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

SCHEDULE 14A

PROXY STATEMENT PURSUANT TO SECTION 14(A) OF THE
SECURITIES EXCHANGE ACT OF 1934 (Amendment No.)

Filed by the Registrant ☒

Filed by a Party other than the Registrant ☐

Check the appropriate box:

☒ Preliminary Proxy Statement

☐ Confidential, For Use of the Commission Only (as permitted by Rule 14a-6(e)(2))

☐ Definitive Proxy Statement

☐ Definitive Additional Materials

☐ Soliciting Materials Under §240.14a-12

BONE BIOLOGICS CORPORATION

(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 all boxes that apply):

☒ No fee required.

☐ Fee paid previously with preliminary materials.

☐ Fee computed on table in exhibit required by Item 25(b) per Exchange Act Rules 14a-6(i)(1) and 0-11.

BONE BIOLOGICS CORPORATION
2 Burlington Woods Drive, Ste 100
Burlington, MA 01803

NOTICE OF ANNUAL MEETING OF STOCKHOLDERS
TO BE HELD ON MAY 30, 2025

Dear Stockholder:

You are cordially invited to attend the 2025 Annual Meeting of Stockholders of Bone Biologics Corporation for the fiscal year ended December 31, 2024 (the “Annual Meeting”), to be held at 11:00 A.M. Eastern Time on Friday, May 30, 2025 at Bone Biologics Corporation offices, 2 Burlington Woods Drive, Ste 100, Burlington, MA 01803. Directions to our corporate headquarters are available at www.bonebiologics.com.

The Annual Meeting is being held for the following purposes, which are more fully described in the accompanying proxy statement:

- To elect four directors to our Board of Directors;
- To approve, in an advisory (non-binding) vote, our executive officer compensation;
- To approve an amendment to the Company’s Amended and Restated Certificate of Incorporation, as amended, to effect a reverse stock split of the Company’s common stock in a range of 1-for-2.5 to 1-for-10, at the discretion of the board of directors (the “Reverse Stock Split”);
- To approve an amendment to our 2015 Equity Incentive Plan, subject to the Reverse Stock Split being approved;
- To ratify the appointment of Weinberg & Company, P.A., as our independent registered public accounting firm for the fiscal year ending December 31, 2025;
- To approve an adjournment of the Annual Meeting, if necessary or appropriate, if there are not sufficient votes at the time of the Annual Meeting to approve the proposals submitted to the Company’s stockholders and/or establish a quorum for the Annual Meeting; and
- To transact any other business as may properly come before the meeting or at any adjournment thereof.

Our Board of Directors has fixed the close of business on April 17, 2025 as the record date for the determination of stockholders entitled to notice of and to vote at the Annual Meeting. Only our stockholders of record at the close of business on that date will be entitled to notice of and to vote at the Annual Meeting or any adjournments or postponements thereof.

We commenced mailing this proxy statement, proxy card and our 2024 Annual Report to stockholders for the fiscal year ended December 31, 2024, which includes our Annual Report on Form 10-K for the fiscal year ended December 31, 2024, as filed with the Securities and Exchange Commission, on or about , 2025.

By Order of the Board of Directors,

Bruce Stroever
Chairman of the Board of Directors

, 2025

YOUR VOTE IS IMPORTANT REGARDLESS OF THE NUMBER OF SHARES YOU OWN. WHETHER OR NOT YOU PLAN TO ATTEND THE ANNUAL MEETING, YOU ARE URGED TO VOTE ELECTRONICALLY VIA THE INTERNET OR BY COMPLETING, SIGNING, DATING AND RETURNING THE PROXY/VOTING INSTRUCTION CARD. IF GIVEN, YOU MAY REVOKE YOUR PROXY BY FOLLOWING THE INSTRUCTIONS IN THE PROXY STATEMENT AND PROXY/VOTING INSTRUCTION CARD.

IMPORTANT NOTICE REGARDING THE AVAILABILITY OF PROXY MATERIALS FOR THE ANNUAL MEETING TO BE HELD ON MAY 30, 2025
Our proxy statement and 2024 Annual Report to stockholders are also available online at
www.bonebiologics.com/investor-relation

TABLE OF CONTENTS

<u>PROXY STATEMENT</u>	1
<u>QUESTIONS AND ANSWERS ABOUT THIS PROXY STATEMENT AND ANNUAL MEETING</u>	3
<u>PROPOSAL I – ELECTION OF DIRECTORS</u>	7
<u>PROPOSAL II – ADVISORY VOTE ON EXECUTIVE COMPENSATION</u>	8
<u>PROPOSAL III – APPROVAL OF AMENDMENT TO THE CHARTER TO EFFECT A REVERSE STOCK SPLIT OF THE COMMON STOCK AT THE DISCRETION OF THE BOARD</u>	9
<u>PROPOSAL IV – APPROVAL OF THE SECOND AMENDMENT TO OUR 2015 EQUITY INCENTIVE PLAN, SUBJECT TO THE REVERSE STOCK SPLIT BEING APPROVED</u>	18
<u>PROPOSAL V – RATIFICATION OF APPOINTMENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM</u>	28
<u>PROPOSAL VI – APPROVAL OF ADJOURNMENT OF THE ANNUAL MEETING</u>	30
<u>SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT</u>	31
<u>DIRECTORS AND EXECUTIVE OFFICERS</u>	32
<u>CORPORATE GOVERNANCE</u>	34
<u>EXECUTIVE COMPENSATION</u>	37
<u>PAY VERSUS PERFORMANCE</u>	39
<u>DIRECTOR COMPENSATION</u>	41
<u>REPORT OF THE AUDIT COMMITTEE</u>	43
<u>CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS.</u>	43
<u>2026 ANNUAL MEETING</u>	44
<u>HOUSEHOLDING OF PROXY MATERIALS</u>	45
<u>OTHER MATTERS</u>	45
<u>FORWARD-LOOKING STATEMENTS</u>	45
<u>APPENDIX A</u>	A-1
<u>APPENDIX B</u>	B-1

BONE BIOLOGICS CORPORATION
2 Burlington Woods Drive, Ste 100
Burlington, MA 01803

PROXY STATEMENT

Annual Meeting of Stockholders to be Held on May 30, 2025

The Annual Meeting

This proxy statement is being furnished to the stockholders of Bone Biologics Corporation, a Delaware corporation (the “Company”), in connection with the solicitation of proxies by the Company’s Board of Directors (the “Board”) for use at the Annual Meeting to be held at 11:00 A.M. Eastern Time on Friday, May 30, 2025, at Bone Biologics Corporation offices, 2 Burlington Woods Drive, Ste 100, Burlington, MA 01803, and at any adjournments or postponements thereof. Directions to our corporate headquarters are available at www.bonebiologics.com.

The Annual Meeting is being held for the following purposes, which are more fully described in this proxy statement:

- To elect four directors to our Board;
- To approve, in an advisory (non-binding) vote, our executive officer compensation;
- To approve an amendment to the Company’s Amended and Restated Certificate of Incorporation, as amended (our “Charter”), to effect a reverse stock split of the Company’s common stock in a range of 1-for-2.5 to 1-for-10, at the discretion of the Board (the “Reverse Stock Split”);
- To approve an amendment to our 2015 Equity Incentive Plan, subject to the Reverse Stock Split being approved;
- To ratify the appointment of Weinberg & Company, P.A., as our independent registered public accounting firm for the fiscal year ending December 31, 2025;
- To approve an adjournment of the Annual Meeting, if necessary or appropriate, if there are not sufficient votes at the time of the Annual Meeting to approve the proposals submitted to the Company’s stockholders and/or establish a quorum for the Annual Meeting (the “Adjournment Proposal”); and
- To transact any other business as may properly come before the meeting or at any adjournment thereof.

Stockholders of the Company as of April 17, 2025, the Record Date, may vote in one of the following four ways: (1) by Internet at www.proxypush.com/BBLG, we encourage you to vote this way, (2) by touch tone telephone: call toll-free at 1-866-883-3382, (3) by completing, signing, dating and returning your proxy card, and (4) at the Annual Meeting. It is important that you vote your shares whether or not you attend the Annual Meeting in person. If you attend the Annual Meeting, you may vote in person even if you have previously returned your proxy card or completed your proxy on the Internet. Only the latest vote you submit will be counted. Shares represented by proxy will be voted in accordance with the instructions you provide to the individuals named on the proxy. If you provide no instruction, the shares will be voted for all of the proposals.

NO MATTER WHAT METHOD YOU ULTIMATELY DECIDE TO USE TO VOTE YOUR SHARES, WE URGE YOU TO VOTE PROMPTLY.

Record Date; Shares Entitled To Vote; Vote Required To Approve the Transaction

The Board has fixed the close of business on April 17, 2025 (the “Record Date”), as the date for the determination of stockholders entitled to notice of and to vote at the Annual Meeting. On the Record Date, shares of our common stock, par value \$0.001 per share (“Common Stock”) were issued and outstanding, and pursuant to our Amended and Restated Bylaws, as amended (the “Bylaws”), each outstanding share of Common Stock is entitled to one vote on each matter submitted to vote at a meeting of our stockholders.

At least one-third of the issued and outstanding shares of Common Stock entitled to vote, represented either in person or by proxy, is necessary to constitute a quorum for the transaction of business at the Annual Meeting. In the absence of a quorum, the Annual Meeting may be postponed from time to time until stockholders holding the requisite number of shares of our Common Stock are represented in person or by proxy. Broker non-votes and abstentions will be counted towards a quorum at the Annual Meeting.

Solicitation, Voting and Revocation of Proxies

This solicitation of proxies is being made by our Board, and our Company will pay the entire cost of preparing, assembling, printing, mailing and distributing these proxy materials. In addition to the mailing of these proxy materials, the solicitation of proxies or votes may be made in person, by telephone or by electronic communications by directors, officers and employees of our Company, who will not receive any additional compensation for such solicitation activities. We have retained Advantage Proxy, Inc. (“Advantage”) to assist in the proxy solicitation process. We have agreed to pay Advantage \$5,000. We also will reimburse brokerage houses and other custodians, nominees and fiduciaries for their reasonable out-of-pocket expenses for forwarding proxy and solicitation materials to our stockholders.

Shares of our Common Stock represented by a proxy received at or prior to the Annual Meeting, unless properly revoked, will be voted in accordance with the instructions on the proxy. If a proxy card is signed and returned without any voting instructions, shares of our Common Stock represented by the proxy card will be voted “FOR” the proposals described in this proxy statement, and in accordance with the determination of the majority of our Board, as to any other matter which may properly come before the Annual Meeting, including any adjournment or postponement thereof. A stockholder may revoke any proxy given pursuant to this solicitation by: (i) submitting a later-dated vote by internet or telephone by 11:59 P.M., Eastern Time, on May 29, 2025 (only your latest internet or telephone vote will be counted); (ii) submit, at or prior to the Annual Meeting, a duly executed proxy card relating to the same shares and bearing a later date; (iii) delivering to our Corporate Secretary a timely written notice that you are revoking your proxy, which must be received no later than May 29, 2025, or (iv) voting in person at the Annual Meeting. Attendance at the Annual Meeting will not, in and of itself, constitute a revocation of a proxy. All written notices of revocation and other communications with respect to the revocation of a proxy should be addressed to:

BONE BIOLOGICS CORPORATION
2 Burlington Woods Drive, Ste 100
Burlington, MA 01803
Attention: Corporate Secretary

Our Board is not aware of any business to be acted upon at the Annual Meeting other than consideration of the proposals described herein.

Internet and Telephone Voting

In addition to marking, signing, dating and mailing the enclosed proxy card, you may vote over the Internet or by telephone. Voting via the Internet and telephone is fast, convenient and your vote is immediately confirmed and tabulated. If you choose to vote via the Internet or telephone, you can do so (1) by Internet at www.proxypush.com/BBLG, we encourage you to vote this way, or (2) by touch tone telephone: call toll-free at 1-866-883-3382. If you own your shares in your own name, you can vote via the Internet or telephone in accordance with the instructions provided on the printed proxy materials. If your shares are held in “street name” by a bank, broker or other nominee, **please follow the instructions in the voting instructions card provided by your broker or bank.**

If you vote via the Internet or telephone, you do not have to mail in a proxy card, but your vote must be received by 11:59 P.M., Eastern Time, on May 29, 2025.

QUESTIONS AND ANSWERS ABOUT THIS PROXY STATEMENT AND ANNUAL MEETING

Q: WHAT IS THIS PROXY STATEMENT AND WHY AM I RECEIVING THESE MATERIALS?

A: You are receiving printed proxy materials to you by mail in connection with the Annual Meeting of stockholders called by our Board in connection with soliciting stockholder votes for the purpose of (i) electing four directors to our Board to serve for a term ending on the date of the next Annual Meeting of stockholders following the date such persons are elected as directors, or until their successors are duly elected and qualified; (ii) approving in an advisory (non-binding) vote, our executive officer compensation; (iii) approving the Reverse Stock Split; (iv) approving an amendment to our 2015 Equity Incentive Plan, subject to the Reverse Stock Split being approved; (v) ratifying the appointment of Weinberg & Company, P.A. as our independent registered public accounting firm for the fiscal year ending December 31, 2025; and (vi) approving the Adjournment Proposal; in each case, as more fully described in this proxy statement. You have been sent the printed proxy materials because you are a stockholder of record and our Board is soliciting your proxy to vote at the Annual Meeting of stockholders called for the purpose of voting on the foregoing matters.

We are making these proxy materials available to stockholders on or about 2025.

Q: WHAT IS INCLUDED IN THESE PROXY MATERIALS?

A: These proxy materials, including the Notice of 2025 Annual Meeting of Stockholders, this proxy statement and the accompanying proxy card or, for shares held in street name (i.e., held for your account by a broker or other nominee), a voting instruction form.

Additionally, upon written request by a stockholder, we will furnish a copy of our 2024 Annual Report, which includes our Annual Report on Form 10-K for the fiscal year ended December 31, 2024, as filed with the Securities and Exchange Commission (the "2024 Annual Report"), including the financial statements and the financial statement schedules, free of charge, except that copies of any exhibit to that report will be furnished once the requesting stockholder has paid our reasonable expenses in furnishing the exhibit. Please direct any written requests to Bone Biologics Corporation, Attention: Corporate Secretary, 2 Burlington Woods Drive, Ste 100, Burlington, MA 01803. Stockholders may also view our 2024 Annual Report in the Investors section of our website, at www.bonebiologics.com/investor-relation. No other information contained on our website is incorporated by reference in, or considered to be a part of, this proxy statement.

Q: WHAT INFORMATION IS CONTAINED IN THIS PROXY STATEMENT?

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

Q: WHO IS ENTITLED TO VOTE AT THE ANNUAL MEETING, AND WHAT VOTE IS REQUIRED TO APPROVE THE PROPOSALS?

A: Only holders of shares of our Common Stock, as of the Record Date, are entitled to vote at the Annual Meeting. As of April 17, 2025, the Record Date, there were _____ shares of our Common Stock issued and outstanding, and entitled to notice of and to vote at the Annual Meeting. For all matters each outstanding share of our Common Stock will be entitled to one vote on each matter. Pursuant to our Bylaws, at least one-third of the issued and outstanding shares of Common Stock entitled to vote, represented either in person or by proxy, is necessary to constitute a quorum for the transaction of business at the Annual Meeting. The table below shows the vote required to approve each of the proposals described in this proxy statement, assuming the presence of a quorum, in person or by proxy, at the Annual Meeting.

Proposal	Description	Vote Required ⁽¹⁾
I	Election of the four directors	Plurality of the votes cast at the Annual Meeting ⁽²⁾
II	Approval, in an advisory (non-binding) vote, our executive officer compensation	Affirmative vote of the majority of votes cast on the proposal ⁽³⁾
III	To approve an amendment to the Charter to effect a reverse stock split of our Common Stock in a range of 1-for-2.5 to 1-for-10	Affirmative vote of the majority of votes cast on the proposal
IV	To approve an amendment to our 2015 Equity Incentive Plan to increase the authorized number of shares available for future issuance under the plan by 30 million shares, subject to the Reverse Stock Split being approved	Affirmative vote of the majority of votes cast on the proposal
V	To ratify the appointment of Weinberg & Company, P.A., as our independent registered public accounting firm for the fiscal year ending December 31, 2025	Affirmative vote of the majority of votes cast on the proposal ⁽⁴⁾
VI	To approve the Adjournment Proposal	Affirmative vote of the majority of votes cast on the proposal
(1)	Because abstentions are not considered votes cast, abstentions will have no effect on any of the proposals at the Annual Meeting.	
(2)	Our stockholders elect directors by a plurality vote, which means that the director nominees receiving the most votes will be elected. A vote to “withhold” will have no effect on the election of director nominees because the nominees who receive the highest number of “for” votes are elected, and since the nominees are running unopposed, they only need a single “for” vote to be elected.	
(3)	The advisory vote to approve the compensation of our named executive officers is not binding upon our Board or the Compensation Committee of our Board. However, the Board and the Compensation Committee will consider the outcome of this vote when making future compensation decisions.	
(4)	We are presenting the appointment of Weinberg & Company, P.A. to our stockholders for ratification. The Audit Committee of our Board will consider the outcome of this vote in its future discussions regarding the appointment of our independent registered public accounting firm.	

Beneficial Owner. For a beneficial owner of shares held in street name, if a proposal is deemed “routine” and you do not give instructions to your broker or nominee, they may, but are not required to, vote your shares with respect to the proposal. If the proposal is deemed “non-routine” and you do not give instructions to your broker or nominee, they may not vote your shares with respect to the proposal and the shares will be treated as broker non-votes. The determination of whether a proposal is “routine” or “non-routine” will be made by the NYSE based on NYSE rules that regulate member brokerage firms. When our inspector of election tabulates the votes for any particular matter, broker non-votes will be counted for purposes of determining whether a quorum is present, but may not otherwise be counted. We therefore encourage you to provide voting instructions on each proposal to the organization that holds your shares. We anticipate Proposals III, V and VI are routine matters on which brokers may vote.

Q: WHO COUNTS THE VOTES?

A: Equiniti Trust Company, LLC has been appointed inspector of election by the Company and will tabulate votes at the Annual Meeting.

Q: DOES OUR BOARD RECOMMEND VOTING “FOR” THE PROPOSALS?

A: Yes. Our Board unanimously recommends that our stockholders vote “FOR” each of the four director nominees in this proxy statement, and “FOR” Proposals II, III, IV, V and VI.

