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 Pursuant to Section 240.14a-12



HEAT BIOLOGICS, INC.

(Name of Registrant as Specified in Its Charter)

(Name of Person(s) Filing Proxy Statement, if Other Than the Registrant)

Payment of Filing Fee (check the appropriate box):

☑ No fee required.

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

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

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

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

(4) Proposed maximum aggregate value of transaction:

(5) Total fee paid:

☐ Fee paid previously with preliminary materials.

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

(1) Amount Previously Paid:

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

(3) Filing Party:

(4) Date Filed:



801 Capitola Drive, Suite 12
Durham, North Carolina 27713

June , 2019

NOTICE OF ANNUAL MEETING OF STOCKHOLDERS

To the Stockholders of Heat Biologics, Inc.:

We hereby notify you that the 2019 Annual Meeting of Stockholders (the "2019 Annual Meeting" or "Annual Meeting") of Heat Biologics, Inc., a Delaware corporation, will be held on July 23, 2019 beginning at 10:00 a.m., local time, at the Company's offices, 801 Capitola Drive, Suite 12, Durham, North Carolina 27713, for the following purposes:

(1) to elect the four (4) nominees for director named herein to our Board of Directors (the "Board" or "Board of Directors") to hold office until our next annual meeting of stockholders and until their successors are duly elected and qualified;
(2) to ratify the appointment of BDO USA, LLP as our independent registered public accounting firm for our fiscal year ending on December 31, 2019;
(3) to approve an amendment to our 2018 Stock Incentive Plan to increase the number of shares of common stock that we will have authority to grant under the plan by an additional 4,000,000 shares of common stock;
(4) to approve (in the event it is deemed advisable by our Board of Directors) an amendment to our third amended and restated certificate of incorporation, as amended (the "Restated Certificate of Incorporation"), to effect a reverse stock split of our issued and outstanding shares of common stock, $0.0002 par value per share, at a ratio to be determined in the discretion of the Board of Directors within a range of one (1) share of common stock for every two (2) to ten (10) shares of common stock (the "Reverse Stock Split");
(5) to approve (in the event it is deemed advisable by our Board of Directors) an amendment to the Restated Certificate of Incorporation, to increase the number of authorized shares of common stock from 100,000,000 to 250,000,000 (the "Increase");
(6) to approve to adjourn the 2019 Annual Meeting, if the Board of Directors determines it to be necessary or appropriate, if a quorum is present, to solicit additional proxies if there are not sufficient votes in favor of the Proposal 4–the Reverse Stock Split or Proposal 5–the Increase (the "Adjournment");
(7) to approve, on an advisory basis, the compensation of our named executive officers, as disclosed in this proxy statement;
(8) to recommend, on an advisory basis, a three year frequency for holding an advisory vote on executive compensation; and
(9) to transact such other business as may properly come before the meeting or any adjournments or postponements of the meeting.

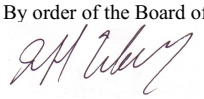
The matters listed in this notice of meeting are described in detail in the accompanying proxy statement. Our Board of Directors has fixed the close of business on May 28, 2019 as the record date for determining those stockholders who are entitled to notice of and to vote at the meeting or any adjournment or postponement of our 2019 Annual Meeting. The list of the stockholders of record as of the close of business on May 28, 2019 will be made available for inspection at the meeting.

IMPORTANT NOTICE REGARDING THE AVAILABILITY OF PROXY MATERIALS FOR THE ANNUAL MEETING OF STOCKHOLDERS TO BE HELD ON JULY 23, 2019

On or about June , 2019, we will begin mailing this proxy statement and our Annual Report on Form 10-K for the year ended December 31, 2018.

YOUR VOTE IS IMPORTANT. WHETHER OR NOT YOU PLAN TO ATTEND THE MEETING IN PERSON, PLEASE VOTE AS PROMPTLY AS POSSIBLE BY USING THE INTERNET OR THE DESIGNATED TOLL-FREE TELEPHONE NUMBER, OR BY REQUESTING A PRINTED COPY OF THE PROXY MATERIALS AND SIGNING, DATING AND RETURNING BY MAIL THE PROXY CARD YOU WILL RECEIVE IN RESPONSE TO YOUR REQUEST.

By order of the Board of Directors,



Jeffrey Wolf
Chairman, Chief Executive Officer and President



801 Capitola Drive, Suite 12
Durham, North Carolina 27713

PROXY STATEMENT

For the Annual Meeting of Stockholders to be held on July 23, 2019

GENERAL INFORMATION

We are providing these proxy materials to holders of shares of common stock, $0.0002 par value per share, of Heat Biologics, Inc., a Delaware corporation (referred to as "Heat," the "Company," "we," or "us"), in connection with the solicitation by the Board of Directors of Heat (the "Board" or "Board of Directors") of proxies to be voted at our 2019 Annual Meeting of Stockholders (the "2019 Annual Meeting" or "Annual Meeting") to be held on July 23, 2019, beginning at 10:00 a.m., local time at Heat's offices located at 801 Capitola Drive, Suite 12, Durham, North Carolina 27713, and at any adjournment or postponement of our 2019 Annual Meeting.

The purpose of the 2019 Annual Meeting and the matters to be acted on are stated in the accompanying Notice of Annual Meeting. The Board of Directors knows of no other business that will come before the 2019 Annual Meeting.

The Board of Directors is soliciting votes (1)**FOR** each of the four (4) nominees named herein for election to the Board of Directors; (2)**FOR** the ratification of the appointment of BDO USA, LLP ("BDO") as our independent registered public accounting firm for our fiscal year ending on December 31, 2019; (3) **FOR** the approval of an amendment to our 2018 Stock Incentive Plan to increase the number of shares of common stock that we will have authority to grant under the plan by an additional 4,000,000 shares of common stock; (4) **FOR** the approval (in the event it is deemed advisable by the Board of Directors) of an amendment to our third amended and restated certificate of incorporation, as amended (the "Restated Certificate of Incorporation"), to effect a reverse stock split of our issued and outstanding shares of common stock, at a ratio to be determined in the discretion of the Board of Directors within a range of one (1) share of common stock for every two (2) to ten (10) shares of common stock (the "Reverse Stock Split"); (5) **FOR** the approval (in the event it is deemed advisable by the Board of Directors) of an amendment to the Restated Certificate of Incorporation to increase the number of authorized shares of common stock from 100,000,000 to 250,000,000 (the "Increase"); (6) **FOR** approval to adjourn the 2019 Annual Meeting, if the Board determines it to be necessary or appropriate, if a quorum is present, to solicit additional proxies if there are not sufficient votes in favor of the Reverse Stock Split or the Increase (the "Adjournment"); (7) **FOR** the approval, on an advisory basis, of the compensation of our named executive officers, as disclosed in this proxy statement; and (8) **FOR** the recommendation, on an advisory basis, of a three year frequency for holding an advisory vote on executive compensation.

ANNUAL MEETING ADMISSION

All stockholders as of the record date are welcome to attend the 2019 Annual Meeting. If you attend, please note that you will be asked to present government-issued identification (such as a driver's license or passport) and evidence of your share ownership of our common stock on the record date. This can be your proxy card if you are a stockholder of record. If your shares are held beneficially in the name of a bank, broker or other holder of record and you plan to attend the 2019 Annual Meeting, you will be required to present proof of your ownership of our common stock on the record date, such as a bank or brokerage account statement or voting instruction card, to be admitted to the 2019 Annual Meeting.

No cameras, recording equipment or electronic devices will be permitted in the 2019 Annual Meeting.

Information on how to obtain directions to attend the 2019 Annual Meeting is available at:*www.heatbio.com*.

HOW TO VOTE

Stockholders of Record

If your shares are registered directly in your name with Heat's transfer agent, Continental Stock Transfer & Trust Company, you are considered the "stockholder of record" of those shares and the proxy statement is being sent directly to you by Heat. If you are a stockholder of record, you can vote your shares in one of two ways: either by proxy or in person at the 2019 Annual Meeting. If you choose to vote by proxy, you may do so by using the internet (please visit *www.proxyvote.com* and follow the instructions) by telephone, or by completing and returning by mail the proxy card you have received. Whichever method you use, each valid proxy received in time will be voted at the 2019 Annual Meeting in accordance with your instructions.

Beneficial Owners of Shares Held in Street Name

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, and the proxy statement is being forwarded to you by your broker, bank or nominee, who is considered the stockholder of record of those shares. As a beneficial owner, you have the right to direct your broker, bank or nominee on how to vote the shares held in your account. However, since you are not a stockholder of record, you may not vote these shares in person at the 2019 Annual Meeting unless you bring with you a legal proxy from the stockholder of record. A legal proxy may be obtained from your broker, bank or nominee. If you do not wish to vote in person or you will not be attending the 2019 Annual Meeting, you may vote using the Internet, by telephone or by mail. Please visit *www.proxyvote.com,* or call 1-800-454-8683 and follow the instructions, or if you request printed proxy materials, you will receive voting instructions from your broker, bank or nominee describing the available processes for voting your stock.

Vote by Mail

If you choose to vote by mail, simply mark, date and sign your proxy card and return it in the postage-paid envelope provided.

Vote by Internet or Telephone

If you choose to vote by internet, go to *www.proxyvote.com* to complete an electronic proxy card. Have your proxy card or voting instruction card in hand when you access the website and follow the instructions to obtain your records and to create an electronic voting instruction form. If you vote by telephone call 1-800-454-8683 and follow the instructions. Your internet or telephonic vote must be received by 11:59 p.m. Eastern Daylight Time on July 22, 2019 to be counted.

Voting at the Annual Meeting

Voting by mail or internet will not limit your right to vote at the 2019 Annual Meeting if you decide to attend in person.

ADDITIONAL INFORMATION ABOUT VOTING

Q: ***What information is contained in the proxy statement?***

A: The information included in this proxy statement relates to the proposals to be voted on at the 2019 Annual Meeting, the voting process, the compensation of our directors and executive officers, and other required information.

Q: ***How do I get electronic access to the proxy materials?***

A: This proxy statement and our Annual Report on Form 10-K for the year ended December 31, 2018 are available at *www.heatbio.com*.

Q: ***What items of business will be voted on at the 2019 Annual Meeting?***

A: The eight (8) items of business scheduled to be voted on at the 2019 Annual Meeting are: (1) the election of the four (4) nominees named herein as directors; (2) the ratification of the appointment of BDO as our independent registered public accounting firm for our fiscal year ending on December 31, 2019; (3) the approval of an amendment to our 2018 Stock Incentive Plan to increase the number of shares of common stock that we will have authority to grant under the plan by 4,000,000; (4) the approval of the Reverse Stock Split at a ratio to be determined in the discretion of the Board of Directors (in the event the Reverse Stock Split is deemed advisable by the Board of Directors) within a range of one (1) share of common stock for every two (2) to ten (10) shares of common stock; (5) the approval of the Increase of the number of authorized shares of common stock from 100,000,000 to 250,000,000 (in the event the Increase is deemed advisable by the Board of Directors); (6) the approval of the Adjournment of the 2019 Annual Meeting, if the Board of Directors determines it to be necessary or appropriate, to solicit additional proxies if there are insufficient votes in favor of the Reverse Stock Split or the Increase; (7) the approval, on an advisory basis, of the compensation of our named executive officers, as disclosed in this proxy statement; and (8) the approval, on an advisory basis, of a three year frequency for holding an advisory vote on executive compensation. We will also consider any other business that properly comes before the 2019 Annual Meeting.

Q: ***How does the Board of Directors recommend that I vote?***

A: The Board of Directors recommends that you vote your shares (1)**FOR** each of the nominees named herein for election to the Board of Directors; (2)**FOR** the ratification of the appointment of BDO as our independent registered public accounting firm for our fiscal year ending on December 31, 2019; (3) **FOR** the approval of an amendment to our 2018 Stock Incentive Plan to increase the number of shares of common stock that we will have authority to grant under the plan by 4,000,000; (4) **FOR** the Reverse Stock Split; (5) **FOR** the Increase; (6) **FOR** the Adjournment of the 2019 Annual Meeting, if the Board determines it to be necessary or appropriate, to solicit additional proxies if there are insufficient votes in favor of the Reverse Stock Split or Increase; (7) **FOR** the approval, on an advisory basis, the compensation of our named executive officers, as disclosed in this proxy statement; and (8) **FOR** the recommendation, on an advisory basis, a three year frequency for holding an advisory vote on executive compensation.

Q: ***What shares can I vote?***

A: You may vote or cause to be voted all shares owned by you as of the close of business on May 28, 2019, the record date. These shares include: (1) shares held directly in your name as a stockholder of record; and (2) shares held for you, as the beneficial owner, through a broker or other nominee, such as a bank.

Q: ***What is the difference between holding shares as a stockholder of record and as a beneficial owner?***

A: Most of our stockholders hold their shares through a broker 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 beneficially.

Record Holder. If your shares are registered directly in your name on the books of Heat maintained with Heat's transfer agent, Continental Stock Transfer & Trust Company, you are considered the "record holder" of those shares, and the proxy statement is sent directly to you by Heat. As the stockholder of record, you have the right to grant your voting proxy directly or to vote in person at the 2019 Annual Meeting.

Beneficial Owner of Shares Held in Street Name. 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 (also called a "street name" holder), and the proxy statement is forwarded to you by your broker, bank or other nominee. As a beneficial owner, you have the right to direct your broker, bank or other nominee on how to vote the shares held in your account. However, since you are not a stockholder of record, you may not vote these shares in person at the 2019 Annual Meeting unless you bring with you a legal proxy from the stockholder of record. A legal proxy may be obtained from your broker, bank or nominee. If you do not wish to vote in person or you will not be attending the 2019 Annual Meeting, you may vote using the internet, by telephone or by mail. Please visit *www.proxyvote.com*, or call 1-800-454-8683 and follow the instructions, or if you request printed proxy materials, you will receive voting instructions from your broker, bank or nominee describing the available processes for voting your stock.

If you hold your shares through a broker and you do not give instructions to the record holder on how to vote, the record holder will be entitled to vote your shares in its discretion on certain matters considered routine, such as the ratification of the appointment of independent auditors, the Reverse Stock Split, the Increase, and the Adjournment. The uncontested election of directors, the approval of the amendment to the Heat Biologics, Inc. 2018 Stock Incentive Plan, the approval of the compensation of our named executive officers and the approval of the frequency for holding an advisory vote on executive compensation are not considered routine matters; and, therefore, brokers do not have the discretion to vote on those proposals. If you hold your shares in street name and you do not instruct your broker how to vote in these matters not considered routine, no votes will be cast on your behalf. These "broker non-votes" will be treated as shares that are present and entitled to vote for purposes of determining the presence of a quorum, but not as shares entitled to vote on a particular proposal.

Q: ***Can I change my vote or revoke my proxy?***

A: You may change your vote or revoke your proxy at any time before the final vote at the 2019 Annual Meeting. To change your vote or revoke your proxy if you are the record holder, you may (1) notify our Corporate Secretary in writing at Heat Biologics, Inc., 801 Capitola Drive, Suite 12, Durham, North Carolina 27713; (2) submit a later-dated proxy (either by mail or internet), subject to the voting deadlines that are described on the proxy card or voting instruction form, as applicable; (3) deliver to our Corporate Secretary another duly executed proxy bearing a later date; or (4) by appearing at the 2019 Annual Meeting in person and voting your shares. Attendance at the meeting will not, by itself, revoke a proxy unless you specifically so request.

For shares you hold beneficially, you may change your vote by submitting new voting instructions to your broker or nominee or, if you have obtained a valid proxy from your broker or nominee giving you the right to vote your shares, by attending the 2019 Annual Meeting and voting in person. You may also change your vote by sending a written notice of revocation to our Corporate Secretary in writing at Heat Biologics, Inc. 801 Capitola Drive, Suite 12, Durham, North Carolina 27713.

Q: ***Who can help answer my questions?***

A: If you have any questions about the 2019 Annual Meeting or how to vote or revoke your proxy, or you need additional copies of this proxy statement or voting materials, you should contact the Corporate Secretary, Heat Biologics, Inc., at 801 Capitola Drive, Suite 12, Durham, North Carolina 27713 or by phone at (919) 240-7133.

Q: ***How are votes counted?***

A: In the election of directors, you may vote FOR all of the four (4) nominees named herein or you may direct your vote to be WITHHELD with respect to any one or more of the four nominees.

With respect to Proposals 2, 3, 4, 5, 6 and 7, you may vote FOR, AGAINST, or ABSTAIN. On these proposals, if you ABSTAIN, it has the same effect as a vote AGAINST.

With respect to Proposal 8, you may vote FOR a frequency of 1 YEAR, 2 YEARS or 3 YEARS or ABSTAIN.

If you provide specific instructions, your shares will be voted as you instruct. If you sign your proxy card or voting instruction card with no further instructions, your shares will be voted in accordance with the recommendations of the Board of Directors, namely (1) **FOR** each of the four (4) nominees for election to the Board of Directors; (2) **FOR** the ratification of the appointment of BDO as our independent registered public accounting firm for the year ending December 31, 2019; (3) **FOR** the approval of an amendment to our 2018 Stock Incentive Plan to increase the number of shares of common stock that we will have authority to grant under the plan by an additional 4,000,000 shares of common stock; (4) **FOR** the approval (in the event it is deemed advisable by the Board of Directors) of the Reverse Stock Split at a ratio to be determined in the discretion of the Board of Directors within a range of one (1) share of common stock for every two (2) to ten (10) shares of common stock; (5) **FOR** the approval (in the event it is deemed advisable by the Board of Directors) of the Increase of the number of authorized shares of common stock from 100,000,000 to 250,000,000; (6) **FOR** the Adjournment of the 2019 Annual Meeting, if the Board determines it to be necessary or appropriate, to solicit additional proxies if there are insufficient votes in favor of the Reverse Stock Split or the Increase; (7) **FOR** the approval, on an advisory basis, of the compensation of our named executive officers, as disclosed in this proxy statement; and (8) **FOR** the recommendation, on an advisory basis, of a three year frequency for holding an advisory vote on executive compensation. If any other matters properly arise at the meeting, your proxy, together with the other proxies received, will be voted at the discretion of the proxy holders.

Q: ***What is a quorum and why is it necessary?***

A: Conducting business at the meeting requires a quorum. The presence, either in person or by proxy, of the holders of one third of our shares of common stock outstanding and entitled to vote on May 28, 2019 is necessary to constitute a quorum. Abstentions are treated as present for purposes of determining whether a quorum exists. Your shares will be counted towards the quorum only if you submit a valid proxy (or one is submitted on your behalf by your broker, bank or other nominee) or if you vote in person at the 2019 Annual Meeting. Broker non-votes (which result when your shares are held in "street name", and you do not tell the nominee how to vote your shares and the nominee does not have discretion to vote such shares or declines to exercise discretion) are treated as present for purposes of determining whether a quorum is present at the meeting. If there is no quorum, the chairperson of the meeting or the stockholders entitled to vote at the meeting present at the meeting in person or represented by proxy may adjourn the meeting to another date.

Q: ***What is the voting requirement to approve each of the proposals?***

A: For Proposal 1 (the election of directors), the four (4) persons named herein receiving the highest number of FOR votes (from the holders of votes of shares present in person or represented by proxy at the 2019 Annual Meeting and entitled to vote on the election of directors) will be elected. Only votes FOR or WITHHELD will affect the outcome. Abstentions and broker non-votes will have no effect on the outcome of the vote as long as each nominee receives at least one FOR vote. You do not have the right to cumulate your votes.

To be approved, Proposal 2, which relates to the ratification of the appointment of BDO, as our independent registered public accounting firm for the year ending December 31, 2019, must receive FOR votes from the holders of a majority of the shares present or represented by proxy and voting at the 2019 Annual Meeting. Abstentions will have the same effect as an AGAINST vote. Although none are expected to exist in connection with Proposal 2 since this is a routine matter for which brokers have discretion to vote if beneficial owners do not provide voting instructions, broker non-votes, if any, will have no effect. This vote is advisory, and therefore is not binding on us, the Audit Committee or the Board of Directors. If our stockholders fail to ratify the appointment, the Audit Committee will reconsider whether or not to retain that firm. Even if the appointment is ratified, the Audit Committee in its discretion may direct the appointment of different independent auditors at any time during the year if they determine that such a change would be in the best interests of the Company and its stockholders.

To be approved, Proposal 3, which relates to the approval of an increase in the number of shares of common stock that may be granted under our 2018 Stock Incentive Plan, must receive FOR votes from the holders of a majority of the votes present represented by proxy and voting at the 2019 Annual Meeting. Abstentions will have the same effect as an AGAINST vote. Broker non-votes will have no effect.

To be approved, Proposal 4, which relates to the approval (in the event the Reverse Stock Split is deemed advisable by the Board of Directors) of the Reverse Stock Split within a range of one (1) share of common stock for every two (2) to ten (10) shares of common stock) must receive FOR votes from the holders of a majority of the issued and outstanding shares of common stock as of the record date. Accordingly, abstentions and broker non-votes with respect to each of these proposals will have the same effect as voting AGAINST each of these proposals (although no broker non-votes are expected to exist in connection with Proposal 4 since this is a routine matter for which brokers have discretion to vote if beneficial owners do not provide voting instructions).

To be approved, Proposal 5, which relates to the approval (in the event the Increase is deemed advisable by the Board of Directors) of the Increase in the number of authorized shares of common stock from 100,000,000 to 250,000,000 must receive FOR votes from the holders of a majority of the issued and outstanding shares of common stock as of the record date. Accordingly, abstentions and broker non-votes with respect this proposal will have the same effect as voting AGAINST this proposal (although no broker non-votes are expected to exist in connection with Proposal 5 since this is a routine matter for which brokers have discretion to vote if beneficial owners do not provide voting instructions).

To be approved, Proposal 6, which relates to the approval of the Adjournment of the 2019 Annual Meeting, if the Board determines it to be necessary or appropriate, to solicit additional proxies if there are insufficient votes in favor of the Reverse Stock Split or the Increase must receive FOR votes from the holders of a majority of the shares present or represented by proxy and voting at the 2019 Annual Meeting. Abstentions will have the same effect as an AGAINST vote. Although none are expected to exist in connection with Proposal 6 since this is a routine matter for which brokers have discretion to vote if beneficial owners do not provide voting instructions, broker non-votes, if any, will have no effect.

To be approved, Proposal 7, which relates to the approval, on an advisory basis, of the compensation of our named executive officers, must receive FOR votes from the holders of a majority of the shares present or represented by proxy and voting at the 2019 Annual Meeting. Abstentions will have the same effect as an AGAINST vote. Broker non-votes will have no effect. This vote is advisory, and therefore is not binding on us, the Compensation Committee or the Board of Directors. The Board of Directors and Compensation Committee value the opinions of our stockholders and to the extent there is any significant vote against the named executive officers' compensation as disclosed in this proxy statement, we will consider our stockholders' concerns and the Compensation Committee will evaluate whether any actions are necessary to address those concerns.

For Proposal 8, which relates to the recommendation, on an advisory basis, of the frequency for holding an advisory vote on the compensation of our named executive officers, the frequency receiving the highest number of votes cast at the 2019 Annual Meeting will be the frequency recommended by our stockholders. Only votes for 1 YEAR, 2 YEARS or 3 YEARS will affect the outcome. Abstentions and broker non-votes will have no effect. However, because this vote is advisory and not binding on us, the Board of Directors or the Compensation Committee, the Board of Directors and Compensation Committee may decide that it is in the best interests of our stockholders and us to hold an advisory vote on executive compensation more or less frequently than the option approved by our stockholders.

If your shares are held in "street name" and you do not indicate how you wish to vote, your broker is permitted to exercise its discretion to vote your shares on certain "routine" matters. The only routine matters to be submitted to our stockholders at the 2019 Annual Meeting are Proposals 2, 4, 5 and 6. None of our other proposals are routine matters. Accordingly, if you do not direct your broker how to vote for a director in Proposal 1 or how to vote for Proposal 3, Proposal 7, or Proposal 8 your broker may not exercise discretion and may not vote your shares on that proposal.

