccine production are now included in clinical and regulatory expense),

ses in patent, license and other professional fees of $0.2 million,

ses in consulting costs of $0.1 million as we bring more of the research and development function in-house

decreases were offset by increased compensation costs of $0.8 million associated with salary increases,
ount additions, and increased non-cash stock-based compensation expense and increased lab supplies and other
f $0.3 million.

al and regulatory expense

al and regulatory expense increased by 163% to $14.1 million for the year ended December 31, 2015
red to $5.3 million for the year ended December 31, 2014. The $8.8 million increase was primarily
table to the following increases:

illion due to increased clinical trial activity related to the initiation of our Phase 1b HS-110 NSCLC clinical
September 2015 and continuation and increased enrollment in our Phase 2 HS-410 NMIBC clinical trial;

illion in costs related to the production of clinical trial material as we advance our clinical trials;

illion in personnel costs, primarily due to headcount additions to support our clinical trials and manufacturing
; and

illion in travel and other costs.

40

al and administrative expense

al and administrative expense increased by 10% to $4.4 million for the year ended December 31, 2015
red to $4.0 million for the year ended December 31, 2014. The $0.4 million increase was due to an increase of
illion in professional fees, largely from recruitment fees associated with the search for a permanent CFO as
s an increase in investor relations fees.

st income

st income increased for the year ended December 31, 2015 as compared to the year ended December 31, 2014.
crease is due to higher interest rates from various short-term financial instruments that generated higher
t income for the year.

income (expense)

income was $0.2 million for the year ended December 31, 2015 as compared to a nominal expense for the year
December 31, 2014. Other income is primarily related to the R&D Tax Incentive for expenses associated with
l trial activities conducted in Australia. Other expense for the year ended December 31, 2014 is due to the
warrant liability revaluation. We had no stock warrant liability after December 31, 2014 and therefore no
l expense during 2015.

st expense

st expense for the year ended December 31, 2015 was $0.4 million compared to $0.1 million for the year ended
mber 31, 2014, all of which is attributable to the Square 1 Bank loans. The first installment, the Tranche 1
was drawn in August 2014, with the remaining draws occurring during 2015. As of December 31, 2015, we
awn down all four Tranche Loans for a total of $7.5 million.

ss attributable to Heat Biologics, Inc.

d a net loss attributable to Heat Biologics, Inc. of $20.3 million, or ($2.53) per basic and diluted share for the nded December 31, 2015 compared to a net loss of $11.8 million, or ($1.83) per basic and diluted share for the nded December 31, 2014.

NCE SHEET AS OF DECEMBER 31, 2015 AND 2014

ments, held to maturity (net)

ments held to maturity (net) decreased to $6.7 million as of December 31, 2015 compared to $10.7 million as ember 31, 2014. The decrease was primarily due to the investments converted to cash for use in our operating ies.

d Expenses

d expenses were slightly higher as of December 31, 2015 compared to December 31, 2014. Prepaid expenses t of insurance, subscription software, and upfront payments to vendors.

nts Payable

nts payable was $2.0 million as of December 31, 2015 compared to $1.4 million as of December 31, 2014. ncrease of $0.6 million was primarily related to increased clinical trial activity.

ed Expenses and Other Payables

ed expenses and other payables were $1.8 million as of December 31, 2015 compared to $0.8 million as of mber 31, 2014. The increase of $1.0 million was primarily related to a $0.8 million increase due to increased l trial activity and a $0.2 million increase in accrued compensation due to expanded headcount.

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IDITY AND CAPITAL RESOURCES

es of liquidity

e, we have not generated any revenues. Since our inception in June 2008, we have financed our operations bally through private placements, our July 2013 initial public offering, our March 2015 public offering, and ommitments (including our loan from Square 1 Bank described below). In connection with our July 2013 public offering, we sold 2,700,000 (including the 200,000 over-allotment option shares) shares of our common at a price of $10.00 per share. Aggregate gross proceeds from the IPO were $27.0 million and net proceeds ed after underwriting commissions and offering expenses of $2.7 million were $24.3 million. As of December 15, we have used all net proceeds derived from the IPO in connection with our clinical trials, manufacturing neral and administrative expenses. In March 2015, we sold 1,640,000 shares of the Company s common stock, 6,000 additional shares of the common stock to cover over-allotments at an offering price of $6.50 per share. otal gross proceeds from the March 2015 offering and subsequent over-allotment option was $12.3 million, underwriting discounts, commissions and other offering expenses payable by us. The net proceeds to us were ximately $11.1 million. In August 2014, we entered into a secured loan with Square 1 Bank (Loan). The Loan ed us with a term loan in the aggregate principal amount not to exceed $7.5 million to be used to supplement ng capital. The Loan was available to us in four tranches: $1.5 million was released to us August 2014 nche 1 Loan), $1.5 million was released to us in December 2014, upon enrollment of the first patient in the 2 clinical trial for HS-110 (Tranche 2 Loan), $2.25 million was released to us upon the initiation of the Phase l for lung cancer indication on June 30, 2015 (Tranche 3 Loan) and $2.25 million was released to us upon ce of the full enrollment of our Phase 1/2 clinical trial for HS-410 Square 1 Bank s on December 30, 2015 nche 4 Loan). We believe that our existing cash and cash equivalents will not be sufficient to meet our pated cash needs for the next twelve months, however, we believe that our existing cash and cash equivalents er with the proceeds from this offering, will be sufficient to fund the completion of our Phase 2 HS-410 C clinical trial and advancing our current Phase 1b trial evaluating HS-110 in combination with nivolumab, a -Myers Squibb PD-1 checkpoint inhibitor, for the treatment of NSCLC through the reporting of topline data. tend to spend substantial amounts on research and development and clinical and regulatory activities, ing product development, regulatory and compliance, clinical studies in support of our future product gs, and the enhancement and protection of our intellectual property. We will need to obtain additional ing to pursue our business strategy, to respond to new competitive pressures or to take advantage of unities that may arise. These factors raise substantial doubt about our ability to continue as a going concern. esult, our independent registered public accounting firm included an explanatory paragraph in its report on our idated financial statements as of and for the year ended December 31, 2015 with respect to this ainty. To meet our financing needs, we are considering multiple alternatives, including, but not limited to, nal equity financings, debt financings and/or funding from partnerships or collaborations. There can be no nce that we will be able to complete any such transactions on acceptable terms or otherwise. If we are unable in the necessary capital, we will need to pursue a plan to scale back our operations, license or sell our assets, be acquired by another entity and/or cease operations. As of December 31, 2015, we had $11.6 million in nd cash equivalents and short term investments.

ed a shelf registration statement on Form S-3 where we may sell securities from time to time and in one or offerings up to a total dollar amount of $50 million of securities. On October 23, 2014, the shelf registration ent was declared effective by the SEC. In October 2014, we entered into an ATM with Cantor Fitzgerald & CF&Co). On December 8, 2015, we delivered written notice to CF&Co that we were terminating our olled Equity Offering[SM] Sales Agreement, dated October 10, 2014 (the At-the-Market Offering Agreement), nt to Section 12(b) thereof. No shares of the Company s common stock or any other securities were offered or ursuant to the At-the-Market Offering Agreement, and the offering program was terminated on December 8,

flows

ting activities. The use of cash in all periods resulted primarily from our net losses adjusted for non-cash s and changes in the components of working capital. The significant increase in cash used in operating ies for the year ended December 31, 2015 compared to the year ended December 31, 2014 was due to an se in clinical and regulatory expenses as we initiated and continued clinical trials. Additionally, there was an se in other operational costs primarily associated with increases in headcount and/or consultants in all ments.

ng activities. Cash provided by investing activities during the years ended December 31, 2015 and 2014 ed the proceeds from maturities of various short-term investments offset by the purchases of these investments rchases of property and equipment.

cing activities. Cash provided by financing activities during the year ended December 31, 2015 was ily from the March 2015 public offering and exercise of the over-allotment option which generated net ds of approximately $11.1 million (after deduction of offering expenses) as well as $4.5 million in proceeds Tranche 3 and Tranche 4 of the Loan. Cash provided by financing activities for the year ended December 31, was approximately $3.0 million related to proceeds from the Loan and the exercise of stock options.

BALANCE SHEET ARRANGEMENTS

d not have during the periods presented, and we do not currently have, any off-balance sheet arrangements, as d under SEC rules.

nt and Future Financing Needs

ve incurred an accumulated deficit of $44.4 million through December 31, 2015. We have incurred negative ows from operations since we started our business. We have spent, and expect to continue to spend, ntial amounts in connection with implementing our business strategy, including our planned product pment efforts, our clinical trials, and our research and discovery efforts.

lieve that our existing cash and short-term investments will not be sufficient to fund our current operating plan pital expenditure requirements for the next 12 months, however, we believe that our existing cash and cash lents together with the proceeds from this offering, will be sufficient to fund the completion of our Phase 2 0 NMIBC clinical trial and advancing our current Phase 1b trial evaluating HS-110 in combination with mab, a Bristol-Myers Squibb PD-1 checkpoint inhibitor, for the treatment of NSCLC through the reporting of e data. We intend to meet our financing needs through multiple alternatives, including, but not limited to, onal equity financings, debt financings and/or funding from partnerships or collaborations.

ver, the actual amount of funds we will need to operate is subject to many factors, some of which are beyond ntrol. These factors include the following:

ogress of our research activities;

mber and scope of our research programs;

ogress of our preclinical and clinical development activities;

ogress of the development efforts of parties with whom we have entered into research and development nents;

ility to maintain current research and development licensing arrangements and to establish new research and pment and licensing arrangements;

ility to achieve our milestones under licensing arrangements;

sts involved in prosecuting and enforcing patent claims and other intellectual property rights;

sts and timing of regulatory approvals; and

bility of our clinical laboratory diagnostic and microbiology services business.

ve based our estimate on assumptions that may prove to be wrong. We may need to obtain additional funds or in greater amounts than we currently anticipate. Potential sources of financing include strategic nships, public or private sales of our equity or debt and other sources. We may seek to access the public or equity markets when conditions are favorable due to our long-term capital requirements. We do not have any itted sources of financing at this time, and it is uncertain whether additional funding will be available when we on terms that will be acceptable to us, or at all. If we raise funds by selling additional shares of common stock er securities convertible into common stock, the ownership interest of our existing stockholders will be diluted. are not able to obtain financing when needed, we may be unable to carry out our business plan. As a result, we ave to significantly limit our operations and our business, financial condition and results of operations would terially harmed.

se and Contractual Agreement Obligations

is a table of our contractual obligations for the years 2016 through 2020 as of December 31, 2015 (in nds).

	2016	2017	2018	2019	2020	Total
e						
nents	$ 38	$ 338	$ 38	$ 113	$ 288	$ 815
nts						
ns	3,226	3,226	490			6,942
t on						
	350	143	3			496
nents	231	238	245	194		908
	$ 3,845	3,945	776	307	288	$ 9,161

onal In-Licensed Programs

ay enter into additional license agreements relating to new product candidates.

BUSINESS

iew

e an immuno-oncology company developing novel therapies intended to activate a patient s immune system to ancer. Using our T cell-stimulating platform technologies, *ImPACT*® (Immune Pan-Antigen Cytotoxic py) and *ComPACT* (Combination Pan-Antigen Cytotoxic Therapy), we have generated several product ates that we believe may be effective in treating certain forms of cancer. Our platform technologies address nergistic mechanisms of action: activation of CD8+ T cells, or killer T cells; and T cell co-stimulation. We e the use of these technologies has the potential to enhance patients' natural immune response against certain s.

our *ImPACT*® platform technology, we have developed product candidates that consist of live, cally-modified, irradiated human cancer cells which secrete a broad spectrum of tumor-associated antigens As) together with a potent immune response stimulator called gp96. The secreted antigen-gp96/TAA complexes e a patient s immune system to recognize and kill cancer cells that express the TAAs included in the product ates, which we have engineered to address the most prevalent TAAs present in the tumor signature of a c cancer.

omPACT platform technology enables us to combine a pan-antigen T cell activating vaccine and a T cell nulator in a single product, offering the potential benefits of combination immunotherapy without the need for le independent biologic products. Using *ComPACT* , we have engineered new product candidates that orate various ligand fusion proteins targeting co-stimulatory receptors (OX40, ICOS, 4-1BB) into the gp96-Ig sion vector, resulting in a single product candidate that includes both a pan-antigen T cell priming vaccine and l co-stimulator.

our platform technologies, we produce product candidates from allogeneic cell lines selected to express the st array of commonly shared tumor antigens for a specified type of cancer. Unlike autologous or personalized eutic vaccine approaches that require the extraction of blood or tumor tissue from each patient and the creation ndividualized treatment, our product candidates are fully allogeneic, do not require extraction of individual s material or custom manufacturing. As a result, our product candidates can be mass-produced and readily le for immediate patient use. Because each patient receives the same treatment, we believe that our notherapy approach offers logistical, manufacturing and other cost benefits compared to one-off, -specific approaches.

our *ImPACT* platform technology, we have developed HS-410 (vesigenurtacel-L) as a product candidate to on-muscle invasive bladder cancer (NMIBC) and HS-110 (viagenpumatucel-L), intended for use in nation with an anti-PD-1 checkpoint inhibitor, as a potential treatment for patients with non-small cell lung (NSCLC). To-date, we have administered in excess of 1,000 doses of HS-410 and HS-110 collectively in ximately 200 patients. We are currently conducting a Phase 2 trial of HS-410 in patients with NMIBC and a 1b trial of HS-110, in combination with nivolumab (Opdivo®), a Bristol-Myers Squibb PD-1 checkpoint or, to treat patients with NSCLC. Using our *ComPACT* platform technology, we have developed HS-120 as a ial treatment for NSCLC. We expect to file an Investigational New Drug, or IND, submission for our first *ACT* product candidate for NSCLC (HS-120) in the second half of 2016.

ble below summarizes our current product candidates and their stages of development:

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e currently conducting a Phase 2 trial evaluating HS-410 either alone or in combination with intravesical
rd of care, Bacillus Calmette-Guérin (BCG), for the treatment of high-risk, NMIBC. The primary endpoint is
ear disease free survival. We completed enrollment for the Phase 2 trial s three randomized, combination arms
ticipates reporting topline efficacy, immune-response and safety data in the fourth quarter of 2016.

bruary 10, 2016, we announced that the U.S. FDA had lifted the partial clinical hold on our HS-410 Phase 2
l trial and that patient enrollment had resumed; clinical timelines were materially unchanged. On February 3,
we announced that we had concluded that the cell line on which HS-410 is based, which is a prostate cancer
ne, had been previously misidentified as a bladder cancer cell line, that we had advised the U.S. FDA of this
sion and that the U.S. FDA had placed our HS-410 Phase 2 clinical trial on partial clinical hold while they
ed certain updated documentation provided by us related to the misidentification. The misidentification
l to the origin of the cell line and not to the antigen profile or other characteristics of the cell line, which have
ccurately characterized throughout the clinical development of HS-410. The partial clinical hold did not relate
cerns regarding the safety and efficacy of HS-410. All data generated and reported remained unchanged,

ing HS-410 s positive safety profile, immune response and shared antigenic profile with patient tumors. Upon ing aware of the misidentification, we amended all of the documentation necessary to correct the error, ing the related investigator brochure, study protocol and informed consent form. Due to the short duration of nical hold, we do not expect any material change in our clinical timelines. In addition, we do not expect that sidentification will have any adverse effect on the future clinical development of HS-410. While our rights to ostate cancer cell line are non-exclusive, we believe that our intellectual property portfolio, which we expect to ffected by the misidentification, will provide us with appropriate protection for the development and potential ercialization of HS-410.

uary 2016, we reported three-month interim data from the unblinded, monotherapy cohort of the company s
g Phase 2 trial of HS-410 for the treatment of NMIBC at the Phacilitate Immunotherapy World Conference.
monotherapy arm, a series of weekly intradermal injections of HS-410 is being dosed as an alternative to
Images of the bladder taken from several treated patients showed changes that resemble lymphoid (T cell
tructures that we have observed in biopsy samples, which we believe indicates that HS-410 is generating an
e response as expected. Six out of seven patients in the 25-patient arm, who had reached the 3-month
oint after treatment with HS-410 alone, remained recurrence free. One of those patients had *carcinoma in situ*
the patient population believed to be least responsive to BCG and that patient experienced complete
se.

vember 2015, we announced the results from our Phase 1 trial, evaluating the safety and immune response of
0, after surgery and treatment with BCG in patients with high-risk NMIBC. In that trial, HS-410 exhibited a
e safety profile and was well-tolerated with no serious adverse events (SAEs) and no patients discontinuing
l due to adverse events (AEs). 7 out of the 10 patients had no documented recurrence of cancer >1 year after
ent. 3 out of 4 patients with *CIS* did not experience a recurrence one year after treatment. In the study
ts, HS-410 elicited a broad-based (polyclonal) expansion of patient T cells and a high level of CD8+
-infiltrating lymphocytes (TILs). Additionally, based on tissue samples taken from each patient, HS-410
15 or more tumor antigens in common with those expressed on the patients' cancer cells, which we believe
rts our belief that HS-410 has the ability to target a broad range of tumor antigens. These data confirm
us preclinical findings regarding the unique mechanism of action for HS-410. Moreover, third-party analysis
ded samples from the trial demonstrated a strong correlation between baseline characteristics of TILs by T cell
or (TCR) sequencing and clinical outcome. Specifically, the 7 patients who remained disease free after one
xhibited the greatest clonal expansion of intratumoral T cells (p-value 0.0126).

ober 2015, we completed enrollment of our 75-patient, blinded, randomized, placebo-controlled arms of our
g Phase 2 clinical trial evaluating HS-410 in combination with BCG in patients with high risk NMIBC. We
rolling an additional 25 patients to evaluate HS-410 as a monotherapy in an unblinded, open-label arm of this
rial, and we anticipate completing enrollment of this arm in the first half of 2016. Our Phase 2 trial will
e safety, tolerability, immune response and preliminary clinical activity of HS-410. The primary endpoint is
ar disease free survival. We expect to report topline efficacy, immune-response and safety results in the
quarter of 2016.

rch 2015, the U.S. Food and Drug Administration (FDA) granted Fast Track designation for HS-410 for the
ent of NMIBC. The Fast Track program is designed to facilitate the development and expedite the review of
ies intended to treat serious or life-threatening conditions and that demonstrate the potential to address unmet
l needs. The advantages of Fast Track designation include actions to expedite development, including
unities for frequent interactions with the FDA review team to discuss all aspects of developments to support
val and eligibility for priority review depending on clinical data at the time of Biologics License Application
A) submission. We believe that this designation will expedite our development of HS-410.

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e conducting a Phase 1b clinical trial evaluating HS-110 in combination with nivolumab (Opdivo®), a -Myers Squibb PD-1 checkpoint inhibitor, to treat patients with NSCLC. The multicenter, open label trial is ed to initially enroll 18 patients and is designed to accommodate cohort expansion up to 30 patients in total. urpose of the trial is to evaluate the safety and efficacy of HS-110 in combination with nivolumab, an FDA ved anti-PD-1 checkpoint inhibitor, in patients with NSCLC whose cancers have progressed after first-line y. Primary and secondary trial endpoints include safety and tolerability, immune response, overall response d progression-free survival. Top-line objective response rate and 6-month progression free survival (PFS) e expected by the end of 2016 for these first 18 patients.

so are conducting a Phase 2 clinical trial evaluating HS-110 in combination with low dose cyclophosphamide chemotherapy alone as a potential third-line or fourth-line treatment in patients with NSCLC. We completed ment of 66 patients in this study in September 2015. These patients will be followed for immune response and l survival with data expected to be reported in the fourth quarter of 2016.

ventor of the *ImPACT*® technology that we license reported results in February 2013 from a Phase 1 abel, single center clinical trial of HS-110 in patients with advanced NSCLC. We believe the results provide l evidence that HS-110 is capable of generating anti-cancer immune responses. In the study, 18 patients were ated, and 15 of the 18 vaccinated patients completed the first course of three planned courses of therapy. Two s completed all three planned courses of therapy (defined as three, six week treatment cycles). HS-110 d no overt toxicity. There were no serious adverse events (SAEs) that were considered by the trial investigator reatment-related. Most of the adverse events (AEs) were reported as mild or moderate (grade 1 or 2) with the requent being injection site reactions and rash that were transitory and usually resolved in one to two weeks. lieve that the results of this Phase 1 trial with HS-110 demonstrate that HS-110 is capable of generating a CTL IFN- immune response in patients with advanced NSCLC. Eleven of the fifteen patients (73%) who eted the first course of therapy with HS-110, exhibited a two-fold or greater increase in CD8+ cells secreting ron gamma (CD8-CTL IFN-). The estimated median survival of these eleven patients was 16.5 months (95% -20.0). In comparison, the 4 patients who failed to show increased CD8-CTL IFN- responses survived 2.1, 2.3, d 6.7 months, or a median survival of 4.5 months, which is consistent with the expected survival times in this population. In 7 of 18 treated patients, tumor growth was stabilized, however no partial or complete tumor ses (e.g., reduction or disappearance of tumors) were observed in any of the 18 patients. The median one-year l survival rate of patients in the study was 44% (95% CI:21.6-65.1), comparing favorably to a 5.5% rate based olished data from a 43-patient advanced lung cancer population. One of the late-stage lung cancer patients ed over four years since starting therapy and another patient survived over three years since starting therapy. findings were consistent with multiple preclinical published studies on *ImPACT*® therapy.

onal Indications

ntinue to evaluate other potential indications for our *ImPACT*® and *ComPACT* platform technologies. fically, using *ComPACT* , we have developed cell lines for several other cancers with the first product ate being a second-generation therapy for NSCLC (HS-120). Our decision to further pursue these product ates or any additional product candidates other than our two lead product candidates will be based in part vailable funding and partnering opportunities. On February 18, 2015, we announced a collaboration with ec Medical Inc. to evaluate the feasibility of OncoSec s ImmunoPulse *in vivo* electroporation technology for moral delivery of gp96-Ig encoding DNA plasmids to activate specific immune responses against private, on-derived tumor neo-antigens. This collaboration is ongoing, and we expect to announce data demonstrating tratumoral electroporation of *ComPACT* plasmid DNA leads to release of tumor specific neo antigens in the lf of 2016.

ACT

ne 15, 2015, we announced the development of a next-generation platform incorporating various T cell ulatory ligand fusion proteins into the gp96-Ig expression vector. *ComPACT* combines a pan-antigen T cell g vaccine and T cell co-stimulator in a single product, offering the potential benefits of combination

notherapy in a single drug without the need for multiple independent biologic products. *ComPACT* has been ered to incorporate various fusion proteins targeting co-stimulatory receptors (OX40, ICOS, 4-1BB), enabling mbination of two important immunotherapy pathways in a single drug. For our *ComPACT* platform logy, we expect to file an IND for our first *ComPACT* candidate for NSCLC (HS-120) in the second half of

***CT*® Therapy**

nPACT® therapy is a novel technology platform designed to educate and stimulate the immune system to t specific disease targets, such as cancer cells. *ImPACT*® utilizes live attenuated, human-derived, cally-modified cells to generate an array of tumor associated antigens and secrete an essential nostimulatory protein called gp96-Ig . The secreted proteins are designed to generate an immune response t cancer cells by mobilizing and activating a patient s own killer T cells to target a broad array of different antigens with the goal of eliminating cancer cells. In contrast with other vaccine technologies that target only tigen, *ImPACT*® *s* pan-antigen approach may enable the body to induce and maintain an immune response t a broad array of tumor-specific proteins, by potentially providing a more robust and sustained immune se and limiting cancer cells ability to evade the immune system. We believe the clinical and preclinical results t that *ImPACT*® generates anti-tumor immune responses capable of targeting and destroying tumors. We e our novel, off-the-shelf, live cell therapy has the potential to be used to combat a wide range of cancers. We everaged our existing infrastructure by developing additional product candidates in areas where we can use our etary technology. Our success will depend on the clinical and regulatory success of our product candidates and ility to retain, on commercially reasonable terms, financial and managerial resources, which are currently l. To date, we have not received regulatory approval for any of our product candidates or derived any revenues heir sales. Moreover, there can be no assurance that we will ever receive regulatory approval for any of our ct candidates or derive any revenues from their sales.

CT*®/*ComPACT Platform Technologies Advantages:

CT® therapy represents a cell-based product platform that functions as both an immune activator and an n-delivery vehicle.

ition, to our knowledge, *ImPACT*® is the only adjuvant currently in clinical development that is specific to cytotoxic T cell immune responses, which we believe is especially important for developing therapeutics in gy.

erapies do not require an additional adjuvant. Some vaccines require the addition of another drug, called an nt, to enhance their effectiveness. Adjuvants typically cause irritation at the injection site. HS-110, one of our ct candidates, is itself an adjuvant, so we do not have to use additional adjuvants to generate and maintain an ed immune response, thereby limiting any injection site reaction to that caused by our own therapies.

ACT™ represents a potential dual-acting immunotherapy, combining a pan-antigen T cell priming vaccine and T
-stimulator in a single product.

knowledge, *ComPACT*™ represents the first dual-acting immunotherapy that provides more effective
ation of CD8+T cells and higher rates of tumor rejection than are achieved with either individual
istration of traditional vaccines, OX40 agonist antibodies, or combinations with OX40 agonist antibodies and
onal vaccines.

D8+ cytotoxic T cell specific nature of our *ImPACT*® and *ComPACT* platform technologies predict that they
most useful in stimulating immune responses for diseases where actual cell-killing is an important part of the
eutic effect. Cancer, which is a disease of mutated cells, naturally became the first area of focus.
CT® and *ComPACT*™ applied to cancer therapies contrast in several critical ways to other cancer
notherapy technologies:

mPACT® and *ComPACT*™ platform technologies offer our ready-to-use approach which do not require any
alized manufacturing. We believe our therapeutic vaccines *are easier and less expensive to manufacture than
gous vaccines* because our therapeutic vaccines do not require the harvesting of blood and/or tumor tissue
ach patient in order to manufacture a course of treatment. We believe this is highly advantageous because it
ng the logistics, manufacturing, cost and distribution of our therapeutic vaccines within the purview of
onal biopharmaceutical product channels and dramatically expand our pool of corporate partners.

mPACT® and *ComPACT*™ platform technologies stimulate an immune response against the full antigenic oire of the cancer cells, not just one or a handful of antigens. Our *ImPACT*® and *ComPACT* platform logies are designed to combine broad antigen targeting of known and unknown tumor associated antigens exed with a potent immune adjuvant. The activated immune response generated by our platform technologies e useful in treating a wide range of cancers.

are no other allogeneic, cell-based vaccine technologies which provide a molecular transporter (gp96-Ig in the f *ImPACT*® and *ComPACT*™) to provide specific activation of a patients CD8+ T cells across MHC barriers.

gy

bjective is to become a leading biopharmaceutical company specializing in the development and ercialization of allogeneic, ready-to-use immunotherapies. Our platform technologies, *ImPACT*® and *ACT* , are designed to address two synergistic mechanisms of action: robust activation of killer T cells and T -stimulation to further enhance patients' immune response. We believe future cancer immunotherapy will e multiple agents and our platform could work synergistically with other therapies, such as checkpoint ors, which are designed to reverse tumor-induced immune suppression. We are focused on discovering, ping and applying our *ImPACT*® and *ComPACT* platform technologies towards a number of disease ions. The key elements of our strategy are:

op and obtain regulatory approval for our product candidates. We have completed enrollment for the mized arms of our NMIBC Phase 2 trial evaluating HS-410 in combination with BCG. We expect to report e efficacy, immune response and safety results in the fourth quarter of 2016. We are conducting a Phase 1b f HS-110 in combination with nivolumab (Opdivo®), a Bristol-Myers Squibb PD-1 checkpoint inhibitor, to atients with NSCLC. Beyond NSCLC and bladder cancer - depending upon funding and partnering unities - we plan to initiate additional clinical trials and in some cases may expand current clinical trials in nd other disease targets utilizing our *ImPACT*® and *ComPACT* platform technologies.

ize commercial opportunity for our ImPACT® and ComPACT™ technology. Our current product candidates large markets with significant unmet medical needs. For each of our product candidates, we seek to retain all acturing, marketing and distribution rights which should give us the ability to maximize the economic ial of any future United States or international commercialization efforts. We believe that we should be well oned to successfully commercialize our product candidates independently or through United States and

tional corporate partnerships.

ce our partnering efforts. We are continually exploring partnerships for licensing and other collaborative nships and remain opportunistic in seeking strategic partnerships.

r expand our broad patent portfolio. We have made a significant investment in the development of our patent io to protect our technologies and programs, and we intend to continue to do so. We have obtained exclusive to six different patent families directed to therapeutic compositions and methods related to our vaccine m and preclinical development programs for cancer and have filed certain additional patent applications that ned by us. Our *ImPACT®/ComPACT™* patent portfolio comprises eighteen issued patents and thirty-one g patent applications. These patents and applications cover the United States, Europe, and Japan as well as l other countries having commercially significant markets.

ge our business with efficiency and discipline. We believe we have efficiently utilized our capital and human ces to develop and acquire our product candidates and programs, and create a broad intellectual property io. We operate cross-functionally and are led by an experienced management team with backgrounds in ping and commercializing product candidates. We use project management techniques to assist us in making ined strategic program decisions and to attempt to limit the risk profile of our product pipeline.

additional grant funding. To more fully develop our *ImPACT*® and *ComPACT*™ platform technologies and pplication to a variety of human diseases, we plan to continue to seek and access external sources of grant g on our own behalf and in conjunction with our academic and other partners to support the development of peline programs. While we intend to work with our academic partners to secure additional grant funding, these rs have no obligation to work with us to secure such funding. We also intend to continue to evaluate unities and, as appropriate, acquire or license technologies that meet our business objectives.

ue to both leverage and fortify our intellectual property portfolio. We believe that we have a strong ctual property position relating to the development and commercialization of our *ImPACT*® and *ComPACT*™ m technologies. We plan to continue to leverage our portfolio to create value. In addition to fortifying our g intellectual property position, we intend to file new patent applications, in-license new intellectual property ke other steps to strengthen, leverage, and expand our intellectual property position.

e Targets and Markets

ncology Market

merican Cancer Society estimates that 1.69 million people in the United States will be diagnosed with cancer 6. The lifetime probability of being diagnosed with an invasive cancer is 43% for men and 38% for women. It ected that 595,690 Americans will die from cancer in 2016.

e continuous advances made in the field of cancer research every year, there remains a significant unmet al need as the overall five-year survival rate for cancer patients diagnosed between 2004 and 2010 is an e of 68%. According to the Centers of Disease Control and Prevention, in 2011, cancer was the second g cause of mortality in the United States (22.9%) behind heart disease (23.7%). The American Cancer Society tes that one in four deaths in the United States is due to cancer.

ain treatments for cancer are surgery, radiotherapy and chemotherapy. There are often, however, significant ating effects resulting from these treatments or lingering morbidity associated with these approaches to ent of cancer. Our goal is to develop new treatments that can lengthen survival times and improve the quality of cancer patients and survivors.

ugh there are a large number of patients, treatment and management of cancer is performed by a relatively ntrated pool of medical professionals. We plan to reach this prescriber base using a relatively small ercial infrastructure that we intend to develop in the future by either hiring internally, or partnering or cting with one or more third-party entities with an established sales force. These development plans are dent on our raising additional capital and/or receiving grant funding, the success of HS-110, and HS-410 and chnologies we might develop in the future and successful negotiation of commercial relationships, none of we have completed to date. We believe, however, assuming the efficacy and safety of HS-110 and HS-410 y other technology we might acquire, that our experienced management team will raise the capital and sh the commercial relationships necessary for success.

ations of Current Cancer Therapies

lieve current cancer treatment alternatives suffer from a number of limitations that impair their effectiveness roving patient survival and overall quality of life including:

y. Chemotherapeutic agents are highly toxic to the human body and very often cause a variety of significant bilitating side effects, including, but not limited to, nausea and vomiting, bleeding, anemia and mucositis. targeted therapeutics have fewer systemic toxicities, but still typically have off-target effects such as ntestinal inflammation, severe skin reactions and breathing difficulties. These side effects limit a patient's to tolerate treatment and as such can deprive the patient of the potential benefit of additional treatments or ent combinations that might otherwise destroy or prevent the growth of cancer cells. Once they become aware limited efficacy, limited increased survival and potentially significant toxicity of existing treatment atives, many patients diagnosed with terminal cancer choose to limit or forego therapy in order to avoid further omising their quality of life. Patients with advanced stage cancer also often cannot tolerate cancer therapy, and therapies can hasten death as the patient's health further deteriorates from the therapy applied.

nism of action. While many current therapeutic approaches can be effective against specific targeted cells, the y of these therapies in treating cancer over the long term generally is limited by the abundance and diversity cancer and tumor cells, which are believed to enable the targeted cells to adapt and become resistant to the t therapeutic approach over time.

term approach. Other than tumor removal in a surgical procedure, curing the cancer is often not the intent or a ial outcome of many current cancer therapies. Rather, increased survival time is the primary focus of many tly marketed and development-stage cancer therapeutics. In this regard, many cancer therapies show only a t impact on the overall survival of the patients and only affect the length of time that passes after treatment and before the patient s disease worsens or the patient dies.

e system suppression. A weakened immune system not only inhibits the body's natural ability to fight cancer, o causes patients to become more susceptible to infections and other diseases. Current approaches to cancer

ent generally involve introduction of an agent, such as a chemical, an antibody or radiation, which causes cell osis (programmed cell death) or inhibits the proliferation of all cells, including immune cells, which has the nded consequence of indirectly suppressing the immune system.

notherapy Overview

nPACT and *ComPACT* platform technologies are forms of immunotherapy. Immunotherapy involves istration of a therapeutic agent that enlists or boosts a subject s immune system in order to fight disease.

nonly recognized successful examples of immunotherapy include *prophylactic vaccines*, such as, childhood nizations against infectious diseases such as measles, mumps, and rubella. In these cases, usually weakened uated) or inactivated viruses are injected into the body to educate certain immune system cells to recognize and mber small pieces of viral or bacterial proteins (antigens). If and when an individual is subsequently exposed to me pathogen, the immune system will recognize these antigens immediately and mount a potent immune se to neutralize and eliminate the pathogenic threat.

peutic vaccines, such as *ImPACT*® and *ComPACT* -based product candidates, operate in a fashion similar to *vlactic vaccines* except that *therapeutic vaccines* are administered after a particular disease is already present. n case, the human immune system is educated and harnessed to recognize and fight the disease of interest. r can be considered a failure of the immune system to effectively recognize and eliminate inappropriately ng and multiplying (malignant) cells. Under ordinary circumstances the human immune system continuously ors and eliminates inappropriately dividing cells. However, for reasons that are not entirely understood, under ous conditions the immune system fails to recognize malignant cells and such cells are permitted to opriately multiply, grow and metastasize to form tumors which can eventually become life threatening. Our eutic vaccines are designed to assist the immune system in identifying and eliminating malignant cells. Our ch involves activating strong T cell immune responses against cellular antigens that are characteristic of ant cells with the goal of destroying the cancer expressing those antigens.

notherapy Approaches

notherapy is designed to stimulate and enhance the body s natural mechanism for killing cancer cells and nfected cells. Generally, immunotherapeutic approaches to treat disease can be separated into two distinct s, passive and active, based on their mechanism of action.

e Immunotherapy: Passive immunotherapies generally consist of monoclonal antibodies directed at a single e-specific enzyme or protein on the surface of the targeted cells with the goal of either killing the targeted cells venting them from dividing. Rather than stimulate or otherwise use the body s immune system to initiate the on the disease, the attack is made by the therapy which is produced *ex vivo*, or outside of the body. These ies also are not usually personalized for the patient.