Q: HOW MAY I VOTE ON THE PROPOSALS IF MY SHARES ARE HELD IN “STREET NAME” BY MY BROKER, BANK OR OTHER NOMINEE?

A: If on the Record Date, your shares of our Common Stock were held in an account at a brokerage firm, bank, dealer or other similar organization, which we collectively refer to as a broker, then you are the beneficial owner of shares held in “street name” and these proxy materials are being made available to you by that organization along with a voting instruction card. As a beneficial owner, you must vote your shares in the manner prescribed by your broker. Your broker has enclosed or otherwise provided a voting instruction card for you to use in directing the broker how to vote your shares. Your shares will be voted as you indicate. Check the voting instruction card used by that organization to see if it offers internet or telephone voting.

If you want to vote in person at the Annual Meeting, you may be instructed to obtain a legal proxy from your broker, bank or other nominee and to submit a copy in advance of the meeting.

Even if you plan to attend the Annual Meeting, we recommend that you submit your proxy or voting instructions in advance of the Annual Meeting as described above so that your vote will be counted if you later decide not to attend or are unable to attend the Annual Meeting.

Q: CAN I VOTE MY SHARES IN PERSON?

A: Yes. The Annual Meeting is open to all holders of our Common Stock as of the Record Date. To vote in person, you will need to attend the meeting and bring with you evidence of your stock ownership. If your shares are registered in your name, you will need to bring a valid picture identification. If your shares are held in the name of your broker, bank or another nominee, you will need to bring evidence of your stock ownership, such as your most recent brokerage account statement, and valid picture identification, and may be instructed to obtain a legal proxy from your broker, bank or other nominee and to submit a copy in advance of the Annual Meeting.

Q: CAN I OBTAIN A STOCKHOLDER LIST?

A: Yes. A stockholder list will be available for examination by our stockholders at our principal executive offices at 2 Burlington Woods Drive, Ste 100, Burlington, MA 01803 during ordinary business hours throughout the ten-day period prior to the Annual Meeting for any purpose germane to the Annual Meeting.

Q: HOW CAN I FIND OUT THE VOTING RESULTS OF THE ANNUAL MEETING?

A: Preliminary voting results will be announced at the Annual Meeting. Final voting results will be published in a Current Report on Form 8-K to be filed with the SEC within four business days after the Annual Meeting.

Q: DO I HAVE DISSENTERS' RIGHTS IN CONNECTION WITH THE PROPOSALS?

A: No. Under Delaware law, "dissenters' rights" are not available in connection with the proposals presented in this proxy statement.

Q: HOW MAY I REQUEST A SINGLE SET OF PROXY MATERIALS FOR MY HOUSEHOLD?

A: If you share an address with another stockholder and have received multiple copies of our proxy materials, you may write us to request delivery of a single copy of these materials. Written requests should be made to Bone Biologics Corporation, Attention: Corporate Secretary, 2 Burlington Woods Drive, Ste 100, Burlington, MA 01803.

Q: WHAT SHOULD I DO IF I RECEIVE MORE THAN ONE SET OF VOTING MATERIALS?

A: You may receive more than one set of voting materials, including multiple copies of this proxy statement and multiple proxy cards or voting instruction cards. For example, if you hold your shares in more than one brokerage account, you may receive a separate voting instruction card for each brokerage account in which you hold shares. If you are a stockholder of record and your shares are registered in more than one name, you will receive more than one proxy card. Please complete, sign, date, and return each proxy card and voting instruction card that you receive.

Q: WHAT HAPPENS IF ADDITIONAL MATTERS ARE PRESENTED AT THE ANNUAL MEETING?

A: Other than the proposals described in this proxy statement, we are not aware of any other business to be acted upon at the Annual Meeting. If you grant a proxy, the persons named as proxy holders will have the discretion to vote your shares on any additional matters properly presented for a vote at the meeting. If for any reason any of our nominees are not available as a candidate for director, the persons named as proxy holders will vote your proxy for such other candidate or candidates as may be nominated by the Board.

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 the Company or to third parties, except: (1) as necessary to meet applicable legal requirements, (2) to allow for the tabulation of votes and certification of the vote, and (3) to facilitate a successful proxy solicitation.

Q: WHO IS PAYING FOR THIS PROXY SOLICITATION?

A: Our Board is soliciting proxies for use at the Annual Meeting, and we will bear the cost of the proxy solicitation. In addition to solicitation by mail, our directors, officers and employees may solicit proxies personally, by telephone, email or other means of communication. We will not compensate these persons for soliciting proxies on our behalf. We have engaged Advantage to assist in proxy solicitation and collection at a cost of \$5,000. We will reimburse brokerage houses and other custodians, nominees and fiduciaries for their reasonable out-of-pocket expenses in forwarding proxy and solicitation materials to our stockholders.

PROPOSAL I – ELECTION OF DIRECTORS

Our Board currently has four directors. The Board proposes that all of the nominees listed below, each of whom currently serves on the Board, be elected as directors to serve for a term ending on the date of the next annual meeting of stockholders following the date such persons are elected as directors, and until their successors are duly elected and qualified. The Nominating and Corporate Governance Committee has approved and recommended for election as directors at the Annual Meeting the nominees described in this proxy statement.

Each of the nominees has consented to serve if elected. If any of them becomes unavailable to serve as a director, the Board may designate a substitute nominee. In that case, the persons named as proxies will vote for the substitute nominee designated by the Board. There are no family relationships between any director, executive officer, or person nominated or chosen by the Company to become a director or executive officer.

Name	Age	Position
Bruce Stroever	75	Chairman of the Board of Directors
Siddhesh Angle	41	Director
Robert Gagnon	51	Director
Phillip Meikle	61	Director

The biographies and work experience of each of our nominees for directors is set forth below under “Directors and Executive Officers.”

Vote Required and Recommendation of Board

The affirmative vote of a plurality of the votes cast at the meeting is required for the election of directors. A properly executed proxy marked “WITHHELD” with respect to the election of one or more directors will not be voted with respect to the director or directors indicated, although it will be counted for purposes of determining whether there is a quorum.

THE BOARD RECOMMENDS A VOTE “FOR” EACH OF THE NOMINEES LISTED ABOVE.

PROPOSAL II – ADVISORY VOTE ON EXECUTIVE COMPENSATION

This proposal, commonly known as a “say-on-pay” proposal, gives you as a stockholder the opportunity to endorse or not endorse our executive pay practices. This vote is intended to provide an overall assessment of our executive compensation program rather than focus on any specific item of compensation. The goal for our executive compensation program is to motivate and retain highly-talented executives who are critical to the successful implementation of our strategic business plan.

At our 2023 annual meeting of stockholders, our stockholders approved that we hold this non-binding, advisory vote on executive compensation every year. Our Board subsequently adopted this preference, and we are providing our stockholders with a say-on-pay vote this year.

We invite you to consider the details of our executive compensation program provided in the tables and narrative discussion relating to the program. These will provide you with the individual elements of our compensation program and allow you to view the trends in compensation for the years presented.

We request stockholder approval of the compensation of our named executive officers as disclosed pursuant to the SEC’s compensation disclosure rules, which disclosures include the compensation tables and the narrative discussion pertaining to compensation. As an advisory vote, this proposal is not binding upon our Board or us. However, we expect that our Compensation Committee, which is responsible for designing and administering our executive compensation program, will consider the outcome of the vote when making future compensation decisions for our named executive officers. Accordingly, we are asking you to approve the following resolution:

RESOLVED, that the compensation paid to the named executive officers of Bone Biologics Corporation, as disclosed in the 2025 Proxy Statement of Bone Biologics Corporation pursuant to Item 402 of SEC Regulation S-K, including the compensation tables and narrative discussion, hereby is approved.

THE BOARD UNANIMOUSLY RECOMMENDS THAT YOU VOTE “FOR” THE APPROVAL, ON AN ADVISORY BASIS, OF THE COMPENSATION OF OUR NAMED EXECUTIVE OFFICERS. PROXIES RECEIVED WILL BE SO VOTED UNLESS STOCKHOLDERS VOTE OTHERWISE VIA THE INTERNET OR SPECIFY OTHERWISE IN THEIR COMPLETED AND RETURNED PROXY CARDS.

**PROPOSAL III:
APPROVAL OF AMENDMENT TO THE CHARTER TO EFFECT A REVERSE STOCK SPLIT OF THE
COMMON STOCK AT THE DISCRETION OF THE BOARD**

General

We are asking stockholders to approve a proposed amendment to our Charter to implement, at the discretion of the Board at any time prior to the one-year anniversary of the Annual Meeting, a reverse stock split of the outstanding shares of Common Stock in a range of not less than 1-for-2.5 shares and not more than 1-for-10 shares, or the Reverse Stock Split. The implementation of the Reverse Stock Split will not reduce the total number of authorized shares of Common Stock.

The Board has unanimously approved and declared advisable the Reverse Stock Split and recommended that our stockholders approve an amendment to the Charter to effect this proposal. The text of the proposed form of Certificate of Amendment to the Charter (the “Reverse Split Certificate”) is attached hereto as Appendix A.

If stockholders approve this proposal, then the Board will cause the Reverse Split Certificate to be filed with the Delaware Secretary of State and the Reverse Stock Split to be effected only if the Board determines that the Reverse Stock Split would be in the best interests of the Company and its stockholders. The Board also may determine in its discretion not to effect the Reverse Stock Split and not to file the Reverse Split Certificate. No further action on the part of stockholders will be required to either implement or abandon the Reverse Stock Split.

The Reverse Split Certificate will effect a reverse stock split of the outstanding shares of Common Stock at a reverse stock split ratio ranging from 1-for-2.5 to 1-for-10, as determined by the Board. We are proposing that the Board have the discretion to select the Reverse Stock Split ratio from within this range, rather than proposing that stockholders approve a specific ratio at this time, in order to give the Board the flexibility to implement a Reverse Stock Split at a ratio that reflects the Board’s then-current assessment of the factors described below under “Criteria to be Used for Determining Whether to Implement Reverse Stock Split.” We believe that enabling the Board to set the ratio of the Reverse Stock Split within the stated range is in the best interests of the Company and its stockholders because it will provide us with the flexibility to implement the Reverse Stock Split in a manner designed to maximize the anticipated benefits for the Company and its stockholders and because it is not possible to predict market conditions at the time the Reverse Stock Split would be implemented.

As of the Record Date, there were shares of Common Stock outstanding. Based on such number of shares of Common Stock outstanding, immediately following the effectiveness of the Reverse Stock Split (without giving effect to the issuance of whole shares in lieu of fractional shares), we will have, depending on the Reverse Stock Split ratio selected by the Board, outstanding shares of stock as illustrated in the tables under the caption “—Principal Effects of the Reverse Stock Split—General.”

All holders of Common Stock will be affected equally by the Reverse Stock Split.

No fractional shares of Common Stock will be issued as a result of the Reverse Stock Split. Instead, any stockholders who would have been entitled to receive a fractional share as a result of the Reverse Stock Split will receive in lieu thereof one additional whole share of Common Stock; provided that, whether or not fractional shares would be issuable as a result of the Reverse Stock Split shall be determined on the basis of (a) the total number of shares of Common Stock that were outstanding immediately prior to the effective time of the Reverse Stock Split (the “Effective Time”) and (b) the aggregate number of shares of Common Stock after the Effective Time into which the shares of Common Stock have been reclassified; and with respect to holders of shares of Common Stock in book-entry form in the records of the Company’s transfer agent that were outstanding immediately prior to the Effective Time, any holder who would otherwise be entitled to a fractional share of Common Stock as a result of the Reverse Stock Split, following the Effective Time, shall be entitled to receive one additional share of Common Stock automatically and without any action by the holder. Each holder of Common Stock will hold the same percentage of the outstanding shares of Common Stock immediately following the Reverse Stock Split as that stockholder did immediately prior to the Reverse Stock Split, except to the extent that the Reverse Stock Split results in stockholders receiving whole shares in lieu of fractional shares. The par value of the Common Stock will continue to be \$0.001 per share (see “—Principal Effects of the Reverse Stock Split—Effect of Reverse Stock Split on Stated Capital”).

Background and Reasons for the Reverse Stock Split

The Board believes that effecting the Reverse Stock Split would help us to:

- maintain the listing of our Common Stock and certain of our warrants on the Nasdaq Capital Market (“Nasdaq”);
- increase the per share price of our Common Stock;
- maintain the marketability and liquidity of our Common Stock; and
- provide other potential benefits.

Maintain Our Listing on Nasdaq

The primary purpose for effectuating the Reverse Stock Split, should the Board choose to effect it, would be to maintain the listing of our Common Stock and certain of our warrants on Nasdaq. Our Common Stock and certain of our warrants are listed on Nasdaq under the symbols “BBLG” and “BBLGW,” respectively.

On April 7, 2025, we received a deficiency letter from Nasdaq notifying us that, because the bid price of our Common Stock closed below \$1.00 per share for 30 consecutive business days, we were no longer in compliance with Nasdaq’s minimum bid price rule, which is a requirement for continued listing on Nasdaq (the “Minimum Bid Price Rule”).

As of the Record Date, the closing price of one share of our Common Stock was \$. The Reverse Stock Split, if effected, should have the immediate effect of increasing the price of our Common Stock as reported on Nasdaq, which we believe would reduce the risk that our Common Stock and certain of our warrants will be delisted from Nasdaq.

Our Board believes that the Reverse Stock Split may be necessary to maintain our listing on Nasdaq. Accordingly, the Board recommended that our stockholders approve the Reverse Split Certificate to effect the Reverse Stock Split and directed that this proposal be submitted to our stockholders for approval at the Annual Meeting. Failure to approve the Reverse Stock Split may have serious, adverse effects on the Company and its stockholders.

Increase the Per Share Price of Common Stock

If the Board chooses to effect the Reverse Stock Split, we believe it would increase the per share price of our Common Stock. In determining to seek authorization for this proposal, the Board considered that, by effectively condensing a number of pre-split shares into one share of Common Stock, the market price of a post-split share should generally be greater than the current market price of a pre-split share.

Maintain the Marketability and Liquidity of the Common Stock

The Board believes that the increased market price of the Common Stock expected as a result of implementing the Reverse Stock Split could improve the marketability and liquidity of the Common Stock and encourage interest and trading in the Common Stock. For example, certain practices and policies favor higher-priced securities listed on a national securities exchange, like Nasdaq, over lower-priced securities quoted on the over-the-counter markets:

- *Stock Price Requirements:* Many brokerage firms have internal policies and practices that have the effect of discouraging individual brokers from recommending lower-priced securities to their clients. Many institutional investors have policies prohibiting them from holding lower-priced securities in their portfolios, which reduces the number of potential purchasers of the Common Stock. Investment funds may also be reluctant to invest in lower-priced securities.
- *Stock Price Volatility:* A higher stock price may increase the acceptability of the Common Stock to a number of long-term investors who may not find the Common Stock attractive at its current prices due to the trading volatility often associated with securities below certain prices. Moreover, the analysts at many brokerage firms do not monitor the trading activity or otherwise provide coverage of lower-priced securities.
- *Transaction Costs:* Investors may be dissuaded from purchasing securities below certain prices because brokers’ commissions, as a percentage of the total transaction value, can be higher for lower-priced securities.
- *Access to Capital Markets:* If we are unable to regain compliance with the Minimum Bid Price Rule and our Common Stock is delisted from Nasdaq, investor demand for additional shares of our Common Stock would be limited, thereby preventing us from accessing the public equity markets as a strategy to raise additional capital.

We believe that the Reverse Stock Split, if effected, could increase analyst and broker interest in our Common Stock by avoiding these internal policies and practices. Increasing visibility of our Common Stock among a larger pool of potential investors could result in higher trading volumes. We also believe that the Reverse Stock Split may make our Common Stock a more attractive and cost-effective investment for many investors, which could enhance the liquidity of the Common Stock for our stockholders. These increases in visibility and liquidity could also help facilitate future financings and give management more flexibility to focus on executing our business strategy, which includes the strategic management of authorized capital for business purposes.

In evaluating whether to seek stockholder approval for the Reverse Stock Split, the Board took into consideration negative factors associated with reverse stock splits. These factors include the negative perception of reverse stock splits that investors, analysts and other stock market participants may hold; the fact that the stock prices of some companies that have effected reverse stock splits, including the Company, have subsequently declined, sometimes significantly, following their reverse stock splits; the possible adverse effect on liquidity that a reduced number of outstanding shares could cause; and the costs associated with implementing a reverse stock split.

Accordingly, after taking into account the negative factors associated with reverse stock splits and based on the positive factors discussed herein, the Board believes that being able to effect the Reverse Stock Split is in the best interests of the Company and its stockholders.

Criteria to be Used for Determining Whether to Implement Reverse Stock Split

In determining whether and when to effect the Reverse Stock Split and which Reverse Stock Split ratio to implement, if any, following receipt of stockholder approval of this proposal, the Board may consider factors such as:

- the continued listing requirements for the Common Stock on Nasdaq or other applicable exchange and our ability to maintain the listing of our Common Stock on Nasdaq;
- the then-prevailing trading price and trading volume of the Common Stock and the expected impact of the Reverse Stock Split on the trading market for the Common Stock in the short- and long-term;
- the historical trading price and trading volume of the Common Stock;
- actual and forecasted results of operations, and the likely effect of these results on the market price of Common Stock;
- the projected impact of the Reverse Stock Split ratio on trading liquidity in the Common Stock;
- the number of shares of Common Stock outstanding and the potential devaluation of our market capitalization as a result of the Reverse Stock Split;
- the anticipated impact of a particular Reverse Stock Split ratio on our ability to reduce administrative and transactional costs; and
- prevailing general market, industry and economic conditions.

Certain Risks and Potential Disadvantages Associated with the Reverse Stock Split

We cannot assure you that the proposed Reverse Stock Split will increase the price of our Common Stock.