For purposes of Proposal 1, Proposal 3, Proposal 7, and Proposal 8, broker non-votes are not considered to be "votes cast" at the meeting and the shares represented by broker non-votes are not "entitled to vote" at the meeting. As such, a broker non-vote will not be counted as a vote FOR or WITHHELD with respect to a director in Proposal 1, a vote FOR or AGAINST with respect to Proposal 3, or Proposal 7, or a vote for a frequency of 1 YEAR, 2 YEARS or 3 YEARS with respect to Proposal 8; and, therefore, will have no effect on the outcome of the vote on any such proposal. Abstentions will be counted in determining the total number of "votes cast" and the total number of shares present in person or represented by proxy and entitled to vote on each of the proposals and will therefore have the effect of a vote AGAINST on each proposal, except for Proposal 1 and Proposal 7, where the abstention will have no effect on the outcome of the vote.

We encourage you to vote **FOR** all eight (8) proposals.

Q: ***What should I do if I receive more than one proxy statement?***

A: You may receive more than one proxy statement. For example, if you are a stockholder of record and your shares are registered in more than one name, you will receive more than one proxy statement. Please follow the voting instructions on all of the proxy statements to ensure that all of your shares are voted.

Q: ***Where can I find the voting results of the 2019 Annual Meeting?***

A: We intend to announce preliminary voting results at the 2019 Annual Meeting and publish final results in a Current Report on Form 8-K, which we expect will be filed within four (4) business days of the 2019 Annual Meeting. If final voting results are not available to us in time to file a Current Report on Form 8-K within four (4) business days after the 2019 Annual Meeting, we intend to file a Current Report on Form 8-K to publish preliminary results and, within four (4) business days after the final results are known to us, file an additional Current Report on Form 8-K to publish the final results.

Q: ***What happens if additional matters are presented at the 2019 Annual Meeting?***

A: Other than the eight (8) items of business described in this proxy statement, we are not aware of any other business to be acted upon at the 2019 Annual Meeting. If you grant a proxy, the persons named as proxy holders, Mr. Jeffrey Wolf, our Chief Executive Officer and Mr. Robert J. Jakobs, our Vice President of Finance, or either of them, will have the discretion to vote your shares on any additional matters properly presented for a vote at the meeting. If for any unforeseen reason any of our nominees are not available as a candidate for director, the persons named as proxy holders will vote your proxy for any one or more other candidates nominated by the Board of Directors.

Q: ***How many shares are outstanding and how many votes is each share entitled?***

A: Each share of our common stock that is issued and outstanding as of the close of business on May 28, 2019, the record date, is entitled to be voted on all items being voted on at the 2019 Annual Meeting, with each share being entitled to one vote on each matter. As of the record date, May 28, 2019, 34,065,652 shares of common stock were issued and outstanding.

Q: ***Who will count the votes?***

A: One or more inspectors of election will tabulate the votes.

Q: ***Is my vote confidential?***

A: Proxy instructions, ballots, and voting tabulations that identify individual stockholders are handled in a manner that protects your voting privacy. Your vote will not be disclosed, either within Heat or to anyone else, except: (1) as necessary to meet applicable legal requirements; (2) to allow for the tabulation of votes and certification of the vote; or (3) to facilitate a successful proxy solicitation.

Q: ***Who will bear the cost of soliciting votes for the 2019 Annual Meeting?***

A: The Board of Directors is making this solicitation on behalf of Heat, which will pay the entire cost of preparing, assembling, printing, mailing, and distributing these proxy materials. Certain of our directors, officers, and employees, without any additional compensation, may also solicit your vote in person, by telephone, or by electronic communication. On request, we will reimburse brokerage houses and other custodians, nominees, and fiduciaries for their reasonable out-of-pocket expenses for forwarding proxy and solicitation materials to stockholders. In addition to the use of the mail, proxies may be solicited by personal interview, telephone, telegram, facsimile and advertisement in periodicals and postings, in each case by our directors, officers and employees without additional compensation. In addition, we have retained D. F. King & Co., Inc. to aid in the solicitation of proxies for this year. We will pay D. F. King & Co., Inc. fees of not more than $7,500 plus expense reimbursement for its services. Brokerage houses, nominees, fiduciaries and other custodians will be requested to forward solicitation materials to beneficial owners and will be reimbursed for their reasonable expenses incurred in so doing. We may request by telephone, facsimile, mail, electronic mail or other means of communication the return of the proxy cards. Please contact (866) 796-7186 with any questions you may have regarding our proposals.

Q: ***When are stockholder proposals and director nominations due for next year's Annual Meeting?***

A: To be considered for inclusion in next year's proxy materials pursuant to SEC Rule 14a-8, your proposal must be submitted in writing by February , 2020, to the attention of the Corporate Secretary of Heat Biologics, Inc. at 801 Capitola Drive, Suite 12, Durham, North Carolina 27713. If you wish to submit a proposal (including a director nomination) at the meeting that is to be included in next year's proxy materials, you must do so in accordance with Heat's amended and restated bylaws (the "Bylaws"), which contain additional requirements about advance notice of stockholder proposals and director nominations and you must comply with all applicable requirements of Rule 14a-8 promulgated under the Securities Exchange Act of 1934, as amended (the "Exchange Act"). See also "Stockholder Proposals for the 2020 Annual Meeting" elsewhere in this proxy statement.

PROPOSAL 1

ELECTION OF DIRECTORS

The Board of Directors, based on the recommendation of the Nominating and Corporate Governance Committee of the Board of Directors, has nominated for annual election as director each of the individuals identified below, all of whom are incumbent directors.

THE NOMINEES

Name	Age	Position	Served as a Director Since
Jeffrey Wolf	56	Chairman, Chief Executive Officer and President	2008
John Monahan, Ph.D.	72	Director	2009
John K.A. Prendergast, Ph.D.	65	Director (Lead Director)	2016
Edward B. Smith, III	44	Director	2010

THE BOARD OF DIRECTORS RECOMMENDS THAT YOU VOTE YOUR SHARES FOR THE ELECTION OF EACH OF THESE NOMINEES

Currently, the Board of Directors consists of four (4) members: Jeffrey Wolf (Chairman), John Monahan, Ph.D., John K.A. Prendergast, Ph.D. (Lead Director) and Edward B. Smith, III. All of the current members have been nominated by the Board of Directors of Heat for the election as directors of Heat. The Board of Directors believes that it is in the best interests of Heat to elect the above-described nominees, each to serve as a director until the next annual meeting of stockholders and until his successor shall have been duly elected and qualified. All the nominees have consented to being named in this proxy statement and to serve as a director if elected. At the time of the 2019 Annual Meeting, if any of the nominees named above is not available to serve as director (an event that the Board of Directors does not currently have any reason to anticipate), all proxies may be voted for any one or more other persons that the Board of Directors designates in their place. It is the intention of the persons named as proxies to vote all shares of common stock for which they have been granted a proxy for the election of each of the nominees, each to serve as a director until the next annual meeting of stockholders and until his successor shall have been duly elected and qualified.

The Board believes that each of the nominees is highly qualified to serve as a member of the Board and each has contributed to the mix of skills, core competencies and qualifications of the Board. When evaluating candidates for election to the Board, the Nominating and Governance Committee seeks candidates with certain qualities that it believes are important, including experience, skills, expertise, personal and professional integrity, character, business judgment, time availability in light of other commitments, dedication, conflicts of interest, those criteria and qualifications described in each director's biography below and such other relevant factors that the Nominating and Governance Committee considers appropriate in the context of the needs of the Board of Directors.

DIRECTOR INDEPENDENCE

Our common stock is listed on the Nasdaq Capital Market ("Nasdaq"). Under the Nasdaq listing standards, independent directors must comprise a majority of a listed company's Board of Directors and all members of our Audit, Compensation and Nominating and Governance Committees must be independent. Audit Committee members must also satisfy the independence criteria set forth in Rule 10A-3 under the Exchange Act and Compensation Committee members must also satisfy the independence criteria set forth in Rule 10C-1 under the Exchange Act. Under the Nasdaq listing standards, a director will only qualify as an "independent director" if, in the opinion of that company's Board of Directors, that person does not have a relationship that would interfere with the exercise of independent judgment in carrying out the responsibilities of a director.

In order to be considered to be independent for purposes of Rule 10A-3, a member of an Audit Committee of a listed company may not, other than in his or her capacity as a member of the Audit Committee, the Board of Directors, or any other board committee: (1) accept, directly or indirectly, any consulting, advisory or other compensatory fee from the listed company or any of its subsidiaries, or (2) be an affiliated person of the listed company or any of its subsidiaries.

The Board undertook a review of its composition, the composition of its committees and the independence of each director. Based upon information requested from and provided by each director concerning his background, employment and affiliations, including family relationships, the Board has determined that Dr. Monahan, Dr. Prendergast and Mr. Smith, representing three of our four directors, do not have a relationship that would interfere with the exercise of independent judgment in carrying out the responsibilities of a director and that each of these directors is "independent" as that term is defined under the listing standards of Nasdaq.

We currently have: (1) an Audit Committee comprised of Dr. Monahan, Dr. Prendergast and Mr. Smith, each of whom are deemed to be independent in accordance with the Nasdaq definition of independence, satisfy the independence criteria set forth in Rule 10A-3 under the Exchange Act as well as qualify as "audit committee financial experts" as that term is used in Item 407 of Regulation S-K; (2) a Compensation Committee comprised of Dr. Monahan, Dr. Prendergast, and Mr. Smith, each of whom is deemed to be independent in accordance with the Nasdaq definition of independence and satisfy the independence criteria set forth in Rule 10C-1 under the Exchange Act; and (3) a Nominating and Governance Committee comprised of Dr. Monahan, Dr. Prendergast, and Mr. Smith, each of whom is deemed to be independent in accordance with the Nasdaq definition of independence.

The Board annually determines the independence of directors based on a review by the directors and the Nominating and Governance Committee. No director is considered independent unless the Board of Directors has determined that he or she has no material relationship with us.

INFORMATION ABOUT THE NOMINEES

Set forth below are summaries of the background, business experience and descriptions of the principal occupation for at least the past five years of each of the Company's current nominees for election as directors:

Jeffrey Wolf, ***Chairman of the Board of Directors, Chief Executive Officer and President***

Mr. Wolf has served our Chairman of the Board of Directors, Chief Executive Officer and President since our inception. He founded Heat Biologics in August 2008. Mr. Wolf served from June 1997 to March 2011, as managing director at Seed-One Ventures, LLC a venture firm focused on launching and growing exceptional healthcare companies from the ground up. Since founding Seed-One Ventures, LLC, Mr. Wolf has founded and run several biomedical companies. Mr. Wolf's start-ups include Avigen, Inc., a gene therapy company where he was a co-founder and director; TyRx Pharma, Inc., a company focused on the development of bio-compatible polymers where he was a co-founder and Chairman; and EluSys Therapeutics, Inc., a company focused on the development of a novel technology to remove blood-borne pathogens where he was a co-founder, Chairman and Chief Executive Officer. Mr. Wolf received his M.B.A. from Stanford Business School, his J.D. from New York University School of Law and his B.A. from the University of Chicago, where he graduated with honors in Economics. Mr. Wolf serves as a director of several Seed-One Ventures, LLC portfolio companies and serves as a director of Synthetic Biologics, Inc., a clinical stage company developing therapeutics to protect the gut microbiome.

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

John Monahan, Ph.D., ***Director***

Dr. Monahan has served on the Board of Directors since November 2009 and is currently a consultant to Synthetic Biologics, Inc., a clinical stage company developing therapeutics to protect the gut microbiome (NYSE MKT: SYN). Dr. Monahan Co-Founded Avigen Inc. (NASDAQ: AVGN) in 1992, a company which has become a leader in its sector for the development of novel pharmaceutical products for the treatment of serious human diseases. Over a 12 year period as CEO of Avigen Inc. he raised over $235M in several private and public financings including its IPO. From 1989-1992, he was VP of R&D at Somatix Therapy Corp., Alameda, CA and from 1985-1989 he was Director of Molecular & Cell Biology at Triton Biosciences Inc., Alameda, CA. Prior to that from 1982-1985, he was Research Group Chief, Department of Molecular Genetics, Hoffmann-LaRoche, Inc. Nutley, NJ, and from 1975 to 1977 he was an Instructor at Baylor College of Medicine, Houston TX. He received his Ph.D. in Biochemistry in 1974 from McMaster University, Canada and his B.Sc. from University College Dublin, Ireland in 1969.

Dr. Monahan is also currently a Board member of Anixa Biosciences Inc. (ANIX) and Cellix Ltd (Ireland). He has served on a number of other public and private company boards over the years.

We selected Dr. Monahan to serve on the Board of Directors because he brings extensive knowledge of the pharmaceutical and biologics industry. Having served in senior corporate positions in many medical companies he has a vast knowledge of the industry.

John K.A. Prendergast, Ph.D., ***Lead Director***

Dr. Prendergast has served on the Board of Directors since April 2016. Dr. Prendergast is co-founder of Palatin Technologies, Inc. ("Palatin"), a biopharmaceutical company developing targeted, receptor-specific peptide therapeutics for the treatment of diseases with significant unmet medical need and commercial potential (NYSE MKT: PTN). Dr. Prendergast has been Chairman of the Board of Palatin since June 14, 2000, and a director since August 1996. Dr. Prendergast has been president and sole stockholder of Summercloud Bay, Inc., an independent consulting firm providing services to the biotechnology industry, since 1993. Dr. Prendergast is a director and executive chairman of the board of directors of Antyra, Inc., a privately-held biopharmaceutical firm. He was previously a member of the board of the life science companies AVAX Technologies, Inc., Avigen, Inc. and MediciNova, Inc. From October 1991 through December 1997, Dr. Prendergast was a managing director of The Castle Group Ltd., a medical venture capital firm. Dr. Prendergast received his M.Sc. and Ph.D. from the University of New South Wales, Sydney, Australia and a C.S.S. in administration and management from Harvard University.

We selected Dr. Prendergast to serve on the Board of Directors because he brings extensive industry experience in corporate development and finance in the life sciences field. His prior service on other publicly traded company boards provides experience relevant to good corporate governance practices.

Edward B. Smith, III, ***Director***

Mr. Smith has served on the Board of Directors since November 2010. Since January 1, 2015, Mr. Smith has also been Managing Member of Aristar Capital Management, LLC, a New York-based investment firm founded in 2015. From April 14, 2017 through July 14, 2017, Mr. Smith served as the interim Chief Executive Officer and interim Chief Financial Officer Agritech Worldwide, Inc. ("Agritech," formerly Z Trim Holdings, Inc.) (OTCPink: FBER), a manufacturer of environmentally friendly agricultural functional ingredients, From January 2015 until May 2016, Mr. Smith also served as the Chief Executive Officer of Agritech and from 2009 through July 2017 he served as a board member of Agritech. From April 2005 through December 2014, Mr. Smith served as the Managing Partner of Brightline Capital Management, LLC ("BCM"), a New York-based investment firm founded in 2005. Prior to founding BCM, Mr. Smith worked at Gracie Capital from 2004-2005, GTCR Golder Rauner from 1999-2001 and Credit Suisse First Boston from 1997-1999. Mr. Smith holds a Bachelor of Arts in Social Studies from Harvard College and a Masters in Business Administration from Harvard Business School.

We selected Mr. Smith to serve on the Board of Directors because he brings a strong business background to our company, and adds significant strategic, business and financial experience. Mr. Smith's business background provides him with a broad understanding of the issues facing us, the financial markets and the financing opportunities available to us. His service on other public company boards provides him with extensive corporate governance knowledge and insight into issues faced by companies similar to ours.

Vote Required

Provided that a quorum is present, the nominees for director receiving a plurality of the votes cast at the 2019 Annual Meeting in person or by proxy will be elected.

THE BOARD OF DIRECTORS RECOMMENDS A VOTE FOR THE ELECTION OF THESE NOMINEES AS DIRECTORS

Stockholder Communications with Directors

The Board has established a process to receive communications from stockholders. Stockholders may contact any member or all members of the Board, any Board committee, or any chair of any such committee by mail. To communicate with the Board of Directors, any individual director or any group or committee of directors, correspondence should be addressed to the Board of Directors or any such individual director or group or committee of directors by either name or title. All such correspondence should be sent "c/o Corporate Secretary" at Heat Biologics, Inc., 801 Capitola Drive, Suite 12, Durham, North Carolina 27713.

All communications received as set forth in the preceding paragraph will be opened by the office of our Secretary and the Corporate Secretary's office will make sufficient copies of the contents to send to each director who is a member of the group or committee to which the envelope or e-mail is addressed. The Board of Directors has instructed the Corporate Secretary to forward stockholder correspondence only to the intended recipients, and has also instructed the Corporate Secretary to review all stockholder correspondence and, in the Corporate Secretary's discretion, refrain from forwarding any items deemed to be of a commercial or frivolous nature or otherwise inappropriate for the Board of Directors' consideration. Any such items may be forwarded elsewhere in Heat for review and possible response.

Corporate Governance

Board Leadership Structure

We have a board leadership structure under which Mr. Wolf, our Chief Executive Officer, also serves as Chairman of the Board of Directors. Following the 2019 Annual Meeting, we will have three other directors, each of whom is independent. The Board of Directors currently has three standing committees, each of which is comprised solely of independent directors with a committee chair. In addition, the Board appoints other committees as the Board considers necessary from time to time.

We currently have the same person serving as our Chairman of the Board and Chief Executive Officer and we do not have a formal policy on whether the same person should (or should not) serve as both the Chief Executive Officer and Chairman of the Board of Directors. Due to the size of Heat, we believe that this structure is appropriate. Mr. Wolf has served as the Chairman of the Board of Directors and Chief Executive Officer since our formation. In serving as Chairman of the Board, Mr. Wolf serves as a significant resource for other members of management and the Board of Directors.

We currently have a separate Lead Director. We do not have a formal policy regarding having a separate Lead Director, however, we do believe that when the Chairman of the Board of Directors is an employee of Heat or otherwise not independent, it is important to have a separate Lead Director, who is an independent director. Dr. Prendergast has served as the Lead Director since September 2016. In that role, he presides over the Board of Directors' executive sessions, during which our independent directors meet without management, and he serves as the principle liaison between management and the independent directors of the Board of Directors. The Lead Director also:

- confers with the Chairman of the Board of Directors regarding Board of Directors meeting agenda;
- chairs meetings of the independent directors including, where appropriate, setting the agenda and briefing the Chairman of the Board of Directors on issues discussed during the meeting;
- oversees the annual performance evaluation of the CEO;
- consults with the Nominating and Governance Committee and the Chairman of the Board of Directors regarding assignment of Board members to various committees; and
- performs such other functions as the Board of Directors may require.

We believe the combination of Mr. Wolf as our Chairman of the Board of Directors and an independent director as our Lead Director is an effective structure for Heat. The division of duties and the additional avenues of communication between the Board of Directors and our management associated with this structure provide the basis for the proper functioning of the Board of Directors and its oversight of management.

Risk Oversight

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

Code of Business Conduct and Ethics

The Board of Directors has adopted a Code of Business Conduct and Ethics that applies to our directors, executives (including our Chief Executive Officer and Vice President of Finance) and employees. The Code of Business Conduct and Ethics is posted on our website at *www.heatbio.com*.

Review and Approval of Transactions with Related Persons

The Board of Directors has adopted policies and procedures for review, approval and monitoring of transactions involving Heat and "related persons" (directors and executive officers or their immediate family members, or stockholders owning 5% or greater of the Company's outstanding stock). The policy covers any related person transaction that meets the minimum threshold for disclosure in the proxy statement under the relevant rules of the Securities and Exchange Commission (the "SEC"). Pursuant to our charter, our Audit Committee reviews on an on-going basis for potential conflicts of interest, and approve if appropriate, all our "Related Party Transactions." For purposes of the Audit Committee Charter, "Related Party Transactions" means those transactions required to be disclosed pursuant to SEC Regulation S-K, Item 404.

A discussion of our current related person transactions appears in this proxy statement under "Transactions with Related Persons, Promoters and Certain Control Persons."

INFORMATION REGARDING THE COMMITTEES OF THE BOARD OF DIRECTORS

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

Board Members	Audit Committee	Compensation Committee	Nominating and Governance Committee
Jeffrey Wolf	—	—	—
John Monahan, Ph.D.	Member	Chairman	Member
Edward B. Smith, III	Chairman	Member	Chairman
John K.A. Prendergast, Ph.D.*	Member	Member	Member

* Dr. Prendergast serves as our independent Lead Director

Audit Committee

Our common stock is listed on the Nasdaq Capital Market. Under the rules of Nasdaq, independent directors must comprise a majority of a listed company's board of directors and all members of our audit, compensation and nominating and governance committees must be independent. Audit committee members must also satisfy the independence criteria set forth in Rule 10A-3 under the Exchange Act. Under the rules of the Nasdaq, a director will only qualify as an "independent director" if, in the opinion of that company's board of directors, that person does not have a relationship that would interfere with the exercise of independent judgment in carrying out the responsibilities of a director.

In order to be considered to be independent for purposes of Rule 10A-3, a member of an audit committee of a listed company may not, other than in his or her capacity as a member of the audit committee, the Board of Directors, or any other board committee: (1) accept, directly or indirectly, any consulting, advisory or other compensatory fee from the listed company or any of its subsidiaries or (2) be an affiliated person of the listed company or any of its subsidiaries.

The Board of Directors undertook a review of its composition, the composition of its committees and the independence of each director. Based upon information requested from and provided by each director concerning his background, employment and affiliations, including family relationships, the Board of Directors has determined that Dr. Monahan, Mr. Smith and Dr. Prendergast, representing three of our four directors, do not have a relationship that would interfere with the exercise of independent judgment in carrying out the responsibilities of a director and that each of these directors is "independent" as that term is defined under the rules of the Nasdaq. In making this determination, the Board of Directors considered the relationships that each non-employee director has with us and all other facts and circumstances the Board of Directors deemed relevant in determining their independence, including the beneficial ownership of our capital stock by each non-employee director. We intend to comply with the other independence requirements for committees within the time periods specified above

Dr. Monahan, Mr. Smith, and Dr. Prendergast currently serve as members of the Audit Committee. The Board of Directors has determined that Dr. Monahan, Mr. Smith and Dr. Prendergast are each "independent" in accordance with the Nasdaq definition of independence and each is an "audit committee financial expert", as defined by the SEC regulations, and each has the related financial management expertise within the meaning of the Nasdaq rules. The primary purpose of the Audit Committee is to act on behalf of the Board of Directors in its oversight of all material aspects of our accounting and financial reporting processes, internal controls and audit functions, including our compliance with Section 404 of the Sarbanes-Oxley Act of 2002. Pursuant to its charter, our Audit Committee reviews on an on-going basis for potential conflicts of interest, and approves if appropriate, all our "Related Party Transactions." For purposes of the Audit Committee Charter, "Related Party Transactions" shall mean those transactions required to be disclosed pursuant to SEC Regulation S-K, Item 404. In addition, the Audit Committee reviews, acts on and reports to the Board of Directors with respect to various auditing and accounting matters, including the selection of the Company's independent registered public accounting firm, the scope of the annual audits, fees to be paid to the independent registered public accounting firm, the performance of the Company's independent registered public accounting firm and the accounting practices of the Company and the Company's internal controls and legal compliance functions. The Audit Committee also reviews, prior to publication, our quarterly earnings releases and our reports to the SEC on Forms 10-K and 10-Q. The Audit Committee operates pursuant to a written charter adopted by the Board of Directors, which is available on the Company's website at *www.heatbio.com*. The charter describes the nature and scope of responsibilities of the Audit Committee.

