
**UNITED STATES
SECURITIES AND EXCHANGE COMMISSION**

Washington, D.C. 20549

SCHEDULE 14A

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

Filed by the Registrant

Filed by a Party other than the Registrant

Check the appropriate box:

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

Organovo Holdings, Inc.

(Name of Registrant as Specified In Its Charter)
Not Applicable

(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.
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Organovo Holdings, Inc.
11555 Sorrento Valley Rd., Suite 100
San Diego, CA 92121

October 7, 2024

Dear Stockholder:

You are cordially invited to attend this year's Annual Meeting of Stockholders of Organovo Holdings, Inc. on Wednesday, November 20, 2024 at 9:00 a.m. (Pacific Daylight Time). **The Annual Meeting will be completely virtual. You may attend the virtual meeting, submit questions and vote your shares electronically during the meeting via live webcast by visiting www.virtualshareholdermeeting.com/ONVO2024.**

On or about October 7, 2024, we will mail our proxy materials to our stockholders, comprised of the enclosed Annual Report, the Notice of Annual Meeting of Stockholders, the Proxy Statement, and proxy card.

The matters to be acted upon are described in the Notice of 2024 Annual Meeting of Stockholders and Proxy Statement. Following the formal business of the meeting, we will respond to questions from stockholders.

Whether or not you plan to virtually attend the meeting, your vote is very important and we encourage you to vote promptly. You may vote by proxy over the internet or by telephone, or you can also vote by mail by following the instructions on your proxy card. If you virtually attend the meeting, you will have the right to revoke your proxy and vote electronically during the meeting via the live webcast. If you hold your shares through an account with a brokerage firm, bank or other nominee, please follow the instructions you receive from your brokerage firm, bank or other nominee to vote your shares.

On behalf of your Board of Directors, thank you for your continued support and interest.

Sincerely yours,

A handwritten signature in black ink that reads "Keith Murphy".

Keith Murphy
Executive Chairman and Corporate Secretary

ORGANOVO HOLDINGS, INC. NOTICE OF 2024 ANNUAL MEETING OF STOCKHOLDERS TO BE HELD ON NOVEMBER 20, 2024

To Our Stockholders:

The 2024 Annual Meeting of Stockholders (the “Annual Meeting”) of Organovo Holdings, Inc. (“we,” “us,” “our,” “Organovo” or the “Company”) will be held on Wednesday, November 20, 2024, at 9:00 a.m. (Pacific Daylight Time). **The Annual Meeting will be completely virtual. You may attend the meeting, submit questions and vote your shares electronically during the meeting via live webcast by visiting www.virtualshareholdermeeting.com/ONVO2024.** At the Annual Meeting, our stockholders will be asked:

1. To elect each of Alison Tjosvold Milhous and Vaidehi Joshi as a Class I director to hold office until the 2027 Annual Meeting of Stockholders and until her respective successor is elected and qualified;
2. To ratify the appointment of Rosenberg Rich Baker Berman P.A. as our independent registered public accounting firm for the fiscal year ending March 31, 2025;
3. To approve, on an advisory basis, the compensation of our named executive officers;
4. To approve the amendment and restatement of the Organovo Holdings, Inc. 2022 Equity Incentive Plan to increase the number of shares reserved for issuance thereunder by 1,775,000 shares;
5. To approve an amendment to the Company’s Certificate of Incorporation, as amended, to effect, in the sole discretion of the Board of Directors of the Company (the “Board”) at any time on or before November 20, 2025, a reverse stock split of the Company’s common stock, par value \$0.001 per share (the “Common Stock”), at a ratio to be determined by the Board within a range of 1-to-5 to 1-to-20 (or any number in between), without reducing the authorized number of shares of Common Stock and without further approval or authorization of our stockholders; and
6. To transact such other business as may properly be brought before the Annual Meeting or any adjournments or postponements thereof.

Our Board of Directors recommends a vote **FOR** each of the director nominees, and **FOR** proposals 2, 3, 4 and 5 listed above. Stockholders of record at the close of business on September 23, 2024 are entitled to notice of, and to vote on, all matters at the Annual Meeting and any reconvened meeting following any adjournments or postponements thereof. For 10 days prior to the Annual Meeting, a complete list of stockholders entitled to vote at the Annual Meeting will be available for examination by any stockholder, for any purpose relating to the Annual Meeting, during ordinary business hours at our corporate offices located at 11555 Sorrento Valley Rd., Suite 100, San Diego, CA 92121.