We expect that the Reverse Stock Split will increase the market price of our Common Stock. However, the effect of the Reverse Stock Split on the market price of our Common Stock cannot be predicted with any certainty, and the history of reverse stock splits for other companies of similar size to us is varied, particularly because investors may view a reverse stock split negatively. We have effected reverse stock splits in the past, however, the price of our Common Stock did not remain at the elevated price for an extended period of time following the reverse stock split. It is possible that the per share price of our Common Stock after the Reverse Stock Split will not increase in the same proportion as the reduction in the number of outstanding shares of Common Stock following the Reverse Stock Split, and the Reverse Stock Split may not result in a per share price that would attract investors who do not trade in lower-priced securities. In addition, we cannot assure you that our Common Stock will be more attractive to investors. Even if we implement the Reverse Stock Split, the market price of our Common Stock may decrease due to factors unrelated to the Reverse Stock Split, including our future performance, similar to the prior reverse stock split by the Company. If the Reverse Stock Split is consummated and the trading price of our 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 the Reverse Stock Split.

The proposed Reverse Stock Split may decrease the liquidity of our Common Stock and result in higher transaction costs.

The Reverse Stock Split may decrease the liquidity of our Common Stock because fewer shares would be outstanding after the Reverse Stock Split. In addition, if the Board implements the Reverse Stock Split, more stockholders may own “odd lots” of fewer than 100 shares of Common Stock, which may be more difficult to sell. Brokerage commissions and other costs of transactions in odd lots are generally higher than the costs of transactions of more than 100 shares or multiples of 100 shares of Common Stock. Accordingly, the Reverse Stock Split may not achieve the desired results of increasing marketability of the Common Stock as described above.

If the Reverse Stock Split is approved and effected, the resulting per-share market price may not attract institutional investors or investment funds and may not satisfy the investing guidelines of such investors and, consequently, the trading liquidity of our Common Stock may not improve.

While the Board believes that a higher stock price may help generate investor interest, there can be no assurance that the Reverse Stock Split will result in a per-share market price that will attract institutional investors or investment funds or that such share price will satisfy the investing guidelines of institutional investors or investment funds. As a result, the trading liquidity of our Common Stock may not necessarily improve.

A decline in the market price of our Common Stock after the Reverse Stock Split is approved and effected may result in a greater percentage decline than would occur in the absence of the Reverse Stock Split.

If the Reverse Stock Split is approved and effected and the market price of our Common Stock declines, the percentage decline may be greater than would occur in the absence of the Reverse Stock Split. The market price of our Common Stock will, however, also be based upon our performance and other factors, which are unrelated to the number of shares of Common Stock outstanding.

We are not currently in compliance with the Nasdaq continued listing requirements. If we are unable to regain compliance with Nasdaq’s listing requirements, our securities will be delisted, which would negatively impact our Common Stock’s market price and liquidity and reduce our ability to raise capital.

On April 7, 2025, we received a deficiency letter from Nasdaq notifying us that, because the bid price of our Common Stock closed below \$1.00 per share for 30 consecutive business days, we were no longer in compliance with the Minimum Bid Price Rule.

We cannot assure you that we will be able to regain compliance with the Minimum Bid Price Rule and maintain compliance with Nasdaq’s other continued listing standards. Accordingly, our Common Stock and certain warrants could be delisted from Nasdaq. We and holders of our securities could be materially adversely impacted if our securities are delisted from Nasdaq. In particular:

- we may be unable to raise equity capital on acceptable terms or at all;
- we may lose the confidence of our business partners, which would jeopardize our ability to continue our business as currently conducted;
- the price of our Common Stock will likely decrease as a result of the loss of market efficiencies associated with Nasdaq and the loss of federal preemption of state securities laws;
- holders may be unable to sell or purchase our securities when they wish to do so;
- we may become subject to stockholder litigation;
- we may lose the interest of institutional investors in our Common Stock;
- we may lose media and analyst coverage;
- our Common Stock could be considered a “penny stock,” which would likely limit the level of trading activity in the secondary market for our Common Stock; and
- we would likely lose any active trading market for our Common Stock, as it may only be traded on one of the over-the-counter markets, if at all.

Effective Time

The Effective Time, if the Reverse Stock Split is approved by stockholders and implemented by us, will be the date and time that is determined by the Board, but will be no later than the one-year anniversary of the Annual Meeting.

If, at any time prior to the filing of the Reverse Split Certificate with the Delaware Secretary of State, the Board, in its discretion, determines that it is in the best interests of the Company and its stockholders to delay the filing of the Reverse Split Certificate or to abandon the Reverse Stock Split, the Reverse Stock Split may be delayed or abandoned, without any further action by our stockholders.

At the Effective Time, the Reverse Stock Split will combine, automatically and without any action on the part of us or our stockholders, the shares of Common Stock outstanding immediately prior thereto into a lesser number of new shares of Common Stock in accordance with the Reverse Stock Split ratio determined by the Board within the limits set forth in this proposal, and will round any fractional shares up to the nearest whole share.

Fractional Shares

Stockholders will not receive fractional shares of Common Stock in connection with the Reverse Stock Split. Instead, stockholders who otherwise would be entitled to receive fractional shares because they hold a number of shares not evenly divisible by the ratio of the Reverse Stock Split will automatically be entitled to receive an additional share of Common Stock. In other words, any fractional share will be rounded up to the nearest whole number. Shares of Common Stock held in registered form and shares of Common Stock held in "street name" (that is, through a broker) for the same stockholder will be considered held in separate accounts and will not be aggregated when effecting the Reverse Stock Split.

Principal Effects of the Reverse Stock Split

General

After the Effective Time, the number of our outstanding shares of Common Stock will decrease at the Reverse Stock Split ratio of not less than 1-for-2.5 and not more than 1-for-10. The Reverse Stock Split would be effected simultaneously for all shares of Common Stock at the same ratio for all shares, resulting in each stockholder owning fewer shares of Common Stock. The Reverse Stock Split will affect all of our stockholders uniformly and will not affect any stockholder's percentage ownership interest in the Company, except to the extent that the Reverse Stock Split results in any of our stockholders receiving whole shares in lieu of fractional shares as described above. Voting rights and other rights and preferences of the holders of Common Stock will not be affected by the Reverse Stock Split. For example, a holder of 2% of the voting power of the outstanding shares of Common Stock immediately prior to the Reverse Stock Split would continue to hold 2% of the voting power of the outstanding shares of Common Stock immediately after the Reverse Stock Split. The number of stockholders of record will not be affected by the Reverse Stock Split. The Reverse Stock Split would not affect our securities law reporting and disclosure obligations, and we would continue to be subject to the periodic reporting requirements of the Securities Exchange Act of 1934 (the "Exchange Act").

The principal effects of the Reverse Stock Split will be that:

- each two and one half to ten shares of Common Stock owned by a stockholder (depending on the Reverse Stock Split ratio selected by the Board), will be combined into one new share of Common Stock;
- no fractional shares of Common Stock will be issued in connection with the Reverse Stock Split; instead, any fractional shares resulting from the Reverse Stock Split will round up to the next whole share;
- proportionate adjustments will be made to the per share exercise price and the number of shares issuable upon the exercise of warrants and all then-outstanding awards under all of the Company's equity plans;
- the number of stockholders owning "odd lots" of less than 100 shares of Common Stock may increase; and
- the number of shares then reserved for issuance under the Company's equity plans will be proportionately reduced.

The following table contains approximate information, based on share information as of April 11, 2025, showing the impact of the Reverse Stock Split at different ratios:

Reverse Stock Split Ratio	Number of Shares of Common Stock Authorized	Number of Shares of Common Stock Outstanding	Number of Shares of Common Stock Reserved for Future Issuance	Number of Shares of Common Stock Authorized but Not Outstanding or Reserved
Pre-Reverse Stock Split	100,000,000	3,271,042	2,483,585	94,245,373
1-for-2.5	100,000,000	1,308,417	993,434	97,698,149
1-for-5	100,000,000	654,209	496,717	98,849,074
1-for-10	100,000,000	327,105	248,359	99,424,536

As illustrated in the table above, the Reverse Stock Split will not result in a reduction of the total number of shares of Common Stock that we are authorized to issue. The par value of the Common Stock would also remain unchanged at \$0.001 per share.

After the Reverse Split Certificate is effective, the Common Stock will have a new Committee on Uniform Securities Identification Procedures, or CUSIP number, a number used to identify the Common Stock.

The Common Stock is currently registered under Section 12(b) of the Exchange Act, and we are subject to the periodic reporting and other requirements of the Exchange Act. The implementation of the Reverse Stock Split will not affect the registration of Common Stock under the Exchange Act. The Common Stock would continue to be listed on Nasdaq under the symbol "BBLG" immediately following the Reverse Stock Split.

Effect of Reverse Stock Split on Stated Capital

Pursuant to the Reverse Stock Split, the par value of the Common Stock will remain \$0.001 per share. As a result of the Reverse Stock Split, the stated capital on our balance sheet attributable to Common Stock (subject to a minor adjustment in respect of the treatment of fractional shares) and the additional paid-in capital account will, in total, not change due to the Reverse Stock Split. However, the allocation between the stated capital attributable to Common Stock and the additional paid-in capital on our balance sheet will change because there will be fewer shares of Common Stock outstanding. The stated capital attributable to Common Stock will decrease, and in turn, the stated capital attributable to the additional paid-in capital will increase. The net income or loss per share of Common Stock will increase because there will be fewer shares of Common Stock outstanding. The Reverse Stock Split would be reflected retroactively in our consolidated financial statements. We do not anticipate that any other accounting consequences would arise as a result of the Reverse Stock Split.

Shares Held in Book-Entry and Through a Broker

The combination of, and reduction in, the number of outstanding shares of Common Stock as a result of the Reverse Stock Split will occur automatically at the Effective Time without any additional action on the part of our stockholders.

Upon the Reverse Stock Split, we intend to treat stockholders holding shares of Common Stock in "street name" (that is, through a broker) in the same manner as registered stockholders whose shares of Common Stock are registered in their names. Brokers will be instructed to effect the Reverse Stock Split for their beneficial holders holding shares of Common Stock in "street name;" however, these brokers may apply their own specific procedures for processing the Reverse Stock Split. If you hold your shares of Common Stock with a broker, and you have any questions in this regard, we encourage you to contact your holder of record.

If you hold registered shares of Common Stock in a book-entry form, you do not need to take any action to receive your post-Reverse Stock Split shares of Common Stock in registered book-entry form. If you are entitled to post-Reverse Stock Split shares of Common Stock, a transaction statement will automatically be sent to your address of record as soon as practicable after the Effective Time indicating the number of shares of Common Stock you hold.

Effects on Equity Compensation Plans and Awards and Convertible Securities

If the Reverse Stock Split is implemented, proportionate adjustments would generally be required to be made with regard to:

- the number of shares deliverable upon vesting and settlement of outstanding restricted stock units issued under the 2015 Equity Incentive Plan;
- the number of shares reserved for issuance under the 2015 Equity Incentive Plan; and
- the per share conversion price, and the number of shares issuable upon conversion of, outstanding convertible securities entitling the holders to purchase or convert into, or otherwise acquire shares of our Common Stock.

In the case of options, convertible securities or other rights to acquire shares of our Common Stock, these adjustments would result in approximately the same aggregate price required under such options, convertible securities or other rights upon exercise, conversion, or settlement, and approximately the same value of shares of Common Stock being delivered upon such exercise, conversion, or settlement, immediately following the Reverse Stock Split as was the case immediately preceding the Reverse Stock Split.

The number of shares of Common Stock issuable upon exercise or vesting of outstanding equity awards and options and the exercise or purchase price related thereto, if any, would be equitably adjusted in accordance with the terms of the Plan, as applicable, or such stock option grants, as the case may be, which may include rounding the number of shares of Common Stock issuable down to the nearest whole share or the payment of cash for fractional shares.

Interest of Certain Persons in Matters to be Acted Upon

No officer or director has any substantial interest, direct or indirect, by security holdings or otherwise, in the Reverse Stock Split that is not shared by all of our other stockholders.

Reservation of Right to Delay the Filing of the Reverse Split Certificate, or Abandon the Reverse Stock Split

We reserve the right to delay the filing of the Reverse Split Certificate or abandon the Reverse Stock Split and at any time before the Effective Time, even if the Reverse Stock Split has been approved by stockholders at the Annual Meeting. By voting in favor of an amendment to effect the Reverse Stock Split, you are also expressly authorizing the Board to delay, until the one-year anniversary of the Annual Meeting, or abandon the Reverse Stock Split if the Board determines that such action is in the best interests of the Company and its stockholders.

No Going Private Transaction

Notwithstanding the decrease in the number of outstanding shares following the Reverse Stock Split, our Board does not intend for this transaction to be the first step in a “going private transaction” within the meaning of Rule 13e-3 of the Exchange Act.

No Appraisal Rights

Under Delaware law, the Charter and our Bylaws, stockholders have no rights to exercise dissenters’ rights of appraisal with respect to the Reverse Stock Split.

Material U.S. Federal Income Tax Consequences of the Reverse Stock Split

The following summary describes, as of the date of this proxy statement, certain U.S. federal income tax consequences of the Reverse Stock Split to holders of our Common Stock. This summary addresses the tax consequences only to a U.S. holder, which is a beneficial owner of our Common Stock that is either:

- an individual citizen or resident of the United States;
- a corporation, or other entity taxable as a corporation for U.S. federal income tax purposes, created or organized in or under the laws of the United States or any state thereof or the District of Columbia;
- an estate, the income of which is subject to U.S. federal income taxation regardless of its source; or
- a trust, if: (i) a court within the United States is able to exercise primary jurisdiction over its administration and one or more U.S. persons has the authority to control all of its substantial decisions or (ii) it was in existence before August 20, 1996 and a valid election is in place under applicable Treasury regulations to treat such trust as a U.S. person for U.S. federal income tax purposes.

This summary is based on the provisions of the Internal Revenue Code of 1986, as amended (the “Code”), U.S. Treasury regulations, administrative rulings and judicial authority, all as in effect as of the date of this proxy statement. Subsequent developments in U.S. federal income tax law, including changes in law or differing interpretations, which may be applied retroactively, could have a material effect on the U.S. federal income tax consequences of the Reverse Stock Split.

This summary does not address all of the tax consequences that may be relevant to any particular investor, including tax considerations that arise from rules of general application to all taxpayers or to certain classes of taxpayers or that are generally assumed to be known by investors. This summary also does not address the tax consequences to (i) persons that may be subject to special treatment under U.S. federal income tax law, such as banks, insurance companies, thrift institutions, regulated investment companies, real estate investment trusts, tax-exempt organizations, U.S. expatriates, persons subject to the alternative minimum tax, persons whose functional currency is not the U.S. dollar, partnerships or other pass-through entities, traders in securities that elect to mark to market and dealers in securities or currencies, (ii) persons that hold our Common Stock as part of a position in a “straddle” or as part of a “hedging transaction,” “conversion transaction” or other integrated investment transaction for federal income tax purposes or (iii) persons that do not hold our Common Stock as “capital assets” (generally, property held for investment). This summary does not address backup withholding and information reporting. This summary does not address U.S. holders who beneficially own Common Stock through a “foreign financial institution” (as defined in Code Section 1471(d)(4)) or certain other non-U.S. entities specified in Code Section 1472. This summary does not address tax considerations arising under any state, local or foreign laws, or under federal estate or gift tax laws.

If a partnership (or other entity classified as a partnership for U.S. federal income tax purposes) is the beneficial owner of our Common Stock, the U.S. federal income tax treatment of a partner in the partnership will generally depend on the status of the partner and the activities of the partnership. Partnerships that hold our Common Stock, and partners in such partnerships, should consult their own tax advisors regarding the U.S. federal income tax consequences of the Reverse Stock Split.

Each holder should consult his, her or its own tax advisors concerning the particular U.S. federal tax consequences of the Reverse Stock Split, as well as the consequences arising under the laws of any other taxing jurisdiction, including any foreign, state, or local income tax consequences.

General Tax Treatment of the Reverse Stock Split

The Reverse Stock Split is intended to qualify as a “reorganization” under Section 368 of the Code that should constitute a “recapitalization” for U.S. federal income tax purposes. Assuming the Reverse Stock Split qualifies as a reorganization, a U.S. holder generally will not recognize gain or loss upon the exchange of our ordinary shares for a lesser number of ordinary shares, based upon the Reverse Stock Split ratio. A U.S. holder’s aggregate tax basis in the lesser number of ordinary shares received in the Reverse Stock Split will be the same such U.S. holder’s aggregate tax basis in the shares of our Common Stock that such U.S. holder owned immediately prior to the Reverse Stock Split. The holding period for the ordinary shares received in the Reverse Stock Split will include the period during which a U.S. holder held the shares of our Common Stock that were surrendered in the Reverse Stock Split. The United States Treasury regulations provide detailed rules for allocating the tax basis and holding period of the shares of our Common Stock surrendered to the shares of our Common Stock received pursuant to the Reverse Stock Split. U.S. holders of shares of our Common Stock acquired on different dates and at different prices should consult their tax advisors regarding the allocation of the tax basis and holding period of such shares.

THE FOREGOING IS INTENDED ONLY AS A SUMMARY OF CERTAIN FEDERAL INCOME TAX CONSEQUENCES OF THE REVERSE STOCK SPLIT, AND DOES NOT CONSTITUTE A TAX OPINION. EACH HOLDER OF OUR COMMON SHARES SHOULD CONSULT ITS OWN TAX ADVISOR REGARDING THE TAX CONSEQUENCES OF THE REVERSE STOCK SPLIT TO THEM AND FOR REFERENCE TO APPLICABLE PROVISIONS OF THE CODE.

Vote Required and Recommendation of Board

The affirmative vote of the majority of votes cast on the proposal is required to approve Proposal III. Proxies solicited by the Board will be voted for approval of this proposal, unless otherwise specified. If stockholder approval for this proposal is not obtained then the Reverse Stock Split will not be effected.

THE BOARD RECOMMENDS A VOTE “FOR” THE APPROVAL OF AMENDMENT TO THE CHARTER TO EFFECT A REVERSE STOCK SPLIT OF THE COMMON STOCK AT THE DISCRETION OF THE BOARD.