Compensation Committee

Our Compensation Committee is comprised of Dr. Monahan, Mr. Smith, and Dr. Prendergast, each of whom is deemed to be independent in accordance with the Nasdaq definition of independence. Compensation Committee members must also satisfy the independence criteria set forth in Rule 10C-1 under the Exchange Act. This committee determines, approves, and reports to the Board of Directors on all elements of compensation of our executive officers. The Compensation Committee also has the power to prescribe, amend, and rescind rules relating to our stock incentive plans, to recommend the grant of options and other awards under the stock incentive plans, and to interpret the stock incentive plans.

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

Our Compensation Committee annually reviews the compensation program for our Chief Executive Officer and other members of senior management and then makes recommendations to the full board for determination. In each case, the Compensation Committee takes into account the results achieved by the executive, his or her future potential, and his or her scope of responsibilities and experience. During our fiscal year ended December 31, 2018, the Compensation Committee evaluated the performance of our executives and considered the compensation levels and equity programs at comparable companies and related industries and the analysis of its outside consultant before it made its compensation recommendations to the full board, including recommendations regarding salary increases, awards of cash bonuses and awards of stock options.

The Compensation Committee administers our equity incentive plans, including review and recommendation of long-term incentive compensation for each executive, director and employee, including grants of stock options. The Compensation Committee believes that this long-term incentive compensation aligns the interests of our executives with those of our stockholders and furthers executive retention.

The Compensation Committee also reviews and recommends to the Board of Directors appropriate director compensation programs for service as directors, committee chairs and committee members.

Nominating and Governance Committee

The Nominating and Governance Committee is comprised of Dr. Monahan, Mr. Smith, and Dr. Prendergast.

The functions performed by the Nominating and Governance Committee include:

- recommending to the Board of Directors individuals for appointment to vacancies on any committee of the Board of Directors;
- recommending to the Board of Directors regarding any changes to the size of the Board of Directors or any committee;
- reporting to the Board of Directors on a regular basis; and
- performing any other duties or responsibilities expressly delegated to the committee by the Board of Directors relating to board or committee members.

Candidates for director should have certain minimum qualifications, including the ability to understand basic financial statements, being over 21 years of age, having relevant business experience (taking into account the business experience of the other directors), and having high moral character. The Nominating and Governance Committee retains the right to modify these minimum qualifications from time to time.

In evaluating an incumbent director whose term of office is set to expire, the Nominating and Governance Committee reviews such director's overall service to our company during such director's term, including the number of meetings attended, level of participation, quality of performance, and any transactions with our company engaged in by such director during his term.

When selecting a new director nominee, the Nominating and Governance Committee first determines whether the nominee must be independent for Nasdaq purposes or whether the candidate must qualify as an "audit committee financial expert." This committee then uses its network of contacts to compile a list of potential candidates, but may also engage, if it deems appropriate, a professional search firm to assist in the identification of qualified director candidates. The Nominating and Governance Committee also will consider nominees recommended by our stockholders. The Nominating and Governance Committee does not distinguish between nominees recommended by our stockholders and those recommended by other parties. This committee evaluates the suitability of potential nominees, taking into account the current board composition, including expertise, diversity and the balance of inside and independent directors. The Nominating and Governance Committee endeavors to establish a diversity of background and experience in a number of areas of core competency, including business judgment, management, accounting, finance, knowledge of our industry, strategic vision, research and development and other areas relevant to our business.

In considering any person recommended by one of our stockholders, the Nominating and Governance Committee will look for the same qualifications that it looks for in any other person that it is considering for a position on the Board of Directors. The Nominating and Governance Committee operates under a formal charter that governs its duties and standards of performance. A copy of the charter is available on our website at *www.heatbio.com*.

BOARD AND COMMITTEE MEETINGS

During our fiscal year ended December 31, 2018, the Board of Directors held 15 meetings. During our fiscal year ended December 31, 2018, our Audit Committee, Compensation Committee and Nominating and Governance Committee met five times, five times, and one time, respectively. Each of our incumbent directors that were directors during our fiscal year ended December 31, 2018 attended no less than 75% of the meetings of the Board of Directors and Board committees on which such director served during 2018.

DIRECTOR ATTENDANCE AT ANNUAL MEETINGS

Our directors are encouraged, but not required, to attend the Annual Meeting of Stockholders. All of our directors attended our 2018 Annual Meeting of Stockholders.

2018 Director Compensation

Compensation of Directors

The following table sets forth information for the fiscal year ended December 31, 2018 regarding the compensation of our directors who at December 31, 2018 were not also named executive officers.

Name and Principal Position	Fees Earned or Paid in Cash	Option Awards	Other Compensation	Totals
John Monahan, PhD (1)	$ 61,500	$ 25,912	—	$87,412
John K.A. Prendergast, Ph.D. (2)	$ 221,000	$ 51,821	—	$272,821
Edward B. Smith, III (1)	$ 72,500	$ 25,912	—	$98,412

(1) The stock options are computed in accordance with FASB ASC 718 and reflect the value of an option to purchase 9,530 granted on January 8, 2018 to Dr. Monahan and Mr. Smith with 100% of these options vesting on the one year anniversary of the date of the grant, subject to remaining on the Board of Directors. The fair value of the options was calculated in accordance with FASB ASC 718, and the assumptions used are described in Note 10 to the Company's audited consolidated financial statements for the years ended December 31, 2018 and 2017.

(2) The stock options are computed in accordance with FASB ASC 718 and reflect the value of an option to purchase 19,059 shares of common stock granted on January 8, 2018 to Dr. Prendergast as lead independent director with 100% of these options vesting on the one year anniversary of the date of the grant, subject to remaining on the Board of Directors. The fair value of the options was calculated in accordance with FASB ASC 718, and the assumptions used are described in Note 10 to the Company's audited consolidated financial statements for the years ended December 31, 2018 and 2017.

As of December 31, 2018, the following table sets forth the number of aggregate outstanding option awards held by each of our directors who were not also named executive officers:

Name	Aggregate Number of Option Awards
John Monahan, Ph.D.	25,018
John K.A. Prendergast, Ph.D.	41,059
Edward B. Smith, III	24,257

Our Compensation Committee conducted an evaluation of the compensation of the members of the Board of Directors with assistance from Korn Ferry. As described in additional detail below under the section entitled "Executive Compensation," Korn Ferry is the Compensation Committee's independent compensation advisor and was engaged to provide analysis, guidance and considerations pursuant to our director pay program. Based on Korn Ferry's review last year, the Compensation Committee determined that the director pay program was consistent with competitive market practices (relative to Heat's publicly-traded peer group at that time), aligned with our overall philosophy and approach to director pay and reflective of desired competitive positioning. During the year ended December 31, 2018, and anticipated to remain the same for 2019, directors who are not employees receive an annual cash fee of $35,000 as well as a cash fee of $8,000 for service on the Audit Committee and $5,000 for service on each of the Compensation Committee and the Nominating and Governance Committee. In addition, the Chairman of each of the Audit, Compensation and Nominating and Governance Committees will each receive an additional cash fee of $12,500, $8,500 and $7,000, respectively. The lead independent director receives a monthly fee of $14,000 for his services as lead independent director.

However, due to the price of our common stock, it was determined that the equity portion of our director pay program was not consistent with competitive market practices (relative to Heat's publicly-traded peer group at that time). Accordingly, on January 1, 2019, after consultation with Korn Ferry, Dr. Monahan and Mr. Smith received an option grant each to purchase 150,000 shares of our common stock (having a value of $140,400) vesting 50% immediately, 30% on the one year anniversary of the grant date, 10% shall vest on the two-year anniversary grant date, and the remaining 10% shall vest on the three-year anniversary grant date. For his services as lead independent director Dr. Prendergast received a grant of 300,000 restricted shares of common stock (having a value of $318,000) vesting 50% immediately, 30% on the one year anniversary of the grant date, 10% shall vest on the two-year anniversary of the grant date, and the remaining 10% shall vest on the three-year anniversary of the grant date. These stock option grants provided to Dr. Monahan and Mr. Smith will expire (10) years from the date of the grant, unless terminated earlier.

Delinquent Section 16(a) Reports

Section 16(a) of the Exchange Act requires our executive officers, directors and persons who beneficially own more than 10 percent of a registered class of our equity securities, to file with the SEC initial reports of ownership and reports of changes in ownership of our common stock. Such officers, directors and persons are required by SEC regulation to furnish us with copies of all Section 16(a) forms that they file with the SEC.

Based solely on a review of the copies of such forms that were received by us, or written representations from certain reporting persons that no Forms 5 were required for those persons, we are not aware of any failures to file reports or report transactions in a timely manner during the year ended December 31, 2018.

PROPOSAL 2

RATIFICATION OF APPOINTMENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

The Audit Committee of the Board of Directors has selected BDO, an independent registered accounting firm, to audit the books and financial records of the Company for the year ending December 31, 2019. Heat is asking its stockholders to ratify the appointment of BDO as Heat's independent registered public accounting firm for fiscal 2019.

A representative of BDO is expected to be present either in person or via teleconference at the 2019 Annual Meeting and available to respond to appropriate questions, and will have the opportunity to make a statement if he or she desires to do so.

Vote Required

The affirmative vote of a majority of the issued and outstanding shares entitled to vote and represented at the 2019 Annual Meeting in person or by proxy will be required to approve the ratification of the appointment of Heat's registered public accounting firm. Abstentions will be counted and will have the same effect as a vote against the proposal. Ratification of the appointment of BDO by our stockholders is not required by law, our bylaws or other governing documents. As a matter of policy, however, the appointment is being submitted to our stockholders for ratification at the 2019 Annual Meeting. If our stockholders fail to ratify the appointment, the Audit Committee will reconsider whether or not to retain that firm. Even if the appointment is ratified, the Audit Committee, in its discretion, may direct the appointment of different independent auditors at any time during the year if they determine that such a change would be in our best interest and the best interests of our stockholders.

THE BOARD OF DIRECTORS UNANIMOUSLY RECOMMENDS THAT YOU VOTE FOR RATIFICATION OF THE SELECTION OF BDO USA, LLP AS OUR INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM FOR OUR FISCAL YEAR ENDING ON DECEMBER 31, 2019.

AUDIT COMMITTEE REPORT[1]

The Audit Committee has reviewed and discussed Heat's audited consolidated financial statements as of and for the year ended December 31, 2018 with the management of Heat and BDO, Heat's independent registered public accounting firm. Further, the Audit Committee has discussed with BDO the matters required by applicable requirements of the Public Company Accounting Oversight Board ("PCAOB") and the SEC, and other applicable regulations, relating to the firm's judgment about the quality, not just the acceptability, of Heat's accounting principles, the reasonableness of significant judgments and estimates, and the clarity of disclosures in the consolidated financial statements.

The Audit Committee also has received the written disclosures and the letter from BDO required by PCAOB Ethics and Independence Rule 3526,*Communication with Audit Committees Concerning Independence*, which relate to BDO's independence from Heat, and has discussed with BDO its independence from Heat. The Audit Committee has also considered whether the independent registered public accounting firm's provision of non-audit services to Heat is compatible with maintaining the firm's independence. The Audit Committee has concluded that the independent registered public accounting firm is independent from Heat and its management. The Audit Committee also considered whether, and determined that, the independent registered public accounting firm's provision of other non-audit services to us was compatible with maintaining BDO's independence. The Committee also reviewed management's report on its assessment of the effectiveness of Heat's internal control over financial reporting. In addition, the Audit Committee reviewed key initiatives and programs aimed at strengthening the effectiveness of Heat's internal and disclosure control structure. The members of the Audit Committee are not our employees and are not performing the functions of auditors or accountants. Accordingly, it is not the duty or responsibility of the Audit Committee or its members to conduct "field work" or other types of auditing or accounting reviews or procedures or to set auditor independence standards. Members of the Audit Committee necessarily rely on the information provided to them by management and the independent auditors. Accordingly, the Audit Committee's considerations and discussions referred to above do not constitute assurance that the audit of our consolidated financial statements has been carried out in accordance with the standards of the PCAOB or that our auditors are in fact independent.

Based on the reviews, reports and discussions referred to above, the Audit Committee recommended to the Board of Directors, and the Board approved, that Heat's audited consolidated financial statements for the year ended December 31, 2018 and management's assessment of the effectiveness of Heat's internal control over financial reporting be included in Heat's Annual Report on Form 10-K for the year ended December 31, 2018, for filing with the SEC. The Audit Committee has recommended, and the Board of Directors has approved, subject to stockholder ratification, the selection of BDO as Heat's independent registered public accounting firm for the year ending December 31, 2019.

Submitted by the Audit Committee of Heat's Board of Directors.

Members of the Audit Committee:

John Monahan, Ph.D.
John K.A. Prendergast. Ph.D.
Edward B. Smith, III

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1 The material in this report is not "soliciting material," is not deemed "filed" with the SEC and is not incorporated by reference in any filing of Heat under the Securities Act of 1933, as amended, or the Exchange Act, whether made before or after the date hereof and irrespective of any general incorporation language in any such filing.

Fees Paid to the Independent Registered Public Accounting Firm

The following table sets forth the aggregate fees including expenses billed to us for the years ended December 31, 2018 and 2017 by BDO.

	December 31, 2018	December 31, 2017
Audit Fees and Expenses (1)	$ 310,000	$ 289,000

(1) Audit fees and expenses were for professional services rendered for the audit and reviews of the consolidated financial statements of the Company, professional services rendered for issuance of consents and assistance with review of documents filed with the SEC.

Audit-Related Fees; Tax Fees and All Other Fee There were no audit-related fees, tax fees or other fees paid to BDO during fiscal years 2018 and 2017.

In considering the nature of the services provided by BDO the Audit Committee determined that such services are compatible with the provision of independent audit services. The Audit Committee discussed these services with BDO and Heat's management to determine that they are permitted under the rules and regulations concerning auditor independence promulgated by the SEC to implement the Sarbanes-Oxley Act of 2002, as well as the American Institute of Certified Public Accountants.

Pre-Approval Policy

Consistent with SEC policies regarding auditor independence, the Audit Committee has responsibility for appointing, setting compensation and overseeing the work of the independent registered public accounting firm. In recognition of this responsibility, the Audit Committee has established a policy to pre-approve all audit and permissible non-audit services provided by the independent registered public accounting firm.

Prior to the engagement of the independent registered public accounting firm for the next year's audit, management will submit a list of services and related fees expected to be rendered during that year for audit services, audit-related services, tax services and other fees to the Audit Committee for approval.

The Audit Committee pre-approves the independent registered public accounting firm's services within each category. The fees are budgeted and the Audit Committee requires the independent registered public accounting firm and management to report actual fees versus budget periodically throughout the year by category of service. During the year, circumstances may arise when it may become necessary to engage the independent registered public accounting firm for additional services not contemplated in the original pre-approval categories. In those instances, the Audit Committee requires specific pre-approval before engaging the independent registered public accounting firm.

The Audit Committee has adopted procedures for pre-approving all audit and non-audit services provided by the independent registered public accounting firm, including the fees and terms of such services. These procedures include reviewing detailed back-up documentation for audit and permitted non-audit services. The documentation includes a description of, and a budgeted amount for, particular categories of non-audit services that are recurring in nature and therefore anticipated at the time that the budget is submitted. Audit Committee approval is required to exceed the pre-approved amount for a particular category of non-audit services and to engage the independent registered public accounting firm for any non-audit services not included in those pre-approved amounts. For both types of pre-approval, the Audit Committee considers whether such services are consistent with the rules on auditor independence promulgated by the SEC and the PCAOB. The Audit Committee also considers whether the independent registered public accounting firm is best positioned to provide the most effective and efficient service, based on such reasons as the auditor's familiarity with our business, people, culture, accounting systems, risk profile, and whether the services enhance our ability to manage or control risks, and improve audit quality. The Audit Committee may form and delegate pre-approval authority to subcommittees consisting of one or more members of the Audit Committee, and such subcommittees must report any pre-approval decisions to the Audit Committee at its next scheduled meeting. All of the services provided by the independent registered public accounting firm were pre-approved by the Audit Committee.

PROPOSAL 3

APPROVAL OF AN AMENDMENT TO OUR 2018 STOCK INCENTIVE PLAN TO INCREASE THE NUMBER OF SHARES OF COMMON STOCK THAT WE WILL HAVE AUTHORITY TO GRANT UNDER THE PLAN BY AN ADDITIONAL 4,000,000 SHARES OF COMMON STOCK

On May 10, 2018, the Board of Directors adopted, and our stockholders subsequently approved on October 2, 2018, the Heat Biologics, Inc. 2018 Stock Incentive Plan which would allow the Company to grant up to 4,000,000 awards under the 2018 Plan (the "2018 Plan"). As of May 28, 2019, there were (i) 58,750 shares of common stock available for grant under the 2018 Plan and (ii) 3,138,314 shares of common stock subject to awards were outstanding under the 2018 Plan. In April 2017 the Board of Directors adopted and on June 29, 2017 at our 2017 Annual Meeting of Stockholders, our stockholders approved our 2017 Stock Incentive Plan (the "2017 Plan") under which we were authorized to grant 500,000 awards (5,000,000 on a pre-stock split basis) awards. In January 2014, the Board of Directors adopted, and on June 11, 2014 at our 2014 Annual Meeting of Stockholders our stockholders approved our 2014 Stock Incentive Plan (the "2014 Plan") under which, as subsequently amended, we were authorized to grant up to 300,000 awards (3,000,000 awards on a pre-stock split basis). In 2009, the Board of Directors adopted and our stockholders approved our 2009 Stock Incentive Plan (the "2009 Plan") under which we are authorized to grant 86,956 awards (869,565 awards on a pre-stock split basis). As of May 28, 2019, we have outstanding an aggregate of 3,922,433 awards under the 2009 Plan, 2014 Plan, 2017 Plan and 2018 Plan and have available for grant an aggregate of 111,800 awards under the 2009 Plan, 2014 Plan, 2017 Plan and 2018 Plan.

In an effort to preserve cash and to attract, retain and motivate persons who make important contributions to our business, we would like to issue securities to our officers, directors and consultants. The 2018 Plan currently only has a limited number of shares of common stock available for issuance. Management believes that the number of shares of common stock currently available for issuance under the 2018 Plan is insufficient to meet its needs to provide for awards to the 2018 Plan participants for the next 12 months and insufficient in order to allow us the ability to compete successfully for talented employees and consultants.

The Board of Directors has approved, subject to stockholder approval, the amendment to the 2018 Plan to increase by 4,000,000 the number of shares that may be granted under the 2018 Plan. The amendment to our 2018 Plan will increase the number of shares of common stock with respect to which awards may be granted under the 2018 Plan from 4,000,000 shares of common stock to 8,000,000 shares of common stock. If the amendment to the 2018 Plan is approved by our stockholders, the number of shares available for future awards will increase to 4,058,750 based on the number shares remaining available for grant under the 2018 Plan as of May 28, 2019. If the Reverse Stock Split is effected, the number of shares available for grant under the 2018 Plan will be appropriately adjusted.

The principal provisions of the 2018 Plan, as amended, are summarized below and the proposed amendment to the 2018 Plan is attached hereto as Appendix A. The following discussion is qualified in its entirety by reference to the 2018 Plan.

Purpose of the 2018 Plan

The Board of Directors believes that the 2018 Plan is necessary for us to attract, retain and motivate our employees, directors and consultants through the grant of stock options, stock appreciation rights, restricted stock, restricted stock units and other equity-based or equity-related awards. The Company believes the 2018 Plan is best designed to provide the proper incentives for our employees, directors and consultants, ensures our ability to make performance-based awards, and meets the requirements of applicable law. There are currently 35 individuals that would be eligible to participate in the 2018 Plan, of which six are directors or executive officers and 30 are employees and consultants.

We manage our long-term stockholder dilution by limiting the number of equity incentive awards granted annually. The Board of Directors monitors our annual stock award Burn Rate, Dilution and Overhang (each as defined below), among other factors, in its efforts to maximize stockholders' value by granting what, in the Board of Directors' judgment, are the appropriate number of equity incentive awards necessary to attract, reward, and retain employees, consultants and directors. The table below illustrates our Burn Rate, Dilution, and Overhang for the past three fiscal years with details of each calculation noted below the table.

	2018	2017	2016
Burn Rate [(1)]	2%	6%	3%
Dilution [(2)]	12%	20%	14%
Overhang [(3)]	11%	6%	5%

(1) Burn Rate is (number of shares subject to equity awards granted during a fiscal year)/weighted average common shares outstanding for that fiscal year.
(2) Dilution is (number of shares subject to equity awards + the number of shares available for future awards at the end of a fiscal year)/(number of shares outstanding at the end of the fiscal year + number of share subject to equity awards + number of shares available for future awards).
(3) Overhang is (number of shares subject to equity awards at the end of a fiscal year)/(number of shares outstanding at the end of the fiscal year + number of shares subject to equity awards + number of shares available for future awards).

Administration

The 2018 Plan generally is administered by the Compensation Committee of the Board of Directors. The administrator of the 2018 Plan will have full authority to establish rules and regulations for the proper administration of the 2018 Plan, to select the employees, directors and consultants to whom awards are granted, and to set the date of grant, the type of award and the other terms and conditions of the awards, consistent with the terms of the 2018 Plan. The administrator of the 2018 Plan may modify outstanding awards as provided in the 2018 Plan.

Limitation on Awards and Shares Available

As of May 28, 2019, there are 58,750 shares of our common stock available for grants that may be made under the 2018 Plan.

Eligibility

Persons eligible to participate in the 2018 Plan include all of our employees, directors and consultants.

Awards

The 2018 Plan provides for the grant of: (i) incentive stock options; (ii) nonqualified stock options; (iii) stock appreciation rights; (iv) restricted stock; (v) restricted stock units; and (vi) other stock-based awards to eligible individuals. The terms of the awards will be set forth in an award agreement, consistent with the terms of the 2018 Plan. No stock option will be exercisable later than ten years after the date it is granted.

The 2018 Plan administrator is authorized to grant awards intended to qualify as "performance-based compensation" under Section 162(m) of the Internal Revenue Code of 1986, as amended (the "Code").

Stock Options. The 2018 Plan administrator may grant incentive stock options as defined in Section 422 of the Code and nonqualified stock options. Options shall be exercisable for such prices, shall expire at such times, and shall have such other terms and conditions as the 2018 Plan administrator may determine at the time of grant and as set forth in the award agreement; however, the exercise price must be at least equal to 100% of the fair market value at the date of grant. The option price is payable in cash or other consideration acceptable to the Company.

Stock Appreciation Rights. The 2018 Plan administrator may grant stock appreciation rights with such terms and conditions as the administrator may determine at the time of grant and as set forth in the award agreement. The grant price of a stock appreciation right shall be determined by the administrator and shall be specified in the award agreement; however, the grant price must be at least equal to 100% of the fair market value of a share on the date of grant. Stock appreciation rights may be exercised upon such terms and conditions as are imposed by the 2018 Plan administrator and as set forth in the stock appreciation right award agreement.

Restricted Stock. Restricted stock may be granted in such amounts and subject to the terms and conditions as determined by the 2018 Plan administrator at the time of grant and as set forth in the award agreement. The administrator may impose performance goals for restricted stock. The administrator may authorize the payment of dividends on the restricted stock during the restricted period.

Restricted Stock Units. The 2018 Plan administrator may grant restricted stock units in such amounts and subject to the terms and conditions as determined by the 2018 Plan administrator at the time of grant. Restricted stock units may be awarded independently of or in connection with any other award under the 2018 Plan.

Other Awards. The 2018 Plan administrator may grant other types of equity-based or equity-related awards not otherwise described by the terms of the 2018 Plan, in such amounts and subject to such terms and conditions, as the administrator shall determine. Such awards may be based upon attainment of performance goals established by the administrator and may involve the transfer of actual shares to participants, or payment in cash or otherwise of amounts based on the value of shares.