All stockholders are invited to attend the virtual Annual Meeting. Whether or not you expect to attend the Annual Meeting, you are urged to vote or submit your proxy as soon as possible so that your shares can be voted at the Annual Meeting in accordance with your instructions. Telephone and internet voting are available. For specific instructions on voting, please refer to the proxy card. If you hold your shares through an account with a brokerage firm, bank or other nominee, please follow the instructions you receive from them to vote your shares.

Important Notice Regarding Availability of Proxy Materials for the Annual Meeting: This Notice of 2024 Annual Meeting of Stockholders, Proxy Statement and Annual Report are available at www.proxyvote.com.

By Order of the Board of Directors



Keith Murphy
Executive Chairman and Corporate Secretary
October 7, 2024



2024 Proxy Statement Summary

To assist you in reviewing the Proxy Statement for the Organovo Holdings, Inc. (“we,” “us,” “our,” “Organovo” or the “Company”) 2024 Annual Meeting of Stockholders (the “Annual Meeting”), we call your attention to the following summary information about the Annual Meeting, the proposals to be considered at the Annual Meeting and our corporate governance and compensation frameworks. For more complete information, please review our Proxy Statement. **Regardless of the number of shares you own, your VOTE is very important.** Even if you presently plan to virtually attend the Annual Meeting, please vote or submit your proxy as soon as possible so that your shares can be voted at the Annual Meeting in accordance with your instructions. Telephone and internet voting are available. For specific instructions on voting, please refer to the proxy card. If you do virtually attend the Annual Meeting and wish to vote electronically, you may withdraw your proxy at that time.

Annual Meeting of Stockholders

Date and Time: November 20, 2024 at 9:00 a.m. (Pacific Daylight Time)

Place: www.virtualshareholdermeeting.com/ONVO2024

Record Date: September 23, 2024

Voting: If you were a “stockholder of record” or beneficial owner of shares held in “street name” as of the Record Date, you may vote your shares. You may vote in person at the Annual Meeting or by the internet, telephone or mail. See the “General Information – Voting Instructions” in the Proxy Statement for more detail regarding how you may vote your shares.

Virtual Meeting: The Annual Meeting will be conducted as a virtual meeting of stockholders by means of a live webcast. We believe that hosting a virtual meeting will enable greater stockholder attendance and participation from any location, improved communication and cost savings to our stockholders. You can virtually attend the Annual Meeting by visiting www.virtualshareholdermeeting.com/ONVO2024, where you will be able to vote your shares and submit your questions during the meeting via the internet. There will not be a physical meeting location and you will not be able to attend in person.

The Annual Meeting starts at 9:00 a.m. (Pacific Daylight Time). We encourage you to access the meeting website prior to the start time to allow time for check-in. If you encounter any difficulties accessing the virtual meeting during the check-in or meeting time, please call the technical support number that will be posted on the virtual shareholder meeting login page.

You do not need to register to virtually attend the Annual Meeting webcast. Follow the instructions on your proxy card to access the Annual Meeting.

Proposals and Voting Recommendations

	Board Vote Recommendation	Page References (for more detail)
<u>Proposals:</u>		
(1) Election of two Class I directors each to hold office until the 2027 Annual Meeting of Stockholders and until her respective successor is elected and qualified.	FOR EACH NOMINEE	7 – 8
(2) Ratification of the appointment of Rosenberg Rich Baker Berman P.A. as our independent registered public accounting firm for the fiscal year ending March 31, 2025.	FOR	9 – 11
(3) Approval, on an advisory and non-binding basis, of the compensation of our named executive officers.	FOR	12