PROPOSAL IV – APPROVAL OF THE SECOND AMENDMENT TO OUR 2015 EQUITY INCENTIVE PLAN, SUBJECT TO THE REVERSE STOCK SPLIT BEING APPROVED

Overview

We are asking our stockholders to approve, subject to the Reverse Stock Split being approved, the Second Amendment (the “Plan Amendment”) to the 2015 Equity Incentive Plan (the “2015 Plan”) to increase the number of shares authorized and available for issuance under the 2015 Plan by 30,000,000 additional shares, resulting in an increase to the total shares authorized and available for issuance under the 2015 Plan from 629,489 shares to 30,629,489 shares. The Plan Amendment will only become effective if the Reverse Stock Split proposal is approved by our stockholders. If the Reverse Stock Split proposal is not approved, the Plan Amendment will not become effective. If the Plan Amendment becomes effective and the Board implements the Reverse Stock Split, then the number of shares available under the 2015 Plan will be proportionally adjusted in the range of 3,000,000 to 12,000,000, depending on the size of the ratio of the Reverse Stock Split. Our Board, upon recommendation of the Compensation Committee, approved the Plan Amendment on March 26, 2025, subject to stockholder approval. The 2015 Plan was originally adopted by our Board on December 28, 2015 and approved by stockholders on December 30, 2015. The First Amendment to the 2015 Plan was approved by the stockholders on August 3, 2023.

The closing stock price of a share of the Company’s Common Stock as reported on the Nasdaq Capital Market on April 17, 2025, our record date, was \$.

Purpose of the Amendment of the 2015 Plan

Equity incentive awards play a vital role in the compensation provided to the Company’s executive officers, non-employee directors and consultants. The Company relies on equity compensation in order to attract and retain experienced and knowledgeable individuals and to align the interests of the Company’s executive officers with those of our stockholders. Despite the role equity awards play in our compensation packages, the Company is concerned about the dilutive effect of equity awards on our stockholders; accordingly, the Company is committed to using equity incentive awards prudently and within reasonable limits.

As a result of our measured approach to the use of equity incentive awards, since the 2015 Plan’s effective date, the Company has increased its 2015 Plan Common Stock reserve only once. As of April 17, 2025, of the 629,489 shares of our Common Stock authorized for awards under the 2015 Plan, approximately shares remained available for future award under the 2015 Plan. Because we believe the equity component of our officers’ and directors’ compensation is important, stockholders are being asked to approve an increase of 30,000,000 additional shares of Common Stock to 30,629,489 shares of Common Stock authorized for issuance under the 2015 Plan, subject to the Reverse Stock Split being approved.

Summary Description of the Amended Plan

The full text of the Plan Amendment is attached to this proxy statement as Appendix B. The principal terms of the 2015 Plan as amended by the Plan Amendment are described below, but the description is qualified in its entirety by reference to the 2015 Plan and the Plan Amendment. In the event of a conflict between the description and the terms of the 2015 Plan or the Plan Amendment, the terms of the Plan Amendment will govern. The Plan Amendment will not become effective unless both this proposal and the Reverse Stock Split proposal is approved by our stockholders. Any stockholder who wishes to obtain a copy of the actual 2015 Plan document may do so upon written request to our Corporate Secretary at our principal offices at 2 Burlington Woods Drive, Ste 100, Burlington, MA 01803.

Types of Awards

The terms of the 2015 Plan provide for the grant of incentive stock options, or ISOs, and nonstatutory stock options, or NSOs, restricted stock awards, restricted stock unit awards, stock appreciation rights, performance stock awards, performance cash award, and other stock awards.

Shares Available for Awards

Subject to the Reverse Stock Split being approved, the aggregate number of shares of our Common Stock that may be issued pursuant to stock awards under the 2015 Plan will consist of 30,629,489 shares of Common Stock. If the Plan Amendment becomes effective and the Board implements the Reverse Stock Split, then the number of shares available under the 2015 Plan will be proportionally adjusted in the range of 3,000,000 to 12,000,000, depending on the size of the ratio of the Reverse Stock Split. The 2015 Plan also includes an “evergreen” feature, which provides that prior to the first day of each fiscal year following the Effective Date (as defined in the 2015 Plan) through December 31, 2035, commencing on the first day of the fiscal year following the fiscal year in which the Effective Date occurs, the Board may, without further stockholder approval, approve an increase in the Share Reserve in an amount not more than 5% of the total number of shares of Common Stock outstanding on the last day of the preceding fiscal year.

If a stock award granted under the 2015 Plan, or any portion thereof, expires or otherwise terminates without all of the shares covered by the stock award having been issued or is settled in cash rather than in shares, such expiration, termination or settlement will not reduce or otherwise offset the number of shares available for issuance under the 2015 Plan. Additionally, shares issued pursuant to stock awards granted under the 2015 Plan that are forfeited back to or repurchased by the Company because of the failure to vest, as well as shares reacquired by us as consideration for the exercise or purchase price of a stock award or to satisfy tax withholding obligations related to a stock award, will become available again for issuance under the 2015 Plan.

As of April 17, 2025, stock options covering an aggregate of _____ shares of Common Stock have been granted under the 2015 Plan and are currently outstanding.

Eligibility

All of our employees, directors and consultants are eligible to participate in the 2015 Plan and may receive all types of awards; provided that ISOs may be granted under the 2015 Plan only to our employees (including officers) and employees of our affiliates. As of April 11, 2025, we have two employees, four non-employee directors and one consultant that may be considered for awards under the 2015 Plan.

Grant Limits

Under the 2015 Plan, the maximum number of shares subject to awards granted during a single fiscal year to any non-employee director under the 2015 Plan, taken together with any cash fees paid to such non-employee director during the fiscal year, shall not exceed \$400,000 in total value (calculating the value of any such awards based on the grant date fair value of such awards for financial reporting purposes). The Board may make exceptions to this limit for individual non-employee directors in extraordinary circumstances (for example, to compensate such individual for interim service in the capacity of an officer of the Company), as the Board may determine in its discretion, provided that the non-employee director receiving such additional compensation may not participate in the decision to award such compensation or in other compensation decisions involving non-employee directors.

Administration

The 2015 Plan is administered by the Board, which may in turn delegate authority to administer the 2015 Plan to a committee. The Board has delegated concurrent authority to administer the 2015 Plan to the Compensation Committee, but may, at any time, revert in itself some or all of the power previously delegated to the Compensation Committee. The Board and the Compensation Committee are considered to be the “plan administrator” for purposes of this Information Statement. Subject to the terms of the 2015 Plan, the plan administrator may determine the recipients, numbers and types of awards to be granted, and terms and conditions of the awards, including the period of their exercisability and vesting. Subject to the limitations set forth below, the plan administrator also determines the fair market value applicable to a stock award and the exercise price of stock options and stock appreciation rights granted under the 2015 Plan.

The plan administrator may also delegate to one or more of our officers the authority to designate employees who are not officers to be recipients of certain stock awards and the number of shares subject to such stock awards, provided that such delegation must specify the total number of shares of our Common Stock that may be subject to the stock awards granted by such officer and such officer may not grant a stock award to himself or herself.

Repricing: Cancellation and Re-Grant of Stock Awards

Subject to the terms of our 2015 Plan and Nasdaq listing standards, the Board has the authority to reprice any outstanding option or stock appreciation right, cancel and re-grant any outstanding stock award in exchange for new stock awards, cash or other consideration, or take any other action that is treated as a repricing under generally accepted accounting principles, with the consent of any adversely affected participant.

Stock Options

Stock options may be granted under the 2015 Plan pursuant to stock option agreements. The 2015 Plan permits the grant of stock options that qualify as ISOs and NSOs. Individual stock option agreements may be more restrictive as to any or all of the permissible terms described in this section.

The exercise price of NSOs may not be less than 100% of the fair market value of the Common Stock subject to the stock option on the date of grant. The exercise price of ISOs may not be less than 100% of the fair market value of the Common Stock subject to the stock option on the date of grant and, in some cases (see “Limitations” below), may not be less than 110% of such fair market value.

The term of stock options granted under the 2015 Plan may not exceed ten years and, in some cases (see “Limitations on Incentive Stock Options” below), may not exceed five years. Except as explicitly provided otherwise in an optionholder’s stock option agreement, stock options granted under the 2015 Plan generally terminate three months after termination of the optionholder’s service unless (i) termination is due to the optionholder’s disability, in which case the stock option may be exercised (to the extent the stock option was exercisable at the time of the termination of service) at any time within 12 months following termination; (ii) the optionholder dies before the optionholder’s service has terminated, or within the period (if any) specified in the stock option agreement after termination of service for a reason other than death, in which case the stock option may be exercised (to the extent the stock option was exercisable at the time of the optionholder’s death) within 18 months following the optionholder’s death by the person or persons to whom the rights to such stock option have passed; (iii) the optionholder is terminated for cause in which case the stock option will cease to be exercisable immediately upon the optionholder’s termination, or (iv) the stock option by its terms specifically provides otherwise. In addition, the plan administrator may grant options with different terms. A stock option term may be extended in the event that exercise of the stock option following termination of service is prohibited by applicable securities laws or if the sale of stock received upon exercise of a stock option would violate our insider trading policy. In no event may a stock option be exercised after its original expiration date.

Acceptable forms of consideration for the purchase of our Common Stock pursuant to the exercise of a stock option under the 2015 Plan will be determined by the plan administrator and may include (i) cash, check, bank draft or money order made payable to us, (ii) payment pursuant to a program developed under Regulation T as promulgated by the Federal Reserve Board, (iii) Common Stock previously owned by the optionholder, (iv) a net exercise feature (for NSOs only), or (v) other legal consideration approved by the plan administrator.

Stock options granted under the 2015 Plan may become exercisable in cumulative increments, or “vest,” as determined by the plan administrator at the rate specified in the stock option agreement. Shares covered by different stock options granted under the 2015 Plan may be subject to different vesting schedules as the plan administrator may determine. The plan administrator also has flexibility to provide for accelerated vesting of stock options in certain events.

Generally, an optionholder may not transfer a stock option other than by will or the laws of descent and distribution or a domestic relations order with the approval of the plan administrator or a duly authorized officer. Additionally, an optionholder may, with the approval of the plan administrator or a duly authorized officer, designate a beneficiary who may exercise the stock option following the optionholder’s death.

Limitations on Incentive Stock Options

The aggregate fair market value, determined at the time of grant, of shares of our Common Stock with respect to ISOs that are exercisable for the first time by an optionholder during any calendar year under all of our stock plans may not exceed \$100,000. The stock options or portions of stock options that exceed this limit are treated as NSOs. No ISO may be granted to any person who, at the time of the grant, owns or is deemed to own stock possessing more than 10% of our total combined voting power or that of any affiliate unless the following conditions are satisfied:

- the exercise price of the ISO must be at least 110% of the fair market value of the stock subject to the ISO on the date of grant; and
- the term of the ISO must not exceed five years from the date of grant.

Subject to the Reverse Stock Split being approved, the aggregate maximum number of shares of Common Stock that may be issued pursuant to the exercise of ISOs granted under the 2015 Plan is 30,629,489 shares.

Restricted Stock Awards

Restricted stock awards may be granted under the 2015 Plan pursuant to restricted stock award agreements. A restricted stock award may be granted in consideration for cash, check, bank draft or money order payable to us, the recipient’s services performed for us or an affiliate of ours, or any other form of legal consideration acceptable to the plan administrator. Shares of our Common Stock acquired under a restricted stock award may be subject to forfeiture to us in accordance with a vesting schedule to be determined by the plan administrator. Rights to acquire shares of our Common Stock under a restricted stock award may be transferred only upon such terms and conditions as are set forth in the restricted stock award agreement. Except as otherwise provided in the applicable restricted stock award agreement, restricted stock awards that have not vested will be forfeited upon the participant’s termination of continuous service for any reason.

Restricted Stock Unit Awards

Restricted stock unit awards may be granted under the 2015 Plan pursuant to restricted stock unit award agreements. Payment of any purchase price may be made in any legal form acceptable to the plan administrator. We will settle a payment due to a recipient of a restricted stock unit award by delivery of shares of our Common Stock, by cash, by a combination of cash and stock, or in any other form of consideration determined by the plan administrator and set forth in the restricted stock unit award agreement. Dividend equivalents may be credited in respect of shares of our Common Stock covered by a restricted stock unit award. Restricted stock unit awards may be subject to vesting in accordance with a vesting schedule to be determined by the plan administrator. Except as otherwise provided in the applicable restricted stock unit award agreement, restricted stock units that have not vested will be forfeited upon the participant's termination of continuous service for any reason.

Stock Appreciation Rights

Stock appreciation rights may be granted under the 2015 Plan pursuant to stock appreciation right agreements. Each stock appreciation right is denominated in Common Stock equivalents. The strike price of each stock appreciation right will be determined by the plan administrator but will in no event be less than 100% of the fair market value of the stock subject to the stock appreciation right at the time of grant. The plan administrator may also impose restrictions or conditions upon the vesting of stock appreciation rights that it deems appropriate. Stock appreciation rights may be paid in our Common Stock, in cash, in a combination of cash and stock, or in any other form of legal consideration approved by the plan administrator and set forth in the stock appreciation right agreement. Stock appreciation rights will be subject to the same conditions upon termination and restrictions on transfer as stock options under the 2015 Plan.

Performance Awards

The 2015 Plan allows us to grant cash and stock based performance awards that may qualify as performance-based compensation. Performance awards may be granted, vest or be exercised based upon the attainment during a specified period of time of specified performance goals. The length of any performance period, the performance goals to be achieved during the performance period, and the measure of whether and to what degree such performance goals have been attained will be determined by the Compensation Committee or the Board.

Performance Goals under the 2015 Plan will be based on any one or more of the following Performance Criteria: (1) earnings (including earnings per share and net earnings); (2) earnings before interest, taxes and depreciation; (3) earnings before interest, taxes, depreciation and amortization; (4) total stockholder return; (5) return on equity or average stockholder's equity; (6) return on assets, investment, or capital employed; (7) stock price; (8) margin (including gross margin); (9) income (before or after taxes); (10) operating income; (11) operating income after taxes; (12) pre-tax profit; (13) operating cash flow; (14) sales or revenue targets; (15) increases in revenue or product revenue; (16) expenses and cost reduction goals; (17) improvement in or attainment of working capital levels; (18) economic value added (or an equivalent metric); (19) market share; (20) cash flow; (21) cash flow per share; (22) share price performance; (23) debt reduction; (24) customer satisfaction; (25) stockholders' equity; (26) capital expenditures; (27) debt levels; (28) operating profit or net operating profit; (29) workforce diversity; (30) growth of net income or operating income; (31) billings; (32) pre-clinical development related compound goals; (33) financing; (34) regulatory milestones, including approval of a compound; (35) stockholder liquidity; (36) corporate governance and compliance; (37) product commercialization; (38) intellectual property; (39) personnel matters; (40) progress of internal research or clinical programs; (41) progress of partnered programs; (42) partner satisfaction; (43) budget management; (44) clinical achievements; (45) completing phases of a clinical study (including the treatment phase); (46) announcing or presenting preliminary or final data from clinical studies; in each case, whether on particular timelines or generally; (47) timely completion of clinical trials; (48) submission of INDs and NDAs and other regulatory achievements; (49) partner or collaborator achievements; (50) internal controls, including those related to the Sarbanes-Oxley Act of 2002; (51) research progress, including the development of programs; (52) investor relations, analysts and communication; (53) manufacturing achievements (including obtaining particular yields from manufacturing runs and other measurable objectives related to process development activities); (54) strategic partnerships or transactions (including in-licensing and out-licensing of intellectual property; (55) establishing relationships with commercial entities with respect to the marketing, distribution and sale of the Company's products (including with group purchasing organizations, distributors and other vendors); (56) supply chain achievements (including establishing relationships with manufacturers or suppliers of active pharmaceutical ingredients and other component materials and manufacturers of the Company's products); (57) co-development, co-marketing, profit sharing, joint venture or other similar arrangements; and (58) other measures of performance selected by the Board.

Performance Goals may be based on a company-wide basis, with respect to one or more business units, divisions, affiliates, or business segments, and in either absolute terms or relative to the performance of one or more comparable companies or the performance of one or more relevant indices. In establishing a Performance Goal, the Compensation Committee and Board may provide that performance will be appropriately adjusted as follows: (1) to exclude restructuring and/or other nonrecurring charges; (2) to exclude exchange rate effects; (3) to exclude the effects of changes to generally accepted accounting principles; (4) to exclude the effects of any statutory adjustments to corporate tax rates; (5) to exclude the effects of any “extraordinary items” as determined under generally accepted accounting principles; (6) to exclude the dilutive effects of acquisitions or joint ventures; (7) to assume that any business divested by the Company achieved performance objectives at targeted levels during the balance of a Performance Period following such divestiture; (8) to exclude the effect of any change in the outstanding shares of Common Stock of the Company by reason of any stock dividend or split, stock repurchase, reorganization, recapitalization, merger, consolidation, spin-off, combination or exchange of shares or other similar corporate change, or any distributions to common stockholders other than regular cash dividends; (9) to exclude the effects of stock based compensation and the award of bonuses under the Company’s bonus plans; (10) to exclude costs incurred in connection with potential acquisitions or divestitures that are required to be expensed under generally accepted accounting principles; (11) to exclude the goodwill and intangible asset impairment charges that are required to be recorded under generally accepted accounting principles and (12) to exclude the effect of any other unusual, non-recurring gain or loss or other extraordinary item. In addition, the Board retains the discretion to reduce or eliminate the compensation or economic benefit due upon attainment of Performance Goals and to define the manner of calculating the performance criteria it selects to use for a Performance Period.

Other Stock Awards

Other forms of stock awards valued in whole or in part with reference to our Common Stock may be granted either alone or in addition to other stock awards under the 2015 Plan. The plan administrator will have sole and complete authority to determine the persons to whom and the time or times at which such other stock awards will be granted, the number of shares of our Common Stock to be granted and all other conditions of such other stock awards. Other forms of stock awards may be subject to vesting in accordance with a vesting schedule to be determined by the plan administrator.

Clawback/Recovery

Stock awards granted under the 2015 Plan will be subject to recoupment in accordance with any clawback policy we may be required to adopt pursuant to applicable law and listing requirements. In addition, the Board may impose such other clawback, recovery or recoupment provisions in any stock award agreement as it determines necessary or appropriate.

Changes to Capital Structure

In the event of certain capitalization adjustments, the plan administrator will appropriately adjust: (i) the class(es) and maximum number of securities subject to the 2015 Plan; (ii) the class(es) and maximum number of securities that may be issued pursuant to the exercise of ISOs; (iii) the class(es) and maximum number of securities that may be awarded to any person pursuant to Section 162(m) limits; (iv) the class(es) and maximum number of securities that may be awarded to any non-employee director; and (v) the class(es) and number of securities and price per share of stock subject to outstanding stock awards.