Adjustments Upon Changes in Stock

In the event of any change in the number of shares of common stock outstanding by reason of any stock dividend or split, reverse stock split, recapitalization, merger, consolidation, combination or exchange of shares or similar corporate change, the maximum number of shares of the common stock with respect to which the 2018 Plan administrator may grant awards under the 2018 Plan and the individual annual limit described in the 2018 Plan, shall be appropriately adjusted by the 2018 Plan administrator. In the event of any change in the number of shares of the common stock outstanding by reason of any other event or transaction, the 2018 Plan administrator may, but need not, make such adjustments in the number and class of shares of the common stock with respect to which awards: (i) may be granted under the 2018 Plan and (ii) granted to any one employee of the Company or a subsidiary during any one calendar year, in each case as the 2018 Plan administrator may deem appropriate, unless such adjustment would cause any award that would otherwise qualify as performance based compensation with respect to a "162(m) covered employee" (as defined in Section 162 of the Code), to cease to so qualify.

Corporate Transactions

In the event of (i) a dissolution or liquidation of the Company, (ii) a sale of all or substantially all of the Company's assets, (iii) a merger or consolidation involving the Company in which the Company is not the surviving corporation or (iv) a merger or consolidation involving the Company in which the Company is the surviving corporation but the holders of shares of the common stock receive securities of another corporation and/or other property, including cash, the 2018 Plan administrator shall, in its absolute discretion, have the power to:

- cancel each option and stock appreciation right outstanding immediately prior to the event and make a payment to the grantee equal to the excess of (a) the value, as determined in the absolute discretion of the 2018 Plan administrator, of the property received by a holder of common stock as a result of the event over (b) the exercise price otherwise payable in connection with the stock;
- cancel each option and stock appreciation right outstanding immediately prior to the event and make a payment to the grantee equal to property received by a holder of common stock as a result of the event; or
- provide for the exchange of each option and stock appreciation right outstanding immediately prior to such event (whether or not then exercisable) for an option on or stock appreciation right with respect to, as appropriate, some or all of the property which a holder of the number of shares of the common stock subject to such option or stock appreciation right would have received and, incident thereto, make an equitable adjustment as determined by the 2018 Plan administrator in its absolute discretion in the exercise price of the option or stock appreciation right, or the number of shares or amount of property subject to the option or stock appreciation right or, if appropriate, provide for a cash payment to the grantee to whom such option or stock appreciation right was granted in partial consideration for the exchange of the option or stock appreciation right.

Amendment and Termination

The Board of Directors may amend the 2018 Plan at any time, subject to stockholder approval to the extent required by applicable law or regulation or the listing standards of the Nasdaq or any other market or stock exchange on which the common stock is at the time primarily traded. Additionally, stockholder approval will be specifically required to (i) increase the number of shares available for issuance under the 2018 Plan or (ii) decrease the exercise price of any outstanding option or stock appreciation right granted under the 2018 Plan.

The Board of Directors may terminate the 2018 Plan at any time. Unless sooner terminated by the Board, the 2018 Plan will terminate on the close of business on May 10, 2028, ten years from the original effective date.

Miscellaneous

The 2018 Plan also contains provisions with respect to payment of exercise prices, vesting and expiration of awards, treatment of awards upon the sale of the Company, transferability of awards, and tax withholding requirements. Various other terms, conditions, and limitations apply, as further described in the 2018 Plan.

Federal Income Tax Consequences

The following is a brief description of the principal federal income tax consequences, as of the date of this proxy statement, associated with the grant of awards under the 2018 Plan. This summary is based on our understanding of present United States federal income tax law and regulations. The summary does not purport to be complete or applicable to every specific situation. Furthermore, the following discussion does not address foreign, state or local tax consequences.

Options

Grant. There is generally no United States federal income tax consequence to the participant solely by reason of the grant of incentive stock options or nonqualified stock options under the 2018 Plan, assuming the exercise price of the option is not less than the fair market value of the shares on the date of grant.

Exercise. The exercise of an incentive stock option is not a taxable event for regular federal income tax purposes if certain requirements are satisfied, including the requirement that the participant generally must exercise the incentive stock option no later than three months following the termination of the participant's employment with us. However, such exercise may give rise to alternative minimum tax liability (see "Alternative Minimum Tax" below). Upon the exercise of a nonqualified stock option, the participant will generally recognize ordinary income in an amount equal to the excess of the fair market value of the shares at the time of exercise over the amount paid by the participant as the exercise price. The ordinary income recognized in connection with the exercise by a participant of a nonqualified stock option will be subject to both wage and employment tax withholding, and we generally will be entitled to a corresponding deduction.

The participant's tax basis in the shares acquired pursuant to the exercise of an option will be the amount paid upon exercise plus, in the case of a nonqualified stock option, the amount of ordinary income, if any, recognized by the participant upon exercise thereof.

Qualifying Disposition. If a participant disposes of shares of our common stock acquired upon exercise of an incentive stock option in a taxable transaction, and such disposition occurs more than two years from the date on which the option was granted and more than one year after the date on which the shares were transferred to the participant pursuant to the exercise of the incentive stock option, the participant will realize long-term capital gain or loss equal to the difference between the amount realized upon such disposition and the participant's adjusted basis in such shares (generally the option exercise price).

Disqualifying Disposition. If the participant disposes of shares of our common stock acquired upon the exercise of an incentive stock option (other than in certain tax free transactions) within two years from the date on which the incentive stock option was granted or within one year after the transfer of shares to the participant pursuant to the exercise of the incentive stock option, at the time of disposition the participant will generally recognize ordinary income equal to the lesser of: (i) the excess of each such share's fair market value on the date of exercise over the exercise price paid by the participant or (ii) the participant's actual gain. If the total amount realized on a taxable disposition (including return on capital and capital gain) exceeds the fair market value on the date of exercise of the shares of our common stock purchased by the participant under the option, the participant will recognize a capital gain in the amount of the excess. If the participant incurs a loss on the disposition (the total amount realized is less than the exercise price paid by the participant), the loss will be a capital loss.

Other Disposition. If a participant disposes of shares of our common stock acquired upon exercise of a nonqualified stock option in a taxable transaction, the participant will recognize capital gain or loss in an amount equal to the difference between the participant's basis (as discussed above) in the shares sold and the total amount realized upon disposition. Any such capital gain or loss (and any capital gain or loss recognized on a disqualifying disposition of shares of our common stock acquired upon exercise of incentive stock options as discussed above) will be short-term or long-term depending on whether the shares of our common stock were held for more than one year from the date such shares were transferred to the participant.

Alternative Minimum Tax. Alternative minimum tax is payable if and to the extent the amount thereof exceeds the amount of the taxpayer's regular tax liability, and any alternative minimum tax paid generally may be credited against future regular tax liability (but not future alternative minimum tax liability).

Alternative minimum tax applies to alternative minimum taxable income. Generally, regular taxable income as adjusted for tax preferences and other items is treated differently under the alternative minimum tax.

For alternative minimum tax purposes, the spread upon exercise of an incentive stock option (but not a nonqualified stock option) will be included in alternative minimum taxable income, and the taxpayer will receive a tax basis equal to the fair market value of the shares of our common stock at such time for subsequent alternative minimum tax purposes. However, if the participant disposes of the incentive stock option shares in the year of exercise, the alternative minimum tax income cannot exceed the gain recognized for regular tax purposes, provided that the disposition meets certain third party requirements for limiting the gain on a disqualifying disposition. If there is a disqualifying disposition in a year other than the year of exercise, the income on the disqualifying disposition is not considered alternative minimum taxable income.

There are no federal income tax consequences to us by reason of the grant of incentive stock options or nonqualified stock options or the exercise of an incentive stock option (other than disqualifying dispositions). At the time the participant recognizes ordinary income from the exercise of a nonqualified stock option, we will be entitled to a federal income tax deduction in the amount of the ordinary income so recognized (as described above), provided that we satisfy our reporting obligations described below. To the extent the participant recognizes ordinary income by reason of a disqualifying disposition of the stock acquired upon exercise of an incentive stock option, and subject to the requirement of reasonableness, the provisions of Section 162(m) of the Code and the satisfaction of a tax reporting obligation, we generally will be entitled to a corresponding deduction in the year in which the disposition occurs. We are required to report to the Internal Revenue Service any ordinary income recognized by any participant by reason of the exercise of a nonqualified stock option. We are required to withhold income and employment taxes (and pay the employer's share of the employment taxes) with respect to ordinary income recognized by the participant upon exercise of nonqualified stock options.

Stock Appreciation Rights

There are generally no tax consequences to the participant or us by reason of the grant of stock appreciation rights. In general, upon exercise of a stock appreciation rights award, the participant will recognize taxable ordinary income equal to the excess of the stock's fair market value on the date of exercise over the stock appreciation rights' base price, or the amount payable. Generally, with respect to employees, the Company is required to withhold from regular wages or supplemental wage payments an amount based on the ordinary income recognized. Subject to the requirement of reasonableness, the provisions of Section 162(m) of the Code and the satisfaction of a tax reporting obligation, the Company generally will be entitled to a business expense deduction equal to the taxable ordinary income realized by the participant.

Restricted Stock

Unless a participant makes a Section 83(b) election, as described below, with respect to restricted stock granted under the 2018 Plan, a participant receiving such an award will not recognize U.S. taxable ordinary income and we will not be allowed a deduction at the time such award is granted. While an award remains unvested or otherwise subject to a substantial risk of forfeiture, a participant will recognize compensation income equal to the amount of any dividends received and we will be allowed a deduction in a like amount. When an award vests or otherwise ceases to be subject to a substantial risk of forfeiture, the excess of the fair market value of the award on the date of vesting or the cessation of the substantial risk of forfeiture over the amount paid, if any, by the participant for the award will be ordinary income to the participant and will be claimed as a deduction for federal income tax purposes by us. Upon disposition of the shares received, the gain or loss recognized by the participant will be treated as capital gain or loss, and the capital gain or loss will be short-term or long-term depending upon whether the participant held the shares for more than one year following the vesting or cessation of the substantial risk of forfeiture.

However, by filing a Section 83(b) election with the Internal Revenue Service within 30 days after the date of grant, a participant's ordinary income and commencement of holding period and the deduction will be determined as of the date of grant. In such a case, the amount of ordinary income recognized by such a participant and deductible by us will be equal to the excess of the fair market value of the award as of the date of grant over the amount paid, if any, by the participant for the award. If such election is made and a participant thereafter forfeits his or her award, no refund or deduction will be allowed for the amount previously included in such participant's income.

Generally, with respect to employees, we are required to withhold from regular wages or supplemental wage payments an amount based on the ordinary income recognized. Subject to the requirement of reasonableness, the provisions of Section 162(m) of the Code the satisfaction of a tax reporting obligation and any tax withholding condition, we generally will be entitled to a business expense deduction equal to the taxable ordinary income realized by the recipient. Upon disposition of stock, the recipient will recognize a capital gain or loss equal to the difference between the selling price and the sum of the amount paid for such stock, if any, plus any amount recognized as ordinary income upon acquisition (or vesting) of the stock. Such gain or loss will be long- or short-term depending on whether the stock was held for more than one year from the date ordinary income is measured.

New Plan Benefits

As of the date of this proxy statement, we are unable to determine any grants of awards under the 2018 Plan that will be made.

Existing Plan Benefits

The following table sets forth information with respect to options, restricted stock units, restricted stock and other awards previously granted under the 2018 Plan.

Name and position	Number of shares subject to grant (#)	Number of Registered Stock Awards Granted	Number of Shares Underlying Options Granted
Jeffrey Wolf, Chief Executive Officer	1,600,000	800,000	800,000
Ann A. Rosar, Former Vice President of Finance	200,000	100,000	100,000
Robert J. Jakobs, Vice President of Finance	75,000	—	75,000
Jeff T. Hutchins, Ph.D., Chief Scientific Officer and Chief Operating Officer	500,000	250,000	250,000
John K.A. Prendergast, Ph.D.	300,000	300,000	—
John Monahan, Ph.D.	150,000	—	150,000
Edward B. Smith, III	150,000	—	150,000
All Current Executive Officers as a Group(3 persons)	2,375,000	1,250,000	1,225,000
All Directors as a Group (3 persons)	600,000	300,000	300,000
All Non-Executive Officer Employee	300,000	139,081	160,919

EQUITY COMPENSATION PLAN INFORMATION

The following table contains information about our equity compensation plans as of December 31, 2018.

Plan 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)
Equity compensation plans approved by security holders			
2009 Stock Incentive Plan	23,799	$25.61	34,290
2014 Stock Incentive Plan	251,684	$16.29	12,358
2017 Stock Incentive Plan	189,820	$ 3.62	213,567
2018 Stock Incentive Plan	—	—	4,000,000
Equity compensation plans not approved by security holders	—	—	—
Total	465,303	$11.60	4,260,215

Subsequent to December 31, 2018, we issued Jeffrey Wolf, Jeff T. Hutchins, Ph.D. and Ann A. Rosar options exercisable for 800,000, 356,860, and 110,570 shares of common stock, respectively, that vested 50% on the grant date, with the remaining options vesting 30% on the first anniversary of the grant date and 10% each of the second and third anniversaries of the grant date as part of their 2018 bonus compensation. Subsequent to December 31, 2018, we also issued: (i) Jeffrey Wolf, Jeff T. Hutchins, Ph.D. and Ann A. Rosar 800,000, 143,140, and 89,430 restricted stock awards, respectively, that vested 50% on the grant date, with the remaining shares of restricted stock vesting 30% on the first anniversary of the grant date, 10% on the second anniversary of the grant date, and the remaining 10% vesting on the third anniversary of the grant date, and (ii) Robert J. Jakobs 75,000 stock options vesting pro rata on a monthly basis over four years.

THE BOARD OF DIRECTORS UNANIMOUSLY RECOMMENDS THAT YOU VOTE FOR THE AMENDMENT TO OUR 2018 STOCK INCENTIVE PLAN TO INCREASE THE NUMBER OF SHARES OF COMMON STOCK AVAILABLE THAT WE WILL HAVE AUTHORITY TO GRANT.

PROPOSAL 4

APPROVAL OF AN AMENDMENT (IN THE EVENT IT IS DEEMED BY THE BOARD TO BE ADVISABLE) TO OUR RESTATED CERTIFICATE OF INCORPORATION TO EFFECT A REVERSE STOCK SPLIT OF THE ISSUED AND OUTSTANDING SHARES OF COMMON STOCK AT A RATIO TO BE DETERMINED IN THE DISCRETION OF THE BOARD OF DIRECTORS WITHIN A RANGE OF ONE (1) SHARE OF COMMON STOCK FOR EVERY TWO (2) TO TEN (10) SHARES OF COMMON STOCK

General

The Board of Directors has adopted and is recommending that our stockholders approve a proposed certificate of amendment (in the event it is deemed by the Board to be advisable) to our Restated Certificate of Incorporation to effect a Reverse Stock Split of the issued and outstanding shares of common stock. Holders of the common stock are being asked to approve the proposal that Article IV of our Restated Certificate of Incorporation be amended to effect a Reverse Stock Split of the common stock at a ratio to be determined in the discretion of the Board of Directors and publicly announced prior to the effectiveness of any Reverse Stock Split within the range of one (1) share of common stock for every two (2) to ten (10) shares of common stock and also to decide whether or not to proceed to effect a Reverse Stock Split or instead to abandon the proposed certificate of amendment altogether. Pursuant to the laws of the State of Delaware, our state of incorporation, the Board of Directors must adopt any amendment to our Restated Certificate of Incorporation and submit the amendment to stockholders for their approval. The form of proposed certificate of amendment to our Restated Certificate of Incorporation to effect the Reverse Stock Split is attached as Appendix B-1 to this proxy statement. If a certificate of amendment is filed with the Secretary of State of the State of Delaware, the certificate of amendment to the Restated Certificate of Incorporation will effect the Reverse Stock Split by reducing the outstanding number of shares of common stock by the ratio to be determined by the Board of Directors and publicly announced prior to the effectiveness of any Reverse Stock Split. If the Board of Directors does not implement an approved Reverse Stock Split prior to the one-year anniversary of this meeting, the Board will seek stockholder approval before implementing any Reverse Stock Split after that time.

By approving this proposal, stockholders will approve the certificate of amendment to our Restated Certificate of Incorporation pursuant to which any whole number of outstanding shares, between and including two and ten, would be combined into one share of common stock, and authorize the Board of Directors to file such certificate of amendment, as determined by the Board of Directors in the manner described herein. If approved, the Board of Directors may also elect not to effect any Reverse Stock Split and consequently not to file any certificate of amendment to the Restated Certificate of Incorporation. The Board of Directors believes that stockholder approval of an amendment granting the Board of Directors this discretion, rather than approval of a specified exchange ratio, provides the Board of Directors with maximum flexibility to react to then-current market conditions and, therefore, is in the best interests of our company and its stockholders. The Board of Directors' decision as to whether and when to effect the Reverse Stock Split will be based on a number of factors, including market conditions, existing and expected trading prices for the common stock, and the continued listing requirements of the Nasdaq Capital Market ("Nasdaq"). Although our stockholders may approve the Reverse Stock Split, we will not effect the Reverse Stock Split if the Board of Directors does not deem it to be in our best interest and the best interest of our stockholders. The Reverse Stock Split, if authorized pursuant to this resolution and if deemed by the Board of Directors to be in our best interest and the best interest of our stockholders, will be effected, if at all, at a time that is not later than one year from the date of the 2019 Annual Meeting. The Board of Directors will publicly announce the ratio selected for the Reverse Stock Split prior to the effectiveness of any such Reverse Stock Split.

This Proposal 4, the proposed approval of the certificate of amendment to our Restated Certificate of Incorporation to effect the Reverse Stock Split, will not change the number of authorized shares of common stock or preferred stock, or the par value of common stock or preferred stock; however effecting the Reverse Stock Split will provide for additional shares of unissued authorized common stock. However, if Proposal 5 (the Increase), is approved and the Board of Directors determined to effect the Increase and not abandon the Increase, the authorized number of shares of common stock will be increased. As of the date of this proxy statement, our current authorized number of shares of common stock is sufficient to satisfy all of our share issuance obligations and we do not have any current plans, arrangements or understandings relating to the issuance of any additional shares of authorized common stock that will become available following the Reverse Stock Split.

Purpose and Background of the Reverse Stock Split

On several days during the month of May 2019, the common stock has closed below the required $1.00 per share bid price. If the common stock closes below the required $1.00 per share bid price for 30 consecutive trading days, we will not continue to comply with the applicable NASDAQ minimum bid price requirement.

The Board of Directors has approved the proposal authorizing the Reverse Stock Split for the following reasons:

- the Board of Directors believes that effecting the Reverse Stock Split could be an effective means of maintaining compliance with the bid price requirement for continued listing of the common stock on the Nasdaq if the common stock should fail to satisfy the $1.00 bid price Nasdaq requirement;
- the Board of Directors believes that continued listing on the Nasdaq provides overall credibility to an investment in our stock, given the stringent listing and disclosure requirements of the Nasdaq. Notably, some trading firms discourage investors from investing in lower priced stocks that are traded in the over-the-counter market because they are not held to the same stringent standards. Increasing visibility of our stock among a larger pool of potential investors could result in higher trading volumes after positive news flow. Such increases in visibility and liquidity could also help facilitate future financings; and
- the Board of Directors believes that a higher stock price, which may be achieved through a Reverse Stock Split, could help us generate investor interest and help attract, retain, and motivate employees.

The Board has considered the potential harm to us of a delisting of the common stock and has determined that, if the common stock continues to close below $1.00 per share bid price, the consummation of the Reverse Stock Split is the best way to maintain liquidity by achieving compliance with the Nasdaq requirements.

The Board of Directors also believes that the current low per share market price of the common stock has a negative effect on the marketability of our existing shares. The Board of Directors believes there are several reasons for this effect. First, certain institutional investors have internal policies preventing the purchase of low-priced stocks. Second, a variety of policies and practices of broker-dealers discourage individual brokers within those firms from dealing in low-priced stocks. Third, because the brokers' commissions on low-priced stocks generally represent a higher percentage of the stock price than commissions on higher priced stocks, the current share price of the common stock can result in individual stockholders paying transaction costs (commissions, markups or markdowns) that are a higher percentage of their total share value than would be the case if the share price of the common stock were substantially higher. This factor is also believed to limit the willingness of some institutions to purchase the common stock. The Board of Directors anticipates that a Reverse Stock Split will result in a higher bid price for the common stock, which may help to alleviate some of these problems. The Board of Directors further believes that some potential employees are less likely to work for us if we have a low stock price or are no longer Nasdaq listed, regardless of size of our overall market capitalization.

We believe that maintaining listing on the Nasdaq will provide us with a market for the common stock that is more accessible than if the common stock were traded on the OTC Bulletin Board or in the "pink sheets" maintained by the OTC Markets Group, Inc. Such alternative markets are generally considered to be less efficient than, and not as broad as, the Nasdaq. Among other factors, trading on the Nasdaq may increase liquidity and may potentially minimize the spread between the "bid" and "asked" prices quoted by market makers. Further, a Nasdaq listing may enhance our access to capital, increase our flexibility in responding to anticipated capital requirements and facilitate the use of common stock in any strategic or financing transactions that it may undertake. We believe that prospective investors will view an investment in us more favorably if our shares qualify for listing on the Nasdaq as compared with the OTC markets.

We expect that, if effected, a Reverse Stock Split of the common stock will increase the market price of the common stock so that we are able to maintain compliance with the Nasdaq minimum bid price listing standard. However, the effect of a Reverse Stock Split on the market price of the common stock cannot be predicted with any certainty, and the history of similar stock split combinations for companies in like circumstances is varied. It is possible that the per share price of the common stock after the Reverse Stock Split will not rise in proportion to the reduction in the number of shares of the common stock outstanding resulting from the Reverse Stock Split, effectively reducing our market capitalization, and there can be no assurance that the market price per post-reverse split share will either exceed or remain in excess of the $1.00 minimum bid price for a sustained period of time. The market price of the common stock may vary based on other factors that are unrelated to the number of shares outstanding, including our future performance.

PLEASE NOTE THAT UNLESS SPECIFICALLY INDICATED TO THE CONTRARY, THE DATA CONTAINED IN THIS PROXY STATEMENT, INCLUDING BUT NOT LIMITED TO SHARE NUMBERS, CONVERSION PRICES AND EXERCISE PRICES OF OPTIONS AND WARRANTS, DOES NOT REFLECT THE IMPACT OF THE REVERSE STOCK SPLIT THAT MAY BE EFFECTUATED

Board Discretion to Implement the Reverse Stock Split

If Proposal No. 4 is approved by the stockholders and the Board determines to effect the Reverse Stock Split, it will consider certain factors in selecting the specific stock split ratio, including prevailing market conditions, the trading price of the common stock and the steps that we will need to take in order to achieve compliance with the bid price requirement and other listing regulations of the Nasdaq. Based in part on the price of the common stock on the days leading up to the filing of the certificate of amendment to the Restated Certificate of Incorporation effecting the Reverse Stock Split, the Board of Directors will determine the ratio of the Reverse Stock Split, in the range of 1:2 to 1:10, that, in the judgment of the Board, of Directors is the reverse split ratio most likely to allow us to achieve and maintain compliance with the minimum $1.00 per share bid price requirement for listing on the Nasdaq for the longest period of time, while retaining a sufficient number of outstanding, tradeable shares to facilitate an adequate market. The Board of Directors will publicly announce the ratio selected for the Reverse Stock Split prior to the effectiveness of the Reverse Stock Split within the limits set forth in Proposal No. 4.

Notwithstanding approval of the Reverse Stock Split by the stockholders, the Board of Directors may, in its sole discretion, abandon the proposed certificate of amendment and determine prior to the effectiveness of any filing with the Secretary of State of the State of Delaware not to effect the Reverse Stock Split prior to the one year anniversary of the 2019 Annual Meeting of stockholders, as permitted under Section 242(c) of the DGCL. If the Board fails to implement the certificate of amendment prior to the one-year anniversary of this meeting of stockholders, stockholder approval would again be required prior to implementing any Reverse Stock Split.