(4) Approval of the amendment and restatement of the Organovo Holdings, Inc. 2022 Equity Incentive Plan (the “Plan”) to increase the number of shares reserved for issuance thereunder by 1,775,000 shares.	FOR	13-25
(5) Approval of an amendment to the Company’s Certificate of Incorporation, as amended, to effect, in the sole discretion of the Board of Directors of the Company (the “Board”) at any time on or before November 20, 2025, a reverse stock split of the Company’s common stock at a ratio to be determined by the Board within a range of 1-to-5 to 1-to-20 (or any number in between), without reducing the authorized number of shares of the Company’s common stock and without further approval or authorization of our stockholders.	FOR	26-36

Current Corporate Governance Summary Facts

We seek to maintain high standards of business conduct and corporate governance, which we believe are fundamental to the overall success of our business, serve our stockholders well and maintain our integrity in the marketplace. The following table summarizes some of the key elements of our current corporate governance framework:

Size of Board	6
Number of Independent Directors	4
Lead Independent Director	Yes
Review Board and Board Committee Independence and Qualifications	Annual
Board Self-Evaluation	Periodic
Hold Executive Sessions	Yes
Diverse Board (as to background, experience and skills)	Yes
Board has Adopted Corporate Governance Guidelines	Yes
Board has Not Amended Charters or Taken Actions to Reduce Stockholder Rights	True
Director Meeting Attendance Above 75%	Yes
Stock Ownership Guidelines	Yes
No Family Relationships Among Officers and Directors	True
All Committee Chairs and Other Committee Members Qualify as Independent Directors	Yes
Plurality Plus Standard in Director Elections	Yes

Summary of Compensation Best Practices

Our Board established a Compensation Committee of the Board (the “Compensation Committee”) comprised of three independent directors in accordance with the rules and regulations established by the Securities and Exchange Commission (the “SEC”) and the Nasdaq Capital Market. Our Board has delegated to the Compensation Committee the authority to establish the Company’s executive compensation program and to approve all compensation received by the Company’s executive officers and the other members of its management team. Since October 1, 2020, the Compensation Committee has retained, on an annual basis, Anderson Pay Advisors LLC (“Anderson”) as its independent compensation consultants, to assist it in evaluating the Company’s executive compensation program and selecting an appropriate peer group of comparable companies for purposes of setting executive compensation.

The Compensation Committee periodically reviews best practices in governance and executive compensation. The following is a high-level summary of certain executive compensation practices that the Compensation Committee believes drive Company performance and serve our stockholders’ long-term interests:

Compensation Committee Comprised of At Least Three Independent Directors	Yes
Independent Compensation Consultant Retained	Yes
Compensation Committee Members all qualify as “outside directors” and “non-employee directors”	True
Compensation Based on Comparison to Peer Group Data	Yes
All Directors and Officers Subject to Stock Ownership Guidelines	Yes

Compensation Committee Performs Compensation Risk Assessment	Annual
Prohibitions Against all Directors, Officers and Employees Hedging or Pledging Stock	Yes
Incentive Plans Based on Performance Metrics	Yes
Company Does Not Offer Tax Gross Ups for Severance or Change of Control	Yes
Reasonable and Double Trigger Accelerated Vesting Provisions Adopted	Yes
No Multi-Year Guaranteed Bonuses	Yes
Stock Option Plan Prohibits Option repricing and Share Recycling	Yes
Company Has Not Repriced Options in Last Three Years	Yes
No Executive Employment Agreements with Guaranteed Terms	Yes
Offer Limited Perquisites to Executives	Yes
Consider Prior Year's Advisory Vote regarding Named Executive Officer Compensation	Yes
Terms of Severance Plan Described to Stockholders	Yes
Equity Incentive Plans Do Not Contain an "Evergreen" Feature	Yes

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ORGANOVO HOLDINGS, INC.
1155 Sorrento Valley Rd., Suite 100,
San Diego, CA 92121

PROXY STATEMENT FOR THE 2024 ANNUAL MEETING OF STOCKHOLDERS TO BE HELD NOVEMBER 20, 2024

This Proxy Statement, along with a proxy card, is being mailed and made available to our stockholders on or about October 7, 2024

GENERAL INFORMATION

We have made these proxy materials available to you in connection with the solicitation by the Board of Directors (the “Board” or “Board of Directors”) of Organovo Holdings, Inc. of proxies to be voted at the 2024 Annual Meeting of Stockholders (the “Annual Meeting”) to be held virtually on Wednesday, November 20, 2024 at 9:00 a.m. (Pacific Daylight Time) via live webcast by visiting www.virtualshareholdermeeting.com/ONVO2024. References in this Proxy Statement to the “Company,” “Organovo,” “we,” “our” and “us” are to Organovo Holdings, Inc. and its subsidiaries.