Immunotherapy: Active immunotherapies generally consist of therapies intended to trigger or stimulate the s own immune system to fight disease. Active immunotherapies have no direct therapeutic action but rather n antigens specifically designed to activate the patient s own immune system to find and kill the targeted cells rry the same antigen. Active immunotherapies depend on the patient s immune system to seek out and destroy d cells or tumors. Most active immunotherapies utilize off-the-shelf antigens, known as defined antigens, than individualized, patient specific antigens, and are often paired with adjuvants, which are agents that lly activate the immune system cells to increase immune response.

omings of Immunotherapies: Both passive and active immunotherapy approaches have shortcomings, which e:

ctive immunotherapies use normal, non-mutated, self-antigens which are typically poor at stimulating
e responses, even from healthy immune systems. In fact, the human immune system generally does not
te immune responses against self-antigens. Most passive and active immunotherapies also target one or only a
tigens, which increases the probability that infected cells will escape detection by the immune system and
otherapy.

active immunotherapies employ a single defined antigen so they are not effective against cancers which do not
s that antigen.

mmunotherapies produce toxic effects resulting in damage to healthy tissues.

patients may not be able to mount effective immune responses with immunotherapy due to tumor or virus
d immunosuppression of accessory cells such as CD4+ helper T cells, which are necessary for the
otherapies to be effective but may be functionally impaired by the patient's disease.

be difficult to commercialize immunotherapies based on cells derived from individual patients in a
ffective manner as a result of the added complexity, limited patient material for production of multiple doses,
e need to store and ship the individual doses.

otherapies that rely on defined, off-the-shelf antigens or a single targeted antigen may have limited
veness because even within the same type of cancer, the genetic makeup and distinct antigens of a tumor can
gnificantly from patient to patient.

ugh many of the immunotherapies currently in clinical development have shown promising results, we believe ecific proprietary elements of the *ImPACT*® and *ComPACT* platform technologies combined with a oned clinical strategy position Heat favorably in the marketplace.

olution: ImPACT®/ComPACT Therapy

lieve our *ImPACT*® and *ComPACT* therapies have a number of advantages over existing therapies. These tages, elaborated below, may enable us to develop commercial products that extend the survival of, and ve the quality of life for, cancer patients:

re designed to fight cancer by activating the immune system against a wide variety of cancer antigens (both and unknown). This has now been confirmed in patients with non-muscle invasive bladder cancer treated S-410.

re intended to continually secrete a wide variety of cancer-associated antigens, thus initiating a broad and ed pan-antigen cytotoxic T cell attack against the targeted cancer. We believe this broad-based attack es the probability of destroying the targeted cancer.

re designed to stimulate a natural immune response against specific cancer cells. We believe this may limit s adverse events related to treatment.

lieve that the novel mechanism of action, good tolerability and favorable safety profile will enable our *CT*® and Com *PACT* product candidates to have potential benefits across multiple disease stages and tumor and in combination with other therapies.

mPACT® therapy represents an agent that functions as both an immune activator and an antigen-delivery e. To our knowledge, *ImPACT*® is the only allogeneic cell-based technology platform currently in clinical pment that is specific to CD8+ cytotoxic T cell immune response, which is especially important for ping therapeutics in oncology.

omPACT™ platform was developed using in-house expertise and is a platform that can provide a vaccine and a T stimulatory molecule in a single therapeutic. In preclinical studies, the *ComPACT* platform incorporating stimulation provided superior immune response and tumor rejection to what is seen with either OX40 agonist dies alone or in combination with traditional vaccines.

mPACT® and *ComPACT*™ platforms are off-the-shelf therapies and offer substantial manufacturing and cost ages compared to autologous or "personalized" immunotherapies.

lieve many patients for whom the risks associated with chemotherapy, BCG or other traditional agents are able may be able to benefit from our *ImPACT*® and *ComPACT* product candidates.

CT® TECHNOLOGY PLATFORM

CT® Background

mPACT® technology represents an off-the-shelf method to deliver cancer antigens complexed to heat shock ns, or HSPs, to illicit an immune response. HSPs are used as a signaling mechanism by the immune system to y mutated proteins (antigens), including those from tumor cells. Although always present within certain cells, are normally only released when cells die by necrosis or unnatural cell death (rather than apoptosis or natural mmed cell death) and upon release are recognized by the host s immune system. When a cell dies an unnatural through necrosis , such as when it is infected and killed by a flu virus or other pathogen, the cell releases its ts into circulation setting off a molecular warning to the immune system thereby generating a rapid and potent ne response. Because HSPs very rarely leave cells, the immune system has evolved to recognize HSPs that een released from dying cells as the sentries of a molecular alarm system. This characterizes the role of heat proteins as damage associated molecular patterns (DAMPS). Upon detection of HSPs, the immune system rects an immune response against any foreign (pathogenic) proteins bound to the HSP at the time the cell that

ed it died.

have several functions including:

ting tissues from pathogens by activating the immune system.

g as a chaperone to:

ate proper protein folding within the endoplasmic reticulum.

e proper function of toll-like receptors and the innate immune system.

damaged proteins to intracellular garbage disposals to be degraded into peptides (short chains of amino acids – e protein fragments).

ng peptides onto another class of proteins known as MHC I molecules. MHC I molecules move to the cellular e where they are monitored by the immune system.

ing antigen cross-presentation for activation of CD8+ T cells toward tumor antigens

p96 is one of the most abundantly expressed proteins in the human body and is expressed by all cells. It is lly retained within cells in a compartment called the endoplasmic reticulum (ER), where it facilitates the g of newly synthesized proteins so that they may perform their various tasks properly. Gp96 is particularly

ant in the process of detecting antigens as it is present in all cell types and, it is able to recognize all antigens. induces the immune system to activate CD8+ (killer) T cells which then seek out and destroy the cells that are d by antigens. Gp96 is normally only contained inside the ER of cells, however when a cell dies an abnormal through necrosis it breaks open and releases gp96 into the surrounding tissue microenvironment. *ImPACT*® by modifying the chemical structure of gp96 so that a cell can continuously secrete it into the extracellular accompanied by the unique peptide that it is folding at the time without causing necrosis. This allows the ne system to seek out and destroy cells characterized with antigens before the body would otherwise have ed them.

***CT*® Technology Overview**

tation of utilizing gp96 as a cancer immunotherapy is that it is normally retained within cells by a small region a KDEL sequence that acts like a leash , preventing gp96 from leaving the ER. Therefore, in order to utilize s a therapeutic, gp96 must either be purified from individual cells or engineered to be secreted from cells.

ercome this limitation, a team of scientists led by Eckhard Podack, M.D., Ph.D., the Former Chairman of our ific Advisory Board and the inventor of this technology, deleted this KDEL sequence and replaced it with r sequence that causes the new fusion protein, called gp96-Ig, to be secreted from cells continuously. Multiple cell lines were then made to express gp96-Ig, and as expected, secreted it continuously into the extracellular n a complex with tumor antigens. Dr. Podack demonstrated that gp96-Ig vaccination effectively presented tumor specific antigens to immune cells, led to expansion of Cytotoxic T Lymphocytes (CTL) and bsequent rejection of injected tumor cells. Importantly, these studies demonstrated that the secreted protein g maintained the critical characteristics of the native gp96 protein required to generate anti-tumor immune ses.

mPACT® technology platform:

ively cross-presents tumor antigens and leads to cytotoxic killer T cell activation

hed studies in mice showed that killer T cell activation was approximately 20 million times greater with *CT*® secreted gp96-Ig than with a corresponding gp96 protein injection. The modified cell secretes gp96 in a ed release for several days after injection. This creates a sustained immune response. These data suggest that chaperoned peptides may represent the most efficient, robust pathway for presenting a cell s antigens to the ne system and activating killer T cells.

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and presents all potential tumor antigens to the immune system simultaneously

le type of tumor might have multiple strains derived from numerous tumor cells. These different strains have nt antigens, all of which are capable of initiating an immune response. By creating a vaccine from a -cell line, we believe that *ImPACT®* *s* technology can develop a therapy that shares many common features atients tumors. We believe this blanket approach will provide each patient with a higher likelihood of a e response to the therapy.

es killer T cell activation that is independent of CD4+ T cell help

l studies have confirmed that our technology initiates a mechanism called cross-presentation that is critical to ng tumor rejection. Importantly, it does this independently and successfully without additional CD4+ T cell nown as a helper T cell) recruitment, which is typically required in a normal immune system response. This is ularly important in cancer and HIV because helper T cell activity is frequently impaired in these disease states.

ause few side effects

lieve our technology allows the body to recognize cancer as a foreign entity and uses the body's natural ne mechanism to recognize and fight it. In doing so, we believe our product candidates will generate fewer side than conventional chemotherapy and that patients will be able to maintain a higher quality of life.

stinguishing characteristics of *ImPACT®* are:

most other immunotherapy approaches target only a single antigen, our patented approach uses modified heat proteins to stimulate an immune response against multiple antigens contained within cancer cells (both known

known). Cancer cells express different antigens that can be used to initiate an immune response. Each
CT® vaccine is created from a tumor-cell line that we believe expresses a wide array of those antigens most
only expressed in a particular type of cancer. For our lung cancer trials, the cell line that was used and
sed the most favorable antigen profile for lung cancer was a lung cancer cell line and for our bladder cancer
he cell line that was used and expressed the most favorable antigen profile for bladder cancer was a prostate
cell line. We believe this pan-antigen approach provides each patient with a higher likelihood of a response to
rapy.

oduct candidates are made from off-the-shelf (allogeneic) cells and may therefore be less expensive to
acture than patient-specific (autologous) vaccines. Our vaccines are mass-produced from a single source while
mmunotherapy approaches require physicians to extract a patient s blood and/or cells, send them to a facility
a personalized vaccine is created, and then have them shipped back to the physician for injection into the
.

competing companies are developing therapies that are both off-the-shelf and which target multiple antigens,
PACT® technology is the only off-the-shelf (allogeneic) vaccine to know our knowledge - that directly
s cross-presentation to the CD8+ (killer) T cells, which are the cytotoxic arm of the immune system.
ating these CD8 (killer) T cells through cross-presentation has recently been shown to be critical to the
ion of effective anti-tumor immunity. We believe our product candidates are able to leverage gp96 to serve as
wn powerful immune stimulant (adjuvant) while other companies technologies rely on the use of a secondary
nt like GMCSF or Alum.

omPACT Technology Platform

omPACT technology platform was created in-house to take advantage of all aspects of the T cell activation m and to build upon them. Because the future of cancer immunotherapy appears to be focused on drug nations, it is valuable to conceive technologies where one drug may be re-purposed to do two things, rather ways relying on individual combinations of different single-function drugs. The need for this sort of tion is highlighted by the recent approval of Nivolumab and Yervoy for patients with late stage melanoma. ice for this combination is upwards of $250,000 per course of therapy, not including the substantially sed ancillary costs associated with monitoring and treating the potentially fatal complications that are common uch a combination. *ComPACT* was designed to deliver the gp96-Ig vaccine molecule together with a T cell ulatory fusion protein in a single compound. The first iterations of *ComPACT* included OX40L-Fc, L-Fc and ICOSL-Fc as the T cell costimulatory proteins, and due to preferential activity with the OX40L-Fc n of *ComPACT* , this compound has been prioritized for rapid clinical development. Interestingly, the activity lly secreted OX40L-Fc from *ComPACT* provides a superior immune response and tumor rejection than what with OX40 agonist antibodies.

roduct Candidates and Clinical Development Programs

ve initiated development programs to target our *ImPACT*® technology platform against a range of diseases, ing non-muscle invasive bladder cancer (NMIBC) and non-small cell lung cancer (NSCLC). In October 2015, mpleted full enrollment of 75 patients in the blinded, randomized, placebo-controlled arms of our ongoing 2 clinical trial evaluating HS-410 either in combination with BCG, or HS-410 alone, in patients with high risk, C. We are enrolling an additional 25 patients to evaluate HS-410 as a monotherapy in an unblinded, abel arm, and we anticipate completing enrollment by in the first half of 2016. We began dosing NSCLC s in combination with nivolumab in a Phase 1b protocol with our first therapeutic vaccine, HS-110, in the l half of 2015. The inventor of our technology platform had also completed a study in primates for the pment of a therapeutic and prophylactic vaccine for the treatment and prevention of HIV. This study was fully l by the NIH. The HIV trials were initiated by the primary inventor and to date have been funded by grants ed to the primary inventor, which can be used at the discretion of the inventor. We have no funding obligation h trials and the primary inventor is responsible for future development and research; nonetheless any research cted by the primary inventor contributes to our body of research and we may choose to progress with any such ch to further clinical trials and incorporate such research into our future development plans.

***CT* INDICATIONS**

er Cancer

e

United States, bladder cancer is the fourth most common type of cancer in men and the eleventh most on cancer in women. According to the National Cancer Institute, 1 in 42 men and women will be diagnosed ladder cancer during their lifetimes, meaning more than half a million people are living with bladder cancer in ited States. In 2015, the American Cancer Society estimated 74,000 cases of bladder cancer will be diagnosed United States, and an estimated 16,000 deaths will occur. According to the American Cancer Society there are tly over 500,000 bladder cancer patients in the United States and thirty percent (30%) of the patients have e invasive bladder cancer (MIBC) and seventy percent (70%) of the patients have NMIBC. Available ents are currently not effective, in all patients, thus this remains an area of high unmet need. According to Park al. *Clin Adv Hematol Oncol* .. 2014 Dec;12(12):838-45, lifetime treatment costs for bladder cancer are ximately $96,000 to $187,000 per individual per year in U.S.

2 Clinical Development

ment is complete for the 75 patients in the blinded, randomized, placebo-controlled arms of our Phase 2
l trial to examine safety, tolerability, immune response and preliminary clinical activity of HS-410 in patients
igh risk, superficial bladder cancer who have completed surgical resection. We are enrolling an additional 25
s to evaluate HS-410 as a monotherapy in an unblinded, open-label arm. The Phase 1 portion started
ent with HS-410 after standard intravesical bacillus Calmette-Guérin (BCG) immunotherapy; the Phase 2
n investigates one of two doses of HS-410 or placebo in combination with BCG or one dose of HS-410 as
herapy. We anticipate including approximately 15-20 clinical sites in the United States with an enrollment
of 18-24 months.

uary 2016, we reported three-month interim data from the unblinded, monotherapy cohort of the company s
g Phase 2 trial of HS-410 for the treatment of NMIBC at the Phacilitate Immunotherapy World Conference.
monotherapy arm, a series of weekly intradermal injections of HS-410 is being dosed as an alternative to
Images of the bladder taken from several treated patients showed changes that resemble lymphoid (T cell
tructures that we have observed in biopsy samples, which we believe indicates that HS-410 is generating an
e response as expected.

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ovember 6, 2015, we announced positive results from our Phase 1 trial, evaluating the safety and immune se of HS-410, after standard of care bacillus Calmette-Guérin (BCG), for the treatment of high-risk NMIBC. results are outlined below:

0 exhibited a positive safety profile and was well-tolerated with no patients discontinuing the trial due to e events (AEs). Furthermore, no serious adverse events (SAEs) were reported, and 7 out of 10 patients had no ented recurrence of cancer >1 year after standard of care surgery. Significantly, 3 out of 4 patients with *oma in situ* (CIS), the patient population least responsive to standard of care, did not recur. HS-410 elicited a based (polyclonal) expansion of patient T cells and a high level of CD8+ tumor-infiltrating lymphocytes . Additionally, based on tissue samples taken from each patient, HS-410 shared 15 or more tumor antigens in on with those expressed on the patients' cancer cells, which we believe indicates HS-410's ability to target a range of tumor antigens for all patients treated to date. These data confirm previous clinical findings ing the unique mechanism of action for HS-410 and for our *ImPACT*® and *ComPACT* platform technologies. ver, third-party analysis of blinded samples demonstrated a strong correlation between baseline characteristics s by T cell receptor (TCR) sequencing and clinical outcome. Specifically, the 7 patients who remain disease hibited the greatest clonal expansion of intratumoral T cells (p-value 0.0126).

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ober 2015, we completed full enrollment of 75 patients in the blinded, randomized, placebo-controlled arms of going Phase 2 clinical trial evaluating HS-410 either in combination with BCG, or HS-410 alone, in patients igh risk, NMIBC. The Phase 2 trial will examine safety, tolerability, immune response and preliminary l activity of HS-410. The primary endpoint is one-year disease free survival. We are enrolling an additional ents to evaluate HS-410 as a monotherapy in an unblinded, open-label arm, which we anticipate completing ment by the first half of 2016. We expect to report topline efficacy, immune-response and safety results in the quarter of 2016.

arch 5, 2015, we were notified that the U.S. Food and Drug Administration (FDA) granted Fast Track ation for HS-410 for the treatment of NMIBC. The Fast Track program is designed to facilitate the pment and expedite the review of therapies intended to treat serious or life-threatening conditions and that strate the potential to address unmet medical needs. The advantages of Fast Track designation include actions edite development, including opportunities for frequent interactions with the FDA review team to discuss all s of developments to support approval and eligibility for priority review depending on clinical data at the time logics License Application (BLA) submission. We believe that this designation will expedite our pment of HS-410.

Cancers

ntinue to evaluate other indications for our *ImPACT* and *ComPACT* platform technologies. Specifically, using *ACT*, we have developed cell lines for several other cancers with the first product candidate being a l-generation therapy for non-small cell lung cancer (HS-120). Our decision to further pursue these or any onal product candidates other than our two lead product candidates will be based in part upon available funding rtnering opportunities.

Cancer

e

cancer is the leading cause of cancer-related death in the United States. According to the National Cancer te, in 2015, lung cancer was expected to account for 26% of all female cancer deaths and 28% of all male deaths. An expected 221,200 people were diagnosed with lung cancer in the United States in 2015. Of these ancers, roughly 85% were expected to present as non-small cell lung cancer. Patients with advanced clinical IIB/IV disease have a 5-year survival rate as low as 1-5%.

1b Clinical Trial

y 2015, we initiated our Phase 1b clinical trial investigating the combination of our HS-110 therapeutic e and nivolumab (Opdivo®), a Bristol-Myers Squibb PD-1 checkpoint inhibitor, to treat patients with mall cell lung cancer (NSCLC). HS-110 is our first product candidate in a series of proprietary *ImPACT*® immunotherapies designed to stimulate patient's own T cells to attack cancer. HS-110 is a biologic product ising a lung cancer cell line that has been genetically modified using our *ImPACT*® technology platform to e a wide range of lung cancer associated antigens bound to gp96 proteins and activate a T cell mediated tigen immune response against the patient s cancer. This multicenter trial is evaluating the safety and efficacy 110 in combination with nivolumab in patients with NSCLC whose cancers have progressed after first-line y. Primary and secondary trial endpoints include safety and tolerability, immune response, overall response d progression-free survival. This trial is expected to initially enroll 18 patients, and we expect to release e objective response rate and 6-month progression free survival (PFS) data on these first 18 patients by the 2016.

1b HS-110/DURGA Trial Design

2 Clinical Development

rom our Phase 2 randomized, controlled trial using HS-110 in combination with cyclophosphamide versus therapy alone in third-line and fourth-line NSCLC patients is expected during the fourth quarter of 2016. This hich enrolled 65 patients is winding down to instead focus on combinations with checkpoint. The trial was ared as a multicenter randomized, study to evaluate the immune response, safety and efficacy endpoints of 0 when administered weekly for 12 weeks in combination with low-dose cyclophosphamide in an induction followed by monotherapy HS-110 every nine weeks during maintenance for up to one year. Patients mized to the comparator arm were treated with one chemotherapy regimen until progression. Blood samples aken to evaluate the immune response and their correlation to overall survival, and where considered priate by the investigator, patients are invited to consent for pre- and post-treatment biopsies for exploratory rker analysis. The primary endpoint was overall survival; secondary endpoints follow objective responses and he response.

1 HS-110 Clinical Trial

round

se 1 clinical trial with HS-110 in patients with very late stage IIIB/IV NSCLC was undertaken by the inventor technology which we license at the Sylvester Comprehensive Cancer Center with a total of 18 patients dosed, which completed the first course of three planned courses of therapy and were evaluated. Two of these 15 s completed all three planned courses. The primary purpose of this trial was to evaluate safety of HS-110, the secondary objectives were to study gp96-Ig specific immune responses and to monitor clinical progress. tients were divided into 3 arms. Due to statistical and safety considerations and early termination of the study, tients in the trial were not evenly divided among the three arms. Arm 1, which consisted of 11 patients, ed 40 million cells every two weeks for 18 weeks, arm 2, which consisted of 4 patients, received 20 million very week for 18 weeks and arm 3, which consisted of 3 patients, received 10 million cells twice a week for eks. Three of the patients, who were late stage lung cancer patients, died before their immune response could luated and were not included in the evaluation set at the end of the trial.

hase 1 trial was conducted under an investigator-sponsored IND and was fully funded by the NIH. The main a for inclusion were: (i) patients with histologically confirmed NSCLC stage IIIB, stage IV, or recurrent e; (ii) at least one site of bi-dimensionally measurable disease; (iii) treated brain metastasis must be stable by an or MRI for at least 8 weeks; (iv) patient must have received and failed at least two lines of therapy (one of rlotinib); (v) age ≥ 18 years; ECOG performance status 0-2; life expectancy ≥ 3 months; and (vi) signed ed consent.

edian age was 67 years (range 38-86). HS-110 showed no overt toxicity. There were no serious adverse events) that were considered by the trial investigator to be treatment-related. Most of the adverse events (AEs) were ed as mild or moderate (grade 1 or 2) with the most frequent being skin induration and rash that were ory and usually resolved in 1 to 2 weeks.

lieve that the results of the Phase 1 trial with HS-110 demonstrate that HS-110 is capable of generating a CTL IFN- immune response in patients with advanced NSCLC. In 11 of the 15 patients (73%) that completed st course of therapy with HS-110, there was a twofold or greater increase in CD8 cells secreting interferon a (CD8-CTL IFN-). These patients also exhibited an estimated median survival of 16.5 months (95% -20.0). In contrast, 4 patients were immune non-responders and survived 2.1, 2.3, 6.7, and 6.7 months, or a n survival of 4.5 months, which is consistent with the expected survival times in this patient population. The ol required that we look for such responses, but, as is typical in immunotherapy, no partial or complete tumor ses were observed. The median one-year overall survival rate of patients in the study was 44% (95% 6-65.1). For comparative purposes, while there was a wide range of survival times, the one-year overall al rate in a published one-year, 43-patient, advanced lung cancer population was 5.5%. One of the late-stage ancer patients survived over four years since starting the therapy and another patient survived over three years tarting the therapy. These findings were consistent with multiple preclinical published studies on *ImPACT*® y.

0 Safety

lieve HS-110 showed no overt toxicity. There were no serious adverse events (SAEs) that were considered by al investigator to be treatment-related. Most of the adverse events (AEs) were reported as mild or moderate 1 or 2) with the most frequent being skin induration and rash that were transitory and usually resolved in 1 to ks. The single grade 3 AE was in the Body as a Whole category (fatigue) and was rated as possibly related. were no immune-related events with the vaccine or the vaccinations.

eactions at the vaccination site were minimal and of short duration and there was no evidence of the generation autoimmune phenomena. In lieu of a dose escalation design, the design of the Phase I trial involved sing the frequency of vaccination, while still retaining the total dose of vaccine cells administered. A more nt vaccination schedule caused increased tumor rejection in preclinical models.

se Events by Body System

	Number of Events	**Severity**
Body System	**(N=219)**	**Grade (# of events)**
Injection Site Reactions	166 (75.8%)	Grade 1 (166)
Respiratory System	9 (4.1%)	Grade 2(5)
Body as a Whole (general disorders including fever)	8(3.7%)	Grade 1(4)
		Grade 2(3) [a]
		Grade 3(1) [b]
Nervous System	8(3.7%)	Grade 2(1)
Musculoskeletal	7(3.2%)	Grade 2(5)
Digestive System	7(3.2%)	Grade 1(7)
Metabolic and Nutrition	6(2.7%)	Grade 1(6)
Skin and Appendages (non-injection site reactions)	4(1.8%)	Grade 2(1)
Cardiovascular System	2(0.9%)	Grade 2(1)
Urogenital System	1(0.5%)	Grade 1(1)
Endocrine System	1(0.5%)	Grade 2(1)
Hemic and Lymphatic		

ade 2 AEs except 4 were classified as non-related to treatment. The grade 2 treatment-related AEs were 1 loskeletal event (joint pain) rated as definitely related. 1 musculoskeletal event (knee weakness) rated as ly related. 1 endocrine event (hot flashes) rated as unlikely related and 1 skin event (pruritus) rated as unlikely l.

ngle grade 3 AE was in the body as a whole category (fatigue) and was rated as possibly related.

ion Site Reactions

	Number of Events
Injection Site Reaction (ISR)	**(N = 166)**
Pain	17 (10%)
Induration	58 (35%)
Pruritus	8 (5%)
Hyperpigmentation/Discoloration	3 (2%)
Rash	78 (47%)
ISR non-specific	2 (1%)

e Immunological Response

of the 15 patients (73%) completing the first course of therapy with HS-110, there was a twofold or greater se in CD8 cells secreting interferon gamma (CD8-CTL IFN-) following vaccination.

FN- response. Samples from 15 patients collected for immune response at
e and after at least one course of vaccination were available for analysis of
8 IFN- response. 20,000 purified patient CD8 T cells were stimulated
accine cells for 40h in ELI-spot plates and the frequency of IFN- secreting
etermined. + indicates first increase. Solid lines indicate immune response
dashed lines no response (IR –).