Consequences if Stockholder Approval for Proposal Is Not Obtained

If we should fail to satisfy the minimum bid price requirement for thirty consecutive trading days, in accordance with Nasdaq's Listing Rule 5810(c)(3)(A), we will be given a period of 180 calendar days to regain compliance with the requirement. We may also be eligible for an additional 180 day extension from Nasdaq. If stockholder approval for Proposal No. 4 is not obtained, we will not be able to file a certificate of amendment to the Certificate of Incorporation to effect the Reverse Stock Split. If stockholder approval of the Reverse Stock Split is not obtained at the 2019 Annual Meeting and we should fail to satisfy the Nasdaq minimum bid price, we will continue to seek stockholder approval of a reverse stock split in order to regain compliance within the time period granted by Nasdaq to regain compliance. If compliance is not achieved by the expiration of period of time we are granted to regain compliance with the Nasdaq requirement, then our stock would be delisted from the Nasdaq. If we were unable to regain compliance during any such period, the common stock would likely be transferred to the OTC Bulletin Board or OTC Market.

If we fail to meet all applicable Nasdaq requirements and Nasdaq determines to delist the common stock, the delisting could adversely affect the market liquidity of the common stock and the market price of the common stock could decrease. Delisting could also adversely affect our ability to obtain financing for the continuation of our operations and/or result in the loss of confidence by investors, suppliers, commercial partners and employees. In addition, the limited number of authorized shares of the common stock that are neither outstanding nor reserved for issuance could adversely affect our ability to raise capital through equity financings.

Principal Effects of the Reverse Stock Split

If the stockholders approve the proposal to authorize the Board of Directors to implement the Reverse Stock Split and the Board of Directors determines to implement the Reverse Stock Split, we will publicly announce the selected ratio for the Reverse Stock Split and file the certificate of amendment to amend the existing provision of our Restated Certificate of Incorporation to effect the Reverse Stock Split. The text of the form of proposed certificate of amendment to the Restated Certificate of Incorporation is annexed to this proxy statement as Appendix B-1.

The Reverse Stock Split will be effected simultaneously for all issued and outstanding shares of common stock and the stock split ratio will be the same for all issued and outstanding shares of common stock. The Reverse Stock Split will affect all of our stockholders uniformly and will not affect any stockholder's percentage ownership interests in our company, except that stockholders who would have otherwise received fractional shares will receive cash in lieu of such fractional shares. After the Reverse Stock Split, the shares of the common stock will have the same voting rights and rights to dividends and distributions and will be identical in all other respects to the common stock now authorized common stock issued pursuant to the Reverse Stock Split will remain fully paid and non-assessable. The Reverse Stock Split will not affect us continuing to be subject to the periodic reporting requirements of the Exchange Act. The Reverse Stock Split is not intended to be, and will not have the effect of, a "going private transaction" covered by Rule 13e-3 under the Exchange Act.

The Reverse Stock Split may result in some stockholders owning "odd-lots" of less than 100 shares of the common stock. Brokerage commissions and other costs of transactions in odd-lots are generally higher than the costs of transactions in "round-lots" of even multiples of 100 shares. In addition, we will not issue fractional shares in connection with the Reverse Stock Split, and stockholders who would have otherwise been entitled to receive such fractional shares will receive an amount in cash determined in the manner set forth below under the heading "Fractional Shares."

Following the effectiveness of any Reverse Stock Split approved by the stockholders and implementation by the Board of Directors, current stockholders will hold fewer shares of common stock, with such number of shares dependent on the specific ratio for the Reverse Stock Split. For example, if the Board approves of a 1-for-5 Reverse Stock Split, a stockholder owning a "round-lot" of 100 shares of common stock prior to the Reverse Stock Split would hold 20 shares of common stock following the Reverse Stock Split. THE HIGHER THE REVERSE RATIO (1-FOR-5 BEING HIGHER THAN 1-FOR-2, FOR EXAMPLE), THE GREATER THE REDUCTION OF RELATED SHARES EACH EXISTING STOCKHOLDER, POST REVERSE STOCK SPLIT, WILL EXPERIENCE.

In deciding whether to implement the Reverse Stock Split and the specific Reverse Stock Split ratio to be used, the Board of Directors will consider primarily the satisfaction of the Nasdaq continuing listing requirements, as described above under the heading "Purpose and Background of the Reverse Stock Split." It may also consider, among other things: (i) the market price of the common stock at the time of the Reverse Stock Split; (ii) the number of shares that will be outstanding after the split; (iii) the stockholders' equity at such time; (iv) the shares of common stock available for issuance in the future; (v) the liquidity of the common stock in the market and the improved liquidity that may result; and (vi) the nature of our operations. The Board of Directors maintains the right to elect not to proceed with the Reverse Stock Split if it determines, in its sole discretion, that we will be able to satisfy the listing requirements of Nasdaq without implementing the Reverse Stock Split or if this proposal is otherwise no longer in our best interests.

IF THIS PROPOSAL IS NOT APPROVED, WE MAY BE UNABLE TO MAINTAIN THE LISTING OF THE COMMON STOCK ON THE NASDAQ, WHICH COULD ADVERSELY AFFECT THE LIQUIDITY AND MARKETABILITY OF THE COMMON STOCK.

Risks Associated with the Reverse Stock Split

There are risks associated with the Reverse Stock Split, including that the Reverse Stock Split may not result in a sustained increase in the per share price of our common stock. There is no assurance that:

- the market price per share of our common stock after the Reverse Stock Split will rise in proportion to the reduction in the number of shares of our common stock outstanding before the Reverse Stock Split;
- the Reverse Stock Split will result in a per share price that will attract brokers and investors who do not trade in lower priced stocks;
- the Reverse Stock Split will result in a per share price that will increase our ability to attract and retain employees and other service providers;
- the liquidity of the common stock will increase; and
- the closing bid price per share will either exceed or remain in excess of the $1.00 minimum bid price as required by Nasdaq, or that we will otherwise meet the requirements of Nasdaq for continued inclusion for trading on the Nasdaq.

Stockholders should note that the effect of the Reverse Stock Split, if any, upon the market price for our common stock cannot be accurately predicted. In particular, we cannot assure you that prices for shares of our common stock after the Reverse Stock Split will be two (2) to ten (10) times, as applicable, the prices for shares of our common stock immediately prior to the Reverse Stock Split. Furthermore, even if the market price of our common stock does rise following the Reverse Stock Split, we cannot assure you that the market price of the common stock immediately after the proposed Reverse Stock Split will be maintained for any period of time. Even if an increased per-share price can be maintained, the Reverse Stock Split may not achieve the desired results that have been outlined above. Moreover, because some investors may view the Reverse Stock Split negatively, we cannot assure you that the Reverse Stock Split will not adversely impact the market price of the common stock.

The market price of the common stock will also be based on our performance and other factors, some of which are unrelated to the Reverse Stock Split or the number of shares outstanding. If the Reverse Stock Split is effected and the market price of the common stock declines, the percentage decline as an absolute number and as a percentage of our overall market capitalization may be greater than would occur in the absence of a Reverse Stock Split. The total market capitalization of the common stock after implementation of the Reverse Stock Split when and if implemented may also be lower than the total market capitalization before the Reverse Stock Split. Furthermore, the liquidity of the common stock could be adversely affected by the reduced number of shares that would be outstanding after the Reverse Stock Split.

While we aim that the Reverse Stock Split will be sufficient to maintain our listing on Nasdaq, it is possible that, even if the Reverse Stock Split results in a bid price for the common stock that exceeds $1.00 per share another reverse split may be necessary in the future and we may not be able to continue to satisfy the other criteria for continued listing of the common stock on Nasdaq.

To continue to have the common stock eligible for continued listing on Nasdaq, we would also need to satisfy additional criteria under at least one of three standards. Under the "Equity Standard Listing Rules," these criteria require, in addition to the minimum bid price, that:

- we have stockholders' equity of at least $2.5 million;
- our public float must consist of at least 500,000 shares with a market value of at least $1 million (public float defined under Nasdaq's rules as the shares held by persons other than officers, directors and beneficial owners of greater than 10% of our total outstanding shares);
- there be at least 300 round lot stockholders;
- there be at least two market makers for the common stock; and
- we comply with certain corporate governance requirements.

We believe that we will satisfy all of these listing criteria; however, we cannot assure you that we will be successful in continuing to meet all requisite continued listing criteria.

We believe that the Reverse Stock Split may result in greater liquidity for our stockholders. However, it is also possible that such liquidity could be adversely affected by the reduced number of shares outstanding after the Reverse Stock Split, particularly if the share price does not increase as a result of the Reverse Stock Split.

Potential Anti-takeover Effects of a Reverse Stock Split

Release No. 34-15230 of the staff of the SEC requires disclosure and discussion of the effects of any action, including the proposals discussed herein, that may be used as an anti-takeover mechanism. The Reverse Stock Split, if effected, will also result in a relative increase in the number of authorized but unissued shares of our common stock vis-à-vis the outstanding shares of our common stock and, could, under certain circumstances, have an anti-takeover effect, although this is not the purpose or intent of the Board of Directors. A relative increase in the number of authorized shares of common stock could have other effects on our stockholders, depending upon the exact nature and circumstances of any actual issuances of authorized but unissued shares. A relative increase in our authorized shares could potentially deter takeovers, including takeovers that the Board of Directors has determined are not in the best interest of our stockholders, in that additional shares could be issued (within the limits imposed by applicable law) in one or more transactions that could make a change in control or takeover more difficult. For example, we could issue additional shares so as to dilute the stock ownership or voting rights of persons seeking to obtain control without our agreement. Similarly, the issuance of additional shares to certain persons allied with our management could have the effect of making it more difficult to remove our current management by diluting the stock ownership or voting rights of persons seeking to cause such removal. The Reverse Stock Split therefore may have the effect of discouraging unsolicited takeover attempts. By potentially discouraging initiation of any such unsolicited takeover attempts, the Reverse Stock Split may limit the opportunity for our stockholders to dispose of their shares at the higher price generally available in takeover attempts or that may be available under a merger proposal.

Although the Reverse Stock Split has been prompted by business and financial considerations and not by the threat of any known or threatened hostile takeover attempt, stockholders should be aware that the effect of the Reverse Stock Split could facilitate future attempts by us to oppose changes in control and perpetuate our management, including transactions in which the stockholders might otherwise receive a premium for their shares over then current market prices. We cannot provide assurances that any such transactions will be consummated on favorable terms or at all, that they will enhance stockholder value, or that they will not adversely affect our business or the trading price of the common stock.

Common Stock

After the effective date of the Reverse Stock Split, each stockholder will own fewer shares of the common stock.

Accordingly, a Reverse Stock Split would result in a significant increase in the number of authorized and unissued shares of common stock. Because our stockholders have no preemptive rights to purchase or subscribe for any of the unissued common stock, the future issuance of additional shares of common stock will reduce our current stockholders' percentage ownership interest in the total outstanding shares of common stock. In the absence of a proportionate increase in our future earnings and book value, an increase in the number of our outstanding shares of common stock would dilute our projected future earnings per share, if any, and book value per share of all our outstanding shares of the common stock. If these factors were reflected in the price per share of our common stock, the potential realizable value of a stockholder's investment could be adversely affected. An issuance of additional shares could therefore have an adverse effect on the potential realizable value of a stockholder's investment. As of the date of this filing, Heat does not have any definitive plans, proposals or arrangements to issue any of the newly available authorized shares for any purpose.

This proposal has been prompted solely by the business considerations discussed in the preceding paragraphs. Any additional shares of common stock that would become available for issuance following the Reverse Stock Split could also be used by us management to delay or prevent a change in control. The Board of Directors is not aware of any pending takeover or other transactions that would result in a change in control, and the proposal was not adopted in response to any such proposals.

All outstanding options and warrants to purchase shares of the common stock, including any held by our officers and directors, would be adjusted as a result of the Reverse Stock Split. In particular, the number of shares issuable upon the exercise of each instrument would be reduced, and the exercise price per share, if applicable, would be increased, in accordance with the terms of each instrument and based on the ratio of the Reverse Stock Split.

The following table sets forth the approximate number of shares of the common stock that would be outstanding immediately after the Reverse Stock Split at various exchange ratios, based on 34,065,652 shares of common stock actually outstanding as of May 28, 2019. The table does not account for fractional shares that will be paid in cash.

Ratio of Reverse Stock Split	Approximate Shares of Common Stock Outstanding After Reverse Stock Split Based on Current Authorized Number of Shares
None	
1:2	17,032,826
1:3	11,355,217
1:4	8,516,413
1:5	6,813,130
1:6	5,677,608
1:7	4,866,521
1:8	4,258,206
1:9	3,785,072
1:10	3,406,565

Procedure for Effecting Reverse Stock Split and Exchange of Stock Certificates, if Applicable

If the certificate of amendment is approved by the stockholders, and if at such time the Board of Directors still believes that a Reverse Stock Split is in our best interests and the best interests of our stockholders, the Board of Directors will determine the ratio, within the range approved by Heat's stockholders, of the Reverse Stock Split to be implemented and will publicly announce the selected ratio for the Reverse Stock Split prior to the effectiveness of the Reverse Stock Split. We will file the certificate of amendment with the Secretary of State of the State of Delaware at such time as the Board of Directors has determined the appropriate effective time for the Reverse Stock Split. The Board of Directors may delay effecting the Reverse Stock Split without re-soliciting stockholder approval. The Reverse Stock Split will become effective on the effective date set forth in the certificate of amendment. Beginning on the effective date of the split, each certificate representing pre-split shares will be deemed for all corporate purposes to evidence ownership of post-split shares.

As soon as practicable after the effective date of the split, stockholders will be notified that the Reverse Stock Split has been effected. If you hold shares of common stock in a book-entry form, you will receive a transmittal letter from our transfer agent as soon as practicable after the effective time of the Reverse Stock Split with instructions on how to exchange your shares. After you submit your completed transmittal letter, if you are entitled to post-split shares of the common stock, a transaction statement will be sent to your address of record as soon as practicable after the effective date of the split indicating the number of shares of the common stock you hold.

Some stockholders hold their shares of common stock in certificate form or a combination of certificate and book-entry form. We expect that our transfer agent will act as exchange agent for purposes of implementing the exchange of stock certificates, if applicable. If you are a stockholder holding pre-split shares in certificate form, you will receive a transmittal letter from our transfer agent as soon as practicable after the effective time of the Reverse Stock Split. The transmittal letter will be accompanied by instructions specifying how you can exchange your certificate representing the pre-split shares of the common stock for a statement of holding. When you submit your certificate representing the pre-split shares of the common stock, your post-split shares of the common stock will be held electronically in book-entry form in the Direct Registration System. This means that, instead of receiving a new stock certificate, you will receive a statement of holding that indicates the number of post-split shares you own in book-entry form. We will no longer issue physical stock certificates unless you make a specific request for a share certificate representing your post-split ownership interest.

STOCKHOLDERS SHOULD NOT DESTROY ANY STOCK CERTIFICATE(S) AND SHOULD NOT SUBMIT ANY CERTIFICATE(S) UNTIL REQUESTED TO DO SO.

Beginning on the effective time of the Reverse Stock Split, each certificate representing pre-split shares will be deemed for all corporate purposes to evidence ownership of post-split shares.

Fractional Shares

No fractional shares will be issued in connection with the Reverse Stock Split. Instead, stockholders who otherwise would be entitled to receive fractional shares will, upon surrender to the exchange agent of certificates representing their fractional shares, be entitled to receive cash in an amount equal to the product obtained by multiplying (i) the closing sales price of the common stock as reported on the Nasdaq on the effective date of the certificate of amendment to the Certificate of Incorporation by (ii) the number of shares of the common stock held by such stockholder before the Reverse Stock Split that would otherwise have been exchanged for such fractional share interest. Holders of as many as 9 shares (if we were to implement a 1:10 Reverse Stock Split) of the common stock would be eliminated as a result of the cash payment in lieu of any issuance of fractional shares or interests in connection with the Reverse Stock Split. The exact number by which the number of holders of the common stock would be reduced will depend on the Reverse Stock Split ratio adopted and the number of stockholders that hold less than the Reverse Stock Split ratio as of the effective date of the Reverse Stock Split.

Effect on Outstanding Stock Options and Warrants

We have equity incentive plans designed primarily to provide stock-based incentives to employees pursuant to which we have issued stock options to purchase shares of the common stock. In addition, we have issued to third party investors and others warrants to purchase shares of the common stock. As of May 28, 2019, we had issued and outstanding warrants to purchase up to 9,030,730 shares and had 3,922,433 outstanding options under our equity incentive plans. In the event of a Reverse Stock Split, the Board of Directors shall make appropriate adjustment to awards granted under the equity incentive plans. Further, the terms of our outstanding warrants all provide for appropriate adjustments in the event of a stock split. Accordingly, if the Reverse Stock Split is approved by our stockholders and the Board of Directors decides to implement the Reverse Stock Split, as of the effective date the number of all outstanding warrants and option grants, the number of shares issuable and the exercise price, as applicable, relating to options under our equity incentive plans and warrants, will be proportionately adjusted using the Reverse Stock Split ratio selected by the Board of Directors. The Board of Directors has also authorized us to effect any other changes necessary, desirable or appropriate to give effect to the Reverse Stock Split, including any applicable technical, conforming changes.

For example, if a 1-for-5 Reverse Stock Split is effected, the aggregate number of shares of the common stock issuable under our outstanding warrants and stock options would be approximately 1,806,146 and 784,487, respectively, representing a 5-fold decrease in the number of shares issuable under those warrants and stock options. The terms of our outstanding warrants and stock options do not permit exercise for fractional shares. As such, the number of shares issuable under any individual outstanding warrant or stock option shall either be rounded up or down as provided for under the specific terms of our equity incentive plans and warrants, or in the case of certain of our warrants, upon exercise of those warrants we have the option to pay cash amounts for fractional shares that otherwise would be issued or round up. Commensurately, the exercise price under each outstanding warrant and stock option would be increased by 5 times such that upon exercise, the aggregate exercise price payable by the warrant holder or optionee to us would remain the same. Furthermore, the aggregate number of shares currently available under our equity incentive plans for future stock option and other equity-based grants will be proportionally reduced to reflect the Reverse Stock Split ratio. For example, in the event of a 1-for-5 Reverse Stock Split, 111,800 shares that currently remain available for issuance under our equity incentive plans (without taking into account the increase in the 2018 Plan) would be adjusted to equal approximately 22,360 shares, subject to future potential increases pursuant to the terms of those plans.

Accounting Matters

The Reverse Stock Split will not affect the common stock capital account on our balance sheet. However, because the par value of the common stock will remain unchanged on the effective date of the split, the components that make up the common stock capital account will change by offsetting amounts. Depending on the size of the Reverse Stock Split the Board of Directors decides to implement, the stated capital component will be reduced to an amount between one-half (1/2) and one-tenth (1/10) of its present amount, and the additional paid-in capital component will be increased with the amount by which the stated capital is reduced. The per share net income or loss and net book value of the common stock will be increased because there will be fewer shares of common stock outstanding. Prior periods' per share amounts will be restated to reflect the Reverse Stock Split.

Material United States Federal Income Tax Consequences of the Reverse Stock Split

The following discussion describes the anticipated material United States Federal income tax consequences to "U.S. holders" (as defined below) of Company capital stock relating to the Reverse Stock Split. This discussion is based upon the Internal Revenue Code of 1986, as amended (the "Code"), Treasury Regulations, judicial authorities, published positions of the Internal Revenue Service ("IRS"), and other applicable authorities, all as currently in effect and all of which are subject to change or differing interpretations (possibly with retroactive effect). We have not obtained a ruling from the IRS or an opinion of legal or tax counsel with respect to the tax consequences of the Reverse Stock Split. The following discussion is for information purposes only and is not intended as tax or legal advice. Each holder should seek advice based on the holder's particular circumstances from an independent tax advisor.

For purposes of this discussion, the term "U.S. holder" means a beneficial owner of our capital stock that is for United States Federal income tax purposes:

(i) an individual citizen or resident of the United States;
(ii) a corporation (or other entity treated as a corporation for U.S. Federal income tax purposes) organized under the laws of the United States, any state, or the District of Columbia;
(iii) an estate with income subject to United States Federal income tax regardless of its source; or
(iv) a trust that (a) is subject to primary supervision by a United States court and for which United States persons control all substantial decisions or (b) has a valid election in effect under applicable Treasury Regulations to be treated as a United States person.

This discussion assumes that a U.S. holder holds our capital stock as a capital asset within the meaning of Code Section 1221. This discussion does not address all of the tax consequences that may be relevant to a particular stockholder or to stockholders that are subject to special treatment under United States Federal income tax laws including, but not limited to, financial institutions, tax-exempt organizations, insurance companies, regulated investment companies, real estate investment trusts, entities disregarded from their owners for tax purposes, persons that are broker-dealers, traders in securities who elect the mark-to-market method of accounting for their securities, or stockholders holding their shares of capital stock as part of a "straddle," "hedge," "conversion transaction," or other integrated transaction, or persons who hold their capital stock through individual retirement or other tax-deferred accounts. This discussion also does not address the tax consequences to us, or to our stockholders that own 5% or more of our capital stock, are affiliates of Heat, or are not U.S. holders. In addition, this discussion does not address other United States Federal taxes (such as gift or estate taxes or alternative minimum taxes), the tax consequences of the Reverse Stock Split under state, local, or foreign tax laws or certain tax reporting requirements that may be applicable with respect to the Reverse Stock Split. No assurance can be given that the IRS would not assert, or that a court would not sustain, a position contrary to any of the tax consequences set forth below.

If a partnership (or other entity treated as a partnership for United States Federal income tax purposes) is a Heat stockholder, the tax treatment of a partner in the partnership, or any equity owner of such other entity will generally depend upon the status of the person and the activities of the partnership or other entity treated as a partnership for United States Federal income tax purposes.

Tax Consequences of the Reverse Stock Split Generally

We believe that the Reverse Stock Split will qualify as a "reorganization" under Section 368(a)(1)(E) of the Code. Accordingly, provided that the fair market value of the post-Reverse Stock Split shares is equal to the fair market value of the pre-Reverse Stock Split shares surrendered in the Reverse Stock Split:

- A U.S. holder will not recognize any gain or loss as a result of the Reverse Stock Split other than cash payments if any, received by a stockholder in lieu of fractional shares as discussed below.
- A U.S. holder's aggregate tax basis in his, her, or its post-Reverse Stock Split shares will be equal to the aggregate tax basis in the pre-Reverse Stock Split shares exchanged therefor, less any basis attributable to fractional share interests.
- A U.S. holder's holding period for the post-Reverse Stock Split shares will include the period during which such stockholder held the pre-Reverse Stock Split shares surrendered in the Reverse Stock Split.
- For purposes of the above discussion of the basis and holding periods for shares of Heat capital stock, and except as provided therein, holders who acquired different blocks of Heat capital stock at different times for different prices must calculate their basis and holding periods separately for each identifiable block of such stock exchanged, converted, canceled or received in the Reverse Stock Split.
- Stockholders who receive cash in lieu of fractional share interests as a result of the Reverse Stock Split will be treated as having received the fractional shares pursuant to the Reverse Stock Split and then as having exchanged the fractional shares for cash in a redemption by Heat, and will generally recognize gain or loss equal to the difference between the amount of cash received in lieu of a fractional share and their adjusted basis allocable to the fractional share interests redeemed. Such gain or loss will be long term capital gain or loss if the shares held prior to the Reverse Stock Split were held for more than one year. The stockholder's holding period for the shares issued after the Reverse Stock Split will include the period during which the stockholder held the shares surrendered in the Reverse Stock Split.