Record Date

Holders of shares of our common stock, our only class of issued and outstanding voting securities, at the close of business on September 23, 2024 (the “Record Date”) are entitled to vote on the proposals presented at the Annual Meeting. As of September 23, 2024, we had 15,365,826 issued and outstanding shares of common stock.

Quorum

The presence, in person or by proxy, of the holders of at least 5,121,942 shares of common stock, representing one-third of the outstanding shares of common stock entitled to vote at the virtual Annual Meeting, is necessary to constitute a quorum for the transaction of business at the Annual Meeting. Votes for and against, abstentions and “broker non-votes” will each be counted as present for purposes of determining the presence of a quorum.

The Annual Meeting may be adjourned or postponed from time to time and at any reconvened meeting, action with respect to the matters specified in this Proxy Statement may be taken without further notice to stockholders except as required by applicable law and our charter documents.

Virtual Annual Meeting

The Annual Meeting will be conducted as a virtual meeting of stockholders by means of a live webcast. We believe that hosting a virtual meeting will enable greater stockholder attendance and participation from any location, improved communication and cost savings to our stockholders. You can virtually attend the Annual Meeting by visiting www.virtualshareholdermeeting.com/ONVO2024, where you will be able to vote your shares and submit your questions during the meeting via the internet. There will not be a physical meeting location and you will not be able to attend in person.

We invite you to virtually attend the Annual Meeting and request that you vote on the proposals described in this Proxy Statement. However, you do not need to attend the virtual meeting to vote your shares. Instead, you may vote by internet, by telephone or, if you requested and received paper copies of the proxy materials by mail, you may also vote by completing and mailing your proxy card.

The Annual Meeting starts at 9:00 a.m. (Pacific Daylight Time) on Wednesday, November 20, 2024. We encourage you to access the meeting website prior to the start time to allow time for check-in. If you encounter any difficulties accessing the virtual meeting during the check-in or meeting time, please call the technical support number that will be posted on the virtual shareholder meeting login page.

You do not need to register to virtually attend the Annual Meeting webcast. Follow the instructions on your proxy card to access the Annual Meeting.

If you wish to submit a question on the day of the Annual Meeting, you may log in to the virtual meeting platform at www.virtualshareholdermeeting.com/ONVO2024, type your question into the “Ask a Question” field and click “Submit.” Questions pertinent to meeting matters will be answered during the Annual Meeting, subject to time constraints. Questions regarding personal matters, including those related to employment, are not pertinent to annual meeting matters and, therefore, will not be answered.

Stockholders of Record

You are a “stockholder of record” if your shares are registered directly in your name with our transfer agent, Continental Stock Transfer and Trust Company. As a stockholder of record, you have the right to grant your voting proxy directly to the Company or to vote in person at the Annual Meeting. All shares represented by a proxy will be voted at the Annual Meeting, and where a stockholder specifies choice with respect to any matter to be acted upon, the shares will be voted in accordance with the specification so made. If a stockholder does not indicate a choice on the proxy card, the shares will be voted in favor of the election of each of the nominees for director contained in this Proxy Statement and in favor of Proposals 2, 3, 4 and 5.

Shares Held in Street Name

You are deemed to beneficially own your shares in “street name” if your shares are held in an account at a brokerage firm, bank, broker-dealer, trust or other similar organization. If this is the case, you will receive a separate voting instruction form with this Proxy Statement from such organization. As the beneficial owner, you have the right to direct your broker, bank, trustee or nominee how to vote your shares, and you are also invited to attend the Annual Meeting. If you hold your shares in street name and do not provide voting instructions to your broker, bank, trustee or nominee, your shares will not be voted on any proposals on which such party does not have discretionary authority to vote (a “broker non-vote”), as further described below under the heading “Broker Non-Votes.”