NSCLC is known to be highly immunosuppressive, we believe that by overcoming tumor-induced-suppression
requent vaccinations as observed anecdotally in the Phase 1 study and the generation of an observed potent

itope specific CD8 CTL is encouraging and warrants further study.

al Response

of 15 patients completing the first course of therapy (39%; 95% CI: 17.3- 64.3%) achieved disease zation after the first course of vaccinations (6 weeks) and 8 patients had disease progression. While the ol required that we look for such responses, as is typical in immunotherapy, no partial or complete tumor ses were noted in the study. Although clinicians and patients may perceive disease stabilization as beneficial, t a control arm the FDA does not consider it to be a clinical benefit for regulatory purposes. In order to obtain pproval, we will be required to show an improvement in progression-free survival (or, PFS) or overall al (or, OS) when compared to a control arm in a randomized study. The Kaplan Meier estimate of median time gression was 1.4 months (95% CI: 1.3-2.7), and the PFS rates at 1, 2 and 3 months were 88.9% (95% CI: 62.4-), 38.9% (95% CI: 17.5-60.0%), and 11.1% (95% CI: 1.9-29.8%), respectively. Of note, two patients remained ssion free for just over 7 months.

pical median survival period for late-stage lung cancer is 4.5 months for patients who are not receiving any ent. Two of the fifteen patients who completed the first course of therapy were followed for over 3 years and 4 respectively. The Kaplan-Meier estimate of median overall survival was 8.1 months (95% CI: 6.7- 18.2), and 2, and 3-year OS rates were 44.4% (95% CI: 21.6-65.1%), 19.0% (95% CI: 4.8- 40.3%), and 9.5% (95% CI: .1%), respectively. While these results may be encouraging, apparent differences in outcome between tion-based survival estimates and treatment groups from a clinical study can arise from differences other than reatment. The reliability of such comparisons must also be considered in light of the unblinded nature of the data at the time that the comparator was chosen. Moreover, the wide range of values in the 95% confidence ls in our study suggests that the actual median survival times could lie anywhere in the reported intervals.

o progression (thick line) and additional follow up (thin line) by
chedule cohort. Patients are shown within cohort in order of increasing
up (shortest at top). Filled diamonds indicate disease progression; open
nds indicate stable disease at last assessment. Filled circles indicate death;
ircles last follow up of surviving patients. IR+: more than twofold increase
8 from baseline. IR − : no CD8 immune response. na: not assessed for
ne response.

of the 15 patients (73%) completing the first course of therapy with HS-110, there was a twofold or greater se in CD8 cells secreting interferon gamma (CD8-CTL IFN-y) following vaccination. In a non-prespecified is, the responders saw a threefold increase in median overall survival compared to the non-responders on al.

ary

mary, based on the results of this Phase 1 trial in 18 patients, we believe HS-110 showed no overt toxicity and s to be capable of generating CD8-CTL IFN- immune responses in patients with advanced NSCLC. These are encouraging and may be predictive of clinical benefit based on stabilization of disease, overall survival e immune responder results.

facturing

y on third-party manufacturers to produce and store our product candidates for clinical use and currently do
n or operate manufacturing facilities.

ve retained Lonza Walkersville, Inc. a vendor, which has begun manufacturing of HS-110 to be used in our 2 and potential Phase 3 clinical trials. We entered into an eight year Manufacturing Services Agreement, dated er 20, 2011, with the vendor (the Manufacturing Agreement). The Manufacturing Agreement provides that the r will manufacture products based on our *ImPACT*® technology intended for use in pharmaceutical or nal end products, including, without limitation, products in a final packaged form and labeled for use in l trials or for commercial sale to end users in accordance with the terms and conditions of individual ents of work. The Manufacturing Agreement requires that we purchase a certain minimum percentage of our global product requirements from the vendor. The Manufacturing Agreement may be terminated by the upon mutual agreement, and by each party for a material breach by the other party that is not cured within the eriod, upon notice that a clinical trial for which product is being produced under the agreement is suspended or ated or upon the other party s insolvency, dissolution or liquidation.

S-110 used in the inventor s Phase 1, and in our Phase 2 clinical trial and HS-410 used in our Phase 1/2 clinical as and is currently manufactured under current good manufacturing practices, or cGMP. The vaccine is grown e quantities, dispensed into individual doses, frozen in liquid nitrogen, and quality tested in compliance with guidelines. The vaccine is irradiated, which is a commonly used attenuation process that eliminates the ability gp96-Ig-containing vaccine cell lines to replicate but allows them to continue secreting gp96-Ig for a period of l days. These batches of frozen, irradiated vaccine are stable for long periods of time, and are thawed diately prior to administration to patients. Sufficient material to dose a subset of patients in the HS-110 Phase 2 has already been produced, and preparations are underway to produce quantities required for trial completion bsequent clinical trials. Sufficient material to complete the Phase 1 portion and part of the Phase 2 portion of -410 Phase1/ 2 study has already been produced, and preparations are underway to produce quantities ed for trial completion and subsequent clinical trials.

etition

harmaceutical industry and biologics industry are each highly competitive and characterized by a number of shed, large companies, mid-sized companies, as well as smaller companies like ours. If our competitors t products that are less expensive, safer or more effective than any future products developed from our product ates, or that reach the market before our approved product candidates, we may not achieve commercial s. Technological developments in our field of research and development occur at a rapid rate and we expect tition to intensify as advances in this field are made. We will be required to continue to devote substantial ces and efforts to our research and development activities. As a biotechnology company with cancer notherapy agents as s lead product candidates, we compete with a broad range of companies. At the highest cancer immunotherapy can be seen as both a complement and a potential competitor to any oncology therapy, notably chemotherapy, biologics and small molecule drugs. Not only do we compete with companies engaged ous cancer treatments including radiology and chemotherapy but we also compete with various companies that eveloped or are trying to develop immunology vaccines for the treatment of cancer. Certain of our competitors ubstantially greater capital resources, large customer bases, broader product lines, sales forces, greater ting and management resources, larger research and development staffs and larger facilities than we do and nore established reputations as well as global distribution channels. Our most significant competitors, among

are fully integrated pharmaceutical companies such as Eli Lilly and Company, Bristol-Myers Squibb
any, Merck & Co., Inc., Novartis AG, MedImmune, LLC (a wholly owned subsidiary of AstraZeneca plc),
on & Johnson, Pfizer Inc., MerckKGaA and Sanofi-Aventis U.S. LLC, and more established biotechnology
nies such as Genentech, Inc. (a member of the Roche Group), Amgen Inc., Celgene Corporation, Gilead
es, Inc., and competing cancer immunotherapy companies such as Kite Pharma, Inc., Juno Therapeutics, Inc.,
rd Bio, Inc., Transgene SA, Valeant Pharmaceuticals International, Inc., NewLink Genetics Corporation,
s Inc., NovaRx Corporation, Aduro Biotech, Inc., Advaxis, Inc., ImmunoCellular Therapeutics, Ltd.,
novaccine Inc., Oncothyreon Inc., Oxford BioMedica plc, Bavarian Nordic A/S, Celldex Therapeutics, Inc.,
a Therapeutics Inc. and others, some of which have substantially greater financial, technical, sales, marketing,
man resources than we do. These companies might succeed in obtaining regulatory approval for competitive
cts more rapidly than we can for our products. In addition, competitors might develop technologies and
cts that are less expensive, safer or more effective than those being developed by us or that would render our
logy obsolete. In addition, the pharmaceutical and biotechnology industry is characterized by rapid
logical change. Because our research approach integrates many technologies, it may be difficult for us to
n current with the rapid changes in each technology. If we fail to stay at the forefront of technological change,
y be unable to compete effectively. Our competitors may render our technologies obsolete by advancing their
g technological approaches or developing new or different approaches.

pect to compete with other pharmaceutical and biotechnology companies, and our competitors may:

p and market products that are less expensive, more effective or safer than our future products;

ercialize competing products before we can launch any products developed from our product candidates;

e larger research and development programs, possess greater manufacturing capabilities or have substantially
financial resources than we do;

e or withstand substantial price competition more successfully than we can;

reater success in recruiting skilled technical and scientific workers from the limited pool of available talent;

effectively negotiate third-party licenses and strategic relationships; and

dvantage of acquisition or other opportunities more readily than we can.

pect to compete for market share against large pharmaceutical and biotechnology companies, smaller nies that are collaborating with larger pharmaceutical companies, new companies, academic institutions, ament agencies and other public and private research organizations.

major pharmaceutical companies have at least one immunotherapy drug or therapeutic in development, either y or in partnership with a smaller biotech firm. Some of our competitors that are developing competitive nology drugs and therapeutics include Merck & Co. Inc., Genentech, Inc. (a member of the Roche Group), -Myers Squibb Company, Transgene SA, Oxford BioMedica plc; NewLink Genetics Corporation; Celldex peutics, Inc., Pfizer Inc.; and Celgene Corporation.

imary treatments for non-small cell lung cancer are surgery, radiation, chemotherapy and various nations of each of these treatments. A large number of patients, particularly with advanced disease, are ory to these treatments and are subsequently treated with a number of emerging biologic agents, including notherapy. Some examples of therapies commonly attempted with stage IIIB/IV NSCLC patients include: mab (Opdivo), pembrolizumab (Keytruda), Alimta (pemetrexed), Avastin (bevacizumab), Tarceva (erlotinib), ar (gemcitabine), Carboplatin, Taxol (paclitaxel), Taxotere (docetaxel), and Vinorelbine. It is unlikely that ic agents will compete with more traditional therapies in the short-term, but many oncologists believe that herapies will eventually become the mainstay of lung cancer therapy. None of these agents have proven ularly effective for stage IIIB/IV NSCLC patients, with the most effective therapies only increasing survival by months. As a result, we do not consider these agents to be direct competitors to HS-110 because they are likely given either in sequence or in conjunction with some of the agents listed. Furthermore, many patients cannot e many of the chemotherapeutics listed. Thus, we believe if HS-110 has a positive safety profile (without ation of local or systemic toxicities, none of which have been seen to date), it is likely that HS-110 would be red both by physicians and patients in this stage of disease.

viously stated we compete with other forms of cancer treatment such as biologic therapies in addition to nology therapies. There are several biologic therapies in clinical development for NSCLC that have been ied as potential competitors to HS-110. In particular, a cell-based vaccine therapy, Lucanix, is in development vaRx. Lucanix has recently completed Phase 3 clinical trials and failed to reach the primary endpoint.

rategy is to emphasize what we believe to be our competitive advantages which are that the therapy will have de effects than most other chemotherapies, will be available at lower prices than other therapies and will work ost all types of cancer and not just one specific type.

gh all chemotherapy drugs have severe side-effects such as overall damage to the immune system, not only to ous cells, leading to hair loss, nausea and vomiting, and considerable pain, etc., the side effects from notherapy are typically reduced because immunotherapy works with the body s own immune response.

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ding to Schreiber et al, patient-specific vaccines are not more effective than off-the shelf vaccines in reducing s. Furthermore, patient-specific vaccines cost far more to produce than off the shelf (allogeneic) vaccines, any donor tissue can be used. Immunotherapies are reported to cost in excess of $100,000 per year and we that our treatment will be less expensive.

ctual Property

se Agreements and Intellectual Property

al is to obtain, maintain and enforce patent protection for our products, formulations, processes, methods and proprietary technologies, preserve our trade secrets and exclusive rights in our unique biological materials, and e without infringing on the proprietary rights of other parties, both in the United States and in other countries. olicy is to actively seek to obtain, where appropriate, the strongest intellectual property protection possible for rrent product candidates (*ImPACT*® therapy) and any future product candidates, proprietary information and etary technology through a combination of contractual arrangements and patents, both in the United States and l. However, even patent protection may not always afford us with complete protection against competitors who circumvent our patents. See Risk Factors - Risks Relating to Our Business We have limited protection of our ctual property.

ll continue to depend upon the skills, knowledge and experience of our scientific and technical personnel, as s that of our advisors, consultants and other contractors, none of which is patentable. To help protect our etary know-how, which is not patentable, and for inventions for which patents may be difficult to enforce, we tly rely and will in the future rely on trade secret protection and confidentiality agreements to protect our ts. To this end, we require all of our employees, consultants, advisors and other contractors to enter into entiality agreements that prohibit the disclosure of confidential information and, where applicable, require sure and assignment to us of the ideas, developments, discoveries and inventions important to our business.

se Agreements

2008, we entered into an exclusive license agreement with the University of Miami (the University) for ctual and tangible property rights relating to our *ImPACT*® technology. This license agreement was quently assigned to our subsidiary Heat Biologics I, Inc. which issued to the University shares of its common epresenting seven and one half percent (7.5%) of its common stock. The term of the license is the length of t to expire patent, unless terminated earlier. The license agreement grants Heat Biologics I, Inc. exclusive, vide rights to make, use or sell licensed materials based upon the following patent-related rights:

atent applications: Serial number 60/075,358 (the “358 application”) entitled “Modified Heat Shock
n-Antigenic Peptide Complex” and filed on February 20, 1998; Serial number 09/253,439 (the “ ‘439 application”)
d “Modified Heat Shock Protein-Antigenic Peptide Complex and filed on February 19, 1999; serial number
3,460 (the 460 application) entitled Recombinant Cancer Cell Secreting Modified Heat Shock
n-Antigenic Peptide Complex and filed on July 24, 2007; and all U.S. patents and foreign patents and patent
ations based on these U.S. applications; as well as all divisionals, continuations, and those claims in
uations-in-parts to the extent they are sufficiently described in the 358, 439, or 460 applications of the
ing, and any re-examinations or reissues of the foregoing (the GP96 Vaccine Technology Portfolio).

sideration for the rights granted in the license agreement, the licensee is obligated to pay the University t license fees, additional yearly and milestone payments and a royalty based on net sales of products covered patent-related rights set forth above. More specifically, the licensee is obligated to pay the University (i) all d future patent costs associated with the licensed patent-related rights; (ii) a license issue fee of $150,000; (iii) payments of $10,000 in 2010, 2011 and 2012, and $20,000 each year thereafter; (iv) a milestone payment of 00 by the earlier of May 31, 2017 or approval of a BLA for the lung cancer vaccine or for a cancer vaccine han lung cancer; and (v) royalties equal to a percentage (in the low-to-mid single digits) of net sales of d products. The royalty rate is subject to reduction if additional license rights from third parties are required to ercialize licensed products. In the event of a sublicense to a third party, Heat Biologics I, Inc. is obligated to yalties to the University equal to a percentage of what it would have been required to pay to the University had the products under sublicense itself. In exchange for additional consideration, the University agreed to ne the payment due dates prior to February 2010 of this license agreement. All past patent costs have been aid.

tember 2014, we amended the license agreement in which the University of Miami agreed not to license the e to third parties while we are in good standing and in compliance of our patent license agreements with the rsity relating to our *ImPACT* platform. A patent for Modified Heat Shock Proteins-Antigenic Peptide ex if issued from the pending patent applications, would expire in 2019 (worldwide), not including any patent djustments or extensions.

ruary 2011, our subsidiary, Heat Biologics I, Inc., entered into four additional exclusive license agreements e University. The terms of each of these additional licenses run until all the patent-related rights licensed have expired, unless terminated earlier. In these additional exclusive license agreements, Heat Biologics I, tained exclusive, worldwide rights to make, use or sell products covered under the following patent-related

atent application serial number 61/347,336 titled “Cancer Treatment” and filed on May 21, 2010, and S2011/037327 titled “Cancer Treatment” and filed May 20, 2011 and all U.S. patents and foreign patents and applications based on these U.S. applications; as well as all divisionals, continuations, and those claims in uations-in-parts (to the extent they are sufficiently described in the applications) of the foregoing, and any minations or reissues of the foregoing (the Cancer Treatment Portfolio). A patent for Cancer Treatment , if from the pending patent applications, would expire in 2031 (worldwide), not including subject to any patent djustments or extensions.

atent application serial number 61/033,425 titled “Allogeneic Cancer –Based Immunotherapy” and filed on 3, 2008 and PCT application number PCT/US2009/001330 titled Allogeneic Cancer Based Immunotherapy n March 3, 2009, and all U.S. patents and foreign patents and patent applications based on these U.S. ations as well as all divisionals, continuations, and those claims in continuations-in-parts (to the extent they are ently described in the applications) of the foregoing, and any re-examinations or reissues of the foregoing (the geneic Cancer Based Immunotherapy Portfolio). A patent for Allogeneic Cancer –Based Immunotherapy”, if from the pending applications, would expire in 2029 (worldwide), not including any patent term adjustments ensions

atent application serial number 61/033,425 titled “Heat Shock Protein GP96 Vaccination and Methods of Using filed on March 20, 2008 and PCT application number PCT/US2009/001727 titled Heat Shock Protein GP96 nation and Methods of Using Same filed on March 19, 2009, and all U.S. patents and foreign patents and applications based on these U.S. applications as well as all divisionals, continuations, and those claims in uations-in-parts (to the extent they are sufficiently described in the applications) of the foregoing, and any minations or reissues of the foregoing (the Heat Shock Protein GP96 Vaccination Portfolio). A patent for Shock Protein GP96 Vaccination and Methods of Using Same , if issued from the pending applications, would in 2029 (worldwide), not including any patent term adjustments or extensions.

atent application serial number 61/116.971 titled “HIV/SIV Vaccine for the Generation of Mucosal and
nic Immunity” filed November 21, 2008 and PCT application number PCT/US2009/065500 titled “HIV/SIV
ne for the Generation of Mucosal and Systemic Immunity filed on November 23, 2009 and all U.S. patents and
n patents and patent applications based on these U.S. applications as well as all divisionals, continuations, and
claims in continuations-in-parts (to the extent they are sufficiently described in the applications) of the
ing, and any re-examinations or reissues of the foregoing (the HIV/SIV Vaccine Portfolio). A patent for
SIV Vaccine for the Generation of Mucosal and Systemic Immunity , if issued from the pending applications,
expire in 2029 (worldwide), not including any patent term adjustments or extensions.

nsideration for the rights granted in these additional four license agreements, the licensee is obligated to pay
iversity certain upfront license fees, past and future patent costs and royalties based on net sales of
ercialized products covered by the patent-related rights set forth above. No annual or milestone payments are
ed under any of these four additional license agreements. The upfront license fees for the Cancer Treatment
lio and the HIV/SIV Vaccine Portfolio license agreements are $10,000 and $50,000, respectively. No upfront
e fees were required under the license agreements for the Allogeneic Cancer Based Immunotherapy and the
hock Protein GP96 portfolios. Under each of these four additional license agreements, the royalties are equal
rcentage (in the low-to-mid single digits) of net sales of products covered by the patent-related rights in the
tive license agreements. These royalty rates are subject to reduction if additional license rights from third
are required to commercialize licensed products. In the event of a sublicense to a third party, Heat Biologics
is obligated to pay royalties to the University equal to a percentage of what it would have been required to pay
University had it sold the products under sublicense itself. Each of these additional license agreements also
es that the licensee will not have to pay more than the above-noted royalty rates and sublicense fees if more
ne license from the University is required to sell products covered by the licensed patent-related rights. In
nge for additional consideration (including the requirement that Heat Biologics I, Inc. pay additional milestone
nts of $25,000 before initiation of any Phase 3 clinical trials for products covered by any of the license
ments, and an additional payment equal to 18% annual interest on the amounts due or a note convertible into an
lent value of shares in our Preferred Stock), the University agreed to postpone the payment due dates prior to
ry 2010 for each of these four additional licenses.

e of the above-described license agreements provide that the licensor has the right to terminate a subject
if the licensee has (i) not introduced, or at least used its best efforts to introduce, a licensed product in the
ercial marketplace in the United States, European Union, or Japan by December 31, 2020; (ii) not otherwise
se diligence to bring licensed products to market; or (iii) files, or has filed against it, a proceeding under the
uptcy Act, is adjudged insolvent, makes an assignment for the benefit of its creditors, or has an unreleased or
sfied writ of attachment or execution levied upon it.

rch 2014, our subsidiary, Heat Biologics I, Inc., entered into an additional exclusive license agreement with the
rsity. The term of this license runs until all the patent-related rights licensed therein have expired, unless
ated earlier. In this exclusive license agreement, Heat Biologics I, Inc. obtained exclusive, worldwide rights to

use or sell products covered under the University s interest in the following patent-related rights:

rovisional Patent Application serial number 61/445,884 titled “Combined Cell Based Gp96-IG-SIV/HIV; nbinant Gp120 Protein Vaccination For Protection From SIV/HIV” and filed February 23, 2011 (the “884 ation”); PCT Application Serial No. PCT/US2012/26256 titled Combined Cell Based Gp96-IG-SIV/HIV, nbinant Gp120 Protein Vaccination For Protection From SIV/HIV filed February 23, 2012 (the 256 ation); and all U.S. patents and foreign patents and patent applications based on these applications; as well as isionals, continuations, and those claims in continuations-in-parts (to the extent they are sufficiently described 884 or 256 applications) of the foregoing, and any re-examinations or reissues of the foregoing (the bination HIV/SIV Vaccine Portfolio). A patent for Combined Cell Based Gp96-IG-SIV/HIV; Recombinant Protein Vaccination For Protection From SIV/HIV, if issued from the pending applications, would expire in worldwide), not including any patent term adjustments or extensions.

tent rights in the Combination HIV/SIV Vaccine Portfolio are co-owned by the University and the National tes of Health (the NIH). Heat Biologics I, Inc. has only licensed the University s rights therein. The NIH s in this portfolio have not been licensed by Heat Biologics I, Inc. As consideration for the rights granted in this e agreement, the licensee is obligated to pay the University an upfront license fee, past patent costs, and es based on net sales on commercialized products covered by the patent-related rights set forth above. No payments are required under this license agreement. The licensee is obligated to make milestone payments this license agreement as follows: $50,000 upon completion of a phase I clinical trial, $100,000 upon etion of a phase II trial, $100,000 upon completion of a phase III trial, and $100,000 upon acceptance of a y the FDA or its foreign equivalent. Under this license agreement, the royalties are equal to a percentage (low digits) of net sales of products covered by the patent-related rights. This royalty rate is subject to reduction if onal license rights from third parties are required to commercialize licensed products. In the event of a ense to a third party, Heat Biologics I, Inc. is obligated to pay royalties to the University equal to a percentage t it would have been required to pay to the University had it sold the products under sublicense itself. This e agreement also provides that the licensee will not have to pay more than the above sublicense fees or a in the low-to-mid single digits if more than one license from the University is required to sell products d by the licensed patent-related rights. The licensor has the right to terminate this license if the licensee has (i) roduced, or at least use its best efforts to introduce, a licensed product in the commercial marketplace in the States, European Union, or Japan by December 31, 2023; (ii) not otherwise exercised diligence to bring ed products to market; or (iii) files, or has filed against it, a proceeding under the Bankruptcy Act, is adjudged ent, makes an assignment for the benefit of its creditors, or has an unreleased or unsatisfied writ of attachment cution levied upon it.

an uncured material breach of an obligation under any one of the above six license agreements by a party, the party has the right to terminate that agreement upon 90 days notice or 30 days notice if the breach relates to nts due to the University. In the event of a termination, Heat Biologics I, Inc. will be obligated to pay all ts that accrued prior to such termination. Each of the above license agreements also contains other customary s and terms as are common in similar agreements between industry and academia, including the licensee s ment to indemnify the University for liabilities arising out of the negligence of the licensee, making the license ubject to the Bayh-Dole act (35 U.S.C. 200 et seq.), the reservation of the licensor of the right to use the ed intellectual property rights for its internal, non-commercial purposes, limitations/disclaimers of various nties and representations, reporting and record-keeping requirements, and licensee liability insurance ements.

the above-described license agreements with the University, we have obtained exclusive rights to six different families. The six patent families associated with our *ImPACT*® and *ComPACT* platform are:

mbinant cancer cell secreting modified heat shock protein-antigenic peptide complex.

amily of patent filings relates to methods and compositions for enhancing an immune response. More ularly, the application describes the creation of a tumor cell therapy including a cancer cell that has been ered to secrete a heat shock protein (gp96), and the use of such therapy to enhance an anti-tumor immune se. Within this family are eight (8) issued patents covering the United States, Australia, Canada, Japan and e (collectively validated in 28 countries) and one (1) pending U.S. application. Not including any patent term ments or extensions (e.g., for patent office delays or extensions/exclusivity periods provided for new drug vals in the United States and some foreign countries), the term for patents in this family extends until 2019.

Shock Protein gp96 Vaccination and Methods of Using Same

amily of patent filings also relates to methods and compositions for enhancing an immune response. It further oes: (a) how intraperitoneal gp96-Ig administration increases recruitment of innate immune cells into the istration site, mediates proliferation of dendritic cells (DCs) and CD8 cells, and activates natural killer (NK) (b) that gp96-Ig-secreting cell vaccines are more effective when gp96-Ig is continuously released; (c) that nt gp96 immunizations can overcome tumor-induced immune suppression and retards tumor growth; and (d) cell depletion can enhance gp96-Ig -mediated recruitment of NK cells and retention of DCs in the istration site. Within this family are one issued United States patent and one issued Australian patent, and one g application each in Canada, Europe, Israel and India. Not including any patent term adjustments or ions, the term for patents in this family extends until 2029.

geneic Cancer Cell Based Immunotherapy

amily of patent filings also relates to methods and compositions for enhancing an immune response. It further pes: (a) making vaccines cells allogeneic by expressing exogenous major histocompatibility complex (MHC) ns; (b) B cell depletion to augment the effectiveness of the vaccines; and (c) the enhancement of anti-tumor ne responses using multiple immunizations less than two weeks apart. Within this family are one issued lian patent, two issued U.S. patents, one issued European patent, one issued Israeli patent and one pending ation each in Canada, China, Europe, India, Japan, and South Korea. Not including any patent term ments or extensions, the term for patents in this family extends until 2029.

cer Treatment

amily of patent filings contains results from a Phase 1 clinical trial of human subjects with cancer. Within this are one pending application each in the United States, Canada, Australia, India and South Korea. Not ing any patent term adjustments or extensions, the term for patents in this family extends until 2031.

/SIV Vaccines to Generate Mucosal and Systemic Immunity This patent family relates to the use of host hat have been engineered to secrete a heat shock protein (gp96) to treat various chronic viral infections ing those caused by HIV. Within this family are one granted Australian patent, one granted South African and one pending application each in Canada and India. Not including any patent term adjustments or ions, the term for patents in this family extends until 2029.

bined Cell Based Gp96-Ig-SIV/HIV, Recombinant Gp120 Protein Vaccination for Protection From IV

atent family relates to combination therapies for treating chronic viral infections including HIV. The nation therapy uses host cells that have been engineered to secrete a heat shock protein (gp96) to induce al T cell responses and soluble viral antigens to induce antiviral antibody responses. Within this family are sued patent in South Africa and one pending application each in Canada, Europe, Hong Kong, India, South and the Philippines. Not including any patent term adjustments or extensions, the term for patents in this extends until 2032.

y 2011, we exercised an option agreement with U.Mich and entered into a license agreement with U.Mich nt to which we are UMich s exclusive licensee and have the right to use, market, offer for sale, sell and/or ense materials and processes related to certain cancer cell lines. The term of the license is perpetual, unless ated earlier by us or by U.Mich where U.Mich can only terminate for our material breach of this agreement. nsideration for the rights granted in the license agreement, we agreed to pay U.Mich up-front license fees and onal yearly and milestone payments. We also assumed under the license agreement responsibility for any gement of third party rights caused by our use of the licensed materials. We paid an option fee of $2,000, a e issue fee of $10,000 and are obligated to pay an annual maintenance fee of $10,000 each year until the first ercial sale of a licensed product at which time the annual maintenance fee increases to $50,000. In addition, obligated to make milestone payments of $25,000, $50,000 and $75,000 upon completion of a Phase 1, Phase Phase 3 trial and $250,000 upon the first commercial sale of a licensed product and $350,000 upon annual net f $100,000,000 or more. The license agreements provide that the licensor has the right to terminate the license we cease to carry on our business, fail to make a required payment or otherwise materially breach or default obligations under the license agreement following the giving of notice and an opportunity to cure any such . The license agreement provides that if we do not achieve the following milestones within the required , U.Mich has the right to terminate the license agreement: completion of a Phase 1 clinical trial on or before y 1, 2015, a Phase 2 clinical trial on or before January 1, 2017, a Phase 3 clinical trial on or before January 1, nd the first commercial sale of a product that includes the materials supplied by U.Mich on or before January 0. The license agreement also contains other customary clauses and terms as are common in similar ments between industry and academia.

il 2011, we entered into an evaluation and biological material license agreement with the ATCC to evaluate, arket, offer for sale, sell and/or sublicense materials and processes related to various different cell lines. In er 2013 and March 2014, this agreement was amended to add additional cell lines in exchange for additional The agreement with ATCC provides for an evaluation term of 12 months subject to two additional renewals, non-exclusive commercial use license upon termination of the evaluation period to utilize the products we in the evaluation to develop, make, use and sell licensed products. The October 2013 amendment also sed the number of evaluation renewals to a total of five. The agreement with ATCC has a term of 40 years. id an evaluation fee and four renewal evaluation fees totaling $25,000, and are obligated to pay a $50,000 fee nitiation of the commercial license and a less than 1% royalty based on sales of licensed products. In addition, obligated to make milestone payments of $15,000, $30,000 and $60,000 upon initiation of a Phase 1, Phase 2, ase 3 trial, respectively; and $200,000 upon receipt of marketing authorization. In December 2015, we ed this agreement with ATCC to add additional cell lines in exchange for additional fees.

tember 2014, we entered into an exclusive license agreement for a multiple myeloma cell line with Professor th Nilsson in Sweden for the production, sale and use for immunotherapy, including the prevention or ent of disease with substances, synthetic or biologic, that modulate the immune response and specifically e the use of the said cell line for discovery of any other therapeutics. The term of the license is perpetual, terminated earlier by us or by Professor Kenneth Nilsson where Profession Nilsson can only terminate for our al breach of this agreement. As consideration for the rights granted in the license agreement, we paid an nt license fee of $5,000 and are obligated to pay an annual maintenance fee of $3,000 each year until the first ercial sale of a licensed product at which time the annual maintenance fee increases to $30,000. In the license nent, we agreed to pay royalties equal to a one-tenth of low single digit percentage of net sales of licensed cts. In addition, we are obligated to make milestone payments of $12,000, $20,000 and $40,000 upon etion of a Phase 1, Phase 2 and Phase 3 trial and $100,000 upon the first commercial sale of a licensed product 00,000 upon annual net sales of $100,000,000 or more. The license agreements provide that the licensor has ht to terminate the license should we cease to carry on our business, fail to make a required payment or ise materially breach or default in our obligations under the license agreement following the giving of notice opportunity to cure any such breach. There are no timelines to achieve the above milestones. The license nent also contains other customary clauses and terms as are common in similar agreements between industry ademia.

gust 2015, we entered into an exclusive license agreement with Columbia University for an endometrial cancer e for the production, sale and use for all human healthcare applications. The term of the license is perpetual, terminated earlier by us or by Columbia University where Columbia University can only terminate for our al breach of this agreement. As consideration for the rights granted in the license agreement, we paid an nt license fee of $7,500 and are obligated to pay an annual maintenance fee of $5,000 each year until the first ercial sale of a licensed product at which time the annual maintenance fee increases to $50,000. In the license nent, we agreed to pay royalties equal to a one-tenth of low single digit percentage of net sales of licensed cts. In addition, we are obligated to make milestone payments of $25,000, $40,000 and $75,000 upon etion of a Phase 1, Phase 2 and Phase 3 trial and $200,000 upon the first commercial sale of a licensed product 00,000 upon annual net sales of $100,000,000 or more. The license agreements provide that the licensor has ht to terminate the license should we cease to carry on our business, fail to make a required payment or ise materially breach or default in our obligations under the license agreement following the giving of notice

opportunity to cure any such breach. There are no timelines to achieve the above milestones. The license
nent also contains other customary clauses and terms as are common in similar agreements between industry
ademia.

nhanced internal research and development capabilities, in 2015-2016, we filed five (5) provisional
ations, one U.S. non-provisional application, and two (2) PCT applications relating to new technologies
ped by the Company. Together, our *ImPACT®/ComPACT* patent portfolio comprises eighteen (18) issued
s and thirty-one (31) pending patent applications. These patents and applications cover the United States,
e, and Japan as well as several other countries having commercially significant markets.

nment Regulation

Approval Process

United States, pharmaceutical products are subject to extensive regulation by the U.S. Food and Drug nistration, or the FDA. The Federal Food, Drug, and Cosmetic Act, (the FDC Act), and other federal and state s and regulations, govern, among other things, the research, development, testing, manufacture, storage, keeping, approval, labeling, promotion and marketing, distribution, post-approval monitoring and reporting, ng, and import and export of pharmaceutical products. Biological products used for the prevention, treatment, e of a disease or condition of a human being are subject to regulation under the FDC Act, except the section of C Act which governs the approval of new drug applications, or NDAs. Biological products are approved for ting under provisions of the Public Health Service Act, or PHSA, via a Biologics License Application, or However, the application process and requirements for approval of BLAs are very similar to those for NDAs, ologics are associated with similar approval risks and costs as drugs. Failure to comply with applicable U.S. ements may subject a company to a variety of administrative or judicial sanctions, such as FDA refusal to ve pending NDAs or BLAs, warning or untitled letters, product recalls, product seizures, total or partial sion of production or distribution, injunctions, fines, civil penalties, and criminal prosecution.

aceutical product development for a new product or certain changes to an approved product in the United typically involves preclinical laboratory and animal tests, the submission to the FDA of an investigational new pplication, or IND, which must become effective before clinical testing may commence, and adequate and ontrolled clinical trials to establish the safety and effectiveness of the drug for each indication for which FDA val is sought. Satisfaction of FDA pre-market approval requirements typically takes many years and the actual equired may vary substantially based upon the type, complexity, and novelty of the product or disease.

nical tests include laboratory evaluation of product chemistry, formulation, and toxicity, as well as animal o assess the characteristics and potential safety and efficacy of the product. The conduct of the preclinical tests omply with federal regulations and requirements, including good laboratory practices. The results of nical testing are submitted to the FDA as part of an IND along with other information, including information product chemistry, manufacturing and controls, and a proposed clinical trial protocol. Long term preclinical uch as animal tests of reproductive toxicity and carcinogenicity, may continue after the IND is submitted.

lay waiting period after the submission of each IND is required prior to the commencement of clinical testing hans. If the FDA has neither commented on nor questioned the IND within this 30-day period, the clinical trial ed in the IND may begin.

al trials involve the administration of the investigational new drug or biologic to healthy volunteers or patients the supervision of a qualified investigator. Clinical trials must be conducted: (i) in compliance with federal tions; (ii) in compliance with good clinical practice, or GCP, an international standard meant to protect the and health of patients and to define the roles of clinical trial sponsors, administrators, and monitors; as well as der protocols detailing the objectives of the trial, the parameters to be used in monitoring safety, and the veness criteria to be evaluated. Each protocol involving testing on U.S. patients and subsequent protocol ments must be submitted to the FDA as part of the IND.