Information Reporting and Backup Withholding

Cash payments received by a U.S. holder of our capital stock pursuant to the Reverse Stock Split are subject to information reporting, and may be subject to backup withholding at the applicable rate specified by the U.S. Internal Revenue Service (currently 28%) if the holder fails to provide a valid taxpayer identification number and comply with certain certification procedures or otherwise establish an exemption from backup withholding. Backup withholding is not an additional United States Federal income tax. Rather, the U.S. Federal income tax liability of the person subject to backup withholding will be reduced by the amount of the tax withheld. If backup withholding results in an overpayment of taxes, a refund may be obtained provided that the required information is timely furnished to the IRS.

Vote Required to Approve Amendment of our Restated Certificate of Incorporation

Approval of the certificate of amendment to our Restated Certificate of Incorporation included as Appendix B-1, and to authorize the Board of Directors, if in their judgment it is necessary, to effect the Reverse Stock Split requires an affirmative vote of a majority of the common stock outstanding and entitled to vote at the 2019 Annual Meeting as of the record date. Abstentions and broker non-votes will be counted towards the vote total for this proposal and will have the same effect as "against" votes. Approval by our stockholders of the Reverse Stock Split is not conditioned upon approval by our stockholders of the Increase; conversely, approval by our stockholder of the Increase is not conditioned upon approval by our stockholders of the Reverse Stock Split.

Recommendation

THE BOARD OF DIRECTORS RECOMMENDS A VOTE "FOR" THE AMENDMENT TO OUR RESTATED CERTIFICATE OF INCORPORATION TO EFFECT A REVERSE STOCK SPLIT OF OUR COMMON STOCK AT A RATIO TO BE DETERMINED IN THE DISCRETION OF THE BOARD OF DIRECTORS IN THE RANGE OF ONE (1) SHARE OF COMMON STOCK FOR EVERY TWO (2) TO TEN (10) SHARES OF COMMON STOCK, AND PROXIES SOLICITED BY THE BOARD OF DIRECTORS WILL BE VOTED IN FAVOR OF THE AMENDMENT UNLESS A STOCKHOLDER INDICATES OTHERWISE ON THE PROXY.

PROPOSAL 5

APPROVAL OF AMENDMENT (IN THE EVENT IT IS DEEMED BY THE BOARD TO BE ADVISABLE) TO OUR RESTATED CERTIFICATE OF INCORPORATION TO INCREASE THE NUMBER OF AUTHORIZED SHARES OF COMMON STOCK FROM 100,000,000 to 250,000,000

The Board of Directors has adopted a resolution approving and recommending to our stockholders for their approval, a proposed certificate of amendment (in the event it is deemed by the Board of Directors to be advisable) to our Restated Certificate of Incorporation to effect an increase in the number of shares of our authorized common stock from the 100,000,000 shares that are currently authorized for issuance pursuant to our Restated Certificate of Incorporation to a total of 250,000,000 shares of common stock, if the Board of Directors deems the Increase advisable.

The text of the form of the proposed certificate of amendment to the Restated Certificate of Incorporation to implement Proposal 5 is annexed to this proxy statement as Appendix B-2. Assuming the stockholders approve the proposal and the Board of Directors deems it advisable, the Increase will be effected upon the filing of the certificate of amendment to the Restated Certificate of Incorporation with the Secretary of State of the State of Delaware. The Board of Directors will implement the Increase at such time, if ever, if and when it is deemed by the Board to be advisable. The Board of Directors will also have the discretion to abandon the Increase in authorized shares if the Board does not believe it to be in the best interests of Heat and our stockholders. If the Board of Directors does not implement an approved Increase prior to the one-year anniversary of the 2019 Annual Meeting, the Board of Directors will seek stockholder approval before implementing any Increase after that time.

The Board of Directors proposes and recommends increasing the number of shares of our authorized common stock from the 100,000,000 shares that are currently authorized for issuance pursuant to our Restated Certificate of Incorporation to a total of 250,000,000 shares of common stock. Of our 100,000,000 shares of currently authorized common stock, 34,065,652 shares were outstanding as of May 28, 2019, and after taking into account (i) shares underlying outstanding warrants and options, and (ii) the reservation of shares for issuance under our stock incentive plans, assuming the 2018 Plan amendment is adopted, approximately 48,869,385 of the 100,000,000 shares authorized in our Restated Certificate of Incorporation would be available for issuance.

The chart below illustrates the number of shares of common stock that will be available for issuance if both the Increase and the Reverse Stock Split are effected based on a 1-for-5 and 1-for-10 reverse stock split. The number of shares disclosed in the column "Estimated Number of shares of Common Stock before Reverse Stock Split and before Increase" reflects the approximate number of shares as of May 28, 2019. The number of shares disclosed in the column "Estimated number of shares of Common Stock after the Increase and before the Reverse Stock Split" gives further effect to the Increase in the number of authorized shares of common stock from 100,000,000 to 250,000,000 and assumes that the 2018 Plan amendment is adopted. The number of shares disclosed in the column "Estimated number of shares of Common Stock after Reverse Stock Split and after the Increase" gives further effect to the Reverse Stock Split based on a 1-for-5 and 1-for-10 reverse stock split and also gives effect to the Increase described in this Proposal 5 and assumes that the 2018 Plan amendment is adopted, but does not take into account any fractional shares.

	Estimated number of shares of Common Stock before Reverse Stock Split and before Increase	Estimated number of shares of Common Stock after the Increase and before the Reverse Stock Split (Assuming the 2018 Plan Amendment is Adopted)	Estimated number of shares of Common Stock after Reverse Stock Split and after the Increase (Assuming the 2018 Plan Amendment is Adopted) (3)	
			Ratio of Reverse Stock Split:	
			1:5	1:10
Authorized	100,000,000	250,000,000	250,000,000	250,000,000
Issued and Outstanding	34,065,652	34,065,652	6,813,130	3,406,565
Issuable under Outstanding Warrants	9,030,730	9,030,730	1,806,146	903,073
Issuable under Outstanding Stock Options	3,922,433	3,922,314	784,487	392,231
Reserved for Issuance(1)	4,111,800	4,111,800	822,360	411,180
Authorized but Unissued(2)	48,869,385	198,869,385	39,773,877	19,886,939

(1) Shares reserved for future issuance under our existing equity incentive plans and assuming the amendment to the 2018 Plan is approved, excluding shares issuable under outstanding stock options.

(2) Shares authorized but unissued represent common stock available for future issuance beyond shares currently outstanding, shares issuable under outstanding warrants and stock options and shares reserved for issuance under equity incentive plans (assuming approval of the amendment to the 2018 Plan).

(3) The shares presented are an estimate as we do not know the number of fractional share roundings that will be required to effectuate the Reverse Stock Split for individual accounts.

The Board of Directors currently believes that the Increase is advisable and in our best interest and the best interest of our stockholders. The Increase will provide us with flexibility in completing financing and capital raising transactions, which may be necessary for us to execute our future business plans. Other possible business and financial uses for the additional shares of common stock include, without limitation, attracting and retaining employees by the issuance of additional securities, and other transactions and corporate purposes that the Board of Directors may deem are in our best interest. We could also use the additional shares of common stock for potential strategic transactions, including, among other things, acquisitions, strategic partnerships, joint ventures, restructurings, business combinations and investments. We believe that the additional authorized shares would enable us to act quickly in response to opportunities that may arise for these types of transactions, in most cases without the necessity of obtaining further stockholder approval and holding a special stockholders' meeting before such issuance(s) could proceed, except as provided under Delaware law, as applicable, or under applicable Nasdaq rules. As of the date of this Proxy Statement, and other than upon issuance of currently outstanding securities exercisable into or convertible into the common stock, we have no arrangements or understandings regarding the additional shares that would be authorized or immediate plans to consummate any such transactions. However, we review and evaluate potential capital raising activities, transactions and other corporate actions on an ongoing basis to determine if such actions would be in our best interest and the best interest of our stockholders. We cannot provide assurances that any such transactions will be consummated on favorable terms or at all, that they will enhance stockholder value, or that they will not adversely affect our business or the trading price of the common stock.

If approved, the Board of Directors may also elect not to effect the Increase and consequently not to file any certificate of amendment to the Restated Certificate of Incorporation. If the Board of Directors fails to implement the certificate of amendment prior to the one-year anniversary of the 2019 Annual Meeting of stockholders, stockholder approval would again be required prior to implementing the Increase. Although approval by our stockholders of the Reverse Stock Split is not conditioned upon approval by our stockholders of the Increase; conversely, approval by our stockholder of the Increase is not conditioned upon approval by our stockholders of the Reverse Stock Split, if the stockholders should approve the Reverse Stock Split and the Board of Directors should implement the Reverse Stock Split, the number of shares of common stock authorized but unissued after implementing the Reverse Stock Split may impact the decision as to whether or not to effect the Increase since effecting the Reverse Stock Split will provide for additional shares of unissued authorized common stock.

The Increase would not have any immediate dilutive effect on the proportionate voting power or other rights of existing stockholders.

As is true for shares presently authorized but unissued, the future issuance of common stock authorized by the Increase may, among other things, decrease existing stockholders' percentage equity ownership, could be dilutive to the voting rights of existing stockholders and, depending on the price at which they are issued could have a negative effect on the market price of the common stock. In addition, an increase in the number of shares of our authorized common stock could result in an increase in the franchise tax that we would owe to the State of Delaware.

Potential Anti-takeover Effects of the Increase

Release No. 34-15230 of the staff of the SEC requires disclosure and discussion of the effects of any action, including the proposals discussed herein, that may be used as an anti-takeover mechanism. Since the amendment to our Restated Certificate of Incorporation will provide that the number of authorized shares of common stock will be 250,000,000, the Increase, if effected, will result in a relative increase in the number of authorized but unissued shares of our common stock vis-à-vis the outstanding shares of our common stock and, could, under certain circumstances, have an anti-takeover effect, although this is not the purpose or intent of the Board of Directors. A relative increase in the number of authorized shares of common stock could have other effects on our stockholders, depending upon the exact nature and circumstances of any actual issuances of authorized but unissued shares. A relative increase in our authorized shares could potentially deter takeovers, including takeovers that the Board of Directors has determined are not in the best interest of our stockholders, in that additional shares could be issued (within the limits imposed by applicable law) in one or more transactions that could make a change in control or takeover more difficult. For example, we could issue additional shares so as to dilute the stock ownership or voting rights of persons seeking to obtain control without our agreement. Similarly, the issuance of additional shares to certain persons allied with our management could have the effect of making it more difficult to remove our current management by diluting the stock ownership or voting rights of persons seeking to cause such removal. The Increase therefore may have the effect of discouraging unsolicited takeover attempts. By potentially discouraging initiation of any such unsolicited takeover attempts, the Increase may limit the opportunity for our stockholders to dispose of their shares at the higher price generally available in takeover attempts or that may be available under a merger proposal.

We have not proposed the Increase with the intention of using the additional authorized shares for anti-takeover purposes, but we would be able to use the additional shares to oppose a hostile takeover attempt or delay or prevent changes in control or management of Heat. For example, without further stockholder approval, the Board of Directors could authorize the sale of shares of common stock in a private transaction to purchasers who would oppose a takeover or favor our current Board of Directors. Although the Increase has been prompted by business and financial considerations and not by the threat of any known or threatened hostile takeover attempt, stockholders should be aware that the effect of the Increase could facilitate future attempts by us to oppose changes in control of our Company and perpetuate our management, including transactions in which the stockholders might otherwise receive a premium for their shares over then current market prices. We cannot provide assurances that any such transactions will be consummated on favorable terms or at all, that they will enhance stockholder value, or that they will not adversely affect our business or the trading price of the common stock.

Vote Required to Approve Amendment of our Restated Certificate of Incorporation

Approval of the certificate of amendment to our Restated Certificate of Incorporation included as Appendix B-2, and to authorize the Board of Directors to effect the Increase requires an affirmative vote of a majority of the shares of common stock outstanding as of the record date. Abstentions and broker non-votes (to the extent a broker does not exercise its authority to vote, although we do not expect any broker non-votes since this is a routine matter for which brokers have discretion to vote if beneficial owners do not provide voting instructions) will be counted towards the vote total for this proposal and will have the same effect as "AGAINST" votes. Approval by our stockholders of the Reverse Stock Split is not conditioned upon approval by our stockholders of the Increase; conversely, approval by our stockholder of the Increase is not conditioned upon approval by our stockholders of the Reverse Stock Split; however, if the stockholders should approve the Reverse Stock Split and the Board of Directors should implement the Reverse Stock Split, the number of shares of common stock authorized but unissued after implementing the Reverse Stock Split may impact the decision as to whether or not to effect the Increase since effecting the Reverse Stock Split will provide for additional shares of unissued authorized common stock.

THE BOARD OF DIRECTORS UNANIMOUSLY RECOMMENDS THAT YOU VOTE FOR APPROVAL OF THE AUTHORIZED SHARE INCREASE.

PROPOSAL 6

ADJOURNMENT OF THE ANNUAL MEETING OF STOCKHOLDERS, IF NECESSARY, TO SOLICIT ADDITIONAL PROXIES IF THERE ARE INSUFFICIENT VOTES IN FAVOR OF PROPOSAL 4 OR PROPOSAL 5

Adjournment to Solicit Additional Proxies

If we fail to receive a sufficient number of votes to approve Proposal 4 (an amendment to the Restated Certificate of Incorporation to effect the Reverse Stock Split) or Proposal 5 (an amendment to the Restated Certificate of Incorporation to effect the Increase), we may propose to adjourn the 2019 Annual Meeting, if the Board of Directors determines it to be necessary or appropriate for the purpose of soliciting additional proxies to approve Proposal 4 or Proposal 5. We currently do not intend to propose adjournment of the 2019 Annual Meeting, if there are sufficient votes in favor of Proposal 4 or Proposal 5. If our stockholders approve this proposal, we could adjourn the 2019 Annual Meeting and any adjourned or postponed session of the 2019 Annual Meeting and use the additional time to solicit additional proxies, including the solicitation of proxies from our stockholders that have previously voted. Among other things, approval of this proposal could mean that, even if we had received proxies representing a sufficient number of votes to defeat Proposal 4 or Proposal 5, we could adjourn the 2019 Annual Meeting without a vote on such proposal and seek to convince our stockholders to change their votes in favor of such proposal.

If it is necessary or appropriate (as determined in good faith by the Board of Directors) to adjourn the 2019 Annual Meeting, no notice of the adjourned meeting is required to be given to our stockholders under Delaware law, other than an announcement at the 2019 Annual Meeting of the time and place to which the 2019 Annual Meeting is adjourned, so long as the meeting is adjourned for 30 days or less and no new record date is fixed for the adjourned meeting. At the adjourned meeting, we may transact any business which might have been transacted at the original meeting.

THE BOARD OF DIRECTORS UNANIMOUSLY RECOMMENDS THAT STOCKHOLDERS VOTE "FOR" PROPOSAL 6 TO ADJOURN THE 2019 ANNUAL MEETING, IF THE BOARD DETERMINES IT TO BE NECESSARY OR APPROPRIATE, TO SOLICIT ADDITIONAL PROXIES IF THERE ARE NOT SUFFICIENT VOTES IN FAVOR OF PROPOSAL 4 OR PROPOSAL 5.

PROPOSAL 7

ADVISORY VOTE ON THE APPROVAL OF EXECUTIVE COMPENSATION

As of January 1, 2019, we are no longer an "emerging growth company" as defined in the Jumpstart Our Business Startups Act of 2012 (the "JOBS Act"). As a result, in accordance with the Dodd-Frank Wall Street Reform and Consumer Protection Act of 2010 (the "Dodd-Frank Act") we are required to provide our stockholders with the opportunity to cast an advisory vote on the compensation of our named executive officers as disclosed in this proxy statement in accordance with SEC rules. The advisory stockholder vote to approve the compensation of our named executive officers is often referred to as the "say-on-pay vote." This say-on-pay vote will not be binding on us, the Board of Directors, or the Compensation Committee.

As described in detail in this proxy statement, our executive compensation program is designed to (1) align executive officers' interests with those of our stockholders; (2) attract, motivate and retain executive officers; and (3) reward the achievement of our annual, long-term and strategic goals. Our executive officers are rewarded for the achievement of specific financial operating goals established by the Compensation Committee and the realization of increased stockholder value.

Our Compensation Committee continually reviews the compensation programs for our executive officers to ensure they achieve the desired goals of aligning our executive compensation structure with our stockholders' interests and current market practices.

The Board of Directors is asking our stockholders to indicate their support for our named executive officers' compensation as disclosed in this proxy statement. This proposal gives our stockholders the opportunity to express their views on our executive compensation. This vote is not intended to address any specific item of compensation, but rather the overall compensation of our named executive officers and the philosophy, policies and practices described in this proxy statement.

Accordingly, the Board of Directors will ask our stockholders to vote "FOR" the following resolution at the 2019 Annual Meeting:

"**RESOLVED**, that the Company's stockholders approve, on an advisory basis, the compensation of the named executive officers as disclosed in the proxy statement for the 2019 Annual Meeting pursuant to the compensation disclosure rules of the Securities and Exchange Commission (which disclosure includes the Summary Compensation Table for fiscal year 2018, and the other related tables and disclosures)."

The say-on-pay vote is advisory, and therefore is not binding on us, the Compensation Committee or the Board of Directors. The Board of Directors and Compensation Committee value the opinions of our stockholders and to the extent there is any significant vote against the named executive officers' compensation as disclosed in this proxy statement, we will consider our stockholders' concerns and the Compensation Committee will evaluate whether any actions are necessary to address those concerns.

Required Vote

The affirmative vote of the holders of a majority of the outstanding shares of the Company's common stock entitled to vote that are present or represented at the meeting and voted is required to approve, on an advisory basis, the compensation of the Company's named executive officers. In accordance with Delaware law, abstentions will be counted for purposes of determining the presence or absence of a quorum as are broker non-votes. Abstentions will have the same effect as a vote against the proposal and broker non-votes will not be counted for purposes of determining the number of shares represented and voted on this proposal in the meeting and, accordingly, will not affect the outcome of the Say-on-Pay vote.

THE BOARD OF DIRECTORS AND COMPENSATION COMMITTEE UNANIMOUSLY RECOMMEND A VOTE FOR THE APPROVAL, ON AN ADVISORY BASIS, OF THE COMPENSATION OF THE NAMED EXECUTIVE OFFICERS AS DISCLOSED IN THIS PROXY STATEMENT.

PROPOSAL 8

ADVISORY VOTE REGARDING THE FREQUENCY OF FUTURE ADVISORY VOTES ON EXECUTIVE COMPENSATION

As of January 1, 2019, we are no longer an "emerging growth company" as defined in the JOBS Act. As a result, in accordance with the Dodd-Frank Act, we are seeking the input of our stockholders on the question of how frequently Heat should seek the stockholder vote to approve (on an advisory basis) the compensation of our named executive officers. The advisory stockholder vote to approve the compensation of our named executive officers is often referred to as the "say-on-pay vote"; Proposal No. 7 is such a "say-on-pay" proposal. This Proposal No. 8 is often referred to as a "say-on-frequency" vote.

The Dodd-Frank Act specifies that stockholders be given the opportunity to vote on the Company's executive compensation programs either annually, every two years, or every three years. Although this vote is advisory and nonbinding, the Board of Directors will review voting results and give consideration to the outcome of such voting. However, because this vote is advisory and not binding on the Board of Directors or us, the Board of Directors may decide that it is in the best interests of our stockholders and us to hold an advisory vote on executive compensation more or less frequently than the option approved by our stockholders.

The Board of Directors recognizes the value of receiving input from the Company's stockholders on important issues such as the Company's compensation programs. However, it believes that a well-structured compensation program should include plans that drive creation of stockholder value over the long-term rather than focus on short term results. The three-year voting cycle allows stockholders to review compensation over a longer period of time, providing sufficient time to evaluate the impact of changes made in one year where outcomes may not be immediately known. In addition, a three-year voting cycle is more closely aligned with a longer-term view of compensation and consistent with the vesting period we typically use for equity awards. The Board of Directors therefore recommends that our stockholders select "3 YEARS" when voting on the frequency of the advisory vote on executive compensation.

Required Vote

The option of one year, two years, or three years that receives the highest number of votes cast by stockholders will be the frequency for the advisory vote on executive compensation that has been selected by stockholders. In accordance with Delaware law, abstentions will be counted for purposes of determining the presence or absence of a quorum as will broker non-votes. Abstentions and broker non-votes will not be counted for purposes of determining the number of shares represented and voted on this proposal and, accordingly, will not affect the outcome of this proposal.

THE BOARD OF DIRECTORS AND COMPENSATION COMMITTEE UNANIMOUSLY RECOMMEND THAT YOU VOTE FOR APPROVAL OF A 3 YEAR FREQUENCY FOR HOLDING AN ADVISORY VOTE ON EXECUTIVE COMPENSATION.

OTHER MATTERS

The Board of Directors knows of no other business that will be presented to the 2019 Annual Meeting. If any other business is properly brought before the Annual Meeting, proxies will be voted in accordance with the judgment of the persons named therein.

EXECUTIVE OFFICERS WHO ARE NOT DIRECTORS

Below is certain information regarding our executive officers who are not Directors.

Name	Age	Position	Served as an Officer Since
Jeff T. Hutchins, Ph. D.	60	Chief Scientific Officer and Chief Operating Officer	2017
Robert J. Jakobs	64	Vice President of Finance, Controller and Secretary	2019

Jeff T. Hutchins, Ph.D., ***Chief Scientific Officer and Chief Operating Officer***

Dr. Hutchins joined our company on January 1, 2017 as Chief Scientific Officer and Senior Vice President of Pre-Clinical Development and in June 2017 he was appointed as both Chief Scientific Officer and Chief Operating Officer. Dr. Hutchins oversees our research efforts, bringing over 27 years of research and clinical development experience from both large pharmaceutical and biotechnology companies. Most recently and since 2012, Dr. Hutchins served as Vice President of Preclinical Research for Peregrine Pharmaceuticals, Inc., a biopharmaceutical company developing therapeutics to fight cancer and infectious diseases. Dr. Hutchins was responsible for building out the research program for Peregrine Pharmaceuticals, Inc.'s lead product candidate, bavituximab, a chimeric monoclonal antibody designed to target phosphatidylserine. Prior to joining Peregrine Pharmaceutical in 2012, from 2001 until 2012, Dr. Hutchins served as Vice President, Preclinical Development at Inhibitex Inc., which was acquired by Bristol-Myers Squibb. From 1991 to 2000, Dr. Hutchins held several senior scientist positions in Discovery Research at Burroughs Wellcome and Glaxo Wellcome, with a visiting professor appointment at Rush Medical College.

Dr. Hutchins earned a B.S. in Biology from Oral Roberts University, a Ph.D. in Biomedical Sciences from the University of Texas, Health Science Center at the M.D. Anderson Cancer Center and conducted postdoctoral training in the University of Southern California's Department of Microbiology at the Norris Cancer Center. Dr. Hutchins' publications and patents span the fields of oncology, infectious disease, osteoarthritis and immunology.

Robert J. Jakobs, ***Vice President of Finance, Controller and Secretary***

Mr. Jakobs joined our company on March 4, 2019 as Controller. Effective April 1, 2019, following the retirement of Ann A. Rosar, Mr. Jakobs was appointed to serve as our Vice President of Finance and Secretary. Prior to joining our company, Mr. Jakobs served as Vice President Accounting and Finance of Anutra Medical, Inc. from 2014 to February 2019. Prior to that, he served as an Independent Chief Financial Officer/Controller Partner at Rankin McKenzie Partners from 2012 through 2014. Mr. Jakobs also served as Senior Director Accounting and Finance at Icagen, Inc. from 1996 through 2012. In addition, Mr. Jakobs served as Corporate Controller of Sphinx Pharmaceuticals Ltd., a publicly traded biotechnology company that was acquired by Eli Lilly and Company, and worked in various accounting positions in the chemical and equipment manufacturing companies.

EXECUTIVE COMPENSATION

NARRATIVE DISCLOSURE TO SUMMARY COMPENSATION TABLE

All share numbers in the discussion below and in the following tables have been adjusted for the one-for-ten reverse stock split effective January 19, 2018.