Please note that if your shares are held of record by a broker, bank, trustee or nominee and you wish to vote at the virtual Annual Meeting, you will not be permitted to vote at the virtual meeting unless you first obtain a proxy issued in your name from the record holder.

Broker Non-Votes

Broker non-votes are shares held by brokers, banks or other nominees who are present in person or represented by proxy, but which are not voted on a particular matter because the brokers, banks or nominees do not have discretionary authority with respect to that proposal and they have not received voting instructions from the beneficial owner. Under the rules that govern brokers, brokers have the discretion to vote on routine matters, but not on non-routine matters. The routine matters to be considered at the Annual Meeting are (i) Proposal 2, the ratification of the appointment of the Company’s independent registered public accounting firm and (ii) Proposal 5, the Reverse Stock Split Proposal. The remaining proposals are considered to be non-routine matters. ***As a result, if you do not provide your brokers or nominees with voting instructions on these non-routine matters, your shares will not be voted on these proposals.***

Voting Matters

Stockholders are entitled to cast one vote per share of common stock on each matter presented for consideration by the stockholders. A list of stockholders entitled to vote at the Annual Meeting will be available for examination by any stockholder for a proper purpose during normal business hours at the executive offices of the Company for a period of at least 10 days preceding the day of the Annual Meeting.

There are five proposals scheduled to be voted on at the Annual Meeting:

1. To elect each of Alison Tjosvold Milhous and Vaidehi Joshi as a Class I director to hold office until the 2027 Annual Meeting of Stockholders and until her respective successor is elected and qualified;
2. To ratify the appointment of Rosenberg Rich Baker Berman P.A. as our independent registered public accounting firm for the fiscal year ending March 31, 2025;
3. To approve, on a non-binding advisory basis, the compensation of our named executive officers;
4. To approve the amendment and restatement of the Organovo Holdings, Inc. 2022 Equity Incentive Plan (the “2022 Plan”) to increase the number of shares reserved for issuance thereunder by 1,775,000 shares; and
5. To approve an amendment to the Company’s Certificate of Incorporation, as amended (the “Certificate of Incorporation”), to effect, in the sole discretion of the Board at any time on or before November 20, 2025, a reverse stock split of the Company’s common stock, at a ratio to be determined by the Board within a range of 1-to-5 to 1-to-20 (or any number in between), without reducing the authorized number of shares of the Company’s common stock and without further approval or authorization of our stockholders (the “Reverse Stock Split Proposal”).

Our Board of Directors recommends a vote **FOR** each of the director nominees and **FOR** proposals 2, 3, 4 and 5 listed above.

We are currently unaware of any matters to be raised at the Annual Meeting other than those referred to in this Proxy Statement. If other matters are properly presented at the Annual Meeting for consideration and you have submitted your proxy, the persons named in your proxy will have the discretion to vote on those matters for you.

Votes Required

Proposal 1 – Election of Directors

Under our Certificate of Incorporation, and our amended and restated bylaws (the “Bylaws”), the Class I directors will be elected by a plurality of the votes cast on this proposal at the Annual Meeting assuming a quorum is present. If you hold your shares through a broker and you do not instruct the broker on how to vote on this proposal, your broker will not have authority to vote your shares. Abstentions and broker non-votes will each be counted as present for purposes of determining the presence of a quorum, but will not have any effect on the outcome of the proposal.

Because this is an uncontested election of directors (an election in which the number of persons properly nominated to serve as director does not exceed the number of directors to be elected), each of Ms. Milhous and Ms. Joshi will be elected to the Board under the plurality voting standard if she receives any vote “FOR” her election. However, pursuant to the Company’s corporate governance guidelines, in an uncontested election, if a nominee receives a greater number of votes “withheld” than votes “for” such nominee’s election, then such nominee must tender such nominee’s resignation to the Board. The Nominating and Corporate Governance Committee will then determine whether the Board should accept or reject such director nominee’s resignation and will submit a recommendation to the Board for prompt consideration by the Board. The Board then will review the Nominating and Corporate Governance Committee’s recommendation and accept or reject the director nominee’s resignation within 100 days following certification of the stockholder vote for the Annual Meeting.