DA may order the temporary, or permanent, discontinuation of a clinical trial at any time, or impose other ons, if it believes that the clinical trial either is not being conducted in accordance with FDA requirements or ts an unacceptable risk to the clinical trial patients. The study protocol and informed consent information for s in clinical trials must also be submitted to an institutional review board, or IRB, for approval. An IRB may quire the clinical trial at the site to be halted, either temporarily or permanently, for failure to comply with the requirements, or may impose other conditions.

al trials to support NDAs or BLAs for marketing approval are typically conducted in three sequential phases, e phases may overlap. In Phase 1, the initial introduction of the drug or biologic into healthy human subjects or ts, the product is tested to assess metabolism, pharmacokinetics, pharmacological actions, side effects ated with increasing doses, and, if possible, early evidence on effectiveness. Phase 2 usually involves trials in a l patient population to determine the effectiveness of the drug or biologic for a particular indication, dosage ce, and optimum dosage, and to identify common adverse effects and safety risks. If a compound strates evidence of effectiveness and an acceptable safety profile in Phase 2 evaluations, Phase 3 trials are aken to obtain the additional information about clinical efficacy and safety in a larger number of patients, ly at geographically dispersed clinical trial sites, to permit the FDA to evaluate the overall benefit-risk nship of the drug or biologic and to provide adequate information for the labeling of the product. In most the FDA requires two adequate and well-controlled Phase 3 clinical trials to demonstrate the efficacy of the r biologic. A single Phase 3 trial with other confirmatory evidence may be sufficient in rare instances where dy is a large multicenter trial demonstrating internal consistency and a statistically very persuasive finding of cally meaningful effect on mortality, irreversible morbidity or prevention of a disease with a potentially s outcome and confirmation of the result in a second trial would be practically or ethically impossible.

completion of the required clinical testing, an NDA or BLA is prepared and submitted to the FDA. FDA val of the NDA or BLA is required before marketing of the product may begin in the United States. The NDA A must include the results of all preclinical, clinical, and other testing and a compilation of data relating to the ct s pharmacology, chemistry, manufacture, and controls. The cost of preparing and submitting an NDA or s substantial. The submission of most NDAs and BLAs is additionally subject to a substantial application user rrently exceeding $2,335,200, and the manufacturer and/or sponsor under an approved new drug application o subject to annual product and establishment user fees, currently exceeding $110,370 per product and 00 per establishment. These fees are typically increased annually.

DA has 60 days from its receipt of an NDA or BLA to determine whether the application will be accepted for based on the agency s threshold determination that it is sufficiently complete to permit substantive review. he submission is accepted for filing, the FDA begins an in-depth review. The FDA has agreed to certain mance goals in the review of NDAs and BLAs. Most such applications for standard review drug or biologic cts are reviewed within ten to 12 months; most applications for priority review drugs or biologics are reviewed o eight months. The FDA can extend these reviews by three months. Priority review can be applied to drugs e FDA determines offer major advances in treatment, or provide a treatment where no adequate therapy exists. logics, priority review is further limited only for products intended to treat a serious or life-threatening e relative to the currently approved products. The review process for both standard and priority review may be ed by the FDA for three additional months to consider certain late-submitted information, or information ed to clarify information already provided in the submission.

DA may also refer applications for novel drug or biologic products, or drug or biologic products that present lt questions of safety or efficacy, to an advisory committee typically a panel that includes clinicians and other s for review, evaluation, and a recommendation as to whether the application should be approved. The FDA is und by the recommendation of an advisory committee, but it generally follows such recommendations. Before

ving an NDA or BLA, the FDA will typically inspect one or more clinical sites to assure compliance with Additionally, the FDA will inspect the facility or the facilities at which the drug is manufactured. FDA will not ve the product unless compliance with current good manufacturing practice, or cGMP, is satisfactory and the or BLA contains data that provide substantial evidence that the drug or biologic is safe and effective in the ion studied.

he FDA evaluates the NDA or BLA and the manufacturing facilities, it issues either an approval letter or a ete response letter. A complete response letter generally outlines the deficiencies in the submission and may e substantial additional testing, or information, in order for the FDA to reconsider the application. If, or when, deficiencies have been addressed to the FDA s satisfaction in a resubmission of the NDA or BLA, the FDA will n approval letter. The FDA has committed to reviewing such resubmissions in two or nine months depending type of information included.

proval letter authorizes commercial marketing of the drug or biologic with specific prescribing information for c indications. As a condition of NDA or BLA approval, the FDA may require a risk evaluation and mitigation y, or REMS, to help ensure that the benefits of the drug or biologic outweigh the potential risks. REMS can e medication guides, communication plans for healthcare professionals, and elements to assure safe use, or U. ETASU can include, but are not limited to, special training or certification for prescribing or dispensing, sing only under certain circumstances, special monitoring, and the use of patient registries. The requirement EMS can materially affect the potential market and profitability of the product. Moreover, product approval equire substantial post-approval testing and surveillance to monitor the product s safety or efficacy. Once d, product approvals may be withdrawn if compliance with regulatory standards is not maintained or problems ntified following initial marketing.

es to some of the conditions established in an approved application, including changes in indications, labeling, ufacturing processes or facilities, require submission and FDA approval of a new NDA or BLA or NDA or upplement before the change can be implemented. An NDA or BLA supplement for a new indication typically es clinical data similar to that in the original application, and the FDA uses the same procedures and actions in ing NDA or BLA supplements as it does in reviewing NDAs or BLAs.

pproval Requirements

n NDA or BLA is approved, a product will be subject to certain post-approval requirements. For instance, the losely regulates the post-approval marketing and promotion of drugs and biologics, including standards and tions for direct-to-consumer advertising, off-label promotion, industry-sponsored scientific and educational ies and promotional activities involving the internet. Drugs and biologics may be marketed only for the ved indications and in accordance with the provisions of the approved labeling.

se event reporting and submission of periodic reports is required following FDA approval of an NDA or BLA. DA also may require post-marketing testing, known as Phase 4 testing, REMS, and surveillance to monitor the of an approved product, or the FDA may place conditions on an approval that could restrict the distribution or the product. In addition, quality control, drug manufacture, packaging, and labeling procedures must continue form to cGMPs after approval. Drug and biologic manufacturers and certain of their subcontractors are ed to register their establishments with the FDA and certain state agencies. Registration with the FDA subject s to periodic unannounced inspections by the FDA, during which the agency inspects manufacturing facilities ss compliance with cGMPs. Accordingly, manufacturers must continue to expend time, money, and effort in as of production and quality-control to maintain compliance with cGMPs. Regulatory authorities may aw product approvals or request product recalls if a company fails to comply with regulatory standards, if it nters problems following initial marketing, or if previously unrecognized problems are subsequently ered.

n Drugs

the Orphan Drug Act, the FDA may grant orphan drug designation to drugs or biologics intended to treat a sease or condition generally a disease or condition that affects fewer than 200,000 individuals in the United Orphan drug designation must be requested before submitting an NDA or BLA. After the FDA grants orphan esignation, the generic identity of the drug or biologic and its potential orphan use are disclosed publicly by A. Orphan drug designation does not convey any advantage in, or shorten the duration of, the regulatory and approval process. The first NDA or BLA applicant to receive FDA approval for a particular active ient to treat a particular disease with FDA orphan drug designation is entitled to a seven-year exclusive ting period in the United States for that product, for that indication. During the seven-year exclusivity period, A may not approve any other applications to market the same drug or biologic for the same disease, except in l circumstances, such as a showing of clinical superiority to the product with orphan drug exclusivity. Orphan xclusivity does not prevent the FDA from approving a different drug or biologic for the same disease or ion, or the same drug or biologic for a different disease or condition. Among the other benefits of orphan drug ation are tax credits for certain research and a waiver of the NDA or BLA application user fee.

rack Designation and Accelerated Approval

DA is required to facilitate the development, and expedite the review, of drugs or biologics that are intended treatment of a serious or life-threatening disease or condition for which there is no effective treatment and demonstrate the potential to address unmet medical needs for the condition. Under the fast track program, the or of a new drug or biologic candidate may request that the FDA designate the candidate for a specific ion as a fast track drug or biologic concurrent with, or after, the filing of the IND for the candidate. The FDA etermine if the drug or biologic candidate qualifies for fast track designation within 60 days of receipt of the or s request.

the fast track program and FDA s accelerated approval regulations, the FDA may approve a drug or biologic erious or life-threatening illness that provides meaningful therapeutic benefit to patients over existing ents based upon a surrogate endpoint that is reasonably likely to predict clinical benefit, or on a clinical nt that can be measured earlier than irreversible morbidity or mortality, that is reasonably likely to predict an on irreversible morbidity or mortality or other clinical benefit, taking into account the severity, rarity, or ence of the condition and the availability or lack of alternative treatments.

ical trials, a surrogate endpoint is a measurement of laboratory or clinical signs of a disease or condition that utes for a direct measurement of how a patient feels, functions, or survives. Surrogate endpoints can often be red more easily or more rapidly than clinical endpoints. A drug or biologic candidate approved on this basis is t to rigorous post-marketing compliance requirements, including the completion of Phase 4 or post-approval l trials to confirm the effect on the clinical endpoint. Failure to conduct required post-approval studies, or m a clinical benefit during post-marketing studies, will allow the FDA to withdraw the drug or biologic from rket on an expedited basis. All promotional materials for drug candidates approved under accelerated tions are subject to prior review by the FDA.

ition to other benefits such as the ability to use surrogate endpoints and engage in more frequent interactions he FDA, the FDA may initiate review of sections of a fast track product s NDA or BLA before the application plete. This rolling review is available if the applicant provides, and the FDA approves, a schedule for the ssion of the remaining information and the applicant pays applicable user fees. However, the FDA s time goal for reviewing an application does not begin until the last section of the NDA or BLA is submitted. onally, the fast track designation may be withdrawn by the FDA if the FDA believes that the designation is no supported by data emerging in the clinical trial process.

arch 5, 2015, we were notified that the FDA granted FAST Track designation for HS-410 for the treatment of uscle invasive bladder cancer. We believe that this designation will expedite our development of HS-410.

ric Information

the Pediatric Research Equity Act, or PREA, NDAs or BLAs or supplements to NDAs or BLAs must contain assess the safety and effectiveness of the drug for the claimed indications in all relevant pediatric pulations and to support dosing and administration for each pediatric subpopulation for which the drug is safe fective. The FDA may grant full or partial waivers, or deferrals, for submission of data. Unless otherwise ed by regulation, PREA does not apply to any drug for an indication for which orphan designation has been d.

onal Controls for Biologics

p reduce the increased risk of the introduction of adventitious agents, the PHSA emphasizes the importance of acturing controls for products whose attributes cannot be precisely defined. The PHSA also provides authority FDA to immediately suspend licenses in situations where there exists a danger to public health, to prepare or e products in the event of shortages and critical public health needs, and to authorize the creation and ement of regulations to prevent the introduction or spread of communicable diseases in the United States and en states.

a BLA is approved, the product may also be subject to official lot release as a condition of approval. As part of nufacturing process, the manufacturer is required to perform certain tests on each lot of the product before it is ed for distribution. If the product is subject to official release by the FDA, the manufacturer submits samples of ot of product to the FDA together with a release protocol showing a summary of the history of manufacture of and the results of all of the manufacturer s tests performed on the lot. The FDA may also perform certain matory tests on lots of some products, such as viral vaccines, before releasing the lots for distribution by the acturer. In addition, the FDA conducts laboratory research related to the regulatory standards on the safety, potency, and effectiveness of biological products. As with drugs, after approval of biologics, manufacturers ddress any safety issues that arise, are subject to recalls or a halt in manufacturing, and are subject to periodic tion after approval.

ilars

ologics Price Competition and Innovation Act of 2009, or BPCIA, creates an abbreviated approval pathway logical products shown to be highly similar to or interchangeable with an FDA-licensed reference biological ct. Biosimilarity sufficient to reference a prior FDA-approved product requires that there be no differences in ions of use, route of administration, dosage form, and strength, and no clinically meaningful differences en the biological product and the reference product in terms of safety, purity, and potency. Biosimilarity must wn through analytical studies, animal studies, and at least one clinical study, absent a waiver by the Secretary. imilar product may be deemed interchangeable with a prior approved product if it meets the higher hurdle of strating that it can be expected to produce the same clinical results as the reference product and, for products istered multiple times, the biologic and the reference biologic may be switched after one has been previously istered without increasing safety risks or risks of diminished efficacy relative to exclusive use of the reference ic. No biosimilar or interchangeable products have been approved under the BPCIA to date. Complexities ated with the larger, and often more complex, structures of biological products, as well as the process by which roducts are manufactured, pose significant hurdles to implementation which are still being evaluated by the

rence biologic is granted 12 years of exclusivity from the time of first licensure of the reference product, and lication for a biosimilar can be submitted for four years from the date of licensure of the reference product. rst biologic product submitted under the abbreviated approval pathway that is determined to be angeable with the reference product has exclusivity against a finding of interchangeability for other biologics same condition of use for the lesser of (i) one year after first commercial marketing of the first angeable biosimilar, (ii) 18 months after the first interchangeable biosimilar is approved if there is no patent nge, (iii) 18 months after resolution of a lawsuit over the patents of the reference biologic in favor of the first angeable biosimilar applicant, or (iv) 42 months after the first interchangeable biosimilar s application has pproved if a patent lawsuit is ongoing within the 42-month period.

nd Tissue Based Biologics

ishments that manufacture cell and tissue based products must comply with the FDA s current good tissue ces, or cGTP, which are FDA regulations that govern the methods used in, and the facilities and controls used e manufacture of such products. The primary intent of the cGTP requirements is to ensure that cell and tissue products are manufactured in a manner designed to prevent the introduction, transmission and spread of unicable disease. FDA regulations also include requirements for a unified registration and listing system, screening and testing, adverse reaction reporting, and labeling.

nd tissue-based products may also be subject to the same approval standards, including demonstration of safety ficacy, as other biologic and drug products if they meet certain criteria such as if the cells or tissues are more inimally manipulated or if they are intended for a non-homologous use. Products manufactured using the *CT*® technology meet this threshold and therefore are considered biological drugs. Manufacture of *ImPACT*® cts are subject to both cGTP and cGMP regulations for manufacturing quality. Marketing of these products in ited States will require FDA approval under the BLA pathway as discussed above.

sure of Clinical Trial Information

ors of clinical trials of FDA-regulated products, including drugs, are required to register and disclose certain l trial information. Our lung and bladder cancer trials have been registered on clinicaltrials.gov, which ation has been updated to reflect the recent discovery of the identity of the cell line used in our bladder cancer nformation related to the product, patient population, phase of investigation, study sites and investigators, and spects of the clinical trial is then made public as part of the registration. Sponsors are also obligated to discuss ults of their clinical trials after completion. Disclosure of the results of these trials can be delayed until the roduct or new indication being studied has been approved. Competitors may use this publicly available ation to gain knowledge regarding the progress of development programs.

.S. Regulation

e our products can be marketed outside of the United States, they are subject to regulatory approval of the tive authorities in the country in which the product should be marketed. The requirements governing the ct of clinical trials, product licensing, pricing and reimbursement vary widely from country to country. No can be taken to market any product in a country until an appropriate application has been approved by the tory authorities in that country. The current approval process varies from country to country, and the time n gaining approval varies from that required for FDA approval. In certain countries, the sales price of a ct must also be approved. The pricing review period often begins after market approval is granted. Even if a ct is approved by a regulatory authority, satisfactory prices might not be approved for such product.

ope, marketing authorizations may be submitted at a centralized, a decentralized or national level; however, ntralized procedure is mandatory for the approval of biotechnology products and provides for the grant of a marketing authorization that is valid in all European Union member states. There can be no assurance that the regulatory strategy will secure regulatory approval on a timely basis or at all.

we intend to market our products outside the United States in compliance with our respective license nents, we have not made any applications with non-U.S. authorities and have no timeline for such applications keting.

rch and Development

ve built an internal and external research and development organization that includes expertise in discovery
ch, preclinical development, product formulation, analytical and medicinal chemistry, manufacturing, clinical
pment and regulatory and quality assurance. We engage third parties on a limited basis to conduct portions of
eclinical research; however, we are not substantially dependent upon any third parties for our preclinical
ch nor do any of these third parties conduct a major portion of our preclinical research. Research and
pment expenses were $2.6 million and $2.9 million during the years ended December 31, 2015 and 2014,
tively.

oyees

December 31, 2015, we had a total of 25 employees, of which 24 are full-time employees and 1 is part-time.
lieve our relationships with our employees are satisfactory. None of our employees is represented by a labor
We anticipate that we will need to identify, attract, train and retain other highly skilled personnel to pursue
velopment program. Hiring for such personnel is competitive, and there can be no assurance that we will be
retain our key employees or attract, assimilate or retain the qualified personnel necessary for the development
business.

Proceedings

are currently no pending legal proceedings against the Company or its subsidiaries.

ommon Stock Listing and Holders

et Information

ommon stock has traded on the NASDAQ Capital Market under the symbol HTBX since July 29, 2013. Prior time, there was no public market for our common stock. The following table states the range of the high and les prices of our common stock for the first quarter of 2016 through February 17, 2016 and for each quarter the year ended December 31, 2015 and the year ended December 31, 2014, respectively. These quotations ent inter-dealer prices, without retail mark-up, markdown, or commission, and may not represent actual ctions. The last reported sale price of our common stock as reported on the NASDAQ on February 17, 2016 2.03 per share.

	High	Low
R ENDED DECEMBER 31, 2014		
Quarter	$ 9.29	$ 6.09
d Quarter	$ 6.80	$ 3.95
Quarter	$ 6.98	$ 3.81
h Quarter	$ 7.31	$ 3.89
R ENDED DECEMBER 31, 2015		
Quarter	$ 8.30	$ 3.99
d Quarter	$ 8.35	$ 5.73
Quarter	$ 6.58	$ 3.42
h Quarter	$ 4.50	$ 1.84
R ENDED DECEMBER 31, 2016		
Quarter of 2016 through February 17, 2016	$ 4.32	$ 2.03

y Compensation Plan Information

ties Authorized for Issuance Under Equity Compensation Plans

llowing table contains information about our equity compensation plans as of December 31, 2015.

Equity Compensation Plan Information

Category	Number of securities to be issued upon exercise of outstanding options (a)	Weighted-average exercise price of outstanding options (b)	Number of securities remaining available for future issuance under equity compensation plans (excluding securities reflected in column (a)) (c)
compensation plans approved by y holders			
Equity Incentive Plan	553,105	$4.03	27,835
Equity Incentive Plan	661,581	$5.69	425,462
compensation plans not approved by y holders			
	1,214,686	$4.93	453,297

quent to year-end, we issued Anil Goyal, Melissa Price, Taylor Schreiber and Jeff Wolf options exercisable for , 51,587, 57,567 and 94,048 shares of common stock, respectively pro rata on a monthly basis over four years of their 2015 bonus.

rs

February 17, 2016, we had 8,424,641 shares of common stock outstanding held by approximately 30 holders ord.

MANAGEMENT AND BOARD OF DIRECTORS

of Directors

usiness and affairs are organized under the direction of our board of directors, or our Board, which currently ts of six members. The primary responsibilities of our board are to provide oversight, strategic guidance, eling and direction to our management. Our Board meets on a regular basis and additionally as necessary.

tive Officers and Board of Directors

DIRECTORS, EXECUTIVE OFFICERS, AND CORPORATE GOVERNANCE

ors, Executive Officers and Corporate Governance

is certain information regarding our directors and executive officers.

	Age	Position	Served as an Officer or Director Since
Wolf	52	Chairman, Chief Executive Officer and Director	2008
ny Creech	55	Chief Financial Officer	2015
. Goyal Ph.D.	51	Vice President of Business Development	2013
a Price Ph.D.	42	Vice President of Product Development	2013
Schreiber	36	Chief Scientific Officer	2014
Monahan, Ph.D.	69	Director	2009
elsky, MD	59	Director	2009
el Kharitonov, Ph.D.	52	Director	2009
d B. Smith	40	Director	2009
C. Bock	50	Director	2013

y Wolf, *Chairman and Chief Executive Officer*

olf founded Heat Biologics in August, 2008. Mr. Wolf served from June 1997 to March 2011 as managing or at Seed-One Ventures, LLC a venture firm focused on launching and growing exceptional healthcare nies from the ground up. Since founding Seed-One, Mr. Wolf has founded and run several biomedical nies. Mr. Wolf s start-ups include Avigen, a gene therapy company where he was a co-founder and director; Pharma, a company focused on the development of bio-compatible polymers where he was a co-founder and man; EluSys Therapeutics, a company focused on the development of a novel technology to remove borne pathogens where he was a co-founder, Chairman and Chief Executive Officer; and GenerationOne, a ny focused on mobile-based collaborative care, where he was the founder, Chairman and Chief Executive r. Mr. Wolf received his M.B.A. from Stanford Business School, his J.D. from New York University School and his B.A. from the University of Chicago, where he graduated with honors in Economics. Mr. Wolf as a director of several Seed-One portfolio companies and serves as a director of Synthetic Biologics, Inc., a nology company focused on the development of novel anti-infective biologic and drug candidates targeting c pathogens that cause serious infections and other diseases.

lected Mr. Wolf to serve on our Board as our chairman because he brings to the board extensive knowledge of armaceutical and biotechnology industries. Having served in senior corporate positions in several biomedical nies, he has a vast knowledge of the industry and brings to the board significant executive leadership and ional experience. His business experience provides him with a broad understanding of the operational, ial and strategic issues facing public companies and his service on other public company boards provides him xtensive corporate governance knowledge.

hy Creech, *Chief Financial Officer*

reech joined Heat Biologics in November 2015 as Chief Financial Officer. Prior to joining Heat, Mr. Creech as Acting Chief Financial Officer of Salix Pharmaceutical, Inc., a publicly-held specialty pharmaceutical ny acquired by Valeant for $11 billion in April 2015. Before his appointment as Acting Chief Financial r for Salix, Mr. Creech held several financial leadership positions at Salix over the last seven years including Vice President, Finance and Administrative Services. Before joining Salix in 2007, Mr. Creech served as resident of Finance and Chief Accounting Officer at Voyager Pharmaceutical Corporation, a privately held nology company. Mr. Creech also previously spent seven years at Trimeris, Inc., a publicly-listed nology company engaged in the discovery and development of novel therapeutic agents, serving in the role of resident of Finance, and Principal Accounting Officer and Secretary.

reech is a certified public accountant (CPA). He received a MBA from the Fuqua School of Business at Duke rsity and a B.S. in business administration and accounting from the University of North Carolina at Chapel

Goyal, Ph.D., *Vice President of Business Development*

oyal joined Heat Biologics in December 2013 as Vice President of Business Development of the Company. o joining Heat Biologics, Dr. Goyal served as President and Chief Executive Officer of Qualiber, Inc., a ny which he co-founded, from April 2010 until December 2013 and Managing Director of OpenDoors Group, a company he founded, from August 2008 until December 2013. From January 2009 until January 2010, Dr. served as the Vice President of Business Development at Optherion, Inc. and from January 2003 until January he served as Vice President of Business Development of Serenex, Inc., an oncology company that was ed by Pfizer. Prior thereto, he served in various key management and development positions at Millennium aceuticals, Genome Therapeutics Corporation and Merck & Co.

a Price, Ph.D., *Vice President of Product Development*

ce is responsible for coordinating the clinical development and operational efforts at Heat Biologics. Prior to g Heat Biologics, Inc., Dr. Price served in various positions at INC Research including Vice President of FSP Solutions at INC Research from February 2012 until October 2013 and Executive Director, Strategic ce Management from January 2010 until February 2012. From June 2009 until January 2010, Dr. Price served Senior Director, Drug Development Partnerships at Novaquest, a Quintiles Company. Prior thereto, from 2006 009 she served in various positions at INC Research and Attenuon. Dr. Price received her Ph.D. in Organic

stry from Yale University.

r H. Schreiber, M.D., Ph.D., *Chief Scientific Officer*

hreiber joined Heat Biologics in March 2014 initially as Vice President of Research and Development and in 015 was appointed Chief Scientific Officer, leading Heat's preclinical drug development and scientific ions. As a cancer biologist and drug development scientist, Dr. Schreiber possesses over 15 years of tory experience in the discovery of novel therapeutic immuno-oncology compounds. He is the co-inventor of cant elements of Heat s *ImPACT* and *ComPACT* immunotherapy platforms as well as a co-inventor of SF25 agonist technologies. Dr. Schreiber received his Ph.D. from the Sheila and David Fuente Program in biology as well as his M.D. at the University of Miami Miller School of Medicine. In addition, he completed st-doctoral fellowship with the original inventor of Heat s *ImPACT* technology platform, Eckhard R. Podack, Ph.D., studying the immunobiology of TNFRSF25. Dr. Schreiber has authored over 25 peer-reviewed tumor nology and heat shock protein-based cancer immunotherapy publications. In 2011, he was nominated as a Leader in Cancer Research by the American Association for Cancer Research.

Belsky, M.D., *Director*

lsky has served on our Board since November 2009. Dr. Belsky has been a partner at Concorde Medical , LLC since June of 1998. Dr. Belsky served as a scientific advisor to Seed-One Ventures, Elusys peutics, Sensatex, GenerationOne and TyRx Pharma. Dr. Belsky has extensive expertise in the clinical practice rnal medicine and cardiovascular diseases, and was formerly on the clinical academic faculty at Weill College dicine, Cornell University. He is a fellow of the American College of Cardiology and the American College of Physicians, is a member of the American College of Physicians, and a Clinical Assistant Professor of ine at New York University School of Medicine. Dr. Belsky received his M.D. from the University of rnia at San Francisco, and his AB in Biology from Brown University, where he was elected Phi Beta Kappa.

lected Dr. Belsky to serve on our Board because he brings to the board extensive knowledge of the medical ry. His medical background aids in the understanding of the detailed science behind our intellectual property.

C Bock, *Director*

C. Bock was a Managing Director of Scale Venture Partners, a venture capital firm, until June 2014. Mr. Bock Scale Venture Partners in September 1997 from Gilead Sciences, Inc., a biopharmaceutical company where rked from September 1989 to September 1997. Prior to Gilead, he was a research associate at Genentech, Inc. November 1987 to September 1989. He currently serves as a director of the following publicly traded nies: Orexigen Therapeutics, Inc., for which he also serves as a member of the Audit and Nominating and nance committees, and Zogenix, Inc., for which he also serves as a member of the Audit, Compensation and nating and Governance committees. In addition, Mr. Bock serves on the board of directors of the following ely-held companies: Molecular Templates, CardioKinetix and Powervision and also serves on the board of rs of Arizona Technology Enterprises, LLC, a non-profit organization. Mr. Bock is responsible for Scale re Partners investment in Seattle Genetics, Inc. In the past five years, Mr. Bock has also served as a member of ards of directors of the following publicly traded companies: diaDexus Inc and Horizon Pharma, Inc. Mr. received his B.S. in Biology from California State University, Chico and an M.B.A. from California State rsity, San Francisco.

lected Mr. Bock to serve on our Board because of his extensive clinical and leadership experience in the nology and biopharmaceuticals industries, including experience in research, project management, business pment and sales from his time at Gilead. His membership on other companies boards of directors, including ns on other audit and nominating/corporate governance committees provides him with extensive corporate nance knowledge and insight into issues faced by companies similar to ours.

el Kharitonov, Ph.D., *Director*

aritonov is a high technology entrepreneur and computer scientist whose areas of expertise include advanced ter and communication technologies and quantitative finance. Dr. Kharitonov is a founder and CEO of Voleon l Management LP, an investment management firm. Dr. Kharitonov was a co-founder and former Chairman EO of Netli Inc., a successful Silicon Valley startup that pioneered the development of Application Delivery rks. Under Dr. Kharitonov s leadership Netli raised over $20 million in venture financing from a number of n Valley s best known venture capital firms. In 2007 Netli was acquired by Akamai Technologies (NASDAQ: M). Dr. Kharitonov also served as a Vice President of D. E. Shaw and Co., an investment firm known as one of ost quantitatively advanced and computerized securities trading firms in the world. Dr. Kharitonov holds a degree from the Department of Computer Science at Stanford University. At Stanford he was awarded a Hertz vship and was a winner of several scholarly awards. He also holds a B.A. in Computer Science and matics with highest honors from University of California at Berkeley.

lected Dr. Kharitonov to serve on our Board because he brings a strong start-up and finance background to the any, and adds significant strategic, business and financial experience. His prior successful management ence and fundraisings provides him with a broad understanding issues faced by growing companies and of the ial markets and the financing opportunities available to us.