Transactions

In the event of a transaction (as defined in the 2015 Plan and described below), the Board will have the discretion to take one or more of the following actions with respect to outstanding stock awards (contingent upon the closing or completion of such transaction), unless otherwise provided in the stock award agreement or other written agreement with the participant or unless otherwise provided by the Board at the time of grant:

- arrange for the surviving or acquiring corporation (or its parent company) to assume or continue the award or to substitute a similar stock award for the award (including an award to acquire the same consideration paid to our stockholders pursuant to the transaction);
- arrange for the assignment of any reacquisition or repurchase rights held by us with respect to the stock award to the surviving or acquiring corporation (or its parent company);
- accelerate the vesting (and, if applicable, the exercisability) of the stock award and provide for its termination prior to the effective time of the transaction;
- arrange for the lapse, in whole or in part, of any reacquisition or repurchase rights held by us with respect to the award;
- cancel or arrange for the cancellation of the stock award, to the extent not vested or exercised prior to the effective time of the transaction, in exchange for such cash consideration or no consideration, as the Board may consider appropriate; and
- make a payment, in such form as may be determined by the Board, equal to the excess, if any, of (i) the value of the property the participant would have received upon the exercise of the stock award immediately prior to the effective time of the transaction, over (ii) any exercise price payable in connection with such exercise.

The Board is not obligated to treat all stock awards or portions of stock awards in the same manner. The Board may take different actions with respect to the vested and unvested portions of a stock award.

For purposes of the 2015 Plan, a transaction will be deemed to occur in the event of a corporate transaction or a change in control. A corporate transaction generally means the consummation of (i) a sale or other disposition of all or substantially all of our consolidated assets, (ii) a sale or other disposition of more than 50% of our outstanding securities, (iii) a merger, consolidation or similar transaction following which we are not the surviving corporation, or (iv) a merger, consolidation or similar transaction following which we are the surviving corporation but the shares of our Common Stock outstanding immediately prior to such transaction are converted or exchanged into other property by virtue of the transaction.

A change of control generally means (i) the acquisition by a person or entity of more than 50% of our combined voting power other than by merger, consolidation or similar transaction; (ii) a consummated merger, consolidation or similar transaction immediately after which our stockholders cease to own more than 50% of the combined voting power of the surviving entity; (iii) a consummated sale, lease or exclusive license or other disposition of all or substantially all of our consolidated assets; or (iv) when a majority of the Board becomes comprised of individuals whose nomination, appointment, or election was not approved by a majority of the members of our Board or their approved successors.

Change in Control

Under the 2015 Plan, a stock award may be subject to additional acceleration of vesting and exercisability upon or after a change in control (as defined in the 2015 Plan) as may be provided in the stock award agreement or other written agreement with the participant, but in the absence of such provision, no such acceleration will occur.

Plan Amendments and Termination

The Board will have the authority to amend or terminate the 2015 Plan at any time. However, except as otherwise provided in the 2015 Plan, no amendment or termination of the 2015 Plan may materially impair any rights under awards already granted to a participant unless agreed to by the affected participant. We will obtain stockholder approval of any amendment to the 2015 Plan as required by applicable law and listing requirements. No ISOs may be granted under the 2015 Plan after December 30, 2035.

U.S. Federal Income Tax Consequences

The information set forth below is a summary only and does not purport to be complete. The information is based upon current federal income tax rules and therefore is subject to change when those rules change. Because the tax consequences to any recipient may depend on his or her particular situation, each recipient should consult the recipient's tax adviser regarding the federal, state, local, and other tax consequences of the grant or exercise of an award or the disposition of stock acquired as a result of an award. The 2015 Plan is not qualified under the provisions of Section 401(a) of the Code and is not subject to any of the provisions of the Employee Retirement Income Security Act of 1974. Our ability to realize the benefit of any tax deductions described below depends on our generation of taxable income as well as the requirement of reasonableness, the provisions of Section 162(m) of the Code and the satisfaction of our tax reporting obligations.

Nonstatutory Stock Options

Generally, there is no taxation upon the grant of an NSO if the stock option is granted with an exercise price equal to the fair market value of the underlying stock on the grant date. On exercise, an optionholder will recognize ordinary income equal to the excess, if any, of the fair market value on the date of exercise of the stock over the exercise price. If the optionholder is employed by us or one of our affiliates, that income will be subject to withholding taxes. The optionholder's tax basis in those shares will be equal to their fair market value on the date of exercise of the stock option, and the optionholder's capital gain holding period for those shares will begin on that date.

Subject to the requirement of reasonableness, the provisions of Section 162(m) of the Code and the satisfaction of a tax reporting obligation, we will generally be entitled to a tax deduction equal to the taxable ordinary income realized by the optionholder.

Incentive Stock Options

The 2015 Plan provides for the grant of stock options that qualify as "incentive stock options," as defined in Section 422 of the Code. Under the Code, an optionholder generally is not subject to ordinary income tax upon the grant or exercise of an ISO. If the optionholder holds a share received on exercise of an ISO for more than two years from the date the stock option was granted and more than one year from the date the stock option was exercised (the "Required Holding Period"), the difference, if any, between the amount realized on a sale or other taxable disposition of that share and the holder's tax basis in that share will be long-term capital gain or loss.

If, however, an optionholder disposes of a share acquired on exercise of an ISO before the end of the Required Holding Period (a "Disqualifying Disposition"), the optionholder generally will recognize ordinary income in the year of the Disqualifying Disposition equal to the excess, if any, of the fair market value of the share on the date the ISO was exercised over the exercise price. However, if the sales proceeds are less than the fair market value of the share on the date of exercise of the stock option, the amount of ordinary income recognized by the optionholder will not exceed the gain, if any, realized on the sale. If the amount realized on a Disqualifying Disposition exceeds the fair market value of the share on the date of exercise of the stock option, that excess will be short-term or long-term capital gain, depending on whether the holding period for the share exceeds one year.

For purposes of the alternative minimum tax, the amount by which the fair market value of a share of stock acquired on exercise of an ISO exceeds the exercise price of that stock option generally will be an adjustment included in the optionholder's alternative minimum taxable income for the year in which the stock option is exercised. If, however, there is a Disqualifying Disposition of the share in the year in which the stock option is exercised, there will be no adjustment for alternative minimum tax purposes with respect to that share. In computing alternative minimum taxable income, the tax basis of a share acquired on exercise of an ISO is increased by the amount of the adjustment taken into account with respect to that share for alternative minimum tax purposes in the year the stock option is exercised.

We are not allowed an income tax deduction with respect to the grant or exercise of an ISO or the disposition of a share acquired on exercise of an ISO after the Required Holding Period. If there is a Disqualifying Disposition of a share, however, we are allowed a deduction in an amount equal to the ordinary income includible in income by the optionholder, subject to Section 162(m) of the Code and provided that amount constitutes an ordinary and necessary business expense for us and is reasonable in amount, and either the employee includes that amount in income or we timely satisfy our reporting requirements with respect to that amount.

Restricted Stock Awards

Generally, the recipient of a restricted stock award will recognize ordinary income at the time the stock is received equal to the excess, if any, of the fair market value of the stock received over any amount paid by the recipient in exchange for the stock. If, however, the stock is not vested when it is received (for example, if the employee is required to work for a period of time in order to have the right to sell the stock), the recipient generally will not recognize income until the stock becomes vested, at which time the recipient will recognize ordinary income equal to the excess, if any, of the fair market value of the stock on the date it becomes vested over any amount paid by the recipient in exchange for the stock. A recipient may, however, file an election with the Internal Revenue Service, within 30 days following his or her receipt of the stock award, to recognize ordinary income, as of the date the recipient receives the award, equal to the excess, if any, of the fair market value of the stock on the date the award is granted over any amount paid by the recipient for the stock.

The recipient's basis for the determination of gain or loss upon the subsequent disposition of shares acquired from stock awards will be the amount paid for such shares plus any ordinary income recognized either when the stock is received or when the stock becomes vested.

Subject to the requirement of reasonableness, the provisions of Section 162(m) of the Code and the satisfaction of a tax reporting obligation, we will generally be entitled to a tax deduction equal to the taxable ordinary income realized by the recipient of the stock award.

Restricted Stock Unit Awards

Generally, the recipient of a stock unit structured to conform to the requirements of Section 409A of the Code or an exception to Section 409A of the Code will recognize ordinary income at the time the stock is delivered equal to the excess, if any, of the fair market value of the shares of our Common Stock received over any amount paid by the recipient in exchange for the shares of our Common Stock. To conform to the requirements of Section 409A of the Code, the shares of our Common Stock subject to a stock unit award may generally only be delivered upon one of the following events: a fixed calendar date (or dates), separation from service, death, disability or a change in control. If delivery occurs on another date, unless the stock units otherwise comply with or qualify for an exception to the requirements of Section 409A of the Code, in addition to the tax treatment described above, the recipient will owe an additional 20% federal tax and interest on any taxes owed.

The recipient's basis for the determination of gain or loss upon the subsequent disposition of shares acquired from stock units will be the amount paid for such shares plus any ordinary income recognized when the stock is delivered.

Subject to the requirement of reasonableness, the provisions of Section 162(m) of the Code and the satisfaction of a tax reporting obligation, we will generally be entitled to a tax deduction equal to the taxable ordinary income realized by the recipient of the stock award.

Stock Appreciation Rights

Under the 2015 Plan, we may grant stock appreciation rights separate from any other award or in tandem with other awards granted under the 2015 Plan.

Where the stock appreciation rights are granted with a strike price equal to the fair market value of the underlying stock on the grant date, the recipient will recognize ordinary income equal to the fair market value of the stock or cash received upon such exercise. Subject to the requirement of reasonableness, the provisions of Section 162(m) of the Code, and the satisfaction of a tax reporting obligation, we will generally be entitled to a tax deduction equal to the taxable ordinary income realized by the recipient of the stock appreciation right.

New Plan Benefits

As of April 17, 2025, shares subject to stock options and performance-based stock options have been granted under the 2015 Plan. Other than with respect to annual grants of stock options to our non-employee directors that will be made immediately following the date of the annual meeting, awards under the 2015 Plan are discretionary and are not subject to set benefits or amounts, and we have not approved any awards that are conditioned on stockholder approval of the 2015 Plan. Accordingly, we cannot currently determine the benefits or number of shares subject to awards that may be granted in the future to executive officers, directors or employees under the 2015 Plan.

The table below sets forth the benefits or amounts that will be received annually by our current non-employee directors under the 2015 Plan pursuant to the Director Compensation Policy. Since the number of shares to be issued to each non-employee director pursuant to the Director Compensation Policy is a function of the Fair Market Value on the grant date, dependent on the value of the underlying shares of Common Stock at the time grant, the actual number of awards to be issued to the non-employee directors under the 2015 Plan is an estimate based on the closing stock price of a share of the Company's Common Stock as reported on the Nasdaq Capital Market on April 17, 2025, our record date.

Name and Position	Dollar Value (\$)	Number of Units ⁽¹⁾
All Current Directors who are Independent and Not Executive Officers as a Group (4 persons)		

(1) Estimated based on the closing stock price of a share of the Company's Common Stock as reported on the Nasdaq Stock Market on April 17, 2025, our record date.

Aggregate Awards Granted

The following table sets forth information with respect to the number of shares subject to awards previously granted to the following listed individuals and specified groups under the 2015 Plan since its inception through April 17, 2025, our record date:

Name and Position	Number of Shares Underlying Options	Number of Shares Underlying Restricted Stock Units	Number of Shares Underlying Restricted Stock Grants
Named Executive Officers:			
Jeffrey Frelick, <i>Chief Executive Officer and President</i>	-	-	-
Deina Walsh, <i>Chief Financial Officer</i>	-	-	-
All Current Executive Officers as a Group	-	-	-
Each Nominee for Election as a Director:			
Bruce Stroeve	-	-	-
Sid Angle	-	-	-
Robert Gagnon	-	-	-
Phil Meikle	-	-	-
All Current Directors who are Not Executive Officers as a Group (4 persons)	-	-	-
Each Associate of any of Such Directors, Executive Officer or Nominees	-	-	-
Each Other Person who Received or is to Receive 5 Percent of Such Options, Warrants or Rights	-	-	-
All Employees, including all Current Officers Who are not Executive Officers, as a Group	-	-	-

Equity Compensation Plan Information as of December 31, 2024

Plan Category	Equity Compensation Plan Information		
	Number of securities to be issued upon exercise of outstanding options, warrants and rights (a)	Weighted average exercise price of outstanding options, warrants and rights (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	194,484	\$ 42.14	435,005
Equity compensation plans not approved by security holders	-	-	-
Total	194,484	\$ 42.14	435,005

Vote Required and Recommendation of Board

The affirmative vote of the majority of votes cast on the proposal is required to approve Proposal IV. Proxies solicited by the Board will be voted for approval of this proposal, unless otherwise specified. If stockholder approval for this proposal and the Reverse Stock Split proposal are not obtained, then the Plan Amendment will not become effective.

THE BOARD RECOMMENDS A VOTE “FOR” THE APPROVAL OF THE SECOND AMENDMENT TO THE 2015 EQUITY INCENTIVE PLAN

PROPOSAL V – RATIFICATION OF APPOINTMENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

General

The Audit Committee of our Board has appointed Weinberg & Company, P.A. (“Weinberg & Company”) to act as our independent registered public accounting firm for the fiscal year ending December 31, 2025, and recommends that our stockholders vote to ratify such appointment. Representatives of Weinberg & Company are not expected to be present at the Annual Meeting.

Stockholder ratification of the selection of Weinberg & Company is not required by our Bylaws or otherwise. However, the Board is submitting the selection of our independent registered accounting firm to the stockholders for ratification as a matter of good corporate governance. If the stockholders fail to ratify this appointment, the Audit Committee may, but is not required to, reconsider whether to retain Weinberg & Company. Even if the appointment is ratified, the Audit Committee in its discretion may direct the appointment of a different accounting firm at any time during the year if it determines that such a change would be in the best interests of the Company and its stockholders.

Principal Accountant Fees and Services

	2024	2023
Audit Fees	\$ 89,108	\$ 121,437
Audit Related Fees	89,620	19,310
Tax fees	-	-
All other fees	-	-
Total	\$ 178,728	\$ 140,747

Audit Fees

Audit fees during the years ended December 31, 2024 and 2023 were for professional services rendered for the audit of our annual consolidated financial statements, for the reviews of our quarterly financial statements, and for services that are normally provided in connection with statutory and regulatory filings or engagements.

Audit Related Fees

Audit-related fees consist of fees for assurance and related services that are reasonably related to the performance of the audit or review of our financial statements and are not reported under “Audit Fees.”

Tax Fees

There were no fees billed to us by Weinberg & Company, P.A. for services that are reasonably related to the performance of tax compliance, tax advice, and tax planning.

All Other Fees

There were no fees billed to us by Weinberg & Company, P.A. for services not set forth above.

Our Audit Committee has determined that the services provided by Weinberg & Company are compatible with maintaining the independence of Weinberg & Company as our independent registered public accounting firm.

Audit Committee Pre-Approval Policies and Procedures. The Audit Committee pre-approves all audit and permissible non-audit services provided by our independent registered public accounting firm. These services may include audit services, audit-related services, tax services and other services. The Audit Committee has adopted policies and procedures for the pre-approval of services provided by our independent registered public accounting firm. The policies and procedures provide that management and our independent registered public accounting firm jointly submit to the Audit Committee a schedule of audit and non-audit services for approval as part of the annual plan for each year. In addition, the policies and procedures provide that the Audit Committee may also pre-approve particular services not in the annual plan on a case-by-case basis. For each proposed service, management must provide a detailed description of the service and the projected fees and costs (or a range of such fees and costs) for the service. The policies and procedures require management and our independent registered public accounting firm to provide quarterly updates to the Audit Committee regarding services rendered to date and services yet to be performed. All of the services provided and fees charged by Weinberg & Company were approved by our Audit Committee.

Vote Required and Recommendation of Board

Under Delaware law and pursuant to our Bylaws, the proposal to ratify Weinberg & Company as our independent registered public accounting firm for the fiscal year ending December 31, 2025, will be approved by the affirmative vote of the majority of the votes cast on the proposal.

THE BOARD RECOMMENDS A VOTE “FOR” THE RATIFICATION OF WEINBERG & COMPANY AS OUR INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM.

PROPOSAL VI:

APPROVAL OF ADJOURNMENT OF THE ANNUAL MEETING

General

We are asking stockholders for approval to adjourn the Annual Meeting from time to time, if necessary or appropriate, if there are not sufficient votes at the time of the Annual Meeting to adopt the proposals submitted to the Company's stockholders and/or establish a quorum for the Annual Meeting.

Vote Required and Recommendation of Board

The affirmative vote of the majority of votes cast on the proposal is required to approve Proposal VI. Proxies solicited by the Board will be voted for approval of this proposal, unless otherwise specified.

THE BOARD RECOMMENDS A VOTE "FOR" THE APPROVAL OF ADJOURNMENT OF THE ANNUAL MEETING.

Security Ownership of Management and Certain Beneficial Owners

The following table sets forth information, as of April 11, 2025, regarding the beneficial ownership of our Common Stock by:

- each person known by us to be a beneficial owner of more than five percent of our outstanding Common Stock;
- each of our directors and director nominee;
- each of our named executive officers; and
- all directors and executive officers as a group.

The amounts and percentage of Common Stock beneficially owned are reported on the basis of regulations of the SEC governing the determination of beneficial ownership of securities. Under the rules of the SEC, a person is deemed to be a “beneficial owner” of a security if that person has or shares “voting power,” which includes the power to vote or to direct the voting of such security, or “investment power,” which includes the power to dispose of or to direct the disposition of such security. A person is also deemed to be a beneficial owner of any securities of which that person has a right to acquire beneficial ownership within 60 days. Under these rules, more than one person may be deemed a beneficial owner of the same securities and a person may be deemed a beneficial owner of securities as to which he has no economic interest. Except as indicated by footnote, the persons named in the table below have sole voting and investment power with respect to all shares of Common Stock shown as beneficially owned by them.

Name of Beneficial Owner or Identity of Group	Shares ⁽¹⁾	Percentage
5% or greater stockholders:		
Executive Officers and Directors⁽²⁾:		
Jeffrey Frelick	81,480 ⁽³⁾	2.4%
Sid Angle	26,365 ⁽⁴⁾	*
Bruce Stroever	26,281 ⁽⁵⁾	*
Deina H. Walsh	41,430 ⁽⁶⁾	1.3%
Robert E. Gagnon	23,371 ⁽⁷⁾	*
Phil Meikle	14,101 ⁽⁸⁾	*
Total Officers and Directors as a Group (6 persons)	213,028 ⁽⁹⁾	6.1%

* Represents beneficial ownership of less than 1% of our outstanding Common Stock.