THE BOARD OF DIRECTORS UNANIMOUSLY RECOMMENDS THAT THE STOCKHOLDERS VOTE FOR AND SOLICITS PROXIES IN FAVOR OF THE ELECTION OF ALISON TJOSVOLD MILHOUS AND VAIDEHI JOSHI AS CLASS I DIRECTORS.

Proposal 2 – Ratification of Appointment of Independent Registered Public Accounting Firm

If a quorum is present, the affirmative vote of a majority of the votes cast on this proposal at the Annual Meeting is required for ratification of the appointment of our independent registered public accounting firm. Abstentions will be counted as present for purposes of determining the presence of a quorum but will not be considered as votes cast for or against the proposal and will therefore have no effect on the outcome of the vote.

THE BOARD OF DIRECTORS UNANIMOUSLY RECOMMENDS THAT THE STOCKHOLDERS VOTE FOR THE RATIFICATION OF THE APPOINTMENT OF ROSENBERG RICH BAKER BERMAN P.A. AS THE COMPANY’S INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM FOR THE FISCAL YEAR ENDING MARCH 31, 2025.

Proposal 3 – Advisory Vote to Approve Compensation of Named Executive Officers

If a quorum is present, the proposal to approve, on an advisory basis, the compensation of the Company’s named executive officers requires the affirmative vote of a majority of the votes cast on this proposal at the Annual Meeting. Abstentions and broker non-votes will each be counted as present for purposes of determining the presence of a quorum. Abstentions and broker non-votes will not be considered as votes cast for or against the proposal and will therefore have no effect on the outcome of the vote.

THE BOARD OF DIRECTORS UNANIMOUSLY RECOMMENDS THAT THE STOCKHOLDERS VOTE FOR THE APPROVAL, ON AN ADVISORY BASIS, OF THE COMPENSATION OF OUR NAMED EXECUTIVE OFFICERS.

Proposal 4 – Approval of Amendment and Restatement of the Organovo Holdings, Inc. 2022 Equity Incentive Plan to Increase the Number of Shares Reserved for Issuance Thereunder by 1,775,000 Shares

If a quorum is present, the affirmative vote of a majority of the votes cast on this proposal at the Annual Meeting is required to approve the amendment and restatement of the 2022 Plan to increase the number of shares reserved for issuance thereunder by 1,775,000 shares. Abstentions and broker non-votes will each be counted as present for purposes of determining the presence of a quorum. Abstentions and broker non-votes will not be considered as votes cast for or against the proposal and will therefore have no effect on the outcome of the vote.

THE BOARD OF DIRECTORS UNANIMOUSLY RECOMMENDS THAT THE STOCKHOLDERS VOTE FOR THE APPROVAL OF THE AMENDMENT AND RESTATEMENT OF THE 2022 PLAN TO INCREASE THE NUMBER OF SHARES RESERVED FOR ISSUANCE THEREUNDER BY 1,775,000 SHARES.

Proposal 5 – Approval of the Reverse Stock Split

If a quorum is present, the affirmative vote of a majority of the votes cast on this proposal at the Annual Meeting is required to approve an amendment to the Company’s Certificate of Incorporation, as amended, to effect, in the sole discretion of the Board at any time on or before November 20, 2025, a reverse stock split of the Company’s common stock, at a ratio to be determined by the Board within a range of 1-to-5 to 1-to-20 (or any number in between), without reducing the authorized number of shares of Company’s common stock and without further approval or authorization of our stockholders. Abstentions will be counted as present for purposes of determining the presence of a quorum but will not be considered as votes cast for or against the proposal and will therefore have no effect on the outcome of the vote.

THE BOARD OF DIRECTORS UNANIMOUSLY RECOMMENDS THAT THE STOCKHOLDERS VOTE FOR THE APPROVAL OF THE REVERSE STOCK SPLIT PROPOSAL.

Voting Instructions

If you are a stockholder of record, you can vote in the following ways:

- **By Internet:** by following the internet voting instructions included on the proxy card at any time up until 11:59 p.m., Eastern Time, on November 19, 2024.
- **By Telephone:** by following the telephone voting instructions included on the proxy card at any time up until 11:59 p.m., Eastern Time, on November 19, 2024.
- **By Mail:** you may vote by mail by marking, dating and signing your proxy card in accordance with the instructions on it and returning it by mail in the pre-addressed reply envelope provided with the proxy materials. The proxy card must be received prior to the Annual Meeting.