Monahan, Ph.D., *Director*

onahan is currently a consultant to Synthetic Biologics, Inc., a clinical stage company developing therapeutics ect the gut microbiome while targeting pathogen-specific diseases focused on the development of synthetic based therapeutics and innovative disease-modifying medicines for serious illnesses. Dr. Monahan unded Avigen Inc. (NASDAQ:AVGN) in 1992, a company which has become a leader in its sector for the pment of novel pharmaceutical products for the treatment of serious human diseases. Over a 12 year period as f Avigen he raised over $235M in several private and public financings including its IPO. From 1989-1992, s VP of R&D at Somatix Therapy Corp., Alameda, CA and from 1985-1989 he was Director of Molecular & iology at Triton Biosciences Inc., Alameda, CA. Prior to that from 1982-1985, he was Research Group Chief, tment of Molecular Genetics, Hoffmann-LaRoche, Inc. Nutley, NJ, and from 1975 to 1977 he was an tor at Baylor College of Medicine, Houston TX. He received his Ph.D. in Biochemistry in 1974 from ster University, Canada and his B.Sc. from University College Dublin, Ireland in 1969. Dr. Monahan is a ific Advisory Board member of Agillis Biotherapeutics. Dr. Monahan is a board member of Tacere peutics, CA. He is also a board member of a number of Irish biotech companies including Genable, Cellix, l and GK Technologies.

lected Dr. Monahan to serve on our Board because he brings to the board extensive knowledge of the aceutical and biologics industry. Having served in senior corporate positions in many medical companies he vast knowledge of the industry.

rd B. Smith, *Director*

January 2015, Mr. Smith has been the Chief Executive Officer of Z Trim Holdings Inc. (Z Trim) ZTHO), a manufacturer of environmentally friendly agricultural functional ingredients and has been a board er of Z Trim since 2009. Since January 1, 2015, Mr. Smith has also been Managing Member of Aristar l Management, LLC, a New York-based investment firm founded in 2015. From April 2005 through mber 2014 Mr. Smith served as the Managing Partner of Brightline Capital Management, LLC (BCM), a New based investment firm founded in 2005. Prior to founding BCM, Mr. Smith worked at Gracie Capital from 2005, GTCR Golder Rauner from 1999-2001 and Credit Suisse First Boston from 1997-1999. Mr. Smith holds helor of Arts in Social Studies from Harvard College and a Masters in Business Administration from Harvard ess School. He is currently a Director of Z Trim Holdings Inc. (OTC: ZTHO), a manufacturer of nmentally friendly agricultural functional ingredients.

lected Mr. Smith to serve on our Board because he brings a strong business background to the Company, and gnificant strategic, business and financial experience. Mr. Smith s business background provides him with a understanding of the issues facing us, the financial markets and the financing opportunities available to us. His

e on other public company boards provides him with extensive corporate governance knowledge and insight sues faced by companies similar to ours.

Composition and Election of Directors

oard of directors consists of six members: Messrs. Belsky, Bock, Kharitonov, Monahan, Smith and Wolf. Our of directors has undertaken a review of its composition and its committees and the independence of each or. Based upon information requested from and provided by each director concerning his background, yment and affiliations, including family relationships, our board of directors has determined that each of s. Belsky, Bock, Kharitonov, Monahan and Smith is independent under the applicable rules of the SEC and AQ and that Mr. Wolf is not independent as defined under the such rules. In making such determination, our of directors considered the relationship that each such non-employee director has with our company and all acts and circumstances that our board of directors deemed relevant in determining his independence, including neficial ownership of our capital stock by each non-employee director. Mr. Wolf is not an independent director these rules because he is our President and Chief Executive Officer.

ittees of the Board of Directors

oard of Directors has a standing Audit Committee, Compensation Committee and Nominating and Governance ittee. The following table shows the directors who are currently members or Chairman of each of these ittees.

Members	Audit Committee	Compensation Committee	Nominating and Governance Committee
olf			
elsky		Member	Member
Bock	Chairman		
Monahan	Member	Chairman	
d Smith	Member		Chairman
el Kharitonov		Member	Member

Committee

onahan, Mr. Smith, and Mr. Bock currently serve as members of the Audit Committee. The Board has ined that Mr. Bock, Mr. Smith and Dr. Monahan are each independent in accordance with the NASDAQ ion of independence and each is a financial expert , as defined by the SEC regulations, and each has the related ial management expertise within the meaning of the NASDAQ rules.

imary purpose of the Audit Committee is to act on behalf of the Board of Directors in its oversight of all al aspects of our accounting and financial reporting processes, internal controls and audit functions, including mpliance with Section 404 of the Sarbanes-Oxley Act of 2002. Pursuant to its charter, our Audit Committee s on an on-going basis for potential conflicts of interest, and approves if appropriate, all our Related Party actions. For purposes of the Audit Committee Charter, Related Party Transactions shall mean those ctions required to be disclosed pursuant to SEC Regulation S-K, Item 404. In addition, the Audit Committee s, acts on and reports to the Board of Directors with respect to various auditing and accounting matters, ing the selection of the Company s independent registered public accounting firm, the scope of the annual fees to be paid to the independent registered public accounting firm, the performance of the Company s ndent registered public accounting firm and the accounting practices of the Company and the Company s l controls and legal compliance functions. The Committee also reviews, prior to publication, our quarterly gs releases and our reports to the Securities and Exchange Commission on Forms 10-K and 10-Q. The formal of the Audit Committee for fiscal year 2014 is set forth below under Proposal 2 under the caption Audit ittee Report. The Audit Committee operates pursuant to a written charter adopted by the Board of Directors,

is available on the Company s website at *www.heatbio.com*. The charter describes the nature and scope of sibilities of the Audit Committee.

ensation Committee

ompensation Committee is comprised of Dr. Belsky, Dr. Kharitonov and Dr. Monahan, each of whom is d to be independent in accordance with the NASDAQ definition of independence. This Committee ines, approves, and reports to the Board of Directors on all elements of compensation of our executive s. The Compensation Committee also has the power to prescribe, amend, and rescind rules relating to our ncentive plans, to recommend the grant of options and other awards under the stock incentive plans, and to et the stock incentive plans.

ompensation Committee operates under a formal charter that governs its duties and standards of performance. y of the charter is available on our website at *www.heatbio.com*.

ompensation Committee annually reviews the compensation program for our Chief Executive Officer and members of senior management and then makes recommendations to the full board for determination. In each he Committee takes into account the results achieved by the executive, his or her future potential, and his or ope of responsibilities and experience. During our fiscal year ended December 31, 2014, the committee ted the performance of our executives and considered the compensation levels and equity programs at rable companies and related industries and the analysis of its outside consultant before it made its nsation recommendations to the full board, including recommendations regarding salary increases, awards of onuses and awards of stock options.

ommittee administers our stock plan, including review and recommendation of long-term incentive nsation for each executive, director and employee, including grants of stock options. The Committee believes is long-term incentive compensation aligns the interests of our executives with those of our stockholders and rs executive retention.

ommittee also reviews and recommends to the Board of Directors appropriate director compensation programs vice as directors, committee chairs and committee members.

ating and Corporate Governance Committee

ominating and Governance Committee is comprised of Dr. Belsky, Dr. Kharitonov and Mr. Smith.

nctions performed by the Nominating and Governance Committee include:

mending to the Board of Directors, individuals for appointment or election as directors;

mending to the Board of Directors individuals for appointment to vacancies on any committee of the Board of ors;

mending to the Board of Directors regarding any changes to the size of the Board of Directors or any
ittee;

ng to the Board of Directors on a regular basis; and

ming any other duties or responsibilities expressly delegated to the committee by the Board of Directors
g to board or committee members.

ominating and Governance Committee operates under a formal charter that governs its duties and standards of
mance. A copy of the charter is available on our website at *www.heatbio.com*.

Oversight

oard has an active role, as a whole and also at the committee level, in overseeing management of the
any s risks. The Board regularly reviews information regarding the Company s strategy, finances and
ions, as well as the risks associated with each. The Audit Committee is responsible for oversight of Company
elating to accounting matters, financial reporting, internal controls and legal and regulatory compliance. The
Committee undertakes, at least annually, a review to evaluate these risks. The members then meet separately
anagement responsible for such area, including the Company s Chief Financial Officer, and report to the Audit
ittee on any matters identified during such discussions with management. In addition, the Compensation
ittee considers risks related to the attraction and retention of talent as well as risks relating to the design of
nsation programs and arrangements. In addition, the Nominating and Governance Committee manages risks
ated with the independence of the Board. While each committee is responsible for evaluating certain risks and
eing the management of such risks, the entire Board is regularly informed through committee reports about
sks. The full Board considers strategic risks and opportunities and regularly receives detailed reports from the
ittees regarding risk oversight in their respective areas of responsibility.

of Conduct

oard of Directors has adopted a Code of Conduct that applies to the Company s directors, executives (including
ef Executive Officer and Chief Financial Officer) and employees. The Code is posted on the Company s
e at *www.heatbio.com*.

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hief Executive Officer also serves as our Chairman of the Board. Our Board does not have a lead independent
r. Our board of directors has determined its leadership structure was appropriate and effective for us given our
f development.

2015 Director Compensation

ensation of Directors

llowing table sets forth information for the fiscal year ended December 31, 2015 regarding the compensation
directors who at December 31, 2015 were not also named executive officers.

	Fees Earned or Paid in Cash	Option Awards	Other Compensation	Total
elsky, MD	$ 43,750	$	$	$ 43,750
Bock	$ 40,000	$	$	$ 40,000
el Kharitonov,	$ 46,250	$	$	$ 46,250
Monahan, Ph.D.	$ 46,250	$	$	$ 46,250
d Smith	$ 43,750	$	$	$ 43,750

December 31, 2015, the following table sets forth the number of aggregate outstanding option awards held by
f our directors who were not also named executive officers:

	Aggregate Number of Option Awards
elsky, MD	33,441
Bock	28,223
el Kharitonov, Ph.D.	41,050
Monahan, Ph.D.	41,050
d Smith	33,441

ompensation Committee conducted an evaluation of the compensation of the members of our board of
rs. In order to aid its decision- making, the Compensation Committee considered the compensation practices
e competitive market for directors at companies with which we compete for personnel and an independent
nsation advisor was retained to conduct a study of our peer group compensation. Based substantially upon the
of the study, commencing January 2016, directors who are not employees receive an annual cash fee of
0 as well as a cash fee of $8,000 for service on the Audit Committee and 5,000 for service on each of the
ensation and Nominating Committees. In addition, the Chairman of each of the Audit, Compensation and
nating Committees will each receive an additional $12,500, $8,500 and $7,000, respectively. In addition, on
y 11, 2016, each director who is not an employee was granted an option exercisable for shares of common
having a value of $45,000) vesting on the one year anniversary of the date of grant. Each nonemployee
r also received an option grant on the date of the 2014 Annual Meeting of Stockholders having a value of
0 on such date, which for 2014 resulted in the issuance of options exercisable for 6,483 shares of common
o each non-employee director. During 2014 and 2015, directors who were not employees received an annual
e of $25,000 as well as a cash fee of $5,000 for each committee on which they serve and the Chairman of the
and Compensation Committees receive an additional $2,000. Upon election to the Board, each non-employee
r receives a grant of stock options exercisable for 21,740 shares of common stock vesting over four years
an exercise price equal to the fair market value of the common stock on the date of the grant. Each
ployee director also received an option grant on the date of the 2014 Annual Meeting of Stockholders having
e of $25,000 on such date, which for 2014 resulted in the issuance of options exercisable for 6,483 shares of
on stock to each non-employee director.

EXECUTIVE COMPENSATION

th below is the compensation paid or accrued to our executive officers during the years ended December 31, nd December 31, 2014 that exceeded $100,000.

Summary Compensation Table

and Principal Position	Year	Salary	Bonus	Options (9)	Other (1)	Total
Wolf	2015	$395,000	$177,750(2)	$47,513		$620,263
nan and CEO	2014	$381,893	$127,500(3)	$346,600	$12,108	$868,101
ny Creech	2015	$24,542(4)		$144,627		$169,169
Financial Officer	2014					
DiPalma	2015	$13,798				$13,798
n Chief Financial Officer	2014					
Czajkowski	2015	$82,500				$82,500
r Chief Financial Officer	2014	$162,500	$40,500(3)	$73,300		$276,300
oyal	2015	$255,000	$51,000(2)	$47,513		$353,513
resident of Business opment	2014	$219,975	$49,500(3)	$257,880		$527,355
a Price	2015	$250,000	$75,000(2)			$325,000
resident of Product opment (7)	2014	$210,000	$47,250(3)	$43,870		$301,120
Schreiber	2015	$272,005	$95,202(2)	$187,390		$554,597
Scientific Officer (8)	2014	$174,411	$39,483(3)	$191,300	$2,567	$407,761

sents payment for health insurance.

onus was accrued in 2015 and paid in 2016.

onus was accrued in 2014 and paid in 2015.

reech commenced employment on November 30, 2015, Mr. Creech s annual salary is $285,000 and he is
d to devote up to twenty percent (20%) of his professional time on other non-competitive efforts.

Palma served on a part time basis as our Chief Financial Officer until the appointment of Mr. Creech effective
nber 30, 2015.

zajkowski resigned as our Chief Financial Officer effective March 15, 2015, includes $45,000 severance.

y 23, 2015, Dr. Price was appointed our Vice President of Product Development.

y 23, 2015, Dr. Schreiber was appointed our Chief Scientific Officer.

stock options, the values reflect the aggregate grant date fair value computed in accordance with FASB ASC
ssumptions made in the calculation of these amounts are described in Note 9 to the Company s audited
ial statements for the years ended December 31, 2015 and 2014.

Outstanding Equity Awards at Fiscal Year-End (December 31, 2015)

and Principal Position	Number of securities underlying unexercised options/ exercisable	Number of securities underlying unexercised options/ unexercisable	Option exercise price	Option expiration date
Wolf	10,965(1)		$2.30	12/18/2019
nan and CEO	108,696(1)		$0.71	4/7/2021
	50,000(2)	50,000	$8.62	6/11/2024
	3,125(3)	9,375	$4.53	1/12/2025
ny Creech	2,916	67,084	$3.10	11/30/2025
Financial Officer(4)				
Czajkowski	23,441		$8.81	5/15/2023
r Chief Financial Officer(5)	2,708		$8.62	1/17/2024
oyal	20,000(6)	20,000 (6)	$7.58	12/16/2023
resident of Business Development	3,125(7)	9,375 (7)	$4.53	1/12/2025
a Price	28,125(8)	21,875 (8)	$12.57	10/1/2023
resident of Product Development	2,916(9)	7,084 (9)	$5.30	10/15/2024
Schreiber	22,914(10)	27,086 (10)	$4.57	6/11/2024
Scientific Officer	2,500(11)	7,500 (11)	$4.53	1/12/2025
	3,645(12)	31,355 (12)	$6.03	7/22/2025

ares are fully vested as of December 31, 2013.

on June 11, 2014, these options are fully vested as of January 2016.

on January 12, 2015 these options vest over a four year period and will be fully vested in December 2018.

vember 30, 2015, Mr. Creech was appointed our Chief Financial Officer and was issued these options which
er a 48 month period and will be fully vested in October 2019.

zajkowski resigned as our Chief Financial Officer effective March 15, 2015. Mr. Czajkowski has 23,441
options which are exercisable up to the ten year anniversary date of grant, May 15, 2023 and 2,708 vested
s which are exercisable up to the ten year anniversary of the date of grant, January 17, 2024.

on December 16, 2013, these shares vest over a 48 month period and will be fully vested in December 2017.

on January 12, 2015 these options vest over a four year period and will be fully vested in December 2018.

on October 1, 2013, these shares vest over a 48 month period and will be fully vested in September 2017.

on October 15, 2014, these shares vest over a 48 month period and will be fully vested in October 2018.

on June 11, 2014, these shares vest over a 46 month period and will be fully vested in February 2018.

on January 12, 2015 these options vest over a four year period and will be fully vested in December 2018.

on July 23, 2015, these options vest over a four year period and will be fully vested in July 2019.

art above does not include the grant of options exercisable for 94,048, 57,567, 51,587 and 21,587 shares of
on stock issued to each of Mr. Wolf, Dr. Schreiber, Dr. Price and Dr. Goyal, respectively, in January 2016.

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oyment Agreements

cember 18, 2009, we entered into an employment agreement with Jeffrey Wolf to act as our Chief Executive r, which was amended on November 22, 2011, and further amended on each of January 20, 2014 and January 16. Mr. Wolf receives an annual base salary of $405,000 per year. He also may receive, at the sole discretion board, an additional cash performance-based bonus equal to up to 50% of his then outstanding base salary at d of each year and a discretionary equity award, with the actual amount of his bonus to be increased or sed in the sole discretion of the Board of Directors. Upon execution of the agreement, Mr. Wolf was issued s exercisable for 119,661 shares of our common stock. In addition, he is to receive certain options to purchase our fully diluted equity at an exercise price equal to the then current market price if our stock is traded on a ally recognized exchange or NASDAQ and our market capitalization is at least $250 million for at least 5 f Mr. Wolf s employment contract is terminated for death or disability (as defined in the agreement), he (or his in the event of death) will receive six month s severance. If Mr. Wolf s employment is terminated by us other or cause, he will receive 12 month s severance. In addition, if Mr. Wolf s employment is terminated by us other or cause all Restricted Shares, common stock and options to purchase common stock that would have vested mmediately vest. Mr. Wolf will not be entitled to any additional severance in the event he is terminated for or voluntarily resigns. Under his employment agreement, Mr. Wolf has also agreed to non-competition ions.

ve November 30, 2015, we appointed Timothy Creech as our Chief Financial Officer. In connection with his tment, Mr. Creech entered into a four-year employment agreement with us (the Creech Employment ment), which was amended on January 11, 2016. Pursuant to the Creech Employment Agreement, Mr. Creech es an annual base salary of $285,000 and will be eligible for a discretionary cash performance bonus payment ty-five percent (35%) of his base salary and a discretionary equity award with the actual amount of his bonus ncreased or decreased in the sole discretion of the Board of Directors. Additionally, Mr. Creech was granted ion to purchase 70,000 shares of our common stock with an exercise price equal to the Company s per share t price on the date of issue. These options vest pro rata, on a monthly basis, over forty-eight months. The n Employment Agreement also includes confidentiality obligations and inventions assignments by Mr. Creech. Creech s employment is terminated for any reason, he or his estate as the case may be, will be entitled to e the accrued base salary, vacation pay, expense reimbursement and any other entitlements accrued by him to tent not previously paid (the Accrued Obligations); provided, however, that if his employment is terminated us without Just Cause (as defined in the Creech Employment Agreement) or (2) by Mr. Creech for Good n (as defined in the Creech Employment Agreement) then in addition to paying the Accrued Obligations: (x) ll continue to pay his then current base salary for a period of six months; (y) he shall receive a pro-rated t of the annual bonus which he would have received during the year without the occurrence of such ation at 100% of the targeted amount. If there is a Change of Control (as defined in our Amended and ed 2014 Stock Incentive Plan) during the term of the Employment Agreement and at such time Mr. Creech has mployed by us for (i) less than five (5) months then fifty percent (50%) of the options granted to Mr. Creech mmediately vest, (ii) at least five (5) months but less than ten (10) months, then seventy five percent (75%) of tion granted to Mr. Creech will immediately vest; or (iii) at least ten (10) months, then the entire option will diately vest.

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ve March 3, 2014, we appointed Taylor Schreiber, M.D., Ph.D., as our Vice President of Research and opment and effective July 23, 2015, Dr. Schreiber was appointed our Chief Scientific Officer. In connection is appointment, Dr. Schreiber entered into a four-year employment agreement with us, which was amended y 12, 2015 and further amended on July 23, 2015 and January 11, 2016. Pursuant to the employment nent, Dr. Schreiber receives an annual base salary of $300,000 and will be eligible for discretionary cash mance bonus payment of thirty-five percent (35%) of his base salary and a discretionary equity award with the amount of his bonus to be increased or decreased in the sole discretion of the Board of Directors. ionally, on June 11, 2014, the date that our stockholders approved our 2014 Stock Incentive Plan, we granted hreiber an option to purchase 50,000 shares of our common stock with an exercise price equal to our per share t price on the date of issue ($4.57). These options will vest pro rata, on a monthly basis, over 48 months, with in percentage vesting immediately upon grant. Dr. Schreiber was also eligible to receive, on the one year rsary of his employment, an option to purchase 10,000 additional shares of our common stock if certain ones were attained and such option was issued on January 11, 2015. The employment agreement also includes entiality obligations and inventions assignments by Dr. Schreiber. If Dr. Schreiber s employment is terminated reason, he or his estate as the case may be, will be entitled to receive the Accrued Obligations accrued by the extent not previously paid (the Accrued Obligations); provided, however, that if his employment is ated (1) by the Company without Just Cause (as defined in the Employment Agreement), or (2) by Dr. ber for Good Reason (as defined in the Employment Agreement) then in addition to paying the Accrued tions, (x) the Company shall continue to pay his then current base salary for a period of four months; (y) he eceive a pro-rated amount of the annual bonus which he would have received during the year without the ence of such termination and (z) he will have the right to exercise any vested options until the earlier of the tion of the severance or the expiration of the term of the option.

ve December 16, 2013, we appointed Anil K. Goyal, Ph.D. as our Vice President of Business Development. nection with his appointment, Dr. Goyal entered into a four-year employment agreement with us (the Goyal yment Agreement), which was amended January 12, 2015 and further amended on January 11, 2016. ant to the Goyal Employment Agreement, Dr. Goyal receives an annual base salary of $255,000 and will be e for a discretionary cash performance bonus payment of thirty percent (30%) of his base salary and a tionary equity award with the actual amount of his bonus to be increased or decreased in the sole discretion of ard of Directors. Additionally, Dr. Goyal was granted an option to purchase 40,000 shares of our common with an exercise price equal to the Company s per share market price on the date of issue. These options vest a, on a monthly basis, over 48 months. Dr. Goyal was also eligible to receive, on the one year anniversary of ployment, an option to purchase 12,500 shares of our common stock if certain milestones were attained and ption was issued on January 12, 2015. The Goyal Employment Agreement also includes confidentiality tions and inventions assignments by Dr. Goyal. If Dr. Goyal s employment is terminated for any reason, he or ate as the case may be, will be entitled to receive the accrued base salary, vacation pay, expense ursement and any other entitlements accrued by him to the extent not previously paid (the Accrued tions); provided, however, that if his employment is terminated (1) by us without Just Cause (as defined in oyal Employment Agreement) or (2) by Dr. Goyal for Good Reason (as defined in the Goyal Employment ment) then in addition to paying the Accrued Obligations: (x) we shall continue to pay his then current base for a period of four months; (y) he shall receive a pro-rated amount of the annual bonus which he would have ed during the year without the occurrence of such termination; and (z) he will have the right to exercise any options and any options that would have vested in the next four months until the earlier of the expiration of verance or the expiration of the term of the option.

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ve October 1, 2013, we appointed Melissa Price, Ph.D. as our Vice President of Clinical and Regulatory s. In connection with her appointment, Dr. Price entered into a four-year employment agreement with us (the Employment Agreement), which was amended on January 20, 2014 and further amended on January 12, 2015, 3, 2015 and January 11, 2016. On July 23, 2015, Dr. Price was appointed our Vice President of Product opment. Pursuant to the Price Employment Agreement, Dr. Price receives an annual base salary of $250,000 ll be eligible for a discretionary cash performance bonus payment of thirty percent (30%) of her base salary discretionary equity award with the actual amount of her bonus to be increased or decreased in the sole ion of the Board of Directors. Additionally, Dr. Price was granted an option to purchase 50,000 shares of our on stock with an exercise price equal to our per share market price on the date of issue. These options vest pro n a monthly basis, over 48 months. Dr. Price was also eligible to receive an option to purchase 10,000 shares common stock if certain agreed to milestones were attained and such option was issued in October 2014. The Employment Agreement also includes confidentiality obligations and inventions assignments by Dr. Price. If ce s employment is terminated for any reason, she or her estate as the case may be, will be entitled to receive crued Obligations accrued by her to the extent not previously paid; provided, however, that if her employment inated (1) by us without Just Cause (as defined in the Price Employment Agreement) or by Dr. Price for Good n (as defined in the Price Employment Agreement) then in addition to paying the Accrued Obligations, (x) we ontinue to pay her then current base salary for a period of four months; (y) she shall receive a pro-rated t of the annual bonus which she would have received during the year without the occurrence of such ation and (z) she will have the right to exercise any vested options and any options that would have vested in xt four months until the earlier of the expiration of the severance or the expiration of the term of the option.

rch 9, 2015, we entered into a consulting agreement (the Consulting Agreement) with Danforth Advisors, Danforth) for finance, accounting and administrative functions, including interim chief financial officer es provided by Mr. Stephen J. DiPalma. We paid Danforth an agreed upon hourly rate for such services and rsed Danforth for expenses. The Consulting Agreement continued until December 31, 2015.

ay 15, 2013, we entered into an employment agreement with Matthew E. Czajkowski to act as our Chief ial Officer, which was amended on January 20, 2014 and further amended on May 1, 2014. Mr. Czajkowski ed an annual base salary of $180,000 per year for his provision of services to us for 80% of his professional n addition, Mr. Czajkowski was eligible to receive, at the sole discretion of the board, additional mance-based bonuses equal to up to 50% of this then outstanding base salary at the end of each year. Mr. owski s employment contract provided for three month s severance pay upon termination not for cause (as d in the agreement) and accelerated vesting of all options that would have vested within one year of such ation. The agreement also provided for payments in the event of death and disability. On March 9, 2015, we d into a severance agreement with Mr. Czajkowski effective as of March 15, 2015. In accordance with the of the severance agreement, Mr. Czajkowski resigned as our Chief Financial Officer effective as of March 15, and we paid Mr. Czajkowski all accrued and unpaid base salary and an expense reimbursement in addition to 0. Mr. Czajkowski has the ability to exercise all stock options issued to him that vested prior to the date of ation in accordance with the terms of his employment agreement at any time prior to the ten year anniversary date of grant and any unvested options at the time of resignation were immediately vested and are exercisable days after March 15, 2015. The severance agreement also contained additional provisions that are customary reements of this type, including confidentiality, non-competition and non-solicitation provisions.

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DESCRIPTION OF OUR SECURITIES

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llowing is a summary of the rights of our common stock and related provisions of our articles of incorporation laws. For more detailed information, please see our articles of incorporation and bylaws.

e authorized to issue 50,000,000 shares of common stock, par value $0.0002 per share, of which 8,424,641 are outstanding and 10,000,000 shares of Preferred Stock, par value $.0001 per share, of which 112,500 are designated Series 1 Preferred Stock, 2,000,000 shares are designated Series A Preferred Stock, 4,100,000 signated as Series B-1 Preferred Stock and 2,000,000 are designated Series B-2 Preferred Stock. There are tly no shares of Preferred Stock outstanding.

mon Stock

olders of our common stock are entitled to one vote per share on all matters to be voted on by the shareholders. ct to preferences that may be applicable to any outstanding shares of Preferred Stock, holders of common stock itled to receive ratably such dividends as may be declared by the Board out of funds legally available ore. If we liquidate, dissolve or wind up, holders of common stock are entitled to share ratably in all assets ning after payment of liabilities and the liquidation preferences of any outstanding shares of Preferred Stock. rs of common stock have no preemptive, conversion or subscription rights. There are no redemption or sinking rovisions applicable to the common stock. All outstanding shares of common stock are, and all shares of on stock to be outstanding upon completion of this offering will be, fully paid and nonassessable. Except as vise required by Delaware law, all stockholder action, other than the election of directors, is taken by the vote ajority of the outstanding shares of common stock voting as a single class present at a meeting of stockholders ch a quorum consisting of a majority of the outstanding shares of common stock is present in person or proxy. ection of directors by our stockholders, is determined by a plurality of the votes cast by the stockholders d to vote at any meeting held for such purposes at which a quorum consisting of a majority of the outstanding of common stock is present in person or proxy.

e Stock Split

ay 29, 2013, we effected a 1-for-2.3 reverse stock split. Upon the effectiveness of the reverse stock split, every ares of outstanding common stock decreased to one share of common stock. Similarly, the number of shares of on stock into which each outstanding option and warrant to purchase common stock is exercisable decreased -for-2.3 basis and the exercise price of each outstanding option and warrant to purchase common stock sed proportionately. In addition, the applicable conversion price of the Preferred Stock that was outstanding at me was proportionately increased to adjust for the stock split resulting in a proportionate decrease in the er of shares that were issued upon conversion of the Preferred Stock upon the closing of our initial public g.

otherwise indicated, all references to share numbers in this prospectus filed as part of this registration ent reflect the effects of this reverse stock split.

nding Common Stock Warrants

arch 10, 2011, we issued warrants to purchase 32,610 shares of common stock to non-employee placement in consideration for a private equity placement transaction, of which 17,392 remain outstanding. The warrants n exercise price of $0.48 per share and expire 10 years from the issuance date.

nection with our initial public offering, we issued warrants to the underwriters for 125,000 shares of common ssuable at $12.50 per share upon exercise. The warrants have a five-year life and expire on July 23, 2018. In on, the warrants provide for registration rights upon request, in certain cases. The holders of the warrants were d demand registration rights for a period of five years from the effective date of the offering and piggyback ation rights for a period of seven years from the effective date of the offering The exercise price and number es issuable upon exercise of the warrants may be adjusted in certain circumstances including in the event of a dividend or our recapitalization, reorganization, merger or consolidation. However, the warrant exercise price erlying shares will not be adjusted for issuances of shares of common stock at a price below the warrant se price.

Option Plans

uary, 2014, the Board adopted, and on June 11, 2014 at our 2014 Annual Meeting of Stockholders our olders approved our 2014 Stock Incentive Plan (the 2014 Plan) under which we are authorized to grant 0 awards in the form of options, restricted stock, restricted stock units and other stock based awards. In 2009, ard adopted and our stockholders approved our 2009 Stock Incentive Plan (the 2009 Plan) under which we are ized to grant 869,565 awards in the form of options, restricted stock, restricted stock units and other stock awards. As of December 31, 2015: (1) 858,892 awards had been granted under the 2014 Plan, of which 3,750 xercised, and 183,959 were canceled and there were 425,462 shares of Common Stock available for grant the 2014 Plan, and (2) 860,270 awards had been granted under the 2009 Plan, of which 188,719 were sed, and 118,446 were canceled and there were 27,835 shares of Common Stock available for grant under the lan.

rch 2015, our Compensation Committee recommended and our Board of Directors adopted and at the 2015 l Meeting of Stockholders, our stockholders approved an amendment to the 2014 Plan to increase by 600,000 the aggregate number of shares of our Common Stock that may be delivered pursuant to awards granted the life of the 2014 Plan. As of July 2013, we had the authority to grant up to 1,100,000 awards under the lan, as amended.

tial Anti-Takeover Effects

n provisions set forth in our Third Amended and Restated Certificate of Incorporation, as amended, in our s and in Delaware law, which are summarized below, may be deemed to have an anti-takeover effect and may deter or prevent a tender offer or takeover attempt that a stockholder might consider to be in its best interests, ing attempts that might result in a premium being paid over the market price for the shares held by olders.