Overview of Our Compensation Program

A. Philosophy and Objectives

Our primary objective with respect to executive compensation is to design compensation programs that will align executives' compensation with our overall business strategies for the creation of stockholder value and attract, motivate and retain highly qualified executives.

Our executive compensation program is based on the following philosophies and objectives:

- *Compensation Should Align with Stockholders' Interests* — The Compensation Committee believes that executives' interests should be aligned with those of the stockholders. Executives are granted stock options so that their total compensation is tied directly to the same value realized by our stockholders. Executive bonuses are tied directly to the value that we gain from an executive's contribution to our success as a whole.

- *Compensation is Competitive* — The Compensation Committee seeks to provide a total compensation package that attracts, motivates and retains the executive talent that we need in order to maximize the return to stockholders. To accomplish this objective, executive compensation is reviewed annually to ensure that compensation levels are competitive and reasonable given our level of performance and other comparable companies with which we compete for talent.

- *Compensation Motivates and Rewards the Achievement of Goals* — Our executive compensation program is designed to appropriately reward both individual and collective performance that meets and exceeds our annual, long-term and strategic goals. To accomplish this objective, a substantial percentage of total compensation is variable, "at risk", both through annual incentive compensation and the granting of long-term incentive awards.

We seek to achieve these objectives through three key compensation elements:

- a base salary;

- a performance-based annual cash incentive (i.e., annual cash incentive compensation); and

- equity awards.

In order to enhance the Compensation Committee's ability to carry out its responsibilities effectively, as well as maintain strong links between executive pay and performance, the Compensation Committee reviews compensation information for each named executive officer (as defined below), which includes the following information:

- the annual compensation and benefit values that are being offered to each executive;

- the value of all outstanding equity awards; and

- the Compensation Committee also meets with our Chairman, Chief Executive Officer and other senior management in connection with compensation matters, and may retain and meet in executive session with, compensation and other advisors from time to time.

B. Compensation Administration

Roles and Responsibilities of Compensation Committee

The primary purpose of the Compensation Committee is to conduct reviews of our general executive compensation policies and strategies and oversee and evaluate our overall compensation structure and programs. The Compensation Committee seeks to confirm that total compensation paid to (i) Jeffrey Wolf, our Chief Executive Officer, (ii) Ann A. Rosar, our Former Vice President of Finance, and (iii) Jeff T. Hutchins, Ph.D., our Chief Scientific Officer and Chief Operating Officer (collectively, our "named executive officers") during the year ended December 31, 2018, is reasonable and competitive. Responsibilities of the Compensation Committee include, but are not limited to:

- Establishing on an annual basis performance goals and objectives for purposes of determining the compensation of our Chief Executive Officer and other senior executive officers, evaluating the performance of such officers in light of those goals and objectives, and setting the compensation level for those officers based on this evaluation.

- Recommending to the Board the compensation for Board members (including retainer, committee and committee chair's fees, stock options and other similar items as appropriate).

- Reviewing the competitive position of, and making recommendations to the Board with respect to, the cash-based and equity-based compensation plans and other programs relating to compensation and benefits.

- Reviewing our financial performance and operations as well as our major benefit plans.

- Overseeing the administration of our stock option and other executive compensation plans, including recommending to the Board of Directors the granting of options and awards under the plans, and the approval or disapproval of the participation of individual employees in those plans.

- Reviewing and approving for our Chief Executive Officer and other senior executive officers: (a) employment agreements; (b) severance agreements; (c) change in control agreements/provisions; and (d) any other material perquisites or other in-kind benefits.

Additional information regarding the Compensation Committee's responsibilities is set forth in its charter, which is posted on our website at *www.heatbio.com*.

Use of Compensation Consultant

As noted above, the Compensation Committee retained Korn Ferry, a nationally-recognized global human resources consulting firm, as its independent compensation advisor for 2018. Korn Ferry principally provides analysis, advice and recommendations regarding named executive officer and non-employee director compensation as well as guidance and considerations on our long-term incentive program for all eligible employees. Korn Ferry reports to the Chairman of the Compensation Committee and has direct access to the other members of the Compensation Committee. Korn Ferry does not provide any other services to the Company other than in its role as the Compensation Committee's independent advisor.

Competitive Considerations

In making compensation decisions with respect to each element of compensation for our named executive officers, the Compensation Committee considers the competitive market pay data from both our publicly-traded peer group (14 similarly-situated biotechnology, pharmaceuticals and biopharma companies) and a premier compensation survey which is specific to our size and industry. In setting 2018 and 2019 target total direct compensation levels for our named executive officers, the Compensation Committee relied in part on reports prepared by Korn Ferry in December 2017 and December 2018, respectively.

For each of our named executive officers in context of competitive market data, the Compensation Committee generally targets total direct compensation that is within a competitive range of market (+/- 15% of median) relative to executives in similar positions and with similar responsibilities and experience. The Compensation Committee's desired competitive positioning and its pay program decision-making (in terms of both compensation levels and overall mix of pay which is focused on variable or "at risk" compensation) is reflective of our pay for performance philosophy and provides alignment of executive and shareholder interests.

We believe that, given the industry in which we operate and our compensation philosophy and objectives, our approach to executive compensation is sufficient to retain our current executive officers and to hire new executive officers when and as required.

Role of the Chief Executive Officer

Our Chief Executive Officer, Mr. Wolf, makes recommendations to the Compensation Committee regarding the compensation of our other named executive officers. Mr. Wolf does not participate in any discussions or processes concerning his own compensation, and participates in a non-voting capacity in discussions or processes concerning the compensation of our Principal Financial Officer and other members of management.

1. Base Salaries

We provide our named executive officers a base salary commensurate with their position, responsibilities and experience. In setting the base salary, the Compensation Committee considers the scope and accountability associated with each named executive officer's position and such factors as performance and experience of each named executive officer. We design base pay to provide the essential reward for an employee's work and are required to be competitive in attracting talent. Once base pay levels are initially determined, increases in base pay may be provided to recognize an employee's specific performance achievements. The base salaries are targeted to be competitive with other similar biotechnology companies. Base salaries for the named executive officers are set by their respective employment contracts and are reviewed annually by the Compensation Committee. Our Chief Executive Officer, Vice President of Finance and Chief Scientific Officer/ Chief Operating Officer typically make performance assessments of our other employees throughout the year, and provide ongoing feedback to employees, provide resources and maximize individual and team performance levels. Based on the analysis provided to us by Korn Ferry and other comparative research performed by the Committee, the Committee was able to compare the base salary for the Chief Executive Officer, Vice President of Finance and Chief Scientific Officer/Chief Operating Officer. It was determined that our Chief Executive's Officer's, Vice President of Finance and Chief Scientific Officer's/Chief Operating Officer's 2018 base salary levels were within a competitive range of market relative to competitive market data and therefore only modest merit-related base salary increases were provided for 2019. The 2018 and 2019 base salaries for our named executive officers are as follows:

Named Executive Officer	Base Salary 2018	Base Salary 2019
Jeffrey Wolf, Chief Executive Officer	$417,150	$427,579
Ann A. Rosar, Former Vice President of Finance	$260,000	$266,500
Jeff T. Hutchins, Ph.D. Chief Scientific Officer and Chief Operating Officer	$335,000	$343,375

2. Bonuses

The Compensation Committee also makes recommendations to the full Board of Directors for determining bonuses. For the year ended December 31, 2018, the Compensation Committee approved a $208,575 cash bonus for Jeffrey Wolf (50% of pro-rated gross base salary), a $100,500 cash bonus for Jeff T. Hutchins, Ph.D. (30% of pro-rated gross base salary) and a $65,000 cash bonus for Ann A. Rosar (25% of pro-rated gross base salary). In addition, on January 1, 2019, the Board of Directors granted the following one time supplemental cash bonuses to the executive officers for significant strategic and operational achievements in 2018: (i) Mr. Wolf a one-time supplemental cash bonus equal to $208,576; (ii) Ms. Rosar a one-time cash supplemental bonus equal to $65,000; and (iii) Dr. Hutchins a one-time supplemental cash bonus equal to $100,500.

The employment agreement with Jeffrey Wolf that was in effect during 2018 provided that he was eligible for a cash performance bonus of up to fifty percent of his base as well an equity bonus in the sole discretion of the Board of Directors, with the actual amount of any such bonus increased or decreased in the sole discretion of the Board of Directors. Dr. Hutchins employment agreement was amended in January 2019 to increase his bonus such that he is eligible for a cash performance bonus of up to thirty percent of his base and as well an equity bonus in the sole discretion of the Board of Directors, with the actual amount of any such bonus increased or decreased in the sole discretion of the Board of Directors. Ann A. Rosar's employment agreement provided that she was eligible for an annual bonus, payable in cash and/or equity, in the discretion of the Board of Directors. The bonuses are to be rewarded based on whether, in the discretion of the Compensation Committee and the Board of Directors, our company and the named executive officer met certain objectives established by the Compensation Committee. The Compensation Committee believes that the granting of a bonus is appropriate to motivate the named executive officers. The Compensation Committee focuses on individual performance, which enables the Compensation Committee to differentiate among executives and emphasize the link between personal performance and compensation. Although the Compensation Committee does not use any fixed formula in determining bonuses, it does link them to financial objectives of importance to it.

3. Long-Term Incentives

The Compensation Committee believes that a substantial portion of the named executive officer's compensation should be awarded in equity-based compensation since equity-based compensation is directly linked to the interests of stockholders. The Compensation Committee has elected to grant a combination of stock options and restricted stock awards to the named executive officers and other key employees as the primary long-term incentive vehicles. In making this determination, the Compensation Committee considered a number of factors including: the accounting impact, potential value of stock option grants versus other equity instruments and cash incentives, and the alignment of equity participants with stockholders. The Compensation Committee determined to grant a combination of stock options and restricted stock awards to:

- enhance the link between the creation of stockholder value and executive compensation;
- provide an opportunity for equity ownership;
- act as a retention tool; and
- provide competitive levels of total compensation.

The Board's rationale for making equity awards was to use the awards to encourage retention and better align the interest of the named executive officers with the stockholders. In 2018 and 2019 the Board also considered each named executive officer prior long terms service and the fact that there was a lack of realizable value from their prior awards since substantially all of the prior awards were of significant low value. Each of Jeffrey Wolf, Jeff T. Hutchins, Ph.D. and Ann A. Rosar were granted options to purchase 800,000, 356,860 and 110,570 shares of common stock, respectively, in January 2019 as part of their long term incentive compensation for the year ended December 31, 2018. In addition, Jeffrey Wolf, Jeff T. Hutchins, Ph.D. and Ann A. Rosar were issued 800,000, 143,140, and 89,430 restricted stock awards, respectively in January 2019, as part of their long term incentive compensation. The stock options and restricted stock awards granted vest 50% immediately, 30% on the one year anniversary of the grant date, 10% shall vest on the two-year anniversary grant date, and the remaining 10% shall vest on the three-year anniversary grant date. The stock options have a term of ten years.

The Compensation Committee reviews the performance, potential burn rates and dilution levels to create an option pool that may be awarded to employee participants. Grants to the named executive officers were determined by the Compensation Committee after reviewing market data, including the reports and analysis discussed above and after considering each executive's performance, role and responsibilities.

The Compensation Committee does not seek to time equity grants to take advantage of information, either positive or negative, about our company that has not been publicly disclosed. Option grants are effective on the date the award determination is made by the Compensation Committee, and the exercise price of options is the closing market price of our common stock on the business day of the grant or, if the grant is made on a weekend or holiday, on the prior business day.

Set forth below is the compensation paid or accrued to our named executive officers during the years ended December 31, 2018 and December 31, 2017 that exceeded $100,000.

Summary Compensation Table

Name and Principal Position	Year	Salary	Bonus	Stock Awards (8)	Options (8)	Other	Total
Jeffrey Wolf	2018	$ 417,150	$ 417,150(1)	$ 160,785	$ 171,533	$ —	$ 1,166,618
Chairman and Chief Executive Officer	2017	$ 417,150	$ 208,575(2)	$ 213,038(3)	$ 125,000	$ —	$ 963,763
Jeff T. Hutchins, Ph.D.	2018	$ 335,000	$ 201,000(4)	$ —	$ 85,386	$ —	$ 621,386
Chief Scientific Officer and Chief Operating officer	2017	$ 309,442	$ 77,361(5)	$ —	$ 94,583	$ 66,000(6)	$ 547,386
Ann A. Rosar	2018	$ 260,000	$ 135,000(7)	$ 17,865	$ 19,060	$ —	$ 431,925
Former Vice President of Finance (9)	2017	$ 212,500	$ 53,125(5)	$ 60,900	$ 52,975	$ —	$ 379,500

(1) Mr. Wolf's annual 2018 bonus of $208,575 was paid in 2018. The one-time supplemental cash bonus of $208,575 was accrued in 2018 and paid in 2019.
(2) Mr. Wolf agreed to accept 26,072 restricted stock units in lieu of $52,144 of his cash bonus (25% of his cash bonus). The restricted stock units received in lieu of the cash bonus had a value at the time of grant of $104,288.
(3) Includes the value of the restricted stock units ($52,144) that exceed the value of the bonus foregone. The restricted stock units vest immediately but may not be sold until the one year anniversary of their grant date. Each restricted stock units represents a contingent right to receive one share of common stock.
(4) Dr. Hutchins' annual 2018 bonus of $100,500 was paid in 2018. The one-time supplemental cash bonus of $100,500 was accrued in 2018 and paid in 2019.
(5) This bonus was accrued in 2017 and paid in 2018.
(6) This is the sign-on bonus per Dr. Hutchins' January 2017 employment agreement.
(7) Ms. Rosar's annual 2018 bonus of $65,000 was paid in 2018. Ms. Rosar received a performance bonus of $5,000 in June 2018. The one-time supplemental cash bonus of $65,000 was accrued in 2018 and paid in 2019.
(8) For all stock options and stock awards, the values reflect the aggregate grant date fair value computed in accordance with FASB ASC 718. Assumptions made in the calculation of these amounts are described in Note 10 to the Company's audited consolidated financial statements for the years ended December 31, 2018 and 2017.
(9) Ms. Rosar resigned as our Vice President of Finance on March 31, 2019.

Outstanding Equity Awards at Fiscal Year-End (December 31, 2018)

	Option Awards				Stock Awards	
Name and Principal Position	**Number of securities underlying unexercised options/ exercisable**	**Number of securities underlying unexercised options/ unexercisable**	**Option exercise price**	**Option expiration date**	**Number of shares or units of stock that have not vested**	**Market value of shares or units of stock that have not vested**
Jeffrey Wolf	1,097(1)	—	$ 23.00	12/18/2019	—	—
Chairman and	10,000(2)	—	$ 86.20	6/11/2024	—	—
Chief Executive Officer	1,251(3)	—	$ 45.30	1/12/2025	—	—
	7,057(4)	2,349	$ 24.70	1/11/2026	—	—
	3,611(5)	3,889	$ 8.60	12/30/2026	1,875(6)	$ 1,838
	6,004(7)	6,497	$ 8.70	1/03/2027	6,250(8)	$ 6,125
	13,651(9)	45,909	$ 3.97	1/07/2028	30,375(10)	$ 29,768
Jeff T. Hutchins, Ph.D.	9,583(11)	10,417	$ 8.70	1/03/2027	—	—
Chief Scientific Officer and	3,958(12)	6,042	$ 6.60	6/28/2027	—	—
Chief Operating Officer	6,794(13)	22,854	$ 3.97	1/07/2028	—	—
Ann A. Rosar	979(14)	21	$ 45.30	1/12/2025	—	—
Former Vice President of	463(15)	155	$ 24.70	1/11/2026	—	—
Finance, Controller	1,375(16)	625	$ 6.60	4/05/2026	—	—
and Secretary	3,354(17)	3,646	$ 8.70	1/03/2027	3,500(18)	$ 3,430
	989(19)	1,511	$ 6.60	6/28/2027	—	—
	1,516(20)	5,102	$ 3.97	1/07/2028	3,375(21)	$ 3,308

(1) All shares are fully vested as of December 2013.
(2) All shares as full vested as of January 2016.
(3) All shares as full vested as of December 2018.
(4) Issued on January 11, 2016, these options vest over a four-year period and will be fully vested in December 2019.
(5) Issued on December 30, 2016, these options vest over a four-year period and will be fully vested in January 2020.
(6) Issued on December 30, 2016, 3,750 restricted stock units vested as of December 30, 2017; 1,875 will vest December 30, 2018; and 1,875 will vest December 30, 2019. Amount represents the value of shares at December 31, 2018.
(7) Issued on January 3, 2017, these shares vest over a 46-month period and will be fully vested in January 2021.
(8) Issued on January 3, 2017, 3,125 restricted stock units vested January 3, 2017; 3,125 vested January 3, 2018; 3,125 will vest January 3, 2019; and 3,125 will vest January 3, 2020. Amount represents the value of shares at December 31, 2018.
(9) Issued on January 7, 2018, these shares vest over a 46-month period and will be fully vested in January 2022.
(10) Issued on January 7, 2018, 10,125 restricted stock units vested January 8, 2018; 10,125 will vest January 8, 2019; 10,125 will vest January 7, 2020; and 10,125 will vest January 8, 2021. Amount represents the value of shares at December 31, 2018.
(11) Issued on January 3, 2017, these shares vest over a 46-month period and will be fully vested in January 2021.
(12) Issued on June 28, 2017, these shares vest over a 46-month period and will be fully vested in May 2021.
(13) Issued January 7, 2018, these shares vest over a 46-month period and will be fully vested in January 2022.
(14) Issued January 12, 2015, these shares vest over a four-year period and will be fully vested in January 2019.
(15) Issued on January 11, 2016, these options vest over a four-year period and will be fully vested in December 2019.
(16) Issued on April 5, 2016, these options vest over a four-year period and will be fully vested in March 2020.
(17) Issued on January 3, 2017, these shares vest over a 46-month period and will be fully vested in January 2021.
(18) Issued on January 3, 2017, 1,750 restricted stock units vested January 3, 2017; 1,750 vested January 3, 2018; 1,750 will vest January 3, 2019; and 1,750 will vest January 3, 2020. Amount represents the value of shares at December 31, 2018.
(19) Issued on June 28, 2017, these shares vest over a 46-month period and will be fully vested in May 2027.
(20) Issued on January 7, 2018, these shares vest over a 46-month period and will be fully vested in January 2022.
(21) Issued on January 7, 2018, 1,125 restricted stock units vested January 7, 2018; 1,125 will vest January 8, 2019; 1,125 will vest January 7, 2020; and 1,125 will vest January 7, 2021. Amount represents the value of shares at December 31, 2018.

The chart above does not include the grant on January 2, 2019 of (i) options exercisable for 800,000, 356,860, and 110,570 shares of common stock issued to each of Mr. Wolf, Dr. Hutchins, and Ms. Rosar, respectively; and (ii) 800,000, 143,140, and 89,430 restricted stock awards that were issued to Mr. Wolf, Dr. Hutchins, and Ms. Rosar, respectively, which vest 50% on grant date, 30% on the one year anniversary of the grant date, 10% shall vest on the two-year anniversary of the grant date, and the remaining 10% shall vest on the three-year anniversary of the grant date and expire (10) years from the date of the grant, unless terminated earlier.

Employment Agreements

On December 18, 2009, we entered into an employment agreement with Jeffrey Wolf to act as our Chief Executive Officer, which agreement was amended on November 22, 2011, and further amended on each of January 20, 2014, January 11, 2016 and January 1, 2017. Mr. Wolf receives an annual base salary of $417,150 per year. He also may receive, at the sole discretion of the board, an additional cash performance-based bonuses equal to up to 50% of his then outstanding base salary at the end of each year and a discretionary equity award, with the actual amount of his bonus to be increased or decreased in the sole discretion of the Board of Directors. In addition, he is to receive certain options to purchase 2% of our fully diluted equity at an exercise price equal to the then current market price if our stock is traded on a nationally recognized exchange or Nasdaq and our market capitalization is at least $250 million for at least 5 days. If Mr. Wolf's employment contract is terminated for death or disability (as defined in the agreement), he (or his estate in the event of death) will receive six month's severance. If Mr. Wolf's employment is terminated by us other than for cause, he will receive 12 month's severance. In addition, if Mr. Wolf's employment is terminated by us other than for cause all Restricted Shares, common stock and options to purchase common stock that would have vested shall immediately vest. Mr. Wolf will not be entitled to any additional severance in the event he is terminated for cause or voluntarily resigns. Under his employment agreement, Mr. Wolf has also agreed to non-competition provisions.

On January 2, 2017, we approved the entry into of a four-year employment agreement, effective as of January 1, 2017, with Jeff T. Hutchins, Ph.D., which agreement was amended on June 29, 2017, January 1, 2018 and January 1, 2019 (collectively, the "Hutchins Employment Agreement"), who was initially appointed to serve as the Chief Scientific Officer and Senior Vice President of Pre-Clinical Development of the Company. Pursuant to the Hutchins Employment Agreement that was amended on June 29, 2017, Dr. Hutchins was appointed to serve as both Chief Scientific Officer and Chief Operating Officer. Pursuant to the Hutchins Employment Agreement, as amended, Dr. Hutchins is entitled to an annual base salary of $335,000 and will be eligible for a cash performance bonus equal to approximately 30% of his then outstanding base salary at the end of each year in addition to an equity bonus in the sole discretion of Board, with the actual amount of any such bonus increased or decreased in the sole discretion of the Board.

If Dr. Hutchins' employment is terminated for any reason, he or his estate as the case may be, is entitled to receive the accrued base salary, vacation pay, expense reimbursement and any other entitlements accrued by him to the extent not previously paid (the "Hutchins Accrued Obligations"); provided, however, that if his employment is terminated by us without Just Cause (as defined in the Hutchins Employment Agreement) then in addition to paying the Hutchins Accrued Obligations, (i) we will shall continue to pay his then current base salary for a period of six (6) months; and (ii) the vesting on all unvested options shall be accelerated so that all options shall become fully vested. If his employment is terminated within one year of a Change of Control (as defined in our Amended and Restated 2014 Stock Incentive Plan), he will be paid his then current base salary for a period of nine (9) months.

On April 5, 2016, we entered into a four-year employment agreement with Ann A. Rosar to serve as our Vice President of Finance, Controller and Corporate Secretary, which agreement was amended on January 1, 2017, June 29, 2017 and January 1, 2018 (collectively, the "Rosar Employment Agreement"). Pursuant to the Rosar Employment Agreement, as amended, Ms. Rosar received an annual base salary of $260,000 and was eligible for a discretionary performance bonus. In addition, Ms. Rosar's agreement that if her employment was terminated for any reason, she or her estate as the case may be, would be entitled to receive the accrued base salary, vacation pay, expense reimbursement and any other entitlements accrued by her to the extent not previously paid ("Rosar Accrued Obligations"); provided, however, that if her employment was terminated by us without Just Cause (as defined in the employment agreement) or by Ms. Rosar for Good Reason (defined as a material breach of the terms of the employment agreement by us, which breach is not cured within thirty (30) days) then in addition to paying the Accrued Obligations, we were obligated to continue to pay her then current base salary for a period of four (4) months.

Ms. Rosar resigned as our Vice President of Finance and on March 7, 2019, we entered into an agreement with Ms. Rosar (the "Rosar Agreement") pursuant to which, among other things, she will be retained as our consultant, effective as of April 30, 2019. In consideration of her continued services as a consultant, Ms. Rosar will be paid her current monthly compensation for services performed for the month of April, an hourly rate thereafter for providing consulting services, will receive payment for unused paid time off and all vested options at the expiration of her provision of services will terminate five years from the date of grant (subject to her execution of a general release).