You may also vote your shares during the virtual Annual Meeting. Even if you plan to attend the virtual Annual Meeting, we encourage you to vote in advance by internet, telephone or mail so that your vote will be counted in the event you later decide not to attend the virtual Annual Meeting.

If you hold shares through a bank or broker, please refer to your proxy card, Notice or other information forwarded by your bank or broker to see which voting options are available to you.

Proxies

Proxies are solicited by and on behalf of our Board and we will bear the entire cost of soliciting proxies, including the costs of preparing, assembling, printing and mailing this Proxy Statement, the proxy card and any additional soliciting materials furnished to stockholders.

All shares represented by a proxy will be voted, and where a stockholder specifies a choice with respect to any matter to be acted upon, the shares will be voted in accordance with the specification so made. If a stockholder does not indicate a choice on the proxy card, the shares will be voted: (i) in favor of the election of the two director nominees contained in this Proxy Statement, (ii) in favor of ratifying the appointment of Rosenberg Rich Baker Berman P.A. as the Company's independent registered public accounting firm for the fiscal year ending March 31, 2025, (iii) in favor of the non-binding advisory vote on the compensation of our named executive officers; (iv) in favor of the amendment and restatement of the 2022 Plan to increase the number of shares reserved for issuance thereunder by 1,775,000 shares; (v) in favor of the Reverse Stock Split Proposal; and (vi) in the discretion of the proxy holders on any other matter that comes before the meeting.

If your shares are held by a broker, bank or other stockholder of record, in nominee name or otherwise, exercising fiduciary powers (typically referred to as being held in "street name"), you may receive a separate voting instruction form with this Proxy Statement. Your broker may vote your shares on Proposal 2 to ratify the appointment of Rosenberg Rich Baker Berman P.A. as our independent registered public accounting firm, and Proposal 5, the Reverse Stock Split Proposal, but will not be permitted to vote your shares with respect to Proposal 1, the election of the Class I directors, Proposal 3, the non-binding advisory vote on the compensation of our named executive officers, or Proposal 4, the amendment and restatement of the 2022 Plan to increase the number of shares reserved for issuance thereunder by 1,775,000 shares, unless you provide instructions as to how to vote your shares. Please note that if your shares are held of record by a broker, bank or nominee and you wish to vote at the meeting, you will not be permitted to vote at the virtual meeting unless you first receive materials necessary to access the Annual Meeting from the record holder.

Proxy Revocation Procedure

If you are a stockholder of record, you may revoke your proxy: (i) by written notice of revocation mailed to and received by the Secretary of the Company prior to the date of the Annual Meeting, (ii) by voting again via the internet or by telephone at a later time before the closing of those voting facilities at 11:59 p.m. (Eastern Time) on November 19, 2024, (iii) by executing and delivering to the Secretary a proxy dated as of a later date than a previously executed and delivered proxy (provided, however, that such action must be taken prior to 11:59 p.m.

(Eastern Time) on November 19, 2024), or (iv) by virtually attending the Annual Meeting and voting electronically by going to www.virtualshareholdermeeting.com/ONVO2024 and using your unique control number that was included in the Proxy Materials that you received in the mail. Attendance at the virtual Annual Meeting will not in and of itself revoke a proxy.

If your shares are held by a bank, broker or other agent, you may change your vote by submitting new voting instructions to your bank, broker or other agent, or by referring to your proxy card or other information forwarded by your bank or broker.

Voting Results

We will announce preliminary voting results at the Annual Meeting. We will report final results in a Current Report on Form 8-K filed with the SEC within four business days after the Annual Meeting. If final voting results are not available to us in time to file a Form 8-K with the SEC within four business days after the Annual Meeting, we intend to file a Form 8-K to publish preliminary results and, within four business days after the final results are known to us, file an additional Form 8-K to publish the final results.