Check Preferred Stock. Our Certificate of Incorporation and bylaws contain provisions that permit us to issue, t any further vote or action by the stockholders, up to 10,000,000 shares of preferred stock in one or more and, with respect to each such series, to fix the number of shares constituting the series and the designation of ies, the voting powers, if any, of the shares of the series, and the preferences and relative, participating, al and other special rights, if any, and any qualifications, limitations or restrictions, of the shares of such

l Meetings of Stockholders. Our bylaws provide that special meetings of stockholders may be called only by airman or by our board. Stockholders are not permitted to call a special meeting of stockholders, to require that ard call such a special meeting, or to require that our board request the calling of a special meeting of olders.

the foregoing provisions of our certificate of incorporation, bylaws and Delaware law may have an keover effect, these provisions are intended to enhance the likelihood of continuity and stability in the sition of the Board of directors and in the policies formulated by the Board of directors and to discourage types of transactions that may involve an actual or threatened change of control. In that regard, these ions are designed to reduce our vulnerability to an unsolicited acquisition proposal. The provisions also are ed to discourage certain tactics that may be used in proxy fights. However, such provisions could have the of discouraging others from making tender offers for our shares and, as a consequence, they also may inhibit ations in the market price of our common stock that could result from actual or rumored takeover attempts. provisions also may have the effect of preventing changes in our management.

are Takeover Statute

eral, Section 203 of the Delaware General Corporation Law prohibits a Delaware corporation that is a public ny from engaging in any business combination (as defined below) with any interested stockholder (defined lly as an entity or person beneficially owning 15% or more of the outstanding voting stock of the corporation y entity or person affiliated with such entity or person) for a period of three years following the date that such older became an interested stockholder, unless: (1) prior to such date, the Board of directors of the corporation ved either the business combination or the transaction that resulted in the stockholder becoming an interested older; (2) on consummation of the transaction that resulted in the stockholder becoming an interested older, the interested stockholder owned at least 85% of the voting stock of the corporation outstanding at the e transaction commenced, excluding for purposes of determining the number of shares outstanding those owned (x) by persons who are directors and also officers and (y) by employee stock plans in which employee pants do not have the right to determine confidentially whether shares held subject to the plan will be tendered nder or exchange offer; or (3) on or subsequent to such date, the business combination is approved by the of directors and authorized at an annual or special meeting of stockholders, and not by written consent, by the ative vote of at least two-thirds of the outstanding voting stock that is not owned by the interested stockholder.

n 203 of the Delaware General Corporation Law defines business combination to include: (1) any merger or idation involving the corporation and the interested stockholder; (2) any sale, transfer, pledge or other ition of ten percent or more of the assets of the corporation involving the interested stockholder; (3) subject to exceptions, any transaction that results in the issuance or transfer by the corporation of any stock of the ation to the interested stockholder; (4) any transaction involving the corporation that has the effect of sing the proportionate share of the stock of any class or series of the corporation beneficially owned by the ted stockholder; or (5) the receipt by the interested stockholder of the benefit of any loans, advances, tees, pledges or other financial benefits provided by or through the corporation.

g of Common Stock

ommon stock is currently listed on the NASDAQ Capital Market under the trading symbol HTBX.

fer Agent

ve retained Continental Stock Transfer & Trust Company as our transfer agent. They are located at 17 Battery 8th floor, New York, New York 10004. Their telephone number is (212) 509-4000.

SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT

llowing table sets forth information, as of January 15, 2016, or as otherwise set forth below, with respect to neficial ownership of our common stock (i) all persons know to us to be the beneficial owners of more than the outstanding shares of our common stock, (ii) each of our directors and our executive officer named in the ary Compensation Table, and (iii) all of our directors and our executive officer as a group. As of January 15, ve had 8,424,641 shares of common stock outstanding.

otherwise indicated the mailing address of each of the stockholders below is c/o Heat Biologics, Inc., 801 la Drive, Bay 12, Durham, North Carolina 27713. Except as otherwise indicated, and subject to applicable unity property laws, except to the extent authority is shared by both spouses under applicable law, the any believes the persons named in the table have sole voting and investment power with respect to all shares of on stock held by them.

of Beneficial Owner	Common Stock	Shares subject to Options (1)	Total Number of Shares Beneficially Owned	Percentage Ownership
tive Officers & Directors				
elsky, M.D. (Director)	47,190	33,441	80,631	1.0%
Bock (Director)		20,068	20,068	*
ny Creech (Chief Financial Officer)		5,834	5,834	*
oyal, Ph.D. (Vice President of Business opment)		26,920	26,920	*
el Kharitonov, Ph.D. (Director)(2)	49,960	41,050	91,010	1.1%
Monahan, Ph.D. (Director)	1,211	41,050	42,261	*
a Price, Ph.D. Vice President of Product opment (3)	692	37,807	38,499	*
Schreiber, M.D., PhD Chief Scientific r(4)	39,132	36,824	75,956	*
d Smith (Director)(5)	697,303	33,441	730,744	8.6%
Wolf (Director, CEO, Treasurer & ary)(6)	1,237,396	229,184	1,466,580	16.9%
ew Czajkowski (Former Chief Financial r)		26,149	26,149	*
en DiPalma (Former Chief Financial Officer)				

ecutive Officers & Directors, as a group rsons)	2,072,884	531,768	2,604,652	29.1%
ockholders(1)				
Capital Management, LLC(5)			697,303	8.3%
Holdings V, LLC (6)			695,653	8.3%
One Holdings VI, LLC(6)			536,862	6.4%
eat Biologics, LLC(7)			453,673	5.4%
in Resources, Inc. (8)			1,433,300	17.0%

han 1%

sents shares subject to options which are vested and exercisable within 60 days of January 15, 2016.

es 49,960 shares of common stock held by Dr. Kharitonov. Dr. Kharitonov disclaims beneficial ownership of hares except to the extent of any pecuniary interest (as defined in Rule 16a 1(a)(2) promulgated under the nge Act) that he may have in the Sunrise Equity, LLC.

92 shares of common stock are held in custodial accounts in the names of Dr. Price s children, of which Dr. disclaims beneficial ownership except to the extent of any pecuniary interest (as defined in Rule 16a 1(a)(2) lgated under the Exchange Act) that she may have.

hreiber and an entity controlled by Dr. Schreiber have been issued an aggregate of 39,132 shares of common hat are included in the number of shares beneficially owned by Dr. Schreiber.

ation obtained from a Schedule 13D/A filed on January 8, 2015 with the Securities and Exchange ission filed on behalf of Aristar Capital Management, LLC of which Mr. Smith disclaims beneficial ship of 697,303 shares of common stock, except to the extent of any pecuniary interest (as defined in Rule (a)(2) promulgated under the Exchange Act) that he may have in such entities.

es 695,653 shares of common stock held by Orion Holdings V, LLC and 536,862 shares of common stock y Seed-One Holdings VI, LLC, entities for which Mr. Wolf serves as the managing member. Mr. Wolf is d to beneficially own the shares held by such entities as in his role as the managing member he has the control e voting and disposition of any shares held by these entities. Includes 3,660 shares purchased May 2014 and shares converted from Series B, does not include 86,957 shares of common stock beneficially owned by olf s children s trust of which Mr. Wolf is not the trustee. Mr. Wolf disclaims beneficial ownership of these except to the extent of any pecuniary interest (as defined in Rule 16a 1(a)(2) promulgated under the Exchange at he may have in such entities. In addition, if our Company is traded on a recognized national exchange or AQ while Mr. Wolf is employed by us and the market capitalization of our Company is in excess of million for at least five consecutive trading days, then Mr. Wolf will be entitled to receive an additional stock equal to 2% of the then outstanding shares of our common stock, at an exercise price equal to the then current price as determined in good faith by the board.

ation obtained from a Schedule 13G filed February 12, 2014 with the Securities and Exchange Commission n behalf of (i) FW Heat Investors, L.P. (the Fund), a Delaware limited partnership, (ii) FW Heat Genpar, LLC General Partner), a Delaware limited liability company, as the general partner to the Fund, and (iii) Jay H. , as the sole member of the General Partner (Hebert and, together with the Fund and the General Partner, the rting Persons). All 453,763 shares of Common Stock are held by the Fund. The mailing address of FW Heat ors L.P is 201 Main Street, Fort Worth, Texas 76102.

ation obtained from a Schedule 13G/A filed with the Securities and Exchange Commission on April 10, 2015. s B. Johnson and Rupert H. Johnson, Jr. each own in excess of 10% of the outstanding common stock of in Resources, Inc. (FRI) and are the principal stockholders of FRI. Franklin Advisor, Inc. a management iary of FRI is also deemed to be a beneficial owner of the common stock owned by FRI. The address of in Resources, Inc. is One Franklin Parkway, San Mateo, California 94403-1906.

ERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS; DIRECTOR INDEPENDENCE

d-Party Transaction Policy

nt to our charter, our Audit Committee shall review on an on-going basis for potential conflicts of interest, prove if appropriate, all our Related Party Transactions as required by of NASDAQ Rule 4350(h). For es of the Audit Committee Charter, Related Party Transactions shall mean those transactions required to be sed pursuant to SEC Regulation S-K, Item 404.

llowing is a summary of transactions since January 1, 2014 to which we have been a party in which the t involved exceeded the lesser of $120,000 or one percent of the average of our total assets at the end of the ecently completed fiscal year and in which any of our executive officers, directors or beneficial holders of han five percent of our capital stock had or will have a direct or indirect material interest, other than nsation arrangements which are described under the section entitled Management Non-Employee Director ensation and Management Executive Compensation.

uary 11, 2016, our named executive officers were awarded the following 2015 year-end bonus compensation: A. Wolf, our Chief Executive Officer, was granted options to purchase 94,048 shares of our common stock ceived a cash bonus in the amount of $177,500; Dr. Goyal was granted options to purchase 21,587 shares of mmon stock and received a cash bonus in the amount of $51,000; Dr. Price was granted options to purchase shares of our common stock and received a cash bonus in the amount of $75,000; and Dr. Schreiber was d options to purchase 57,567 shares of our common stock and received a cash bonus in the amount of $95,202. tock options granted have an exercise price of $2.47 per share, which is the closing price of our common stock grant date (January 11, 2016), vest pro rata, on a monthly basis, over a four (4) year period and expire ten (10) from the date of the grant, unless terminated earlier.

uary 11, 2016 our non executive directors were granted options to purchase 23,810 shares of our common The stock options granted have an exercise price of $2.47, which is the closing price of our common stock on nt date (January 11, 2016), vest on January 11, 2017 and expire ten (10) years from the date of the grant, terminated earlier.

y 23, 2015, we issued an additional 35,000 options to Dr. Schreiber vesting monthly on a pro rata basis over a ear period.

arch 9, 2015, we entered into a severance agreement with Mr. Czajkowski effective as of March 15, 2015. In ance with the terms of the severance agreement, Mr. Czajkowski resigned as our Chief Financial Officer ve as of March 15, 2015, and we paid Mr. Czajkowski all accrued and unpaid base salary and an expense ursement in addition to $45,000. Mr. Czajkowski has the ability to exercise all stock options issued to him that prior to the date of resignation in accordance with the terms of his employment agreement at any time prior to -year anniversary of the date of grant and any unvested options at the time of resignation were immediately and are exercisable for 90 days after March 15, 2015. The severance agreement also contained additional ions that are customary for agreements of this type, including confidentiality, non-competition and licitation provisions.

uary 12, 2015, our named executive officers were awarded the following 2014 year-end bonus compensation: A. Wolf, our Chief Executive Officer, was granted options to purchase 12,500 shares of our common stock ceived a cash bonus in the amount of $127,500; Dr. Goyal was granted options to purchase 12,500 shares of mmon stock and received a cash bonus in the amount of $49,500; Dr. Price received a cash bonus in the t of $47,250; and Dr. Schreiber was granted options to purchase 10,000 shares of our common stock and ed a cash bonus in the amount of $39,483. The stock options granted have an exercise price of $4.53, which is sing price of the Common Stock on the grant date (January 12, 2015), vest pro rata, on a monthly basis, over a -) year period and expire ten (10) years from the date of the grant, unless terminated earlier.

UNDERWRITING

ve entered into an underwriting agreement with Roth Capital Partners, LLC, acting as the representative of the l underwriters named below, with respect to the shares of common stock subject to this offering. Subject to conditions, we have agreed to sell to the underwriters, and the underwriters have severally agreed to se, the number of shares of common stock provided below opposite their respective names.

rwriters	Number of Shares
Capital Partners, LLC	
Capital Corporation	

derwriters are offering the shares of common stock subject to their acceptance of the shares of common stock s and subject to prior sale. The underwriting agreement provides that the obligations of the several vriters to pay for and accept delivery of the shares of common stock offered by this prospectus are subject to proval of certain legal matters by their counsel and to certain other conditions. The underwriters are obligated and pay for all of the shares of common stock if any such shares are taken. However, the underwriters are quired to take or pay for the shares of common stock covered by the underwriters over-allotment option bed below.

Allotment Option

ve granted the underwriters an option, exercisable for 45 days from the date of this prospectus, to purchase up ggregate of 923,645 additional shares of common stock (assuming a public offering price of $2.03 per share, t reported sale price of our common stock on the NASDAQ Capital Market on February 17, 2016) to cover llotments, if any, at the public offering price set forth on the cover page of this prospectus, less the vriting discount. The underwriters may exercise this option solely for the purpose of covering llotments, if any, made in connection with the offering of the shares of common stock offered by this ctus. If the underwriters exercise this option, each underwriter will be obligated, subject to certain conditions, chase a number of additional shares proportionate to that underwriter s initial purchase commitment as ted in the table above for which the option has been exercised.

unt, Commissions and Expenses

nderwriters have advised us that they propose to offer the shares of common stock to the public at the initial offering price set forth on the cover page of this prospectus and to certain dealers at that price less a ssion not in excess of $ per share. The underwriters may allow, and certain dealers may reallow, a nt from the concession not in excess of $ per share to certain brokers and dealers. After this offering, the public offering price, concession and reallowance to dealers may be changed by the representative. No such e shall change the amount of proceeds to be received by us as set forth on the cover page of this prospectus. hares of common stock are offered by the underwriters as stated herein, subject to receipt and acceptance by nd subject to their right to reject any order in whole or in part. The underwriters have informed us that they intend to confirm sales to any accounts over which they exercise discretionary authority.

llowing table shows the underwriting discount payable to the underwriters by us in connection with this g. Such amounts are shown assuming both no exercise and full exercise of the underwriters over-allotment to purchase additional shares.

	Per Share	Total Without Exercise of Over-Allotment Option	Total With Exercise of Over-Allotment Option
offering price	$	$	$
writing discount	$	$	$

ve agreed to reimburse the underwriters for certain out-of-pocket expenses not to exceed $60,000 in the gate without our consent which shall not be unreasonably withheld. We estimate that expenses payable by us nection with this offering, including reimbursement of the underwriters out-of-pocket expenses, but excluding derwriting discount referred to above, will be approximately $325,000.

nification

ve agreed to indemnify the underwriters against certain liabilities, including liabilities under the Securities Act bilities arising from breaches of representations and warranties contained in the underwriting agreement, or to bute to payments that the underwriters may be required to make in respect of those liabilities.

up Agreements

ur officers, directors and certain of our stockholders have agreed, subject to limited exceptions, for a period of s after the date of the underwriting agreement, not to offer, sell, contract to sell, pledge, grant any option to se, make any short sale or otherwise dispose of, directly or indirectly any shares of common stock or any ies convertible into or exchangeable for our common stock either owned as of the date of the underwriting ment or thereafter acquired without the prior written consent of the representative. The representative may, in e discretion and at any time or from time to time before the termination of the lock-up period, without notice, e all or any portion of the securities subject to lock-up agreements.

Stabilization, Short Positions and Penalty Bids

nection with the offering the underwriters may engage in stabilizing transactions, over-allotment transactions, ate covering transactions and penalty bids in accordance with Regulation M under the Exchange Act:

zing transactions permit bids to purchase the underlying security so long as the stabilizing bids do not exceed fied maximum.

llotment involves sales by the underwriters of shares in excess of the number of shares the underwriters are ted to purchase, which creates a syndicate short position. The short position may be either a covered short n or a naked short position. In a covered short position, the number of shares over-allotted by the underwriters greater than the number of shares that they may purchase in the over-allotment option. In a naked short n, the number of shares involved is greater than the number of shares in the over-allotment option. The vriters may close out any covered short position by either exercising their over-allotment option and/or asing shares in the open market.

cate covering transactions involve purchases of shares of the common stock in the open market after the ution has been completed in order to cover syndicate short positions. In determining the source of shares to out the short position, the underwriters will consider, among other things, the price of shares available for se in the open market as compared to the price at which it may purchase shares through the over-allotment . If the underwriters sell more shares than could be covered by the over-allotment option, a naked short n, the position can only be closed out by buying shares in the open market. A naked short position is more to be created if the underwriters are concerned that there could be downward pressure on the price of the in the open market after pricing that could adversely affect investors who purchase in the offering.

y bids permit the representative to reclaim a selling concession from a syndicate member when the common originally sold by the syndicate member is purchased in a stabilizing or syndicate covering transaction to cover ate short positions.

stabilizing transactions, syndicate covering transactions and penalty bids may have the effect of raising or aining the market price of our common stock or preventing or retarding a decline in the market price of the on stock. As a result, the price of our common stock may be higher than the price that might otherwise exist in en market. Neither we nor the underwriters make any representation or prediction as to the direction or tude of any effect that the transactions described above may have on the price of the common stock. In n, neither we nor the underwriters make any representations that the underwriters will engage in these zing transactions or that any transaction, once commenced, will not be discontinued without notice.

e Market Making

nection with this offering, the underwriters and any selling group members may engage in passive market g transactions in our common stock on The NASDAQ Stock Market in accordance with Rule 103 of ation M under the Securities Exchange Act of 1934, as amended, during a period before the commencement of or sales of common stock and extending through the completion of the distribution. A passive market maker isplay its bid at a price not in excess of the highest independent bid of that security. However, if all ndent bids are lowered below the passive market maker s bid, that bid must then be lowered when specified ase limits are exceeded.

onic Distribution

rospectus in electronic format may be made available on websites or through other online services maintained e or more of the underwriters, or by their affiliates. Other than this prospectus in electronic format, the nation on any underwriter s website and any information contained in any other website maintained by an vriter is not part of this prospectus or the registration statement of which this prospectus forms a part, has not pproved and/or endorsed by us or any underwriter in its capacity as underwriter, and should not be relied upon estors.

time to time, certain of the underwriters and/or their affiliates have provided, and may in the future provide, s investment banking and other financial services for us for which services they have received and, may in the receive, customary fees. In the course of their businesses, the underwriters and their affiliates may actively our securities or loans for their own account or for the accounts of customers, and, accordingly, the vriters and their affiliates may at any time hold long or short positions in such securities or loans. Except for es provided in connection with this offering, no underwriter has provided any investment banking or other ial services to us during the 180-day period preceding the date of this prospectus and we do not expect to any underwriter to perform any investment banking or other financial services for at least 90 days after the f this prospectus. Aegis Capital Corporation, or Aegis, owns warrants to purchase 21,875 shares of our on stock and representatives of Aegis own warrants to purchase an additional 50,374 shares of our common

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NOTICE TO INVESTORS

e to Investors in the United Kingdom

tion to each Member State of the European Economic Area which has implemented the Prospectus Directive a Relevant Member State) an offer to the public of any securities which are the subject of the offering nplated by this prospectus [supplement and the related prospectus] may not be made in that Relevant Member except that an offer to the public in that Relevant Member State of any such securities may be made at any time the following exemptions under the Prospectus Directive, if they have been implemented in that Relevant er State:

l entities which are authorized or regulated to operate in the financial markets or, if not so authorized or ted, whose corporate purpose is solely to invest in securities;

legal entity which has two or more of (1) an average of at least 250 employees during the last financial year; otal balance sheet of more than €43,000,000 and (3) an annual net turnover of more than €50,000,000, as shown ast annual or consolidated accounts;

underwriter to fewer than 100 natural or legal persons (other than qualified investors as defined in the ctus Directive); or

other circumstances falling within Article 3(2) of the Prospectus Directive, provided that no such offer of ecurities shall result in a requirement for the publication by the issuer or the underwriter of a prospectus nt to Article 3 of the Prospectus Directive.

e purposes of this provision, the expression an offer to the public in relation to any of the securities in any ant Member State means the communication in any form and by any means of sufficient information on the of the offer and any such securities to be offered so as to enable an investor to decide to purchase any such ies, as the same may be varied in that Member State by any measure implementing the Prospectus Directive in ember State and the expression Prospectus Directive means Directive 2003/71/EC and includes any relevant menting measure in each Relevant Member State.

nderwriter has represented, warranted and agreed that:

only communicated or caused to be communicated and will only communicate or cause to be communicated vitation or inducement to engage in investment activity (within the meaning of section 21 of the Financial es and Markets Act 2000 (the FSMA)) received by it in connection with the issue or sale of any of the ies in circumstances in which section 21(1) of the FSMA does not apply to the issuer; and

complied with and will comply with all applicable provisions of the FSMA with respect to anything done by it tion to the securities in, from or otherwise involving the United Kingdom.

ean Economic Area

icular, this document does not constitute an approved prospectus in accordance with European Commission s ation on Prospectuses no. 809/2004 and no such prospectus is to be prepared and approved in connection with fering. Accordingly, in relation to each Member State of the European Economic Area which has implemented ospectus Directive (being the Directive of the European Parliament and of the Council 2003/71/EC and ing any relevant implementing measure in each Relevant Member State) (each, a Relevant Member State), ffect from and including the date on which the Prospectus Directive is implemented in that Relevant Member the Relevant Implementation Date) an offer of securities to the public may not be made in that Relevant er State prior to the publication of a prospectus in relation to such securities which has been approved by the tent authority in that Relevant Member State or, where appropriate, approved in another Relevant Member nd notified to the competent authority in that Relevant Member State, all in accordance with the Prospectus ive, except that it may, with effect from and including the Relevant Implementation Date, make an offer of ies to the public in that Relevant Member State at any time:

l entities which are authorized or regulated to operate in the financial markets or, if not so authorized or ted, whose corporate purpose is solely to invest in securities;

legal entity which has two or more of (1) an average of at least 250 employees during the last financial year; otal balance sheet of more than €43,000,000; and (3) an annual net turnover of more than €50,000,000, as shown last annual or consolidated accounts; or

other circumstances which do not require the publication by the Issuer of a prospectus pursuant to Article 3 of ospectus Directive.

e purposes of this provision, the expression an offer of securities to the public in relation to any of the ies in any Relevant Member State means the communication in any form and by any means of sufficient nation on the terms of the offer and the securities to be offered so as to enable an investor to decide to purchase scribe for the securities, as the same may be varied in that Member State by any measure implementing the ctus Directive in that Member State. For these purposes the shares offered hereby are securities.

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LEGAL MATTERS

lidity of the shares of common stock offered hereby will be passed upon for us by Gracin & Marlow, LLP, ork, New York. Lowenstein Sandler LLP, New York, New York, is acting as counsel to the underwriters in fering.

EXPERTS

nsolidated financial statements as of December 31, 2015 and 2014 and for each of the two years in the period December 31, 2015 included in this Prospectus and in the Registration Statement have been so included in e on the report of BDO USA, LLP, an independent registered public accounting firm, (the report on the ial statements contains an explanatory paragraph regarding our ability to continue as a going concern) ing elsewhere herein and in the Registration Statement, given on the authority of said firm as experts in g and accounting.

WHERE YOU CAN FIND ADDITIONAL INFORMATION

ve filed with the Securities and Exchange Commission a registration statement on Form S-1 under the ties Act with respect to the common stock offered by this prospectus. This prospectus, which is part of the ation statement, omits certain information, exhibits, schedules and undertakings set forth in the registration ent. For further information pertaining to us and our common stock, reference is made to the registration ent and the exhibits and schedules to the registration statement. Statements contained in this prospectus as to ntents or provisions of any documents referred to in this prospectus are not necessarily complete, and in each ce where a copy of the document has been filed as an exhibit to the registration statement, reference is made to hibit for a more complete description of the matters involved.

ay read and copy all or any portion of the registration statement without charge at the public reference room Securities and Exchange Commission at 100 F Street, N.E., Washington, D.C. 20549. Copies of the ation statement may be obtained from the Securities and Exchange Commission at prescribed rates from the reference room of the Securities and Exchange Commission at such address. You may obtain information ing the operation of the public reference room by calling 1-800-SEC-0330. In addition, registration statements rtain other filings made with the Securities and Exchange Commission electronically are publicly available h the Securities and Exchange Commission s website at http://www.sec.gov. The registration statement, ing all exhibits and amendments to the registration statement, has been filed electronically with the Securities xchange Commission. You may also read all or any portion of the registration statement on our website at

heatbio.com. The information contained in, and that can be accessed through, our website is not incorporated
d is not part of this prospectus.

e subject to the information and periodic reporting requirements of the Exchange Act and, accordingly, are
ed to file annual reports containing financial statements audited by an independent public accounting firm,
rly reports containing unaudited financial data, current reports, proxy statements and other information with
curities and Exchange Commission. You will be able to inspect and copy such periodic reports, proxy
ents and other information at the Securities and Exchange Commission s public reference room, the website of
curities and Exchange Commission referred to above, and our website referred to above.

INDEX TO FINANCIAL STATEMENTS

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

of Directors and Stockholders

iologics, Inc.

m, North Carolina

ve audited the accompanying consolidated balance sheets of Heat Biologics, Inc. (the Company) as of
nber 31, 2015 and 2014 and the related consolidated statements of operations and comprehensive loss,
olders equity, and cash flows for each of the two years in the period ended December 31, 2015. These
ial statements are the responsibility of the Company s management. Our responsibility is to express an opinion
se consolidated financial statements based on our audits.

nducted our audits in accordance with the standards of the Public Company Accounting Oversight Board
d States). Those standards require that we plan and perform the audit to obtain reasonable assurance about
er the consolidated financial statements are free of material misstatement. The Company is not required to
nor were we engaged to perform, an audit of its internal control over financial reporting. Our audits included
eration of internal control over financial reporting as a basis for designing audit procedures that are
priate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the
any s internal control over financial reporting. Accordingly, we express no such opinion. An audit also includes
ning, on a test basis, evidence supporting the amounts and disclosures in the financial statements, assessing the
nting principles used and significant estimates made by management, as well as evaluating the overall financial
ent presentation. We believe that our audits provide a reasonable basis for our opinion.

opinion, the consolidated financial statements referred to above present fairly, in all material respects, the
ial position of Heat Biologics, Inc. at December 31, 2015 and 2014, and the results of its operations and its
ows for each of the two years in the period ended December 31, 2015**,** in conformity with accounting
ples generally accepted in the United States of America.

companying consolidated financial statements have been prepared assuming that the Company will continue
oing concern. As described in Note 2 to the consolidated financial statements, the Company has suffered
ng losses from operations and has not generated significant revenue or positive cash flows from operations.
factors raise substantial doubt about the Company s ability to continue as a going concern. Management s plans
rd to these matters are also described in Note 2. The consolidated financial statements do not include any
ments that might result from the outcome of this uncertainty.

O USA, LLP

h, North Carolina

ry 18, 2016

HEAT BIOLOGICS, INC.

Consolidated Balance Sheets

(in thousands, except share and per share data)

	December 31, 2015	December 31, 2014
nt Assets		
nd cash equivalents	$ 4,940	$ 3,714
ments, held to maturity (net)	6,690	10,699
d expenses and other current assets	869	863
Current Assets	12,499	15,276
rty and Equipment, net	446	446
Assets		
cted cash	101	101
its	70	20
d party receivable	58	49
ed financing costs	44	24
Other Assets	273	194
Assets	$ 13,218	$ 15,916
ities and Stockholders' Equity		
nt Liabilities		
nts payable	$ 1,980	$ 1,367
ed expenses and other payables	1,847	806
t portion of long term debt	3,134	397
Current Liabilities	6,961	2,570
Term Liabilities		
erm debt, net of discount and current portion	3,612	2,314
long term liabilities	150	
Liabilities	10,723	4,884
itments and Contingencies		
holders' Equity		
on stock, $.0002 par value; 50,000,000 shares authorized, 641 and 6,492,622 issued and outstanding at December 31, 2015 014, respectively	1	1
onal paid-in capital	48,567	35,895

nulated deficit		(44,430)		(24,135)
nulated other comprehensive loss		(87)		
Stockholders' Equity - Less Non-Controlling Interest		4,051		11,761
Controlling Interest		(1,556)		(729)
Stockholders' Equity Heat Biologics, Inc.		2,495		11,032
Liabilities and Stockholders' Equity	$	13,218	$	15,916

See Notes to Consolidated Financial Statements

HEAT BIOLOGICS INC.

Consolidated Statements of Operations and Comprehensive Loss

(in thousands, except share and per share data)

	Year ended, December 31,	
	2015	**2014**
ing expenses:		
rch and development	$ 2,595	$ 2,861
al and regulatory	14,071	5,348
al and administrative	4,356	3,978
operating expenses	21,022	12,187
rom operations	(21,022)	(12,187)
perating income (expenses)		
t income	66	41
income (expense)	198	(24)
t expense	(364)	(73)
non-operating expenses	(100)	(56)
ss	(21,122)	(12,243)
ss - non-controlling interest	(827)	(454)
ss attributable to Heat Biologics, Inc.	$ (20,295)	$ (11,789)
ss per share attributable to Heat Biologics, Inc.-		
nd diluted	$ (2.53)	$ (1.83)
ted-average number of common shares used in net loss per share		
table to Heat Biologics, Inc. -		
nd diluted	8,015,687	6,454,866
ss	(21,122)	(12,243)
comprehensive loss:		
ized loss on foreign currency translation	(87)	
comprehensive loss	(21,209)	(12,243)
rehensive loss attributable to non-controlling interest	(827)	(454)
rehensive loss attributable to Heat Biologics, Inc.	$ (20,382)	$ (11,789)

See Notes to Consolidated Financial Statements

HEAT BIOLOGICS INC.

Consolidated Statements of Stockholders Equity

(in thousands, except share amounts)

	Common Stock	APIC	Accumulated Deficit	Accumulated Other Comprehensive Loss	Non-Controlling Interest	Total Stockholders Equity
ce at nber 31,	$ 1	$ 34,338	$ (12,346)	$	$ (275)	$ 21,718
se of options, shares ess		38				38
se of s, 10,442 ess						
se of nts, shares based nsation ss		453				453
		1,066				1,066
			(11,789)		(454)	(12,243)
ce at nber 31,	$ 1	$ 35,895	$ (24,135)	$	$ (729)	$ 11,032
2015 ment g, 000 net of vriters nts issuance		11,400				11,400
		(302)				(302)
ess se of s, 6,812 g of ted stock,						

' shares based nsation		1,574				1,574
ehensive				(87)		(87)
ss			(20,295)		(827)	(21,122)
e at nber 31,	$ 1	$ 48,567	$ (44,430)	$ (87)	$ (1,556)	$ 2,495

See Notes to Consolidated Financial Statements

HEAT BIOLOGICS, INC.