(1) Based on 3,271,042 outstanding shares. The number of shares issued and outstanding that was used to calculate the percentage ownership of each listed person includes the shares underlying convertible debt, stock options and warrants that are exercisable within 60 days from our report date.

(2) Except as indicated by footnote, the address for our executive officers and directors is 2 Burlington Woods Drive, Ste 100, Burlington, MA 01803.

(3) Includes 79,329 shares underlying stock options exercisable within 60 days.

(4) Includes 26,365 shares underlying stock options exercisable within 60 days.

(5) Includes 26,281 shares underlying stock options exercisable within 60 days.

(6) Includes 39,555 shares underlying stock options exercisable within 60 days.

(7) Includes 23,371 shares underlying stock options exercisable within 60 days.

(8) Includes 14,092 shares underlying stock options exercisable within 60 days.

(9) Consists of 4,026 shares and 209,240 shares underlying stock options exercisable within 60 days.

DIRECTORS AND EXECUTIVE OFFICERS;

The following table and biographical summaries set forth information, including principal occupation and business experience, about our directors and executive officers as of the date of this proxy statement:

Name	Age	Position
Jeffrey Frelick	59	Chief Executive Officer and President
Deina H. Walsh	60	Chief Financial Officer
Bruce Stroeve	75	Chairman of the Board of Directors
Siddhesh Angle	41	Director
Robert Gagnon	51	Director
Phil Meikle	61	Director

Jeffrey Frelick: Chief Executive Officer and President

Jeffrey Frelick serves as our President and Chief Executive Officer, bringing more than 35 years of leadership, operational, and investment experience in the life science industry. He joined Bone Biologics in 2015 as our Chief Operating Officer and assumed his current role in June 2019. Prior to Bone Biologics, Mr. Frelick spent 15 years on Wall Street as a sell-side analyst following the med-tech industry at investment banks Canaccord Genuity, ThinkEquity and Lazard. He also previously worked at Boston Biomedical Consultants where he provided strategic planning assistance, market research data and due diligence for diagnostic companies. He began his career at Becton Dickinson in sales and sales management positions after gaining technical experience as a laboratory technologist with Clinical Pathology Facility. Mr. Frelick received a B.S. in Biology from University of Pittsburgh and an M.B.A. from Suffolk University's Sawyer Business School.

Deina H. Walsh: Chief Financial Officer

Deina Walsh has served as our Chief Financial Officer since November 2014. She is a certified public accountant and was the owner/founder of DHW CPA, PLLC, a public accounting firm. Prior to forming her firm, Ms. Walsh spent 13 years at a public accounting firm where, as a partner, she was actively responsible for leading firm audit engagements of publicly held entities in accordance with PCAOB standards and compliance with SEC regulations, including internal control requirements under Section 404 of the Sarbanes-Oxley Act. Ms. Walsh had a global client base including entities throughout the United States, Canada and China. These entities encompass a diverse range of industries including manufacturing, wholesale, life sciences, pharmaceuticals, and technology. Her experience includes work with start-up companies and well-established operating entities. She has assisted many entities seeking debt and equity capital. Areas of specialty include mergers, acquisitions, reverse mergers, consolidations, complex equity structures, foreign currency translations and revenue recognition complexities. Ms. Walsh has an Associates of Science Degree in Business Administration from Monroe Community College and a Bachelor of Science Degree in Accounting from the State University of New York at Brockport.

Bruce Stroeve: Chairman of the Board of Directors

Mr. Stroeve has served on the Board since 2012, bringing forty years of product development and general management experience in the medical device and orthobiologics fields. Mr. Stroeve most recently served as President and Chief Executive Officer at MTF until he retired in 2018 after 30 years of service. Under Mr. Stroeve's leadership, MTF grew to be the largest tissue bank in the world. From 1971 to 1988, Mr. Stroeve held several positions with Ethicon, Inc., a Johnson & Johnson, Inc. subsidiary. Mr. Stroeve served on the advisory board for the New Jersey Organ and Tissue Sharing Network. He was also elected to the Board of Governors of the American Association of Tissue Banks for a three-year term in 1999 and subsequently in 2012. He was a founding member of the Tissue Policy Group subsidiary of the AATB and served as its Chairman for two terms. Mr. Stroeve serves on the Board of Donate Life New York State, a non-profit based in Albany, New York. Mr. Stroeve received his B.E. in Mechanical/Chemical Engineering from Stevens Institute of Technology in 1972 and a M.S. in Bioengineering from Columbia University in 1977. Given Mr. Stroeve's educational background, his senior management experience in our industry and the continuity he brings to the Board, we believe that Mr. Stroeve is well qualified to serve as a member of the Board.

Siddhesh (Sid) R. Angle: Director

Dr. Angle's appointment to the Board became effective upon completion of October 2021 Offering. From 2018 to the present, Dr. Angle is Co-Founder, President and Chief Executive Officer of Regenosine, an early stage start-up for osteoarthritic disease. From 2021 to present, Dr. Angle also serves on the Executive Team of Vetosine, an animal health affiliate of Regenosine. From 2020 to 2021, Dr. Angle was Associate Director, Innovation Commercialization at NYU Langone. From 2017 to 2020, Dr. Angle was Program Manager, Innovation Commercialization at NYU Langone. From 2013 to 2017, Dr. Angle worked in various R&D capacities at Zimmer Biomet, culminating as R&D manager of global orthobiologics. From 2011 to 2013, Dr. Angle served as Research Scientist at Carnegie Mellon University. Given Mr. Angle's extensive background in research and development, we believe that Mr. Angle is well qualified to serve as a member of the Board.

Robert Gagnon: Director

Mr. Gagnon's appointment to the Board became effective on January 8, 2024. Mr. Gagnon has served as the Chief Financial Officer of Remix Therapeutics, a biotechnology company, since March 2023. Prior to Remix Therapeutics, Mr. Gagnon served as an Operating Partner at Gurnet Point Capital, a healthcare venture capital and private equity fund, from October 2022 to June 2023. Earlier, he served as Chief Financial Officer of Verastem, Inc. from August 2018 to October 2022 in addition to serving as Chief Business Officer from June 2019 to October 2022. Prior to Verastem, Mr. Gagnon served as the Chief Financial Officer for Harvard Bioscience, Inc. from November 2013 to August 2018. From 2012 through 2013, Mr. Gagnon served as the Executive Vice President, Chief Financial Officer and Treasurer at Clean Harbors, Inc. Mr. Gagnon's prior experience includes serving as Chief Accounting Officer and Controller at Biogen Idec, Inc., as well as a variety of senior positions at Deloitte & Touche, LLP, and PricewaterhouseCoopers, LLP. Mr. Gagnon holds an M.B.A. from the MIT Sloan School of Management and a B.A. in accounting from Bentley College. Mr. Gagnon currently serves as on the board of directors at Verastem and Purple Biotech Ltd. Given Mr. Gagnon's significant financial, accounting and management expertise, as well as his experience within the pharmaceutical and biotechnology industries, we believe that Mr. Gagnon is well qualified to serve as a member of the Board.

Phil Meikle: Director

Mr. Meikle is a seasoned healthcare executive with over 32 years of orthopedic and spine industry experience. He founded Biosystems of New England, Inc. in 1992 and has served as CEO and President since. He has broad experience representing diverse and innovative orthopedic industry companies in developing and distributing innovative products. He sold his company to Stryker in 2019 and has served as a Stryker consultant for the past five years.

Family Relationships

There are no family relationships between any of our directors or executive officers.

Legal Proceedings

In the normal course of our business, we may periodically become subject to various lawsuits. We are not presently a party to any legal proceedings that, if determined adversely to us, would individually or taken together have a material adverse effect on our business, results of operations, financial condition or cash flows. Regardless of the outcome, litigation can have an adverse impact on us because of defense and settlement costs, diversion of management resources and other factors.

CORPORATE GOVERNANCE

Our Board consists of four members: Bruce Stroeve, Sid Angle, Robert Gagnon and Phil Meikle. The Board met nine times during the fiscal year ended December 31, 2024 ("fiscal year 2024").

Director Independence

The listing standards of Nasdaq require that a majority of our Board be independent. No director will qualify as independent unless the board affirmatively determines that the director has no relationship with us that would interfere with the exercise of independent judgment in carrying out the responsibilities of a director. Based upon the Nasdaq listing standards and applicable SEC rules and regulations, our Board has determined that each of Bruce Stroeve, Sid Angle, Robert Gagnon and Phil Meikle are independent and that Erick Lucera, who resigned from the Board effective January 8, 2024, was independent during his service on the Board.

Board Leadership Structure and Role in Risk Oversight

The Board believes it is important to select the Company's Chairman and Chief Executive Officer in the manner it considers in the best interests of the Company at any given time. The Board has elected a Chairman of the Board who is different from the Company's Chief Executive Officer.

The Board currently is comprised of individuals who are independent from the management of the Company. The Board and its committees meet regularly throughout the year to assure that the independent directors are well briefed and informed with regard to the Company's affairs. Independent directors have unfettered access to any employee within the Company and are encouraged to call upon whatever employee he deems fit to secure the information each director feels is important to their understanding of our Company. In this fashion, we seek to maintain well informed, independent directors who are prepared to make informed decisions regarding our business affairs.

Management is responsible for the day-to-day management of risks the Company faces, while the Board as a whole plays an important role in overseeing the identification, assessment and mitigation of such risks. The Board reviews information regarding the Company's finances and operations, as well as the risks associated with each. For example, the oversight of financial risk management lies primarily with the Board's Audit Committee, which is empowered to appoint and oversee our independent auditors, monitor the integrity of our financial reporting processes and systems of internal controls and provide an avenue of communication among our independent auditors, management and the Board. The Company's Compensation Committee is responsible for overseeing the management of risks relating to the Company's compensation plans and arrangements. In fulfilling its risk oversight responsibility, the Board, as a whole and acting through any established committees, regularly consults with management to evaluate and, when appropriate, modify our risk management strategies.

Board Committees

Our Board has appointed an audit committee, nominating and corporate governance committee, and compensation committee. The table below shows the number of meetings held by our Audit Committee, Compensation Committee, and Nominating and Corporate Governance Committee during fiscal year 2024 and the names of the directors who are currently serving on each committee.

Committee Name	Number of Meetings Held	Committee Members
Audit	2 ⁽²⁾	Bruce Stroeve Robert Gagnon ⁽¹⁾ Sid Angle
Compensation	0 ⁽³⁾	Bruce Stroeve ⁽¹⁾ Robert Gagnon Sid Angle
Nominating and Corporate Governance Committee	1 ⁽⁴⁾	Bruce Stroeve Robert Gagnon Sid Angle ⁽¹⁾

⁽¹⁾ Committee Chair

⁽²⁾ The Audit Committee acted by unanimous written consent twice in fiscal year 2024.

⁽³⁾ The Compensation Committee acted by unanimous written consent one time in fiscal year 2024.

⁽⁴⁾ The Nominating and Corporate Governance Committee acted by unanimous written consent one time in fiscal year 2024.

Each committee acts pursuant to a written charter adopted by our Board. The current charters for each committee are available on our website, www.bonebiologics.com under the heading, “Investors” and the subheading, “Corporate Governance.” The information contained on our website is not a part of this proxy statement.

Audit Committee

The Audit Committee is responsible for overseeing: (i) our accounting and reporting practices and compliance with legal and regulatory requirements regarding such accounting and reporting practices; (ii) the quality and integrity of our financial statements; (iii) our internal control and compliance programs; (iv) our independent auditors’ qualifications and independence and (v) the performance of our independent auditors. In so doing, the Audit Committee maintains free and open means of communication between our directors and management.

The Audit Committee is a separately designated standing committee established in accordance with Section 3(a)(58)(A) of the Securities Exchange Act of 1934, as amended (the “Exchange Act”). The Board has determined that each member of the Audit Committee meets the independence and financial literacy requirements applicable to audit committee members under the Nasdaq listing standards and SEC rules. The Board has further determined that Mr. Gagnon qualifies as an “audit committee financial expert” in accordance with the applicable rules and regulations of the SEC.

Compensation Committee

The Compensation Committee is responsible for reviewing and approving the compensation of our executive officers and directors and our performance plans and other compensation plans. The Compensation Committee makes recommendations to our Board in connection with such compensation and performance plans.

Nominating and Corporate Governance Committee

The Nominating and Corporate Governance Committee is responsible for (i) identifying, screening and reviewing individuals qualified to serve as directors (consistent with criteria approved by our Board) and recommending to our Board candidates for nomination for election at the annual meeting of stockholders or to fill Board vacancies or newly created directorships; (ii) developing and recommending to our Board and overseeing the implementation of our corporate governance guidelines (if any); (iii) overseeing evaluations of our Board and (iv) recommending to our Board candidates for appointment to Board committees.

The Nominating and Corporate Governance Committee receives recommendations for potential director candidates from stockholders, management, directors, and other sources. In its assessment of each potential candidate, the Nominating and Corporate Governance Committee considers, among other things, each candidate’s experience, qualifications, attributes, diversity and skills in light of the Company’s business, structure and current needs of the Board. Stockholders may recommend candidates for Nominating and Governance Committee consideration by submitting such recommendation using the method described under “Communications with the Board.” Stockholders may also nominate director candidates in accordance with our Bylaws as described under “2026 Annual Meeting — Stockholder Nominations of Directors.”

Board (and Committee) Meetings and Attendance

For fiscal year 2024, each of our directors attended 75% or more of the aggregate number of meetings of the Board, and the committee(s) of the Board on which he serves. Each director is expected to attend and participate in, either in person or by means of telephonic or video conference, all scheduled meetings of the Board and all meetings of the committees of the Board on which such director serves, and all scheduled meetings of stockholders of the Company. All of our current directors are expected to attend the Annual Meeting via teleconference.

Indemnification Agreements

Our Board has approved and we have entered into an indemnification agreement with each of our directors and executive officers ("Indemnification Agreement"). The Indemnification Agreement provides for indemnification against expenses, judgments, fines and penalties actually and reasonably incurred by an indemnitee in connection with threatened, pending or completed actions, suits or other proceedings, subject to certain limitations. The Indemnification Agreement also provides for the advancement of expenses in connection with a proceeding prior to a final, non-appealable judgment or other adjudication, provided that the indemnitee provides an undertaking to repay to us any amounts advanced if the indemnitee is ultimately found not to be entitled to indemnification by us. The Indemnification Agreement sets forth procedures for making and responding to a request for indemnification or advancement of expenses, as well as dispute resolution procedures that will apply to any dispute between us and an indemnitee arising under the Indemnification Agreement.

Code of Conduct and Ethics

The Company adopted a formal code of ethics within the meaning of Item 406 of Regulation S-K promulgated under the Securities Act of 1933, as amended, that applies to our principal executive officer, principal financial officer, principal accounting officer or controller, or persons performing similar functions and that that establishes, among other things, procedures for handling actual or apparent conflicts of interest. Our Code of Conduct and Ethics is available at our website www.bonebiologics.com/investor-relation.

Insider Trading Policy

We have adopted an insider trading policy designed to promote compliance with insider trading laws, rules and regulations, and any listing standards applicable to the Company. Insiders, who include our directors, executive officers, and certain employees who we may designate from time to time (the "Designated Individuals"), may buy and sell our stock within an open "window period," which begins on the first trading day after the release of the Company's quarterly or annual financial results for that particular quarter and ends on the 14th day prior to the close of the next fiscal quarter. Designated Individuals are prohibited from purchasing or selling our stock if they are in possession of material non-public information, even if it is within the open "window period." We reserve the right to impose event-specific black-out periods if we deem certain employees or groups to be in possession of non-public information regarding potentially significant matters, regardless of if it is an open "window period" and we may do so with little or no notice. Employees subject to an event-specific black-out period will be notified by our Chief Financial Officer.

Anti-Hedging Policy

We have an insider trading policy that prohibits directors, officers and employees from engaging in transactions that hedge or offset any decrease in the market value of equity securities granted as compensation.

Communications with the Board

Stockholders may communicate directly with the Board by writing to them at Board, c/o Corporate Secretary, Bone Biologics Corporation, 2 Burlington Woods Drive, Ste 100, Burlington, MA 01803. Such communications will be forwarded to the director or directors to whom it is addressed, except for communications that are (1) advertisements or promotional communications, (2) solely related to complaints with respect to ordinary course of business issues, or (3) clearly unrelated to the Company's business, industry, management or Board or committee matters.

EXECUTIVE COMPENSATION

This proxy statement contains information about the compensation earned and paid to our named executive officers during fiscal year 2024 and fiscal year ended December 31, 2023 (“fiscal year 2023”). For fiscal year 2024, in accordance with the executive compensation disclosure rules and regulations of the SEC, we determined that the following officers were our named executive officers:

- Jeffrey Frelick, Chief Executive Officer and President; and
- Deina Walsh, Chief Financial Officer.

Summary Compensation Table

As a smaller reporting company under the Exchange Act, we are providing the following executive compensation information in accordance with the scaled disclosure requirements of Regulation S-K. The table below summarizes the compensation earned for services rendered to us in all capacities, for the fiscal years indicated, by its named executive officers:

Name and Principal Position	Year	Salary (\$)	Option Awards (\$) ⁽¹⁾	Non-Equity Incentive Plan Compensation (\$) ⁽²⁾	All Other Compensation (\$)	Total Compensation (\$)
Jeffrey Frelick, Chief Executive Officer and President	2024	\$ 300,000	\$ 30,788	\$ 54,109	\$ -	\$ 384,897
	2023	\$ 300,000	\$ 51,600	\$ 25,000	\$ -	\$ 376,600
Deina Walsh, Chief Financial Officer	2024	\$ 200,000	\$ 15,394	\$ 27,054	\$ -	\$ 242,448
	2023	\$ 200,000	\$ 25,900	\$ 12,500	\$ -	\$ 238,300

(1) Represents the grant date fair value of the option award, calculated in accordance with Financial Accounting Standards Board Accounting Standards Codification (“FASB ASC”) Topic 718, “Compensation – Stock Compensation.” The assumptions used in calculating the grant date fair value of the option awards for 2024 are set forth in Note 8 of the consolidated financial statements included in our Form 10-K for fiscal year 2024.