Effective April 1, 2019, Robert J. Jakobs, became our Vice President of Finance and Secretary. Mr. Jakobs joined our company on March 4, 2019 as Controller. Pursuant to our offer letter with Mr. Jakobs, Mr. Jakobs is entitled to an annual base salary of $220,000 and is eligible to receive an annual bonus of up to 20% of his annual salary. In addition, Mr. Jakobs will be granted 75,000 incentive stock options to purchase shares of common stock that will vest pro rata over four (4) years. Mr. Jakobs will also be eligible for other benefits consistent with those received by our other executives.

OTHER INFORMATION REGARDING THE COMPANY

Security Ownership of Certain Beneficial Owners and Management

The following table sets forth information, as of May 28, 2019, or as otherwise set forth below, with respect to the beneficial ownership of our common stock (i) all persons know to us to be the beneficial owners of more than 5% of the outstanding shares of our common stock, (ii) each of our directors and our executive officer named in the Summary Compensation Table, and (iii) all of our directors and our executive officer as a group. As of May 28, 2019, we had 34,065,652 shares of common stock outstanding.

Principal Stockholders Table

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

Name of Beneficial Owner	Common Stock	Shares subject to Options (1)	Total Number of Shares Beneficially Owned	Percentage Ownership
Executive Officers & Directors				
Jeff T. Hutchins, Ph.D. (Chief Scientific Officer and Chief Operating Officer)	143,140(2)	204,977	348,117	1.0%
Robert J. Jakobs, (Vice President of Finance, Controller and Secretary)	0	1,563	1,563	*
John Monahan, Ph.D. (Director)	516	100,018	100,534	*
John K.A. Prendergast, Ph.D. (Director)	300,000(3)	40,225	340,225	1.0%
Ann A. Rosar (Former Vice President of Finance, Former Controller and Former Secretary)	51,539(4)	65,088	116,627	*
Edward B. Smith, III (Director) (5)	104,305	99,257	203,562	*
Jeffrey Wolf (Chairman of the Board of Directors, Chief Executive Officer and President) (6)	1,012,235(7)	462,827	1,475,062	4.3%
All Executive Officers and Directors, as a group (7 persons)	1,611,735	973,955	2,585,690	7.4%

* less than 1%

(1) Represents shares subject to options that are currently vested and options that will vest and become exercisable within 60 days of May 28, 2019.

(2) Dr. Hutchins was granted 143,140 restricted stock award January 2, 2019 of which 50% vested on grant date and the remaining 71,570 is subject to forfeiture.

(3) Dr. Prendergast was granted 300,000 restricted stock award January 2, 2019 of which 50% vested on grant date and the remaining 150,000 is subject to forfeiture.

(4) Includes 89,430 Restricted Stock Award granted January 2, 2019 of which 50% vested on grant date and the remaining 44,715 has been forfeited .

(5) Includes 69,730 shares of common stock owned by Aristar Capital Management, LLC, an entity of which Mr. Smith is the managing member and exercises investment discretion. Mr. Smith disclaims beneficial ownership of the 69,730 shares of common stock, except to the extent of any pecuniary interest (as defined in Rule 16a–1(a)(2) promulgated under the Exchange Act) that he may have in such entities.
(6) Includes 77,172 shares of common stock held by Orion Holdings V, LLC and 71,620 shares of common stock held by Seed-One Holdings VI, LLC, entities for which Mr. Wolf serves as the managing member. Mr. Wolf is deemed to beneficially own the shares held by such entities as in his role as the managing member he has the control over the voting and disposition of any shares held by these entities. Does not include 26,468 shares of common stock beneficially owned by Mr. Wolf's children's trust of which Mr. Wolf is not the trustee. Mr. Wolf disclaims beneficial ownership of these shares except to the extent of any pecuniary interest (as defined in Rule 16a – 1(a)(2) promulgated under the Exchange Act) that he may have in such entities. In addition, if our company is traded on a recognized national exchange or Nasdaq while Mr. Wolf is employed by us and the market capitalization of our company is in excess of $250 million for at least five consecutive trading days, then Mr. Wolf will be entitled to receive an additional stock option equal to 2% of the then outstanding shares of our common stock, at an exercise price equal to the then current market price as determined in good faith by the board.
(7) Includes 800,000 Restricted Stock Award granted January 2, 2019 of which 50% vested on grant date and the remaining 400,000 is subject to forfeiture.

NO DISSENTERS' RIGHTS

The corporate actions described in this proxy statement will not afford stockholders the opportunity to dissent from the actions described herein or to receive an agreed or judicially appraised value for their shares.

TRANSACTIONS WITH RELATED PERSONS, PROMOTERS AND CERTAIN CONTROL PERSONS

Pursuant to our charter, our Audit Committee shall review on an on-going basis for potential conflicts of interest, and approve if appropriate, all our "Related Party Transactions" as required by of Nasdaq Rule 4350(h). For purposes of the Audit Committee Charter, "Related Party Transactions" shall mean those transactions required to be disclosed pursuant to SEC Regulation S-K, Item 404.

The following is a summary of transactions since January 1, 2017 to which we have been a party in which the amount involved exceeded $120,000 and in which any of our executive officers, directors or beneficial holders of more than five percent of our capital stock had or will have a direct or indirect material interest, other than compensation arrangements which are described under the sections of this proxy statement "2018 Director Compensation" and "Executive Compensation."

On March 8, 2017, we entered into a Stock Purchase Agreement with Pelican, and the majority of the stockholders of Pelican to purchase outstanding capital stock of Pelican. On April 28, 2017, we completed the acquisition of 80% of Pelican's common stock. Pelican is a biotechnology company focused on the development and commercialization of monoclonal antibody and fusion protein-based therapies that are designed to activate the immune system. Pelican has been awarded a $15.2 million grant to fund preclinical and some clinical activities from CPRIT. Jeffrey Wolf, through one or more of his affiliated entities, and Edward B. Smith, III and entities controlled by Mr. Smith sold approximately 84.7% of their shares of the capital stock of Pelican. Mr. Wolf was the managing member of a limited liability company (the "LLC") that at the time of the Pelican Acquisition owned 60.1% of the outstanding capital stock of Pelican and Mr. Wolf directly and through entities owned by him owned 31.6% of the membership interests of the LLC. Mr. Smith directly and through entities that he controlled held approximately 10.2% of Pelican's outstanding capital stock at the time of the Pelican Acquisition and Mr. Smith directly and indirectly through an entity he controlled at the time of the Pelican Acquisition owned an aggregate of 23.1% of the membership interests of the LLC. Taylor Schreiber, M.D., Ph.D. our former Chief Scientific Officer, held less than 1% of Pelican's total outstanding capital stock at the time of the Pelican Acquisition and indirectly through an entity he controlled, at the time of the Pelican Acquisition owned 5% of the limited liability company at the time of the Pelican Acquisition. Dr. Schreiber also sold approximately 84.7% of his shares of the capital stock of Pelican in order to meet the 80% closing condition, on the same terms as the other participating Pelican stockholders. John Monahan, Ph.D. owned 0.46% of the LLC. In addition, a trust for which Mr. Wolf does not serve as the trustee for the benefit of Mr. Wolf's children directly owned 2.2% of Pelican's total outstanding capital stock and at the time of the Pelican Acquisition owned 10% of the membership interests of the LLC. Mr. Wolf disclaims beneficial ownership of all shares held by the trust.

Compensation paid to our executive officers during 2018 and 2019, equity awards granted to our executive officers and directors during 2018 and on January 2, 2019, as well as the terms of our consulting arrangement with Ann A. Rosar are disclosed under the sections of this proxy statement entitled "2018 Director Compensation" and "Executive Compensation."

OTHER MATTERS

As of the date of this proxy statement, the Board of Directors of Heat knows of no other matters to be presented for stockholder action at the 2019 Annual Meeting. However, other matters may properly come before the 2019 Annual Meeting or any adjournment or postponement thereof. If any other matter is properly brought before the 2019 Annual Meeting for action by the stockholders, proxies in the enclosed form returned to Heat will be voted in accordance with the recommendation of the Board of Directors.

ANNUAL REPORT/FORM 10-K

Heat's 2018 Annual Report on Form 10-K for the year ended December 31, 2018 to its stockholders is being mailed to certain stockholders concurrently with this proxy statement. Copies of the Company's Annual Report on Form 10-K as filed with the SEC and any amendments thereto may be obtained without charge by writing to Heat Biologics, Inc., 801 Capitola Drive, Suite 12, Durham, North Carolina 27713, Attention: Corporate Secretary. A complimentary copy may also be obtained at the internet website maintained by the SEC at *www.sec.gov*, and by visiting our internet website at *www.heatbio.com*.

NOTICE REGARDING DELIVERY OF STOCKHOLDER DOCUMENTS ("HOUSEHOLDING" INFORMATION)

The SEC has adopted rules that permit companies and intermediaries (e.g., brokers) to satisfy the delivery requirements for proxy statements and annual reports by delivering a single copy of these materials to an address shared by two or more Heat stockholders. This process, which is commonly referred to as "householding," potentially means extra convenience for stockholders and cost savings for companies and intermediaries. A number of brokers and other intermediaries with account holders who are our stockholders may be householding our stockholder materials, including this proxy statement. In that event, a single proxy statement, as the case may be, will be delivered to multiple stockholders sharing an address unless contrary instructions have been received from the affected stockholders. Once you have received notice from your broker or other intermediary that it will be householding communications to your address, householding will continue until you are notified otherwise or until you revoke your consent, which is deemed to be given unless you inform the broker or other intermediary otherwise when you receive or received the original notice of householding. If, at any time, you no longer wish to participate in householding and would prefer to receive a separate proxy statement, please notify your broker or other intermediary to discontinue householding and direct your written request to receive a separate proxy statement to us at: Heat Biologics, Inc., Attention: Corporate Secretary, 801 Capitola Drive, Suite 12, Durham, North Carolina 27713 or by calling us at (919) 240-7133. Stockholders who currently receive multiple copies of the proxy statement at their address and would like to request householding of their communications should contact their broker or other intermediary.

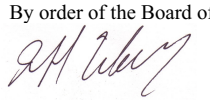
STOCKHOLDER PROPOSALS FOR THE 2020 ANNUAL MEETING

Stockholders who intend to present proposals at the 2020 Annual Meeting of Stockholders under SEC Rule 14a-8 must ensure that such proposals are received by the Corporate Secretary of the Company not later than February , 2020. Such proposals must meet the requirements of the SEC to be eligible for inclusion in the Company's 2020 proxy materials.

The Company's Bylaws provide that the nomination of persons for election to the Board and the proposal of business to be considered by stockholders may be made at the annual meeting as set out in the Company's notice of such meeting, by or at the direction of the Board or by any stockholder of the Company who is entitled to vote at the meeting on such nomination or other proposal, and who, in the case of a holder of common stock, complies with certain notice procedures. Any holder of common stock proposing to nominate an individual for election to the Board or proposing business to be considered by the Company's stockholders at an annual meeting must give written notice and certain information to the Corporate Secretary of the Company generally not less than 90 days nor more than 120 days before the first anniversary of the preceding year's annual meeting (however, if we hold the 2020 Annual Meeting of Stockholders on a date that is not within 30 days before or 70 days after such anniversary date, we must receive the notice no earlier than 120 days prior to such annual meeting and no later than 90 days prior to such annual meeting or 10 days after the day on which public announcement of the date of such meeting is first made by us we announce it publicly). As a result, stockholders who intend to present proposals at the 2020 Annual Meeting of Stockholders under these provisions must give written notice to the Corporate Secretary, and otherwise comply with the Bylaw requirements, no earlier than the close of business on March 25, 2020, and no later than the close of business on April 24, 2020.

All proposals should be addressed to the Corporate Secretary, Heat Biologics, Inc., 801 Capitola Drive, Suite 12, Durham, North Carolina 27713.

By order of the Board of Directors,



Jeffrey Wolf
Chairman, Chief Executive Officer and President

Durham, North Carolina
June , 2019

APPENDIX A

AMENDMENT NO. 1 TO THE

HEAT BIOLOGICS, INC.

2018 STOCK INCENTIVE PLAN

This amendment (the "**Amendment**") to the Heat Biologics, Inc. 2018 Stock Incentive Plan (the "**Plan**"), is hereby adopted this 21st day of May, 2019, by the Board of Directors (the "**Board**") of Heat Biologics, Inc. (the "**Company**"). All capitalized terms used in this Amendment and not otherwise defined herein shall have the meanings set forth in the Plan.

WITNESETH:

WHEREAS, the Company adopted the Plan for the purposes set forth therein; and

WHEREAS, pursuant to Section 15 of the Plan, the Board has the right to amend the Plan with respect to certain matters, provided that any material increase in the number of Shares available under the Plan shall be subject to stockholder approval; and

WHEREAS, the Board has approved and authorized this Amendment to the Plan and has recommended that the stockholders of the Company approve this Amendment;

NOW, THEREFORE, BE IT RESOLVED, that the Plan is hereby amended, subject to and effective as of the date of stockholder approval hereof, in the following particulars:

1. Section 4(a) of the Plan is hereby amended by increasing the share references in such section by an additional 4,000,000shares of common stock to 8,000,000 shares of common stock, so that Section 4(a) reads in its entirety as follows:

"(a) Shares Available for Awards. The maximum aggregate number of shares of Company Stock reserved for issuance under the Plan (all of which may be granted as Incentive Stock Options) shall be Eight Million (8,000,000) shares. Shares reserved under the Plan may be authorized but unissued Company Stock or authorized and issued Company Stock held in the Company's treasury. The Compensation Committee may direct that any stock certificate evidencing shares issued pursuant to the Plan shall bear a legend setting forth such restrictions on transferability as may apply to such shares pursuant to the Plan."

2. Except as specifically set forth herein, the terms of the Plan shall be and remain unchanged, and the Plan as amended shall remain in full force and effect.

The foregoing is hereby acknowledged as being Amendment No. 1 to the Heat Biologics, Inc. 2018 Stock Incentive Plan, as adopted by the Board on May 21, 2019, and approved by the Company's stockholders on July 23, 2019.

HEAT BIOLOGICS, INC.

By: /s/ Jeffrey Wolf
Name: Jeffrey Wolf
Title: Chairman, President and Chief Executive Officer

FORM OF
CERTIFICATE OF AMENDMENT
OF THE
THIRD AMENDED AND RESTATED
CERTIFICATE OF INCORPORATION
OF
HEAT BIOLOGICS, INC.

Heat Biologics, Inc., a corporation organized and existing under the laws of the State of Delaware (the "Corporation"), does hereby certify:

1. The Board of Directors of the Corporation has duly adopted a resolution pursuant to Section 242 of the General Corporation Law of the State of Delaware setting forth a proposed amendment to the Third Amended and Restated Certificate of Incorporation of the Corporation and declaring said amendment to be advisable. The requisite stockholders of the Corporation have duly approved said proposed amendment in accordance with Section 242 of the General Corporation Law of the State of Delaware. The amendment amends the Third Amended and Restated Certificate of Incorporation of the Corporation as follows:

Article IV is hereby amended to add the following paragraph immediately after the first paragraph of Article IV:

"Effective at 5:01 p.m. Eastern time, on the date of the filing of this Certificate of Amendment to the Certificate of Incorporation with the Secretary of State of the State of Delaware (the "Effective Time"), the shares of the Corporation's Common Stock, par value $0.0002 per share, issued and outstanding immediately prior to the Effective Time and the shares of Common Stock issued and held in the treasury of the Corporation immediately prior to the Effective Time shall be combined into a smaller number of shares such that each [2 to 10 shares, with the exact number of shares to be determined by the Board of Directors and publicly announced by the Corporation prior to the Effective Time], of issued and outstanding Common Stock immediately prior to the Effective Time are combined into one validly issued, fully paid and nonassessable share of Common Stock, par value $0.0002 per share. Notwithstanding the immediately preceding sentence, no fractional shares shall be issued and, in lieu thereof, upon surrender after the Effective Time of a certificate which formerly represented shares of Common Stock that were issued and outstanding immediately prior to the Effective Time, any person who would otherwise be entitled to a fractional share of Common Stock as a result of the combination, following the Effective Time (after taking into account all fractional shares of Common Stock otherwise issuable to such holder), shall be entitled to receive a cash payment equal to the fraction to which such holder would otherwise be entitled multiplied by the fair value of the Common Stock on the date of the Effective Time, as determined by the Board of Directors.

Each stock certificate that, immediately prior to the Effective Time, represented shares of Common Stock that were issued and outstanding immediately prior to the Effective Time shall, from and after the Effective Time, automatically and without the necessity of presenting the same for exchange, represent that number of whole shares of Common Stock after the Effective Time into which the shares of Common Stock formerly represented by such certificate shall have been combined (as well as the right to receive cash in lieu of fractional shares of Common Stock after the Effective Time), provided however, that each person of record holding a certificate that represented shares of Common Stock that were issued and outstanding immediately prior to the Effective Time shall receive, upon surrender of such certificate, a new certificate evidencing and representing the number of whole shares of Common stock after the Effective Time into which the shares of Common Stock formerly represented by such certificate shall have been combined."

2. This Certificate of Amendment shall be effective as of ____ at ____ Eastern Time.

IN WITNESS WHEREOF, the Corporation has caused this Certificate of Amendment to the Certificate of Incorporation to be signed by Jeffrey Wolf, its Chairman, Chief Executive Officer and President, this [ ] day of [ ], 201[ ].

HEAT BIOLOGICS, INC.

By: _____
Jeffrey Wolf
Chairman, Chief Executive Officer and President

FORM OF
CERTIFICATE OF AMENDMENT
TO THE
THIRD AMENDED AND RESTATED
CERTIFICATE OF INCORPORATION
OF
HEAT BIOLOGICS, INC.

Heat Biologics, Inc., a corporation organized and existing under the laws of the State of Delaware (the "***Corporation***"), does hereby certify:

1. The Board of Directors of the Corporation has duly adopted a resolution pursuant to Section 242 of the General Corporation Law of the State of Delaware setting forth a proposed amendment to the Third Amended and Restated Certificate of Incorporation of the Corporation and declaring said amendment to be advisable. The requisite stockholders of the Corporation have duly approved said proposed amendment in accordance with Section 242 of the General Corporation Law of the State of Delaware. The amendment amends the Third Amended and Restated Certificate of Incorporation of the Corporation as follows:

Article IV is hereby amended by deleting the first paragraph of Article IV and replacing such paragraph with the following paragraph:

"The total number of shares of all classes of capital stock which the Corporation is authorized to issue is 260,000,000 shares, consisting of 250,000,000 shares of common stock, par value $0.0002 per share (the "***Common Stock***"), and 10,000,000 shares of preferred stock, par value $0.0001 per share (the "***Preferred Stock***").

2. This Certificate of Amendment shall be effective as of ____ at ____ Eastern Time.

IN WITNESS WHEREOF, the Corporation has caused this Certificate of Amendment to the Third Amended and Restated Certificate of Incorporation of the Corporation to be signed by Jeffrey Wolf, its Chairman, Chief Executive Officer and President, this [ ] day of [ ], 2019.

HEAT BIOLOGICS, INC.

By: _____
Jeffrey Wolf
Chairman, Chief Executive Officer and President

HEAT BIOLOGICS, INC.
801 CAPITOLA DRIVE, SUITE 12
DURHAM, NC 27713

VOTE BY INTERNET - www.proxyvote.com
Use the Internet to transmit your voting instructions and for electronic delivery of information up until 11:59 P.M. Eastern Time on July 22, 2019. Have your proxy card in hand when you access the web site and follow the instructions to obtain your records and to create an electronic voting instruction form.

ELECTRONIC DELIVERY OF FUTURE PROXY MATERIALS
If you would like to reduce the costs incurred by our company in mailing proxy materials, you can consent to receiving all future proxy statements, proxy cards and annual reports electronically via e-mail or the Internet. To sign up for electronic delivery, please follow the instructions above to vote using the Internet and, when prompted, indicate that you agree to receive or access proxy materials electronically in future years.

VOTE BY MAIL
Mark, sign and date your proxy card and return it in the postage-paid envelope we have provided or return it to Vote Processing, c/o Broadridge, 51 Mercedes Way, Edgewood, NY 11717.

TO VOTE, MARK BLOCKS BELOW IN BLUE OR BLACK INK AS FOLLOWS: ☐ KEEP THIS PORTION FOR YOUR RECORDS

THIS PROXY CARD IS VALID ONLY WHEN SIGNED AND DATED. DETACH AND RETURN THIS PORTION ONLY

		For All	Withhold All	For All Except	To withhold authority to vote for any individual nominee(s), mark "For All Except" and write the number(s) of the nominee(s) on the line below.
The Board of Directors recommends you vote FOR the following:					
1.	Election of Directors	☐	☐	☐	_____

Nominees:

01 Jeffrey Wolf 02 John Monahan, Ph.D. 03 Edward B. Smith, III 04 John K.A. Prendergast, Ph.D.

		For	Against	Abstain
The Board of Directors recommends you vote FOR the proposals 2, 3, 4, 5, 6, 7 and 8.				
2.	To ratify the appointment of BDO USA, LLP as our independent registered public accounting firm for our fiscal year ending on December 31, 2019.	☐	☐	☐
3.	To approve an amendment to our 2018 Stock Incentive Plan to increase the number of shares of common stock that we will have authority to grant under the plan by an additional 4,000,000 shares of common stock.	☐	☐	☐
4.	To approve (in the event it is deemed advisable by our Board of Directors) an amendment to our third amended and restated certificate of incorporation, as amended (the "Restated Certificate of Incorporation"), to effect a reverse stock split of our issued and outstanding shares of common stock, $0.0002 par value per share, at a ratio to be determined in the discretion of our Board of Directors within a range of one (1) share of common stock for every two (2) to ten (10) shares of Common Stock.	☐	☐	☐
5.	To approve (in the event it is deemed advisable by our Board of Directors) an amendment to the Restated Certificate of Incorporation to increase the number of authorized shares of common stock from 100,000,000 to 250,000,000.	☐	☐	☐
6.	To approve an adjournment of the Annual Meeting, if the Board determines it to be necessary or appropriate, if a quorum is present, to solicit additional proxies if there are not sufficient votes in favor of Proposal 4 or Proposal 5.	☐	☐	☐
7.	To approve, on an advisory basis, the compensation of our named executive officers, as disclosed in this proxy statement.	☐	☐	☐

		1 year	2 years	3 years	Abstain
8.	To recommend, on an advisory basis, a three year frequency for holding an advisory vote on executive compensation.	☐	☐	☐	☐

NOTE : To transact such other business as may properly come before the meeting or any adjournments or postponements of the meeting.

Please sign exactly as your name(s) appear(s) hereon. When signing as attorney, executor, administrator, or other fiduciary, please give full title as such. Joint owners should each sign personally. All holders must sign. If a corporation or partnership, please sign in full corporate or partnership name, by authorized officer.

Signature [PLEASE SIGN WITHIN BOX]	Date	Signature (Joint Owners)	Date

Important Notice Regarding the Availability of Proxy Materials for the Annual Meeting: The Notice & Proxy Statement, and Form 10-K are available at *www.proxyvote.com*

HEAT BIOLOGICS, INC.
2019 Annual Meeting of Stockholders
July 23, 2019 10:00 A.M. Local Time
This proxy is solicited by the Board of Directors

The undersigned stockholder hereby appoints Jeffrey Wolf and Robert J. Jakobs, or either of them, as proxies, each with the power to appoint his substitute, and hereby authorizes them to represent and to vote, as designated on the reverse side of this ballot, all of the shares of common stock of HEAT BIOLOGICS, INC. that the undersigned is entitled to vote at the 2019 Annual Meeting of Stockholders to be held at 10:00 A.M., local time, on July 23, 2019, at the offices of the Company, 801 Capitola Drive, Suite 12, Durham, North Carolina 27713, and any adjournment or postponement thereof.

This proxy, when properly executed, will be voted in the manner directed herein. If no such direction is made, this proxy will be voted in accordance with the Board of Directors' recommendations.

Continued and to be signed on reverse side