Consolidated Statements of Cash Flows

(in thousands)

	For the year ended December 31,	
	2015	**2014**
Flows from Operating Activities		
ss	$ (21,122)	$ (12,243)
ments to reconcile net loss to net cash used in operating activities:		
ciation	116	67
ization of deferred financing costs and debt issuance costs	101	38
ization of held to maturity investment premium	142	173
asurement of fair value of stock warrant liability		7
based compensation	1,574	1,066
se (decrease) in cash arising from changes in assets and liabilities:		
d party receivable	(9)	(24)
d expenses and other current assets	(32)	203
cted cash		(100)
its	(50)	(10)
nts payable	642	716
ed expenses and other payables	1,041	303
long term liabilities	150	
ed interest		(25)
ash Used in Operating Activities	(17,447)	(9,829)
Flows from Investing Activities		
eds from maturities of short-term investments	14,957	18,624
ases of short term investments	(11,090)	(12,199)
ase of property and equipment	(116)	(459)
ash Provided by Investing Activities	3,751	5,966
Flows from Financing Activities		
eds from March 2015 public offering, net of underwriting discounts	11,400	
issuance costs	(302)	
eds from issuance of long term debt, net	4,471	2,973
ents on long term debt	(558)	
eds from the exercise of stock options		37
ash Provided by Financing Activities	15,011	3,010
of exchange rate changes on cash and cash equivalents	(89)	
crease (Decrease) in Cash and Cash Equivalents	1,226	(853)

and Cash Equivalents - Beginning of Period		3,714		4,567
and Cash Equivalents - End of Period	$	4,940	$	3,714
emental Disclosure for Cash Flow Information				
t paid	$	262	$	32
emental Schedule of Noncash Investing and Financing ties				
ss exercise of stock options	$	33	$	
ss exercise of stock warrants	$		$	453
ce of warrants	$		$	323

See Notes to Consolidated Financial Statements

HEAT BIOLOGICS, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

ization

iologics, Inc. (Heat or the Company) was incorporated in 2008 pursuant to the laws of the state of Delaware. s a development stage company focused on developing novel allogeneic, off-the-shelf cellular therapeutic es to combat a wide range of cancers. The Company currently has two drug candidates, one in a Phase 2 trial dder cancer, and one in a Phase 1b trial for non-small cell lung cancer.

wns 92.5% interest in its subsidiary, Heat Biologics I, Inc. On May 30, 2012, Heat formed two-wholly owned iaries, Heat Biologics III, Inc. (Heat III) and Heat Biologics, IV, Inc. (Heat IV). Heat formed Heat Biologics (Heat GmbH), a wholly-owned limited liability company, organized in Germany on September 11, 2012. lso formed Heat Biologics Australia Pty LTD, a wholly-owned proprietary company, registered in Australia rch 14, 2014.

s product candidates require clinical trials and approvals from regulatory agencies, as well as acceptance in the tplace. Part of Heat s strategy is to develop and commercialize some of its product candidates by continuing g arrangements with academic and corporate collaborators and licensees and by entering into new orations.

ary of Significant Accounting Policies

Concern

companying consolidated financial statements have been prepared on a going concern basis. The Company accumulated a deficit of approximately $44.4 million as of December 31, 2015 and a net loss of ximately $20.3 million for the year ended December 31, 2015, and has not generated significant revenue or

e cash flows from operations. These factors raise substantial doubt about the Company s ability to continue as g concern. The accompanying consolidated financial statements do not include any adjustments relating to the rability and classification of recorded asset amounts or amounts of liabilities that might result from the me of this uncertainty. To meet its capital needs, the Company is considering multiple alternatives, including, t limited to, additional equity financings, debt financings and/or funding from partnerships or collaborations. can be no assurance that the Company will be able to complete any such transactions on acceptable terms or vise. If the Company is unable to obtain the necessary capital, it will need to pursue a plan to scale back its ions, license or sell its assets, seek to be acquired by another entity and/or cease operations and comprehensive

ples of Consolidation

onsolidated financial statements include the accounts of Heat Biologics, Inc. and its subsidiaries, Heat gics I, Inc. (Heat I) Heat Biologics III, Inc. (Heat III), Heat Biologics IV, Inc. (Heat IV), Heat Biologics GmbH eat Biologics Australia Pty Ltd. The functional currency of the entities located outside the United States of ca (the foreign entities) is the applicable local currency of the foreign entities. Assets and liabilities of the n entities are translated at period-end exchange rates. Statement of operations accounts are translated at the e exchange rate during the period. The effects of foreign currency translation adjustments are included in comprehensive loss, which is a component of accumulated other comprehensive loss in stockholders equity. gnificant intercompany accounts and transactions have been eliminated in consolidation. At December 31, nd 2014, Heat held a 92.5% controlling interest in Heat I and accounts for its less than 100% interest in the idated financial statements in accordance with U.S. GAAP. Accordingly, the Company presents ontrolling interest as a component of stockholders equity on its consolidated balance sheets and reports ontrolling interest net loss under the heading net loss non-controlling interest in the consolidated statements of ions.

Estimates

eparation of financial statements in conformity with U.S. GAAP requires management to make estimates and ptions that affect the amounts reported in the financial statements and accompanying notes. Estimates are used t not limited to, useful lives of fixed assets, income taxes and stock-based compensation. Actual results may from those estimates.

HEAT BIOLOGICS, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

nd Cash Equivalents and Restricted Cash

ompany considers all cash and other highly liquid investments with initial maturities from the date of se of three months or less to be cash and cash equivalents. The Company had a restricted cash balance of $0.1 n at December 31, 2015 and 2014, respectively. The United States Patent and Trade Office (USPTO) requires mpany to maintain an account with a minimum of $1,000 to be used to pay fees associated with new arks of the Company and one of the Company s lenders required a minimum $0.1 million cash balance to be ined with the lending bank to secure the Company credit card during 2015 and 2014.

ntration of Credit Risk

es, cash balances may exceed the Federal Deposit Insurance Corporation (FDIC) insurable limits. The any has never experienced any losses related to these balances. As of December 31, 2015 and 2014, cash ts in excess of $0.3 million were not fully insured. The uninsured cash balance as of December 31, 2015 was illion. The Company does not believe it is exposed to significant credit risk on cash and cash equivalents.

ed Financing Costs, net

ed financing costs, net include the costs incurred to obtain financing and are amortized using the straight-line d, which approximates the effective interest method, over the life of the related debt. Deferred financing costs, included in the accompanying consolidated balance sheets net of amortization.

rty and Equipment

ty and equipment are stated at cost and are capitalized. Depreciation is calculated using the straight-line d and is based on estimated useful lives of five years for lab equipment and computer equipment, and seven for furniture and fixtures.

oss per Share

net loss per share is computed by dividing net loss by the weighted average number of common shares nding during each year. Fully diluted net loss per share is computed using the weighted average number of on shares and dilutive securities outstanding during each year. Dilutive securities having an anti-dilutive effect uted loss per share are excluded from the calculation.

Value of Financial Instruments

rrying amount of certain of the Company s financial instruments, including cash and cash equivalents, nts payable and accrued expenses and other payables approximate fair value due to their short maturities. The ng value of debt approximates fair value because the interest rate under the obligation approximates market f interest available to the Company for similar instruments.

asis for determining the fair value of certain of the Company s financial instruments, the Company utilizes a ier value hierarchy, which prioritizes the inputs used in measuring fair value as follows:

I Observable inputs such as quoted prices in active markets for identical assets or liabilities.

II Observable inputs, other than Level I prices, such as quoted prices for similar assets or liabilities, quoted in markets that are not active or other inputs that are observable or can be corroborated by observable market r substantially the full term of the assets or liabilities.

III Unobservable inputs that are supported by little or no market activity and that are significant to the fair of the assets or liabilities.

HEAT BIOLOGICS, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

ierarchy requires the Company to use observable market data, when available, and to minimize the use of ervable inputs when determining fair value. The Company does not have any financial instruments that are red at fair value on a recurring basis. There were no assets or liabilities measured at fair value on a recurring s of December 31, 2015 or 2014.

ting

ting costs are expensed as incurred and is included in clinical and regulatory expense in the consolidated ent of operations and comprehensive loss. Marketing expense totaled $0.3 million and $0.1 million for the ended December 31, 2015 and 2014, respectively.

e Tax

e taxes are accounted for using the asset and liability method. Deferred tax assets and liabilities are recognized future tax consequences attributable to temporary differences between the carrying amounts of assets and ies and their respective tax bases, operating loss carryforwards, and tax credit carryforwards. Deferred tax and liabilities are measured using enacted tax rates expected to apply to taxable income in the years in which emporary differences are expected to be recovered or settled. The effect on deferred tax assets and liabilities hange in tax rates is recognized in income in the period that includes the enactment date.

ordance with FASB ASC 740, *Accounting for Income Taxes*, the Company reflects in the financial statements nefit of positions taken in a previously filed tax return or expected to be taken in a future tax return only when nsidered more-likely-than-not that the position taken will be sustained by a taxing authority. As of December 15 and 2014, the Company had no unrecognized income tax benefits and correspondingly there is no impact Company s effective income tax rate associated with these items. The Company s policy for recording interest nalties relating to uncertain income tax positions is to record them as a component of income tax expense in companying consolidated statements of operations and comprehensive loss. As of December 31, 2015 and the Company had no such accruals.

Based Compensation

ompany accounts for stock-based compensation arrangements with employees and non-employee directors a fair value method which requires the recognition of compensation expense for costs related to all stock-based nts, including stock options. The fair value method requires the Company to estimate the fair value of based payment awards on the date of grant using an option pricing model.

based compensation costs are based on the fair value of the underlying option calculated using the Scholes-Merton option pricing model on the date of grant for stock options and are recognized as expense on ght-line basis over the requisite service period, which is the vesting period. Determining the appropriate fair model and related assumptions requires judgment, including estimating stock price volatility, forfeiture rates pected term. The expected volatility rates are estimated based on the actual volatility of comparable public nies over the expected term. The expected term for the years ended December 31, 2015 and 2014 represents erage time that options are expected to be outstanding based on the mid-point between the vesting date and the the contractual term of the award. Forfeitures are estimated at the time of grant and revised, if necessary, in quent periods if actual forfeitures differ from those estimates. The Company has not paid dividends and does ticipate paying a cash dividend in the foreseeable future and, accordingly, uses an expected dividend yield of The risk-free interest rate is based on the rate of U.S. Treasury securities with maturities consistent with the ted expected term of the awards. The measurement of nonemployee share-based compensation is subject to ic adjustments as the underlying equity instruments vest and is recognized as an expense in the period over services are received.

ss attributable to non-controlling interests

ss attributable to non-controlling interests is the result of the Company's consolidation of subsidiaries of it does not own 100%. The Company's net loss attributable to non-controlling interests relates to the rsity of Miami s ownership in Heat I, for the years ended December 31, 2015 and 2014.

HEAT BIOLOGICS, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

ue Recognition

ompany recognizes government grants when there is reasonable assurance that they will comply with the ions attached to the grants and the grants will be received. The grants are recognized using an income ch and grant revenue is recognized as the related expenses are incurred.

rch and Development

rch and development costs are expensed as incurred. The Company has acquired exclusive licensing rights to ctual property to further its research and development. These costs are expensed as incurred. The Company curs intellectual property costs relating to the filing and application fees for patents which are owned by the sities with which the Company has license agreements. These costs are also expensed as research and pment expense as incurred.

t of recently issued Accounting Standards:

gust 2014, the FASB issued ASU 2014-15, *Presentation of Financial Statements Going Concern* (Subtopic 0): *Disclosure of Uncertainties about an Entity s Ability to Continue as a Going Concern*. The amendments in 2014-15 are intended to define management s responsibility to evaluate whether there is substantial doubt about anization s ability to continue as a going concern and to provide related footnote disclosures. This ASU es guidance to an organization s management, with principles and definitions that are intended to reduce ty in the timing and content of disclosures that are commonly provided by organizations today in the financial ent footnotes. This update is effective for annual periods ending after December 15, 2016, and interim periods annual periods beginning after December 15, 2016. Early application is permitted for annual or interim ng periods for which the financial statements have not previously been issued. The adoption of this guidance expected to have a material impact on the Company s consolidated financial statements.

uary 2015, the FASB issued ASU 2015-1, *Income Statement - Extraordinary and Unusual Items*. ASU 01 will eliminate from U.S. GAAP the concept of extraordinary items and will no longer require an entity to tely classify, present, and disclose extraordinary events and transactions. ASU 2015-01 is effective for fiscal and interim periods within those fiscal years, beginning after December 15, 2015, and early adoption is

ted provided that the guidance is applied from the beginning of the fiscal year of adoption. The Company does
ieve the adoption of this guidance will have a material impact on its consolidated financial statements or
footnote disclosures.

il 2015, the FASB issued ASU 2015-03, Interest - *Imputation of Interest (Subtopic 835-30): Simplifying the
tation of Debt Issuance Costs* (ASU 2015-03). ASU 2015-03 revises Subtopic 835-30 to require that debt
ce costs be reported in the balance sheet as a direct deduction from the face amount of the related liability,
tent with the presentation of debt discounts. Prior to the amendments, debt issuance costs were presented as a
ed charge (i.e., an asset) on the balance sheet. The amendments are effective for public business entities for
years beginning after December 15, 2015, and interim periods within those fiscal years. The amendments must
lied retrospectively. All entities have the option of adopting the new requirements as of an earlier date for
ial statements that have not been previously issued. The Company does not expect believe the adoption of this
ce will have a material impact on its consolidated financial statements or related footnote disclosures.

HEAT BIOLOGICS, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

uary 2016, the FASB issued ASU 2016-01, *Recognition and Measurement of Financial Assets and Financial ties*. ASU 2016-01 requires equity investments to be measured at fair value with changes in fair value ized in net income; simplifies the impairment assessment of equity investments without readily determinable lues by requiring a qualitative assessment to identify impairment; eliminates the requirement for public ss entities to disclose the method(s) and significant assumptions used to estimate the fair value that is required disclosed for financial instruments measured at amortized cost on the balance sheet; requires public business s to use the exit price notion when measuring the fair value of financial instruments for disclosure purposes; es an entity to present separately in other comprehensive income the portion of the total change in the fair of a liability resulting from a change in the instrument-specific credit risk when the entity has elected to re the liability at fair value in accordance with the fair value option for financial instruments; requires separate tation of financial assets and financial liabilities by measurement category and form of financial assets on the e sheet or the accompanying notes to the financial statements and clarifies that an entity should evaluate the or a valuation allowance on a deferred tax asset related to available-for-sale securities in combination with the s other deferred tax assets. ASU 2016-01 is effective for financial statements issued for fiscal years beginning December 15, 2017, and interim periods within those fiscal years. The Company does not expect believe the on of this guidance will have a material impact on its consolidated financial statements or related footnote sures.

ments

ments in certain securities may be classified into three categories:

o-maturity - Debt securities that the Company has the positive intent and ability to hold to maturity are ed at amortized cost.

g securities - Debt and equity securities that are bought and held principally for the purpose of selling in the rm are reported at fair value with unrealized gains and losses included in earnings.

ble-for-sale - Debt and equity securities not classified as either securities held-to-maturity or trading securities
orted at fair value with unrealized gains or losses excluded from earnings and reported as a separate
nent of stockholders equity.

ompany reassesses the appropriateness of the classification of its investments at the end of each reporting
. The Company has determined that its debt securities should be classified as held-to-maturity as of December
15 and 2014. This classification was based upon management s determination that it has the positive intent and
to hold the securities until their maturity dates, as all of the investments mature within 6 months and the
ying cash invested in these securities is not required for current operations.

ments consist of short-term FDIC insured certificates of deposit, commercial paper rated A1/P1 or above and
ate notes and bonds rated A and above carried at amortized cost using the effective interest method.

llowing summarizes information about short term investments at December 31, 2015 and 2014, respectively
usands):

	Amortized Cost	Gross Unrealized Losses	Estimated Fair Value
cates of deposit, commercial paper	$ 6,690	$ 5	$ 6,685
cates of deposit, commercial paper	$ 10,699	$ 2	$ 10,697

December 31, 2015 and 2014, the estimated fair value of the investments was less than the amortized cost.
se management intends to hold the investments until their maturity dates, these unrealized losses were not
ed in the consolidated financial statements.

HEAT BIOLOGICS, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

aturities of held-to-maturity investments at December 31, 2015 and 2014, respectively were as follows (in nds):

	Less than 1 Year	Total
cates of deposit, commercial paper	$ 6,690	$ 6,690
cates of deposit, commercial paper	$ 10,699	$ 10,699

rty and Equipment

ty and equipment are recorded at cost and depreciated using the straight-line method over estimated useful anging generally from five to seven years. Expenditures for maintenance and repairs are charged to expense as ed.

ty and equipment consisted of the following at (in thousands):

	December 31, 2015	2014
quipment	$ 541	$ 448
uters	41	24
ure and fixtures	56	50
	638	522
nulated depreciation	(192)	(76)
ty and equipment, net	$ 446	$ 446

ciation expense totaled $0.1 million and $0.07 million for the years ended December 31, 2015 and 2014, tively.

ed Expenses

ed expenses consist of the following at (in thousands):

	December 31, 2015	December 31, 2014
ed clinical trial expenses	$ 1,193	$ 196
ensation and related benefits	561	519
ed rent	53	51
fees	40	40
	$ 1,847	$ 806

ssuance Costs

g 2014, the Company recorded $0.3 million to debt discount for the initial fair value of the warrant to purchase on stock and $0.03 million to deferred financing costs related to third party fees paid in connection to the e 1 Bank loan, which are amortized over the 42 month term of the loan.

amortization expense for the debt issuance costs was $0.1 million and $0.04 million during fiscal year 2015 014, respectively.

HEAT BIOLOGICS, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

Payable

gust 2014, the Company entered into a secured loan with Square 1 Bank (Loan). The Loan provides the any with a term loan in the aggregate principal amount not to exceed $7.5 million to be used to supplement ng capital. The Loan is available to the Company in four tranches: $1.5 million was made available to the any on August 22, 2014 (Tranche 1 Loan), $1.5 million became available to the Company upon enrollment of st patient in its the Phase 2 clinical trial for HS-110 (Tranche 2 Loan), $2.25 million was made available to the any upon the initiation of the Phase 1B trial for lung cancer indication on June 30, 2015 (Tranche 3 Loan), and million was made available to the Company upon Square 1 Bank s receipt on December 30, 2015 of the full ment of our Phase 1/2 clinical trial for HS-410 (Tranche 4 Loan). As of December 31, 2014, the Company had down $1.5 million each under the Tranche 1 Loan and Tranche 2 Loan, totaling $3.0 million. At December 15, the Company had drawn down the entire $7.5 million available under the Loan.

oan accrues interest monthly at an interest rate of 3.05% plus the prime rate or 6.30% per annum, whichever is r. The Tranche 1 Loan was payable as interest-only period until June 30, 2015 and thereafter is payable in ly installments of principal plus accrued interest until February 22, 2018. The Tranche 2 Loan is payable as t-only prior to October 31, 2015 and thereafter is payable in monthly installments of principal plus accrued t until February 22, 2018. The Tranche 3 Loan is payable as interest-only prior to October 31, 2015 and fter is payable in monthly installments of principal plus accrued interest until February 22, 2018. The Tranche n is payable in monthly installments of principal plus accrued interest until February 22, 2018. During the year December 31, 2014, the Company made $0 in principal payments and $24,150 in interest payments on the nding loan. During the year ended December 31, 2015, the Company made $0.4 million in principal payments .3 million in interest payments on the outstanding loan. The agreement with Square 1 Bank sets forth various ative and negative covenants. The failure of the Company to comply with one or more of the covenants utes a default under the Loan. The covenants include the Company having at least two ongoing clinical trials imes, the attainment of the funding conditions set forth in the agreement and covenants regarding financial ng, limits on the Company s cash burn, incurrence of indebtedness, permitted investments, encumbrances, utions, investments and mergers and acquisitions. The Loan is also secured by a security interest in all of the any s personal property, excluding its intellectual property. The Company is in compliance with the covenants Loan as of December 31, 2015.

nection with the Loan, in August 2014, the Company issued Square 1 Bank warrant, exercisable for 52,695 of the Company s common stock at an exercise price of $4.27. In accordance with ASC 480-10, *guishing Liabilities from Equity*, the freestanding warrant for the Company s common stock was recognized as ity and recorded at fair value in all periods prior to exercise. The warrant liability was re-measured to fair

prior to reclassification to additional paid in capital upon its exercise. The initial fair value of the warrant of illion was recorded as a liability and a discount to notes payable and is being amortized to interest expense he term of the Loan. The debt discount was $0.2 million and $0.3 million as of December 31, 2015 and 2014, tively. In September 2014, the warrant was exercised via a cashless exercise into 17,664 shares of the any s common stock. The fair value of the warrant is shown as a debt discount and is netted against the nding loan balance in the consolidated balance sheets.

December 31, 2015, future principal payments under the Company s notes payable agreement are as follows (in nds):

Years ending December 31,		
2016	$	3,226
2017		3,226
2018		490
Total	$	6,942

HEAT BIOLOGICS, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

e Agreements

rsity of Miami

ning in 2008, the Company has entered into various agreements with the University of Miami (the "University") ellectual and tangible property rights relating to the *ImPACT*™, technology activities ("License Agreement 03-31, and License Agreement 97-14 , or collectively License Agreements). These license agreements were quently assigned to the Company s subsidiary Heat Biologics I, Inc. which issued to the University shares of its on stock representing seven and one half percent (7.5%) of its common stock. The term of the license is the of the last to expire patent, unless terminated earlier.

ompany agreed to make minimum royalty payments of $10,000 for three years beginning in 2010 that are due anniversary date of the agreement for License Agreement 97-14. Beginning in 2013, and thereafter for the life agreement, the minimum royalty payment shall be $20,000 due on the same date. A milestone payment is due r than May 2017 of $250,000 for License Agreement 97-14.

gust 2009, Heat I and the University entered into a second amendment ("Amendment 2") to License Agreement to extend the foregoing payment due dates for all past due license fees and patent costs.

bruary 18, 2011, Heat I entered into a license agreement ("SS114A") with the University to obtain additional logy related to License Agreement 97-14. Heat I agreed to reimburse the University for all past patent costs of

1. As partial consideration for SS114A, Heat II agreed to grant back certain exclusive rights to the University.

bruary 18, 2011, Heat I entered into a license agreement (“143”) with the University to obtain additional logy related to License Agreement 97-14. In consideration for 143, Heat I agreed to pay the University a fee ,000 and reimburse them for past patent costs of $14,158.

bruary 18, 2011, Heat I entered into a license agreement (J110) with the University to obtain additional logy related to License Agreement 97-14. In consideration for J110, Heat I agreed to pay the University a fee ,000 and reimburse them for past patent costs of $1,055.

bruary 18, 2011, Heat I entered into a license agreement (“D-107”) with the University to obtain additional logy related to License Agreement 97-14. There are no financial obligations on our part under the ement.

ition, Heat entered into an agreement for Modified Heat Shock Proteins-Antigenic Peptide Complex with the rsity of Miami in September 2014 for a cancer cell line where the University agreed not to license the cell line d parties while the Company is in good standing and in compliance of its patent license agreements with the rsity relating to our *ImPACT*® platform. There is no financial obligation on the Company s part under the ement.

License Agreements

ril 12, 2011, Heat entered into a non-exclusive evaluation and biological material license agreement with a r-profit corporation for evaluation and production of vaccines. In consideration for the evaluation and ercial use license, Heat agreed to pay the not-for-profit corporation a fee of $5,000 and $50,000, respectively. as the option to renew the license once the original term has expired. Milestone payments are due upon events agreed upon by Heat and the not-for-profit corporation. In December 2015, Heat amended the

tion and biological material license agreement to add additional cell lines in exchange for a one-time payment
000.

HEAT BIOLOGICS, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

gust 30, 2010, Heat entered into an option agreement with the University of Michigan ("University II") to e the right to negotiate an exclusive license for certain materials which include cancer cells and all unmodified tives of these cells. An option fee of $2,000 was paid on September 8, 2010 to grant a period of nine months s consideration. In July 2011, the Company exercised the option to acquire the license for $10,000.

ptember 23, 2014, Heat entered into an exclusive license agreement for a multiple myeloma cell line with sor Kenneth Nilsson in Sweden. In consideration of the commercial license, Heat agreed to pay an up-front e fee of $5,000 and is obligated to pay an annual maintenance fee of $3,000 each year until the first ercial sale of a licensed product at which time the annual maintenance fee increases to $30,000. Milestone nts are due upon certain events agreed upon by Heat and Professor Kenneth Nilsson.

gust 2015, the Company entered into an exclusive license agreement with Columbia University for an etrial cancer cell line for the production, sale and use for all human healthcare applications. The term of the e is perpetual, unless terminated earlier by us or by Columbia University. Columbia University can only ate for our material breach of this agreement. The Company paid an up-front license fee of $7,500 and is ted to pay an annual maintenance fee of $5,000 each year until the first commercial sale of a licensed product ch time the annual maintenance fee increases to $50,000. The Company agreed to pay royalties equal to a nth of low single digit percentage of net sales of licensed products. In addition, the Company is obligated to milestone payments of $25,000, $40,000 and $75,000 upon completion of a Phase 1, Phase 2 and Phase 3 trial, tively, $200,000 upon the first commercial sale of a licensed product and $500,000 upon annual net sales of 000,000 or more.

minimum royalty payments as of December 31, 2015 are as follows (in thousands):

Year ended December 31,		
2016	$	38
2017		338
2018		38

2019		113
2020		288
Total	$	815

olders Equity

rized Capital

as authorized 10,000,000 shares of Preferred Stock (par value $0.0001) as of December 31, 2015 and 2014. December 31, 2015 and 2014, there were no outstanding shares of Preferred Stock.

ad 50,000,000 shares of common stock (par value $0.0002) authorized as of December 31, 2015 and 2014. Of 000,000 common stock shares, 8,424,641 and 6,492,622 were issued and outstanding as of December 31, nd 2014, respectively.

HEAT BIOLOGICS, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

red Stock

A, Series B-1, and Series B-2

atic Conversion

hare of Preferred Stock automatically converts to common stock upon the earlier to occur of (i) on the date of mmation of a sale of common stock in a firm commitment underwritten public offering resulting in aggregate sh proceeds to the Company (after deducting applicable underwriting discounts and commissions) of at least illion net proceeds; (ii) with respect to the Series A Preferred Stock, if 2/3 of the Series A Preferred Stock s (including one of the larger investors so long as they hold 40% of the Series A Preferred Stock) vote in favor onversion then the Series A will automatically convert to common stock; and (iii) with respect to the Series B red Stock if 2/3 of the Series B Preferred Stock holders vote in favor of a conversion then the Series B will atically convert to common stock. As a result of the IPO, all outstanding shares of preferred stock were atically converted to common stock.

nal Conversion

eferred stock is convertible into common stock at the option of the holder at any time. The conversion ratio for hare of the Series A Preferred Stock was its Original Issue Price ($2.10 for each share of the Series A red Stock) divided by its Conversion Price, as adjusted for stock splits, stock dividends, reorganizations, talizations and the like, which Conversion Price initially was the Original Issue Price. The conversion ratio for hare of the Series B-1 Preferred Stock and the Series B-2 Preferred Stock was its Original Issue Price ($2.67 .00 for each share of the Series B-1 Preferred Stock and Series B-2 Preferred Stock, respectively) plus accrued paid dividends thereon divided by its conversion price, as adjusted for stock splits, stock dividends, nizations, recapitalizations and the like, which conversion price initially was the Original Issue Price. As a of the 1-for-2.3 reverse stock split, the conversion ratio for the Preferred Stock was 0.4348.

event the Company at any time or from time to time after the Initial Series B Issuance Date shall issue onal shares of common stock without consideration or for consideration per share less than the Series A rsion Price, Series B-1 Conversion Price, or Series B-2 Conversion Price, in effect on the date of and

diately prior to such issue, then the Series A Conversion Price, the Series B-1 Conversion Price, Series B-2 rsion Price, shall be reduced, to a price determined by multiplying the Series A Conversion Price, the Series onversion Price, or the Series B-2 Conversion Price in effect by a fraction, (A) the numerator of which shall be mber of shares of common stock outstanding immediately prior to such issuance, on a fully-diluted basis, plus mber of shares of common stock which the aggregate consideration received by the Company for the total r of Additional Shares of Common Stock so issued would purchase at the Series A Conversion Price, the B-1 Conversion Price, or the Series B-2 Conversion Price, as in effect immediately prior to such issuance, and e denominator of which shall be the number of shares of common stock outstanding immediately prior to such ce, on a fully-diluted basis, plus the number of such Additional Shares of common stock so issued. As a result IPO, all outstanding shares of preferred stock were automatically converted to common stock.

eferred stock was determined to have characteristics more akin to equity than debt. Particularly, the preferred had no mandatory redemption provision nor was it redeemable at the option of the holder. As a result, the rsion option was determined to be clearly and closely related to the preferred stock and therefore did not need ifurcated and classified as a liability.

nds

eries B Preferred Stock has a priority with respect to dividend distributions and distributions upon liquidation. eries B Preferred Stock receive dividends when and as and if declared by the Board at a rate of 5% of their al issue price of such shares which is $6.14 per share for the Series B-1 Preferred Stock and $11.50 per share Series B-2 Preferred Stock. If the Company declares or pays a dividend upon the common stock, they must ay to the holders of the Series A and B Preferred Stock the dividends that would have been declared with t to common stock issuable upon conversion of the Series A and B Preferred Stock; provided, however that the any cannot declare or pay a dividend unless and until all accrued dividends on the Series B Preferred Stock een paid.

HEAT BIOLOGICS, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

ation

event of a liquidation, the holders of the Series B-1 and B-2 Preferred Stock are entitled to receive before any nt to any other Preferred Stockholder or common stock holder an amount per share equal to the greater of for the Series B-1 Preferred Stock and $11.50 for the Series B-2 Preferred Stock plus any dividends accrued paid whether or not declared. After payment in full of the Series B Preferred Stockholders the holders of the A Preferred Stock are entitled to receive before any payment to the common stock holder an amount per share o $4.83 plus any dividends declared but unpaid. After the payment in full of the amounts set forth above, the any s assets will be distributed ratably to all holders of common stock and Series B Preferred Stock on an as rted basis except that the Series B Preferred Stockholders shall not continue to share in such distribution after as received 3 times its Original Issue Price.

Rights

older of Preferred Stock is entitled to vote on all matters stockholders are entitled to vote and to cast the r of votes as shall equal the whole number of shares of common stock into which their shares of Preferred are convertible.

Offering

arch 10, 2015, the Company entered into an Underwriting Agreement (the Underwriting Agreement) with Capital Corp. (Aegis), as representative of the several underwriters named therein (the Underwriters), ing for the offer and sale in a firm commitment underwritten public offering (the Offering) of 1,640,000 of the Company s common stock, and 246,000 additional shares of the common stock to cover over-allotments ffering price of $6.50 per share. The net proceeds to the Company from the Offering were approximately million, after deducting underwriting discounts, commissions, and other third party offering expenses. The writing Agreement contains customary representations, warranties, and agreements by the Company, nary conditions to closing, indemnification obligations of the Company and the Underwriters, including for ies under the Securities Act of 1933, as amended (the Securities Act), other obligations of the parties and ation provisions.

cted Stock

December 31, 2015 and 2014, all restricted stock has vested. The Company recognized $78,815 and $0 in based compensation expense related to vested restricted stock during the years ended December 31, 2015 and respectively.

on Stock Warrants

ember 2011 and August 2012, the Company issued 20,549 warrants to lenders that were originally exercisable eries A Preferred stock. The warrants had an expiration period of 10 years and converted from preferred stock nts into warrants to purchase common stock at an exercise price of $4.83 per share upon the completion of the public offering in July 2013. In January and February 2014, all 20,549 warrants were exercised in cashless ctions that resulted in the issuance of 8,065 shares of common stock.

arch 10, 2011, the Company issued warrants to purchase 32,610 shares of common stock to non-employee ment agents in consideration for a private equity placement transaction. The warrants have an exercise price of per share and expire 10 years from the issuance date. These warrants do not meet the criteria required to be ied as liability awards and therefore they are treated as equity awards. In February 2014, 15,218 warrants were sed in cashless transactions that resulted in the issuance of 14,318 shares of common stock.

nection with our initial public offering, the Company issued warrants to the underwriters for 125,000 shares of on stock issuable at $12.50 per share upon exercise. The warrants have a five-year life and expire on July 23, These warrants do not meet the criteria required to be classified as liability awards and therefore they are as equity awards.