(2) The amounts shown in this column reflect performance-based cash awards earned during the applicable fiscal year under our executive compensation program.

Annual Performance-Based Awards

The Company has an annual performance-based cash award program for our executive officers, which is designed to reinforce the Company’s goals and strategic initiatives, and reward our executive officers for meeting objective performance goals for a fiscal year. The annual performance-based awards are determined by the achievement of Company and individual performance metrics established at the beginning of each fiscal year by the Compensation Committee and our Board. For each of the fiscal year 2024 and fiscal year 2023, annual bonuses were based on achievement of Company goals related to clinical development objectives, business development goals, capital raising and certain investor goals. The target award opportunity under the annual performance-based award program for each of the fiscal years ended December 31, 2024 and 2023 as a percentage of base salary was 50% for Mr. Frelick and 25% for Ms. Walsh.

Following the Compensation Committee’s review of the achievement of corporate and individual performance for the fiscal year ended December 31, 2024, the Compensation Committee awarded Mr. Frelick \$54,109 in cash and options to purchase 54,110 shares of Common Stock and Ms. Walsh \$27,054 in cash and options to purchase 27,054 shares of Common Stock, respectively. For fiscal year ended December 31, 2023, the Compensation Committee awarded Mr. Frelick \$25,000 in cash and options to purchase 25,000 shares of Common Stock and Ms. Walsh \$12,500 in cash and options to purchase 12,500 shares of Common Stock, respectively.

Employment Agreements with Consultants and Named Executive Officers

Jeffrey Frelick – Chief Executive Officer and President

On March 12, 2024, the Company entered into an amended and restated letter agreement, effective as of January 1, 2024 (the “Frelick Agreement”), with Jeffrey Frelick, to serve as the Company’s Chief Executive Officer with an annual salary of \$300,000. The Frelick Agreement automatically renews for successive one-year periods on January 1st of each calendar year, unless either party provides notice of non-renewal to the other no later than July 9th during any term. Under the terms of the amended and restated agreement, Mr. Frelick is eligible to receive a transaction bonus of 1% to 2% of the transaction value depending on the size of the transaction in the event the Company is acquired. The Frelick agreement contains standard restrictive covenants, including non-competition and non-solicitation, and terms and conditions customarily found in similar agreements.

Pursuant to the Frelick Agreement, he is eligible to earn an annual target bonus of 50% of his base salary as in-effect for the applicable calendar year, subject to the achievement of personal and corporate objectives or milestones to be established by the Board, or the Compensation Committee (after considering any input or recommendations from Mr. Frelick) within 60 days of the beginning of each calendar year during Mr. Frelick's employment. In order to earn the annual bonus under this provision, the applicable objectives must be achieved and Mr. Frelick must be employed by Company at the time the annual bonus is distributed by Company. The annual bonus, if any, shall be paid on or before March 15th of the calendar year following the year in which it is considered earned. The actual annual bonus paid may be more or less than 50% of Mr. Frelick's base salary. In the event of Mr. Frelick's termination without cause, Mr. Frelick is entitled to receive any unpaid salary and expenses, a payment equal to 12 months of his base salary, a pro-rated annual bonus at the Board's discretion, and a continuation of benefits for 12 months. To allow Mr. Frelick to prevent or mitigate dilution of his equity interests in the Company, in connection with each financing, Mr. Frelick will be provided an opportunity to invest in the Company such that his interest, at his option, remains undiluted or partially diluted.

Deina Walsh – Chief Financial Officer

On December 17, 2021, the Company entered into an employment agreement with Ms. Walsh, effective January 3, 2022, to serve as the Company's full-time Chief Financial Officer with an annual salary of \$200,000. Ms. Walsh's employment agreement has an indeterminate term and is at will.

Pursuant to Ms. Walsh's employment agreement she is eligible to earn an annual target bonus of 25% of her base salary as in-effect for the applicable calendar year, subject to the achievement of personal and corporate objectives or milestones to be established by the Board, or any compensation committee thereof, (after considering any input or recommendations from Ms. Walsh) within 60 days of the beginning of each calendar year during Ms. Walsh's employment. In order to earn the annual bonus under this provision, the applicable objectives must be achieved and Ms. Walsh must be employed by Company at the time the annual bonus is distributed by Company. The annual bonus, if any, shall be paid on or before March 15th of the calendar year following the year in which it is considered earned. The actual annual bonus paid may be more or less than 25% of Ms. Walsh's base salary. In the event of Ms. Walsh's termination without cause, Ms. Walsh is entitled to receive any unpaid salary and expenses, a payment equal to 4 months of her base salary, a pro-rated annual bonus at the Board's discretion, and a continuation of benefits for 4 months. To allow Ms. Walsh to prevent or mitigate dilution of her equity interests in the Company, in connection with each financing, Ms. Walsh shall be provided an opportunity to invest in the Company such that her interest, at her option, remains undiluted or partially diluted.

On March 12, 2024, the Company entered into an amendment (the "Amendment") to the letter agreement between the Company and Ms. Walsh, dated December 17, 2021. The Amendment became effective as of March 11, 2024. Under the terms of the Amendment, Ms. Walsh is eligible to receive a transaction bonus of 0.5% to 1% of the transaction value depending on the size of the transaction in the event the Company is acquired.

Stock Options

On January 15, 2025, Mr. Frelick received a stock option grant whereby he is entitled to purchase 54,110 shares of Common Stock at an exercise price of \$0.9678. The stock options vested immediately and expire on January 15, 2027. In the event Mr. Frelick is terminated prior to January 15, 2027, any unexercised portion of this stock option grant will be forfeited unless such termination is without Cause, as defined in the 2015 Equity Incentive Plan, in which case the vested and unexercised options will not be forfeited until the earlier of three months from such termination or January 15, 2027.

On January 15, 2025, Ms. Walsh received a stock option grant whereby she is entitled to purchase 27,055 shares of Common Stock at an exercise price of \$0.9678. The stock options vested immediately and expire on January 15, 2027. In the event Ms. Walsh is terminated prior to January 15, 2027, any unexercised portion of this stock option grant will be forfeited unless such termination is without Cause, as defined in the 2015 Equity Incentive Plan, in which case the vested and unexercised options will not be forfeited until the earlier of three months from such termination or January 15, 2027.

On January 17, 2024, Mr. Frelick received a stock option grant whereby he is entitled to purchase 25,000 shares of Common Stock at an exercise price of \$3.61. The stock options vested immediately and expire on January 17, 2026. In the event Mr. Frelick is terminated prior to January 17, 2026, any unexercised portion of this stock option grant will be forfeited unless such termination is without Cause, as defined in the 2015 Equity Incentive Plan, in which case the vested and unexercised options will not be forfeited until the earlier of three months from such termination or January 17, 2026.

On January 17, 2024, Ms. Walsh received a stock option grant whereby she is entitled to purchase 12,500 shares of Common Stock at an exercise price of \$3.61. The stock options vested immediately and expire on January 17, 2026. In the event Ms. Walsh is terminated prior to January 17, 2026, any unexercised portion of this stock option grant will be forfeited unless such termination is without Cause, as defined in the 2015 Equity Incentive Plan, in which case the vested and unexercised options will not be forfeited until the earlier of three months from such termination or January 17, 2026.

Our Compensation Committee believes the compensation under the employment agreements and other incentives granted to our named executive officers align our named executive officers' interests with those of our stockholders. Our Compensation Committee and Board continues to evaluate our executive compensation program with a view toward motivating our named executive officers to meet our strategic operational and financial goals in the best interests of our stockholders.

Outstanding Equity Awards at Fiscal Year End

Name (a)	Number of securities underlying unexercised options (#) exercisable (b)	Option exercise price (\$) (e)	Option expiration date (f)
Jeffrey Frelick, Chief Executive Officer and President	25,000	\$ 3.61	January 17, 2026
	158	\$ 57.60	January 25, 2025
	45	\$ 12,300.00	May 26, 2026
	174	\$ 9,540.00	December 27, 2025
Deina Walsh, Chief Financial Officer	12,500	\$ 3.61	January 17, 2026
	79	\$ 57.60	January 25, 2025

PAY VERSUS PERFORMANCE

We are providing the following information about the relationship between executive compensation actually paid ("CAP") and certain financial performance of the Company as required by SEC rules (see "Executive Compensation" above for discussion of our compensation program).

Year	Summary Compensation Table Total for PEO ⁽¹⁾	Compensation Actually Paid to PEO ⁽²⁾	Average Summary Compensation Table Total for Non-PEO NEOs ⁽³⁾	Average Compensation Actually Paid to Non-PEO NEOs ⁽²⁾	Value of Initial Fixed \$100 Investment Based on Total Shareholder Return ⁽⁴⁾	Net (Loss) ⁽⁵⁾
2024	\$ 384,897	\$ 405,709	\$ 242,449	\$ 252,855	\$ 0.08	\$ (4,112,420)
2023	\$ 376,600	\$ 332,965	\$ 238,300	\$ 216,483	\$ 0.37	\$ (8,948,731)
2022	\$ 414,715	\$ 406,750	\$ 250,458	\$ 246,475	\$ 4.12	\$ (1,484,620)

(1) Amounts shown reflect total compensation set forth in the Summary Compensation Table for our PEO, Mr. Frelick, for fiscal years 2024 and 2023.

(2) The following table describes the adjustments for fiscal year 2024, each of which is prescribed by SEC rule, to calculate the compensation actually paid ("CAP") amounts from the summary compensation table ("SCT") amounts. The SCT amounts and the CAP amounts do not reflect the actual amount of compensation earned by or paid to our executives during the applicable years, but rather are amounts determined in accordance with Item 402 of Regulation S-K under the Exchange Act. To determine CAP, adjustments below were made to our executive officers' total compensation. The adjustments made for fiscal year 2023 and our fiscal year ended December 31, 2022 ("fiscal year 2022") can be found in our proxy statement filed with the SEC on August 8, 2024.

Adjustments	2024	
	PEO	Other NEO
SCT Amounts	\$ 384,897	\$ 242,449
<i>Adjustments for stock awards and option awards</i>		
(Deduct): Aggregate value for stock awards and option awards included in SCT Total for the covered fiscal year	\$ (30,788)	\$ (15,394)
Add: Fair value at year end of awards granted during the covered fiscal year that were outstanding and unvested at the covered fiscal year end		
Add (Deduct): Year-over-year change in fair value at covered fiscal year end of awards granted in any prior fiscal year that were outstanding and unvested at the covered fiscal year end		
Add: Vesting date fair value of awards granted and vested during the covered fiscal year	\$ 51,600	\$ 25,800
Add (Deduct): Change as of the vesting date (from the end of the prior fiscal year) in fair value of awards granted in any prior fiscal year for which vesting conditions were satisfied during the covered fiscal year		
(Deduct): Fair value at end of prior fiscal year of awards granted in any prior fiscal year that failed to meet the applicable vesting conditions during the covered fiscal year		
Add: Change in incremental fair value of awards modified during the covered fiscal year		
Add: Dividends or other earnings paid on awards in the covered fiscal year prior to vesting if not otherwise included in the SCT Total for the covered fiscal year		
CAP Amounts	\$ 405,709	\$ 252,855

- (3) Amounts shown reflect average total compensation set forth in the Summary Compensation Table for our NEO, Ms. Walsh, for fiscal year 2024, 2023 and 2022.
- (4) Amounts shown reflect the value of a fixed investment of \$100 on October 13, 2021, of \$1,221.60, our initial listing on Nasdaq, and on January 1, 2022 of \$844.80, December 29, 2023 of \$4.52 and on December 31, 2024 of \$0.94 as quoted by Nasdaq. All amounts have been adjusted for a 1-for-30 reverse stock split effective June 5, 2023 and a 1-for-8 reverse stock split effective December 20, 2023.
- (5) The amounts reported in this column represent net loss reflected in the Company's audited financial statements for the applicable fiscal year.

Analysis of Information Presented in the Pay Verses Performance Table

We are providing the following descriptions of the relationships between information presented in the Pay Versus Performance table, including CAP, as required by Item 402(v) of Regulation S-K. We are a pre-revenue medical device development stage entity engaged in research and development activities focused the development of a medical device to assist in bone regeneration in spinal fusion. Accordingly, the Compensation Committee does not use total stockholder return or net income (loss) in its compensation programs. However, the Compensation Committee does utilize several other performance measures, including management of research efforts, development and management of intellectual property assets, budget management, and capital raising efforts, to align executive compensation with our performance and business objectives (see "Executive Compensation").

In 2024, the compensation paid to the Principal Executive Officer (PEO) increased by \$72,744 compared to 2023. Similarly, the compensation for the non-PEO Named Executive Officers (NEOs) also increased year over year. These increases reflect the achievement of predefined performance goals set for 2024, which were designed to align executive compensation with the Company's strategic objectives and clinical development objectives. The adjustments in compensation are a direct result of meeting or exceeding these established benchmarks, reinforcing the Company's commitment to performance-based incentives.

In 2023, the compensation paid to the PEO decreased by \$73,785 compared to 2022. This reduction was influenced by a bonus awarded when the Company fully resumed operations in 2022 after scaling back during most of 2021 due to limited capital resources. Additionally, in 2023, the PEO received a cash bonus of \$25,000 and was granted 25,000 stock options. Similarly, the compensation paid to non-PEO NEOs decreased in 2023 compared to 2022, also attributable to the bonus granted during the Company's full resumption of operations in 2022 after scaling back in 2021 due to limited capital resources.

Compensation actually paid to the PEO increased by \$116,750 in 2022 as compared to 2021 due to the Company fully resuming operations in 2022 after scaling back operations during most of 2021 as a result of limited capital resources. In 2022, our PEO was paid a cash bonus of \$37,750 and was granted 158 stock options. In 2021, our PEO was not paid a cash bonus and was not granted any stock options. Compensation actually paid to the non-PEO NEOs increased in 2022 as compared to 2021, as Ms. Walsh, our Chief Financial Officer, became a full-time employee in 2022.

The information provided above under the "Pay Versus Performance" heading will not be deemed to be incorporated by reference into any filing of the Company under the Securities Act of 1933, as amended, or the Securities Exchange Act of 1934, as amended, whether made before or after the date hereof and irrespective of any general incorporation language in any such filing, except to the extent the Company specifically incorporates such information by reference.

DIRECTOR COMPENSATION

As a smaller reporting company under the Exchange Act, we are providing the following director compensation information in accordance with the scaled disclosure requirements of Regulation S-K.

The following table shows information regarding the compensation earned during the fiscal year 2024 by the members of our Board.

Name	Fees Earned or Paid in Cash	Option Awards ⁽¹⁾	Total
Bruce Stroeve	\$ 31,705	\$ 49,406	\$ 81,111
Don Hankey ⁽²⁾⁽³⁾	-	-	-
Sid Angle	30,000	49,406	79,406
Robert Gagnon ⁽⁴⁾	30,000	62,034	92,034
Phil Meikle ⁽⁵⁾	4,264	27,987	32,251
Erick Lucera ⁽⁶⁾	-	-	-

⁽¹⁾ The amounts in this column reflect the aggregate grant date fair value of stock options under FASB ASC Topic 718, which was determined using a Black-Scholes option-pricing model with the assumptions that are disclosed in Note 8 of our consolidated financial statements included in our Form 10-K for fiscal year 2024. The following table provides information regarding equity awards held by each independent non-employee director as of December 31, 2024:

Name	Stock Options Outstanding (#)
Bruce Stroeve	41,638
Don Hankey	-
Sid Angle	41,722
Robert Gagnon	38,728
Phil Meikle	28,194
Erick Lucera	5,649

⁽²⁾ Non-independent director. No compensation paid per our Non-Employee Director Compensation Policy.

⁽³⁾ Resigned effective October 1, 2024.

⁽⁴⁾ Appointed January 8, 2024.

⁽⁵⁾ Appointed October 16, 2024.

⁽⁶⁾ Resigned effective January 8, 2024.

The Board adopted a Non-Employee Director Compensation Policy (the “Director Compensation Policy”) as follows:

Annual Cash Compensation

Each member of the Board who (i) is an independent director under applicable Nasdaq Listing Rules, except that the amount of compensation as referred to in the Nasdaq Rule 5605 shall not exceed \$10,000 per year and/or (ii) does not beneficially own, or is not a director or executive officer of an entity which beneficially owns, 5% or more of the Company’s Common Stock (each such member an, “Independent Director”) will receive compensation set forth below for service on the Board. The annual cash compensation amounts will be payable in equal quarterly installments, in arrears following the end of each quarter in which the service occurred, pro-rated for any partial months of service. All annual cash fees are vested upon payment.

1. Annual Board Service Retainer:
 - a. All Independent Directors other than the Board Chair: \$25,000
 - b. Independent Director who is the Board Chair: \$35,000
2. Annual Committee Chair Service Retainer (in addition to Annual Board Service Retainer):
 - a. Chairman of the Audit Committee: \$5,000
 - b. Chairman of the Compensation Committee: \$5,000
 - c. Chairman of the Corporate Governance Committee: \$5,000

Equity Compensation

Equity awards will be granted under the 2015 Equity Plan or any successor equity incentive plan. All stock options granted under this Director Compensation Policy will be Nonstatutory Stock Options (as defined in the Plan), with a term of ten years from the date of grant and an exercise price per share equal to 100% of the Fair Market Value (as defined in the Plan) of the underlying Common Stock of the Company on the date of grant.

(a) Automatic Equity Grants.

(i) **Initial Grant for New Directors.** Without any further action of the Board, each person who, after the effective date of the Director Compensation Policy, is elected or appointed for the first time to be an Independent Director will automatically, upon the date of his or her initial election or appointment to be an Independent Director, be granted a Nonstatutory Stock Option to purchase 9 shares of Common Stock (the “Initial Grant”), regardless of when such person is elected or appointed to the Board. Each Initial Grant will fully vest on the date of the annual meeting of the stockholders of the Company next following the Initial Grant.

(ii) **Annual Grant.** Without any further action of the Board, at the close of business on the date of each annual meeting of stockholders following the effective date of the Director Compensation Policy, each person who is then an Independent Director will automatically be granted to a Nonstatutory Stock Option to purchase a number of shares of Common Stock having an option value (calculated on the date of grant) of \$50,000 (the “Annual Grant”). Each Annual Grant will vest in a series of four successive equal quarterly installments over the one-year period measure from the date of grant.