HEAT BIOLOGICS, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

nection with the Loan, in August 2014, the Company issued Square 1 Bank a warrant, exercisable for 52,695 of the Company s common stock at an exercise price of $4.27. In September 2014, the warrants were sed via a cashless exercise into 17,664 shares of the Company s common stock.

llowing table summarizes the activity of the Company s common stock warrants.

	Common Stock Warrants
nding, January 1, 2013	178,159
d to lenders	52,695
sed	(88,462)
d	
nding, December 31, 2014	142,392
nding, December 31, 2015	142,392

eighted average exercise price of the outstanding warrants as of December 31, 2015 is $11.03.

Compensation Plan

Stock Incentive Plan

9, the Company adopted the 2009 Stock Option Plan of Heat Biologics, Inc. (the 2009 Plan), under which options to acquire 217,391 common shares could be granted to key employees, directors, and independent ctors. Under the 2009 Plan, both incentive and non-qualified stock options could be granted under terms and ions established by the Board of Directors. The exercise price for incentive stock options was the fair market of the related common stock on the date the stock option was granted. Stock options granted under the 2009 enerally have terms of 10 years and have various vesting schedules.

ompany amended the 2009 Stock Option Plan and all related addendum agreements in April 2011. This
l amendment increased the number of shares available for issuance from 217,391 to 652,174. The Company
ed the 2009 Plan to increase the number of shares available for issuance to 869,565. As of December 31, 2015
014, there were 553,105 and 581,842 stock options outstanding under the 2009 Plan, respectively.

Stock Incentive Plan

e 2014, the stockholders approved the 2014 Stock Option Plan of Heat Biologics, Inc. (the 2014 Plan), under
the Company is authorized to grant 500,000 awards in the form of both incentive and non-qualified stock
s, restricted stock, stock appreciation rights and other stock based awards with terms established by the
ensation Committee of the Board of Directors which has been appointed by the Board of Directors to
ister the 2014 Plan. In 2015, the stockholders approved an amendment to the Plan to increase the number of
by 600,000 that would allow the Company to grant up to 1,100,000 awards, as amended. Persons eligible to
pate in the 2014 Plan include employees, directors, and consultants. Stock options granted under the 2014 Plan
lly have terms of 10 years and have various vesting schedules.

December 31, 2015, there were 661,581 stock options outstanding under the 2014 Plan.

December 31, 2015, there are 453,297 stock options remaining available for grant under the Plans. The
ing table summarizes the components of the Company s stock-based compensation included in net loss (in
nds):

	For the years ended December 31,	
	2015	**2014**
yee stock options	$ 924	$ 571
mployee stock options	571	495
cted stock awards	79	
	$ 1,574	$ 1,066

HEAT BIOLOGICS, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

Options

ir value of each stock option is estimated on the date of grant using the Black-Scholes-Merton option pricing with the following assumptions for stock options granted during the years ended:

	December 31,	
	2015	**2014**
end yield	0.0%	0.0%
ted volatility	72.4-107.6%	107 110%
ree interest rate	1.69-2.27%	2.06 2.23%
ted lives (years)	6.25 10	5.9 6.5

sk-free interest rate is based on U.S. Treasury interest rates at the time of the grant whose term is consistent he expected life of the stock options. The Company used an average historical stock price volatility based on lysis of reported data for a peer group of comparable companies that have issued stock options with ntially similar terms, as the Company had limited to no trading history for its common stock. Expected term ents the period that the Company s stock option grants are expected to be outstanding. The Company elected to the simplified method to estimate the expected term. Under this approach, the weighted-average expected life umed to be the average of the vesting term and the contractual term of the option.

ted dividend yield was considered to be 0% in the option pricing formula since the Company had not paid any nds and had no plans to do so in the future. The forfeiture rate was considered to be none insofar as the cal experience of the Company is very limited. As required by ASC 718, the Company will adjust the ted forfeiture rate based upon actual experience.

ompany recognized $1.6 million and $1.1 million in stock-based compensation expense for the years ended nber 31, 2015 and 2014, respectively, for the Company s stock option awards.

llowing tables summarize the stock option activity for the year ended December 31, 2015:

	Shares	Weighted Average Exercise Price
nding, December 31, 2014	1,018,590	$ 5.04
ed	393,375	$ 5.32
sed	(10,272)	$ 1.97
ed	(187,007)	$ 6.53
nding, December 31, 2015	1,214,686	$ 4.93

eighted average grant-date fair value of stock options granted during the years ended December 31, 2015 and vas $3.20 and $5.66, respectively.

tal fair value of stock options that vested during the year ended December 31, 2015 was approximately $2.9 n.

llowing table summarizes information about stock options outstanding at December 31, 2015:

Options Outstanding			Options Vested and Exercisable		
nce of 2015	Weighted Average Remaining Contractual Life (Years)	Weighted Average Exercise Price	Balance as of 12/31/2015	Weighted Average Remaining Contractual Life (Years)	Weighted Average Exercise Price
,686	7.40	$4.93	807,975	6.57	$4.44

HEAT BIOLOGICS, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

December 31, 2015, the unrecognized stock-based compensation expense related to unvested stock options pproximately $2.4 million that is expected to be recognized over a weighted average period of approximately onths.

e Tax

mponents of income tax expense (benefit) attributable to continuing operations are as follows:

	Years ended December 31,	
	2015	**2014**
t expense:		
l	$	$
ed expense (benefit):		
l	$	$
	$	$

fferences between the Company s consolidated income tax expense attributable to continuing operations and pense computed at the 34% United States statutory income tax rate were as follows (in thousands):

	Years ended December 31,	
	2015	**2014**
l income tax expense at statutory rate	$ (7,182)	$ (4,200)
se (reduction) in income tax resulting from:		
nd local income taxes, net of federal benefit	(420)	(300)
n rate differential	64	
eductible expenses		300

eriod true-up	(489)	(200)
rch & development credit	(171)	(500)
based compensation	194	100
se in valuation allowance	8,004	4,800
	$	$

x effects of temporary differences and operating loss carryforwards that give rise to significant portions of the ed tax assets and deferred tax liabilities are presented below (in thousands):

	December 31,	
	2015	**2014**
ed tax assets:		
erating loss carryforward	$ 15,758	$ 8,142
rch & development credit	982	961
based compensation	791	467
	101	34
ed tax assets	17,632	9,604
ed tax liabilities:		
ty, plant and equipment, primarily due to differences in iation	(40)	(16)
ed tax liabilities:	(40)	(16)
ion allowance	(17,592)	(9,588)
ferred income taxes	$	$

HEAT BIOLOGICS, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

cember 31, 2015 and December 31, 2014, the Company evaluated all significant available positive and ve evidence, including the existence of losses in recent years and management s forecast of future taxable e, and, as a result, determined it was more likely than not that federal and state deferred tax assets, including ts related to net operating loss carryforwards, would not be realized. The valuation allowance was increased 9.6 million at December 31, 2014 to $17.6 million at December 31, 2015. The increase in valuation nce was due primarily to the increase in net operating loss carryforwards.

cember 31, 2015, the Company has federal net operating loss carryforwards of approximately $42.1 million, are available to offset future taxable income. The federal net operating loss carryforwards begin to expire in The Company has various state net operating loss carryforwards totaling approximately $39.2 million, which ailable to offset future state taxable income. State net operating losses begin to expire in 2029. The Company rious foreign net operating loss carryforwards of approximately $1.4 million. The foreign net operating loss orwards are carried forward indefinitely. Because the Company has incurred cumulative net operating losses nception, all tax years remain open to examination by U.S. federal, state, and foreign income tax authorities.

ordance with FASB ASC 740, *Accounting for Income Taxes*, the Company reflects in the consolidated ial statements the benefit of positions taken in a previously filed tax return or expected to be taken in a future urn only when it is considered more-likely-than-not that the position taken will be sustained by a taxing ity. As of December 31, 2015 and 2014, the Company had no unrecognized income tax benefits and pondingly there is no impact on the Company s effective income tax rate associated with these items. The any s policy for recording interest and penalties relating to uncertain income tax positions is to record them as a nent of income tax expense in the accompanying statements of operations. As of December 31, 2015 and the Company had no such accruals.

ompany files income tax returns in the United States and various state and foreign jurisdictions. The Company ect to examination by taxing authorities for the tax years ended December 31, 2008 through 2014.

d Party Transactions

nber of the Company s management was paid $0 and $28,000 in consulting fees for the years ended December 15 and 2014, respectively.

ompany compensates its board members. Board members received between $40,000 and $43,750 and between
00 and $37,000 for services rendered during 2015 and 2014, respectively.

ompany had a related party payable balance of $0 and $26,750 as of December 31, 2015 and 2014,
tively.

ompany had a related party receivable balance of $58,017 and $48,642 as of December 31, 2015 and 2014,
tively.

oss Per Share

net loss per common share is computed by dividing net loss applicable to common stockholders by the
ted-average number of common shares outstanding during the periods. Fully diluted net loss per common
s computed using the weighted average number of common and dilutive common equivalent shares
nding during the periods. Common equivalent shares consist of stock options and warrants that are computed
the treasury stock method.

e years ended December 31, 2015 and 2014, all of the Company s common stock options and warrants are
lutive and therefore have been excluded from the diluted calculation.

HEAT BIOLOGICS, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

llowing table reconciles net loss to net loss applicable to Heat Biologics, Inc. (in thousands, except share and are data):

	For the years ended December 31,	
	2015	**2014**
ss	$ (21,122)	$ (12,243)
ss: Non-controlling interest	(827)	(454)
ss applicable to Heat Biologics, Inc.	$ (20,295)	$ (11,789)
ted-average number of common shares used in net loss per applicable to Heat Biologics, Inc basic and diluted	8,015,687	6,454,866
ss per share applicable to Heat Biologics, Inc basic and diluted	$ (2.53)	$ (1.83)

llowing potentially dilutive securities were excluded from the calculation of diluted net loss per share due to nti-dilutive effect:

	For the years ended December 31,	
	2015	**2014**
nding stock options	1,214,686	1,018,590
on stock warrants	142,392	142,392

itments and Contingencies

uary 24, 2014 the Company entered into a five-year lease for 5,303 square feet of office and laboratory space nthly rent of $10,341 exclusive of payments required for maintenance of common areas and utilities. On mber 30, 2014 the lease was amended to expand the premises by an additional 676 square feet for a total of square feet at a monthly rent of $11,638. The Company believes that such facilities are adequate for our t operations, and that there are spaces available sufficient for any future expansion requirements should the rise. Rent expense was $0.2 million and $0.1 million, for the years ended December 31, 2015 and 2014,

tively. The Company s approximate future minimum payments for its operating lease obligations that have remaining non-cancelable terms in excess of one year are as follows (in thousands):

Years ending December 31,		
2016	$	231
2017		238
2018		245
2019		193
Thereafter		
Total	$	907

Shares of Common Stock

PROSPECTUS

le Book-Running Manager
Roth Capital Partners

Lead Manager
Aegis Capital Corp

, 2016

PART II - INFORMATION NOT REQUIRED IN PROSPECTUS

13. OTHER EXPENSES OF ISSUANCE AND DISTRIBUTION

timate that expenses in connection with the distribution described in this registration statement (other than age commissions, discounts or other expenses relating to the sale of the shares of common stock being red in this registration statement) will be as set forth below. We will pay all of the expenses with respect to the ution, and such amounts, with the exception of the SEC registration fee and the Financial Industry Regulatory rity, Inc. (FINRA) filing fee, are estimates.

egistration fee	$ 1,448
A filing fee	2,657
nting fees and expenses	50,000
fees and expenses	175,000
writer out-of-pocket expenses	60,000
laneous	35,895
	$ 325,000

14. INDEMNIFICATION OF DIRECTORS AND OFFICERS

n 145 of the Delaware General Corporation Law authorizes a court to award, or a corporation s board of ors to grant, indemnity to directors and officers in terms sufficiently broad to permit such indemnification certain circumstances for liabilities, including reimbursement for expenses incurred, arising under the ties Act of 1933, as amended (the Securities Act).

mended and restated certificate of incorporation provides for indemnification of our directors and executive s to the maximum extent permitted by the Delaware General Corporation Law, and our amended and restated s provide for indemnification of our directors and executive officers to the maximum extent permitted by the are General Corporation Law.

underwriting agreement we enter into in connection with the sale of common stock being registered hereby, derwriters will agree to indemnify, under certain conditions, us, our directors, our officers and persons who l us, within the meaning of the Securities Act, against certain liabilities.

15. RECENT SALES OF UNREGISTERED SECURITIES

llowing information sets forth certain information with respect to all securities which we have sold during the ree years.

il and May 2013, we issued options exercisable for an aggregate of 72,496 shares of common stock at an se price of $8.81 to 8 individuals for services rendered. These issuances were deemed to be exempt from ation under the Securities Act in reliance upon Section 4(a)(2) of the Securities Act of 1933, as amended (the rities Act) (or Regulation D promulgated thereunder), or Rule 701 promulgated under Section 3(b) of the ties Act as transactions by an issuer not involving any public offering or pursuant to benefit plans and cts relating to compensation as provided under Rule 701.

he closing of the IPO in July 2013, all shares of our then-outstanding preferred stock automatically converted aggregate of 1,696,683 shares of common stock. The issuance qualified for exemption under Section 3(a)(9) Securities Act.

so issued in July 2013, in connection with the IPO, an additional 36,167 shares of our common stock to the B Preferred Stockholders and our obligation to issue and their obligation to purchase, Series B-2 Preferred under the Stock Purchase Agreement we entered into with them was terminated. These issuances were d to be exempt from registration under the Securities Act in reliance upon Section 4(a)(2) of the Securities Act gulation D promulgated thereunder).

about August 25, 2014, the Company issued to Square 1 Bank a Warrant exercisable for 52,695 shares of its on stock. The Warrant is exercisable for a period of ten years at an exercise price of $4.27. The Warrant was d and sold in reliance on the exemption from registration afforded by Section 4(a)(2) under the Securities Act rresponding provisions of state securities laws, which exempt transactions by an issuer not involving any offering with an accredited investor as such term is defined in Regulation D promulgated under the Securities

arch 3, 2015, we issued 10,000 shares of our common stock to an investor relations firm as partial eration for services rendered pursuant to the terms of an agreement that we entered into with such firm. These were issued upon the exemption from the registration provisions of the Securities Act provided for by n 4(a)(2) thereof for transactions not involving a public offering.

ril 30, 2015, we issued 10,000 shares of our common stock to an investor relations firm, as partial eration for services rendered pursuant to the terms of an agreement that we entered into with such firm. These were issued upon the exemption from the registration provisions of the Securities Act provided for by n 4(a)(2) thereof for transactions not involving a public offering.

gust 30, 2015, we issued 10,000 shares of our common stock to an investor relations firm, as partial eration for services rendered pursuant to the terms of an agreement that we entered into with such firm. These were issued upon the exemption from the registration provisions of the Securities Act provided for by n 4(a)(2) thereof for transactions not involving a public offering.

16. EXHIBITS

it

Description
Form of Underwriting Agreement (1)
Form of Underwriting Agreement with Roth
Certificate of Incorporation filed on June 10, 2008(4)
Amended and Restated Bylaws, as currently in effect(4)
Amended and Restated Certificate of Incorporation filed on October 16, 2009(4)
Second Amended and Restated Certificate of Incorporation filed on December 16, 2011(4)
Third Amended and Restated Certificate of Incorporation, as currently in effect(4)
Certificate of Amendment to the Third Amended and Restated Certificate of Incorporation filed on May 29, 2013(1)
2009 Stock Incentive Plan(4)##
First Amendment of the 2009 Stock Incentive Plan(4)##
Second Amendment of the 2009 Stock Incentive Plan(4)##
Third Amendment of the 2009 Stock Incentive Plan(4)##
Fourth Amendment of the 2009 Stock Incentive Plan(4)##
Warrant issued to Square 1 Bank(4)
Warrant issued to North Carolina Biotechnology Center(1)
Specimen Common Stock Certificate of Heat Biologics, Inc.(4)
Form of Stock Purchase Agreement by and among Heat Biologics, Inc. and the Series B investors (Portions of the exhibit have been omitted pursuant to a request for confidential treatment. The omitted portions have been filed with the Commission)(4)##
Form of Representative s Warrant (1)
Amendment to Stock Warrant with North Carolina Biotechnology Center(1)
2014 Stock Incentive Plan (5)##
Warrant issued to Square 1 Bank(6)
First Amendment to Loan and Security Agreement with Square 1 Bank dated June 22, 2015(16)
Opinion of Counsel, Gracin & Marlow, LLP

License Agreement (UMJ110) between the University of Miami and Heat Biologics, Inc. effective February 18, 2011 (4)**
License Agreement (97-14) between the University of Miami and its School of Medicine and Heat Biologics, Inc. effective July 11, 2008(4)**
License Agreement (143) between the University of Miami and its School of Medicine and Heat Biologics I, Inc. effective February 11, 2011(4)**
License Agreement (D-107) between the University of Miami and its School of Medicine and Heat Biologics I, Inc. effective February 18, 2011(4)**
License Agreement (SS114A) between the University of Miami and its School of Medicine and Heat Biologics I, Inc. effective February 18, 2011 (4)**
Promissory Note with North Carolina Biotechnology Center dated December 14, 2011(4)
Loan Agreement with North Carolina Biotechnology Center dated December 14, 2011(4)
Common Stock Subscription Agreement between the University of Miami and Heat Biologics I, Inc. dated July 7, 2009(4)
Employment Agreement with Jeffrey Wolf dated December 18, 2009(4)##
Amendment to Employment Agreement with Jeffrey Wolf dated as of January 1, 2011(4)##
Lease with Europa Center dated as of November 18, 2011(4)
Non-Exclusive Evaluation and Biological Material License Agreement with American Type Culture Collection effective April 12, 2011(4) **
Manufacturing Services Agreement with Lonza Walkersville, Inc. dated as of October 20, 2011(1)
Assignment and Assumption Agreement dated June 26, 2009(4)
Termination Agreement UM97-114 dated June 26, 2009(4)

Loan and Security Agreement with Square 1 Bank dated August 7, 2012(2)
Employment Agreement with Jennifer Harris dated November 3, 2011 and amendment thereto dated May 1, 2013(1)##
Amendment to License Agreement (UM97-14) dated April 29, 2009(4)
First Amendment to Loan and Security Agreement with Square 1 Bank dated November 30, 2012(4)
Second Amendment to License Agreement (UMSS-114) dated August 11, 2009(4)
Exclusive License between Heat Biologics, Inc. and the University of Michigan dated July 22, 2011(4)
1st Lease Modification Agreement dated December 19, 2012(3)
Form of Co Sale and First Refusal Agreement by and among Heat Biologics, Inc. and the Series B investors(4)
Form of Voting Agreement by and among Heat Biologics, Inc. and the Series B investors(4)
Form of Investor s Rights Agreement by and among Heat Biologics, Inc. and the Series B investors(4)
Second Amendment to Loan and Security Agreement with Square 1 Bank dated January 14, 2013(4)
Third Amendment to Loan and Security Agreement with Square 1 Bank dated February 28, 2013(4)
Fourth Amendment to Loan and Security Agreement with Square 1 Bank dated March 19, 2013(4)
Option Contract for Exclusive License between Heat Biologics, Inc. and the University of Miami dated April 1, 2013(4)
Fifth Amendment to the Loan and Security Agreement with Square 1 Bank dated April 18, 2013(4)
Employment Agreement with Matthew Czajkowski dated May 15, 2013(1)##
Form of Lock-up Agreement(1)
Form of Agreement with Series B Preferred Stockholders to amend Stock Purchase Agreement(1)
Employment Agreement, dated as of October 1, 2013, by and between Melissa Price and the Company(7)##
Employment Agreement, dated as of December 16, 2013, by and between Anil K. Goyal and the Company(8)##
Amendment to Employment Agreement, dated as of January 20, 2014 between the Company and Jeffrey Wolf(9)##
Amendment to Employment Agreement, dated as of January 20, 2014 between the Company and Melissa Price(9)##
Amendment to Employment Agreement, dated as of January 20, 2014 between the Company and Matthew Czajkowski(9)##
Employment Agreement, dated as of March 3, 2014 between the Company and Taylor Schreiber (11)##
Lease Agreement dated January 24, 2014(21)
License Agreement (UMK-161) between the University of Miami and its School of Medicine and Heat Biologics I, Inc. effective March 4, 2014(10) **
Amendment to Employment Agreement dated May 7, 2014, between the Company and Matthew Czajkowski(12)##
Loan and Security Agreement dated August 22, 2014 by and between Square 1 Bank, the Company and Heat Biologics I, Inc., Heat Biologics III, Inc. and Heat Biologics IV, Inc.(13)
Amendment to Employment Agreement dated January 12, 2015 between the Company and Melissa Price(14)##
Amendment to Employment Agreement dated January 12, 2015 between the Company and Anil Goyal(14)##

	Amendment to Employment Agreement dated January 12, 2015 between the Company and Taylor Schreiber(14)##
	Severance Agreement, dated as of March 9, 2015 with Matthew Czajkowski (15)
	First Amendment to Lease dated January 24, 2014(21)
	Second Amendment to Lease dated January 24, 2014(21)
	Amendment to Employment Agreement between the Company and Taylor Schreiber, M.D., Ph.D., dated July 23, 2015(17)
	Amendment to Employment Agreement between the Company and Melissa Price, Ph.D., dated July 23, 2015(17)
	Amended and Restated Heat Biologics, Inc. 2014 Stock Incentive Plan(18)
	Form of Incentive Stock Option Agreement under the 2014 Stock Incentive Plan, as amended(17)
	Form of Non-Statutory Stock Option Agreement under the 2014 Stock Incentive Plan, as amended(17)
	Employment Agreement, dated as of November 30, 2015 between the Company and Timothy Creech(19)
	Amendment to Employment Agreement between the Company and Jeffrey Wolf, dated January 11, 2016(20)
	Amendment to Employment Agreement between the Company and Melissa Price, dated January 11, 2016(20)
	Amendment to Employment Agreement between the Company and Taylor Schreiber, dated January 11, 2016(20)
	Amendment to Employment Agreement between the Company and Anil Goyal dated January 11, 2016(20)
	Amendment to Employment Agreement between the Company and Timothy Creech dated January 11, 2016(20)
	List of Subsidiaries(22)
	Consent of Independent Registered Public Accounting Firm (BDO USA, LLP)*
	Consent of Gracin & Marlow, LLP (included in its opinion filed as Exhibit 5.1)
	Power of Attorney (included on the signature page of the original filing of this Registration Statement)
IS	XBRL Instance Document *
CH	XBRL Taxonomy Extension Schema Document *
AL	XBRL Taxonomy Extension Calculation Linkbase Document *
EF	XBRL Taxonomy Extension Definition Linkbase Document *
AB	XBRL Taxonomy Extension Label Linkbase Document *
RE	XBRL Taxonomy Extension Presentation Linkbase Document *

usly filed as an exhibit to the Registration Statement on Form S-1 with the Securities and Exchange
ission on May 30, 2013 (File No. 333-188365).

usly filed as an exhibit to the Registration Statement on Form S-3 filed with the Securities and Exchange
ission on October 10, 2014 (File No. 333-199274)

usly filed as an exhibit to the Current Report on Form 8-K filed with the Securities and Exchange Commission
rch 13, 2014 (File No. 001-35994).

usly filed as an exhibit to the Registration Statement on Form S-1 with the Securities and Exchange
ission on May 6, 2013 (File No. 333-188365).

usly filed as an exhibit to the Registration Statement on Form S-8 with the Securities and Exchange
ission on June 13, 2014 (File No. 333-196763)

usly filed as an exhibit to the Current Report on Form 8-K with the Securities and Exchange Commission on
t 15, 2014 (File No. 001-35994).

usly filed as an exhibit to the Registration Statement on Form 8-K with the Securities and Exchange
ission on October 1, 2013 (File No. 001-35994).

usly filed as an exhibit to the Current Report on Form 8-K with the Securities and Exchange Commission on
ber 19, 2013 (File No. 001-35994).

usly filed as an exhibit to the Current Report on Form 8-K with the Securities and Exchange Commission on
y 21, 2014(File No. 001-35994).

usly filed as an exhibit to the Annual Report on Form 10-K with the Securities and Exchange Commission on
31, 2014(File No. 001-35994).

usly filed as an exhibit to the Current Report on Form 8-K with the Securities and Exchange Commission on
5, 2014(File No. 001-35994).

usly filed as an exhibit to the Current Report on Form 8-K with the Securities and Exchange Commission on
, 2014 File No. 001-35994).

usly filed as an exhibit to the Current Report on Form 8-K with the Securities and Exchange Commission on
t 25, 2014 File No. 001-35994).

usly filed as an exhibit to the Current Report on Form 8-K with the Securities and Exchange Commission on
y 16, 2015 (File No. 001-35994).

usly filed as an exhibit to the Current Report on Form 8-K with the Securities and Exchange Commission on
10, 2015 (File No. 001-35994).

usly filed as an exhibit to the Current Report on Form 8-K with the Securities and Exchange Commission on
4, 2015 (File No. 001-35994).

usly filed as an exhibit to the Current Report on Form 8-K with the Securities and Exchange Commission on
7, 2015 (File No. 001-35994).

usly filed as Appendix A to the Definitive Proxy Statement on Schedule 14A filed with the Securities and
nge Commission on June 22, 2015 (File No. 001-35994).

usly filed as an exhibit to the Current Report on Form 8-K with the Securities and Exchange Commission on
ber 1, 2015 (File No. 001-35994).

usly filed as an exhibit to the Current Report on Form 8-K with the Securities and Exchange Commission on
y 15, 2016 (File No. 001-35994).

usly filed as an exhibit to the Annual Report on Form 10-K with the Securities and Exchange Commission on
27, 2015 (File No. 001-35994).

usly filed as an exhibit to the Annual Report on Form 10-K with the Securities and Exchange Commission on
ry 18, 2016 (File No. 001-35994).

erewith.

filed by amendment.

gement contract or compensatory plan or arrangement required to be identified pursuant to Item 15(a)(3) of
port.

dential treatment has been requested as to certain portions of this exhibit pursuant to Rule 24b-2 of the
ties Exchange Act of 1934, as amended.

17. UNDERTAKINGS

e undersigned registrant hereby undertakes:

file, during any period in which offers or sales are being made, a post-effective amendment to this registration ent:

include any prospectus required by Section 10(a)(3) of the Securities Act of 1933;

reflect in the prospectus any facts or events arising after the effective date of the registration statement (or the ecent post-effective amendment thereof) which, individually or in the aggregate, represent a fundamental e in the information set forth in the registration statement. Notwithstanding the foregoing, any increase or se in volume of securities offered (if the total dollar value of securities offered would not exceed that which gistered) and any deviation from the low or high end of the estimated maximum offering range may be ed in the form of prospectus filed with the Commission pursuant to Rule 424(b) if, in the aggregate, the es in volume and price represent no more than 20 percent change in the maximum aggregate offering price set n the Calculation of Registration Fee table in the effective registration statement.

o include any material information with respect to the plan of distribution not previously disclosed in the ation statement or any material change to such information in the registration statement;

at, for the purpose of determining any liability under the Securities Act of 1933, each such post-effective ment shall be deemed to be a new registration statement relating to the securities offered therein, and the g of such securities at that time shall be deemed to be the initial *bona fide* offering thereof.

remove from registration by means of a post-effective amendment any of the securities being registered which unsold at the termination of the offering.

at, for the purpose of determining liability under the Securities Act of 1933 to any purchaser in the initial ution of the securities:

ndersigned registrant undertakes that in a primary offering of securities of the undersigned registrant pursuant registration statement, regardless of the underwriting method used to sell the securities to the purchaser, if the ies are offered or sold to such purchaser by means of any of the following communications, the undersigned ant will be a seller to the purchaser and will be considered to offer or sell such securities to such purchaser:

y preliminary prospectus or prospectus of the undersigned registrant relating to the offering required to be filed nt to Rule 424 (§230.424 of this chapter);

y free writing prospectus relating to the offering prepared by or on behalf of the undersigned registrant or used rred to by the undersigned registrant;

e portion of any other free writing prospectus relating to the offering containing material information about dersigned registrant or its securities provided by or on behalf of the undersigned registrant; and

ny other communication that is an offer in the offering made by the undersigned registrant to the purchaser.

e undersigned registrant hereby undertakes to provide to the underwriter at the closing specified in the vriting agreements certificates in such denominations and registered in such names as required by the vriter to permit prompt delivery to each purchaser.

ofar as indemnification for liabilities arising under the Securities Act may be permitted to directors, officers ntrolling persons of the Company pursuant to the foregoing provisions, or otherwise, the Company has been d that in the opinion of the Securities and Exchange Commission such indemnification is against public policy ressed in the Securities Act and is, therefore, unenforceable. In the event that a claim for indemnification t such liabilities (other than the payment by the Company of expenses incurred or paid by a director, officer or lling person of the Company in the successful defense of any action, suit or proceeding) is asserted by such r, officer or controlling person in connection with the securities being registered, the Company will, unless in nion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate ction the question whether such indemnification by it is against public policy as expressed in the Securities d will be governed by the final adjudication of such issue.

e undersigned registrant hereby undertakes that:

r purposes of determining any liability under the Securities Act of 1933, the information omitted from the form spectus filed as part of this registration statement in reliance upon Rule 430A and contained in a form of ctus filed by the registrant pursuant to Rule 424(b)(1) or (4) or 497(h) under the Securities Act shall be d to be part of this registration statement as of the time it was declared effective.

r the purpose of determining any liability under the Securities Act of 1933, each post-effective amendment that ns a form of prospectus shall be deemed to be a new registration statement relating to the securities offered , and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.

SIGNATURES

nt to the requirements of the Securities Act of 1933, the Registrant has duly caused this Amendment No. 1 to ration Statement on Form S-1 to be signed on its behalf by the undersigned, thereunto duly authorized, in the f Durham, State of North Carolina, February 18, 2016.

HEAT BIOLOGICS, INC.

By: */s/ Jeffrey Wolf*
Name: Jeffrey Wolf
Title: Chairman and Chief Executive Officer

nt to the requirements of the Securities Act 1933, this report has been signed by the following persons on of the Registrant and in the capacities and on the dates indicated.

Signature	Title	Date
rey Wolf	Chief Executive Officer,	February 18, 2016
Wolf	President and Chairman (Principal Executive Officer)	
nothy Creech	Chief Financial Officer	February 18, 2016
y Creech	(Principal Financial and Accounting Officer)	
	Director	February 18, 2016
Monahan, Ph.D.		
	Director	February 18, 2016
el Kharitonov, Ph.D.		
	Director	February 18, 2016
C. Bock		
	Director	

		February 18, 2016
elsky, MD		
	Director	February 18, 2016
d B. Smith		

s/ Jeffrey Wolf
effrey Wolf
Attorney-in-Fact