(iii) **Pro-rated Annual Grant.** If a person is elected or appointed to the Board at a time other than at the annual stockholder meeting, then on the date of such election or appointment, the person will be automatically, and without further action by the Board, granted an Annual Grant covering a pro-rated number of shares of Common Stock pursuant to the Director Compensation Policy.

Policies and Practices Related to the Grant of Certain Equity Awards

We have adopted a policy governing the grant of equity awards in order to create a framework for the consistent process for the granting of equity awards and to ensure the integrity and efficiency of our equity award process. Equity awards, including stock options, are granted in accordance with a predetermined schedule. Initial grants of equity awards, including stock options, to newly appointed Independent Directors are granted as of the date of the Independent Director's appointment to the Board. Annual grants of equity awards, including stock options, to Independent Directors are made at the close of business on the date of each annual meeting of stockholders. Equity awards, including stock options, to executive officers are granted on the third Wednesday in the month of January, or as soon as reasonably practicable thereafter.

Our Compensation Committee does not purposely accelerate or delay the public release of material information in order to allow the award recipient to benefit from a more favorable stock price. Management advises the Compensation Committee and the Board whenever it is aware that material non-public information is planned to be released to the public in close proximity to the grant date of any equity award, including stock options.

During the fiscal ended December 31, 2024, we did not grant any equity awards, including stock options, in the period beginning four business days before and ending one business day after the filing of a periodic report on Form 10-Q or Form 10-K, or the filing or furnishing of a current report on Form 8-K that disclosed material non-public information.

REPORT OF THE AUDIT COMMITTEE

In connection with our financial statements for the fiscal year ended December 31, 2024, the Audit Committee has: (1) reviewed and discussed the audited financial statements with management; (2) discussed with the independent registered public accounting firm (the "Auditors") the matters required to be discussed by the applicable requirements of the Public Company Accounting Oversight Board and the SEC; and (3) received the written disclosures and the letter from the Auditors required by applicable requirements of the Public Company Accounting Oversight Board regarding the Auditors' communications with the Audit Committee concerning independence, and has discussed with the Auditors their independence.

Based on the review and discussions referred to in items (1) through (3) of the above paragraph, the Audit Committee recommended to the Board that the audited financial statements be included in our Annual Report on Form 10-K for the fiscal year ended December 31, 2024, for filing with the SEC.

Robert Gagnon, Chair
Bruce Stroever
Sid Angle

CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS

Since January 1, 2023, none of the following persons has any direct or indirect material interest in any transaction to which we are a party since our incorporation or in any proposed transaction to which we are proposed to be a party:

- Any of our directors or officers;
- Any proposed nominee for election as our director;
- Any person who beneficially owns, directly or indirectly, shares carrying more than 5% of the voting rights attached to our Common Stock; or
- Any relative or spouse of any of the foregoing persons, or any relative of such spouse, who has the same house as such person or who is a director or officer of any parent or subsidiary of our Company.

Review, Approval or Ratification of Transactions with Related Persons

Due to the small size of our Company, we do not at this time have a formal written policy regarding the review of related party transactions, and rely on our full Board to review, approve or ratify such transactions and identify and prevent conflicts of interest. Our Board reviews any such transaction in light of the particular affiliation and interest of any involved director, officer or other employee or stockholder and, if applicable, any such person's affiliates or immediate family members. Management aims to present transactions to our Board for approval before they are entered into or, if that is not possible, for ratification after the transaction has occurred. If our Board finds that a conflict of interest exists, then it will determine the appropriate action or remedial action, if any. Our Board approves or ratifies a transaction if it determines that the transaction is consistent with our best interests and the best interest of our stockholders.

2026 ANNUAL MEETING

Stockholder Proposals for Inclusion in the Company's Proxy Materials for the 2026 Annual Meeting of Stockholders.

We will include in our proxy materials for our 2026 annual meeting of stockholders any stockholder proposals that comply with Rule 14a-8 under the Exchange Act. Among other things, Rule 14a-8 requires that we receive such proposals not less than 120 days prior to the one-year anniversary of this proxy statement, or ; provided, however, that if the date of the 2026 annual meeting of stockholders is more than 30 days before or after the first anniversary of the Annual Meeting, notice by the stockholder must be delivered a reasonable time before we print and send our proxy materials for the 2026 annual meeting of stockholders. If the proposal is in compliance with all of the requirements set forth in Rule 14a-8 under the Exchange Act, we will include the stockholder proposal in our proxy statement and place it on the form of proxy issued for the 2026 annual meeting. Stockholder proposals submitted for inclusion in our proxy materials should be mailed to the following address: Bone Biologics Corporation, Attention: Corporate Secretary, 2 Burlington Woods Drive, Suite 100, Burlington, MA 01803.

Stockholder Proposals for Consideration at the 2026 Annual Meeting of Stockholders, but not for Inclusion in the Proxy Materials.

Pursuant to our Bylaws, items of business that are proposed outside of the process pursuant to Rule 14a-8 under the Exchange Act as described above, may properly be brought before the 2026 annual meeting of stockholders only if we receive notice of such business no earlier than 120 days and no later than 90 days prior to the one-year anniversary of the previous year's annual meeting. Thus, for the 2026 annual meeting of stockholders, we must receive notice of business that is not submitted for inclusion in our proxy materials pursuant to Rule 14a-8 under the Exchange Act between January 30, 2026 and March 2, 2026. The notice must be in accordance with and contain all information provided for in our Bylaws and such business must be a proper matter for stockholder action under the General Corporation Law of Delaware. We will not permit business that does not comply with the foregoing notice requirement to be brought before the 2026 annual meeting of stockholders. Stockholder business that is not submitted for inclusion in our proxy statement pursuant to Rule 14a-8 should be mailed to the following address: Bone Biologics Corporation, Attention: Corporate Secretary, 2 Burlington Woods Drive, Suite 100, Burlington, MA 01803. You may obtain a copy of Bylaws by writing to the Corporate Secretary at the address above.

Stockholder Nominations of Directors.

Pursuant to our Bylaws, no nominations for directors shall be acted upon at the annual meeting except for those made by the Board and those made by stockholders of record upon timely notice in writing to our Corporate Secretary. To be considered timely, notice must be received by us no earlier than 120 days and no later than 90 days prior to the one-year anniversary of the previous year's annual meeting. Thus, for the 2026 annual meeting of stockholders, we must receive the notice between January 30, 2026 and March 2, 2026. The notice must contain all information, including the completed questionnaire, referenced in our amended and restated by-laws. Stockholder notice of nominations for directors should be mailed to the following address: Bone Biologics Corporation, Attention: Corporate Secretary, 2 Burlington Woods Drive, Suite 100, Burlington, MA 01803. You may obtain a copy of our Bylaws by writing to the Corporate Secretary at the address above.

In addition to satisfying the advance notice requirements under our Bylaws, to comply with the universal proxy rules under the Exchange Act, stockholders who intend to solicit proxies in support of director nominees other than the Company's nominees must provide notice to our Corporate Secretary that sets forth the information required by Rule 14a-19 under the Exchange Act no later than March 31, 2026.

HOUSEHOLDING OF PROXY MATERIALS

The SEC has adopted rules that permit companies and intermediaries (e.g., brokers) to satisfy the delivery requirements for proxy materials with respect to two or more stockholders sharing the same address by delivering a single set of proxy materials addressed to those stockholders. This process, which is commonly referred to as “householding,” potentially means extra convenience for stockholders and cost savings for companies.

This year, a number of brokers with account holders who are Company stockholders will be “householding” the Company’s proxy materials. A single set of proxy materials will be delivered to multiple stockholders sharing an address unless contrary instructions have been received from the affected stockholders. Once you have received notice from your broker that they will be “householding” communications to your address, “householding” will continue until you are notified otherwise or until you revoke your consent. If, at any time, you no longer wish to participate in “householding” and would prefer to receive a separate set of proxy materials, please notify your broker or the Company. Direct your written request to Bone Biologics Corporation, Attention: Corporate Secretary, 2 Burlington Woods Drive, Ste 100, Burlington, MA 01803 and oral requests may be made by calling the Company at (781) 552-4452 and we will promptly deliver a separate copy. Stockholders who currently receive multiple copies of the proxy materials at their addresses and would like to request “householding” of their communications should contact their brokers.

OTHER MATTERS

Management does not intend to present any other items of business and knows of no other matters that will be brought before the Annual Meeting. Whether or not you plan to attend the Annual Meeting, please sign and date the enclosed proxy card.

FORWARD-LOOKING STATEMENTS

This proxy statement and materials delivered with this proxy statement, including our 2024 Annual Report, contains “forward-looking” statements. All statements other than statements of historical facts included in this proxy statement and materials delivered with this proxy statement, including, without limitation, statements regarding our financial position, business strategy, and plans and objectives of management for future operations and capital expenditures, are forward-looking statements. Although we believe that the expectations reflected in the forward-looking statements and the assumptions upon which the forward-looking statements are based are reasonable, we can give no assurance that such expectations and assumptions will prove to have been correct. Additional statements concerning important factors that could cause actual results to differ materially from our expectations are disclosed in the “Cautionary Note on Forward-Looking Statements” section of our Annual Report on Form 10-K for fiscal year 2024. All written and oral forward-looking statements attributable to us or persons acting on our behalf subsequent to the date of this proxy statement are expressly qualified in their entirety by such cautionary statements.

By Order of the Board of Directors,

Bruce Stroeve
Chairman of the Board of Directors

, 2025

Appendix A

CERTIFICATE OF AMENDMENT
OF THE
AMENDED AND RESTATED
CERTIFICATE OF INCORPORATION
OF
BONE BIOLOGICS CORPORATION

Bone Biologics Corporation, a corporation organized and existing under and by virtue of the provisions of the Delaware General Corporation Law (the “**DGCL**”), does hereby certify as follows:

FIRST: The name of the corporation is Bone Biologics Corporation (the “**Corporation**”).

SECOND: The Amended and Restated Certificate of Incorporation was filed with the Secretary of the State of Delaware on July 28, 2014, as was amended by those Certificate of Amendments filed with the Secretary of State of the State of Delaware on September 22, 2014, July 16, 2018, October 8, 2021, June 5, 2023, and December 14, 2023 (the “**Certificate of Incorporation**”).

THIRD: Article 5 of the Certificate of Incorporation is hereby amended in its entirety to provide as follows:

“The total number of shares of capital stock which the Corporation shall have authority to issue is: One Hundred Twenty Million (120,000,000). These shares shall be divided into two classes with 100,000,000 shares designated as common stock at \$0.001 par value (the “Common Stock”) and 20,000,000 shares designated as preferred stock at \$0.001 par value (the “Preferred Stock”).

Effective at [] Eastern Time on [] (the “Effective Time”), pursuant to the DGCL, this Certificate of Amendment to the Amended and Restated Certificate of Incorporation of the Corporation, as amended, each [] ([]) shares of Common Stock outstanding immediately prior to the Effective Time shall, automatically and without any action on the part of the respective holders thereof, be converted into one (1) share of Common Stock (the “Reverse Stock Split”). No fractional shares shall be issued in connection with the Reverse Stock Split. Stockholders of record who otherwise would be entitled to receive fractional shares of Common Stock because they hold a number of shares not evenly divisible by the Reverse Stock Split ratio will automatically be entitled to receive an additional fraction of a share of Common Stock to round up to the next whole share. Each certificate that immediately prior to the Effective Time represented shares of Common Stock (“Old Certificates”), shall thereafter represent that number of shares of Common Stock into which the shares of Common Stock represented by the Old Certificate shall have been converted, subject to the elimination of fractional share interests as described above.

The Preferred Stock of the Corporation shall be issued by the Board of Directors of the Corporation in one or more classes or one or more series within any class and such classes or series shall have such voting powers, full or limited, or no voting powers, and such designations, preferences, limitations or restrictions as the Board of Directors of the Corporation may determine, from time to time.

Holders of shares of Common Stock shall be entitled to cast one vote for each share held at all stockholders’ meetings for all purposes, including the election of directors. The Common Stock does not have cumulative voting rights.

No holder of shares of stock of any class shall be entitled as a matter of right to subscribe for or purchase or receive any part of any new or additional issue of shares of stock of any class, or of securities convertible into shares of stock of any class, whether now hereafter authorized or whether issued for money, for consideration other than money, or by way of dividend.”

FOURTH: This Certificate of Amendment shall become effective on [] at [] Eastern Time.

FIFTH: This Certificate of Amendment was duly adopted by the Board of Directors of the Corporation and approved by the Corporation’s stockholders in accordance with Section 242 of the DGCL.

[Signature page follows.]

IN WITNESS WHEREOF, the Corporation has caused this Certificate of Amendment to be signed by its duly authorized officer on this [] day of [].

Bone Biologics Corporation

By: _____
Name: Jeffrey Frelick
Title: Chief Executive Officer

Appendix B
SECOND AMENDMENT
TO THE
BONE BIOLOGICS CORPORATION
2015 EQUITY INCENTIVE PLAN

The Bone Biologics 2015 Equity Incentive Plan (the “Plan”) is hereby amended as follows, effective May 30, 2025:

3. Section 3(a)(i) of the Plan is hereby amended and restated in its entirety to provide as follows:

“(i) Subject to Section 9(a) relating to Capitalization Adjustments, the aggregate number of shares of Common Stock that may be issued pursuant to Stock Awards from and after the Effective Date will not exceed 30,629,489 (the “*Share Reserve*”).”

4. Section 3(c) of the Plan is hereby amended and restated in its entirety to provide as follows:

“(c) **Incentive Stock Option Limit.** Subject to the Share Reserve and Section 9(a) relating to Capitalization Adjustments, the aggregate maximum number of shares of Common Stock that may be issued pursuant to the exercise of Incentive Stock Options will be 30,629,489 shares of Common Stock.”

**BONE BIOLOGICS
CORPORATION**

Shareowner Services
P.O. Box 64945
St. Paul, MN 55164-0945

Address Change? Mark box, sign, and indicate changes below: ☐

TO VOTE BY INTERNET OR
TELEPHONE, SEE REVERSE SIDE
OF THIS PROXY CARD.

THIS PROXY CARD IS VALID ONLY WHEN SIGNED AND DATED

The Board of Directors Recommends you vote FOR all the nominees listed.

- I. Election of directors: 01 Bruce Stroeve 03 Robert Gagnon 04 Phillip Meikle ☐ Vote FOR all nominees (except as marked) ☐ Vote WITHHELD from all nominees

(Instructions: To withhold authority to vote for any indicated nominee, write the number(s) of the nominee(s) in the box provided to the right.)

⬇ Please fold here – Do not separate ⬇

(Instructions: To withhold authority to vote for any indicated nominee, write the number(s) of the nominee(s) in the box provided to the right.)

The Board of Directors recommends you vote FOR Proposals II, III, IV, V, and VI.

- II. To approve, on a non-binding advisory basis, the compensation of the Company's named executive officers as disclosed in the proxy statement. ☐ For ☐ Against ☐ Abstain
- III. To approve an amendment to the Company's Amended and Restated Certificate of Incorporation, as amended, to effect a reverse stock split of the Company's common stock in a range of 1-for-2.5 to 1-for-10, at the discretion of the Board of Directors (the "Reverse Stock Split"). ☐ For ☐ Against ☐ Abstain
- IV. To approve an amendment to our 2015 Equity Incentive Plan, subject to the Reverse Stock Split being approved. ☐ For ☐ Against ☐ Abstain
- V. To ratify the appointment of Weinberg & Company, P.A. as our independent registered public accounting firm for the year ending December 31, 2025. ☐ For ☐ Against ☐ Abstain
- VI. To approve an adjournment of the Annual Meeting, if necessary or appropriate, if there are not sufficient votes at the time of the Annual Meeting to approve the proposals submitted to the Company's stockholders and/or establish a quorum for the Annual Meeting. ☐ For ☐ Against ☐ Abstain

NOTE: In their discretion, the proxies are authorized to vote upon such other business as may properly come before the Annual Meeting or at any adjournment of the meeting.

Date _____

Signature(s) in Box

Please sign exactly as your name(s) appears on Proxy. If held in joint tenancy, all persons should sign. Trustees, administrators, etc., should include title and authority. Corporations should provide full name of corporation and title of authorized officer signing the Proxy.

BONE BIOLOGICS CORPORATION

ANNUAL MEETING OF STOCKHOLDERS

May 30, 2025

11:00 a.m. ET

2 Burlington Woods Drive, Suite 100

Burlington, MA 01803

Proxy Statement and Annual Report on Form 10-K are available at
<https://www.bonebiologics.com/investor-relation/>

Bone Biologics Corporation

**2 Burlington Woods Drive, Suite 100
Burlington, MA 01803**

proxy

This proxy is solicited by the Board of Directors for use at the Annual Meeting on May 30, 2025, at 11:00 a.m., Eastern Time. Each matter to be voted on at the Annual Meeting has been proposed by our Board of Directors.

The undersigned hereby appoints Jeffrey Frelick as proxy, with full power of substitution, and hereby authorizes him to represent and to vote, as designated on the reverse side of this ballot, all of the shares of common stock of Bone Biologics Corporation that the undersigned is entitled to vote at the Annual Meeting of Stockholders to be held at 11:00 a.m., Eastern Time on May 30, 2025, at the Company's Corporate Headquarters, 2 Burlington Woods Drive, Suite 100, Burlington, MA 01803, and any adjournment or postponement thereof.

This proxy, when properly executed, will be voted in the manner directed herein and it revokes any prior proxy given by you. If no such direction is made, this proxy will be voted FOR the listed nominees for director and FOR Proposals II, III, IV, V, and VI; and in the discretion of the proxy holder on any other matter that properly comes before the meeting.

Vote by Internet, Telephone or Mail 24 Hours a Day, 7 Days a Week

Your phone or Internet vote authorizes the named proxies to vote your shares in the same manner as if you marked, signed and returned your proxy card.



INTERNET/MOBILE

www.proxypush.com/BBLG

Use the Internet to vote your proxy until 11:59 p.m. (ET) on May 29, 2025.



PHONE

1-866-883-3382

Use a touch-tone telephone to vote your proxy until 11:59 p.m. (ET) on May 29, 2025.



MAIL

Mark, sign and date your proxy card and return it in the postage-paid envelope provided.

If you vote your proxy by Internet or by Telephone, you do NOT need to mail back your Proxy Card.