Interests of Officers and Directors in Any Matters to be Acted Upon at the Annual Meeting

Each of Ms. Milhous and Ms. Joshi has an interest in Proposal 1, the election of Ms. Milhous and Ms. Joshi as Class I directors, as each of them is currently a member of the Board that is up for reelection. Members of the Board and our executive officers do not have any interest in Proposal 2, the ratification of the appointment of Rosenberg Rich Baker Berman P.A. as our independent registered public accounting firm. Our named executive officers have an interest in Proposal 3, as the compensation for our named executive officers is subject to this vote. Our executive officers and directors have an interest in Proposal 4, the amendment and restatement of the 2022 Plan to increase the number of shares reserved for issuance thereunder by 1,775,000 shares, as our executive officers and directors are eligible to receive awards under the terms of the 2022 Plan. Certain of our executive officers and directors have an interest in Proposal 5, the Reverse Stock Split, as a result of their ownership of shares of the Company's common stock, as set forth in the section entitled "Security Ownership of Certain Beneficial Owners and Management" below.

PROPOSAL 1: ELECTION OF DIRECTORS

General

Our Certificate of Incorporation and Bylaws provide for a classified Board consisting of three classes of directors with staggered three-year terms. The Board currently consists of six directors, having terms expiring at the respective annual meetings of stockholders listed below:

2024 Annual Meeting	2025 Annual Meeting	2026 Annual Meeting
Alison Tjosvold Milhous	Douglas Jay Cohen	Keith Murphy
Vaidehi Joshi	David Gobel	Adam Stern

Proposal to Elect Two Directors to Hold Office for Three Years until the 2027 Annual Meeting

The Board is recommending, and has nominated for election at the Annual Meeting, the following slate of two nominees, each to hold office for three years until the 2027 Annual Meeting of Stockholders and until her respective successor is duly elected and qualified.

Name	Age	Director Since	Principal Occupation	Experience/ Qualifications	Current Committee Membership	Independent?
Alison Tjosvold Milhous	45	2020	Vice President of Accounting at Erasca, Inc.	Industry, Accounting; Finance	- Audit Committee - Nominating and Corporate Governance Committee	Yes
Vaidehi Joshi	38	2022	Director of Discovery Biology at Organovo Holdings, Inc. and Director of Discovery Biology at Viscient Biosciences, Inc.	Industry	- Science and Technology Committee	No

Each of the nominees is currently serving as a director and has indicated her willingness to serve if elected, but if either nominee should be unable or unwilling to stand for election, the shares represented by proxies may be voted for a substitute as the Board of Directors may designate, unless a contrary instruction is indicated in the proxy.

Additional Information

For additional information about each nominee and each of the other directors serving on our Board, please see pages 37-40 in this Proxy Statement.

Vote Required

Under our Certificate of Incorporation and Bylaws, the Class I directors will be elected by a plurality of the votes cast in person or by proxy at the Annual Meeting assuming a quorum is present. If you hold your shares through a broker and you do not instruct the broker on how to vote on this proposal, your broker will not have authority to vote your shares. Abstentions and broker non-votes will each be counted as present for purposes of determining the presence of a quorum, but will not have any effect on the outcome of the proposal.

Because this is an uncontested election of directors (an election in which the number of persons properly nominated to serve as director does not exceed the number of directors to be elected), each of Ms. Milhous and Ms. Joshi will be elected to the Board under the plurality voting standard if she receives any votes "FOR" their re-election. However, pursuant to the Company's corporate governance guidelines, in an uncontested election, if a nominee receives a greater number of votes "withheld" than votes "for" such nominee's election, then such nominee must tender such nominee's resignation to the Board. The Nominating and Corporate Governance Committee will then determine whether the Board should accept or reject such director nominee's resignation and will submit a recommendation to the Board for prompt consideration by the Board. The Board will then review the Nominating

and Corporate Governance Committee's recommendation and accept or reject the director nominee's resignation within 100 days following certification of the stockholder vote for the Annual Meeting.

Board Recommendation

THE BOARD OF DIRECTORS UNANIMOUSLY RECOMMENDS THAT THE STOCKHOLDERS VOTE FOR AND SOLICITS PROXIES IN FAVOR OF THE ELECTION OF EACH OF ALISON TJOSVOLD MILHOUS AND VAIDEHI JOSHI.

Unless otherwise instructed, it is the intention of the persons named as proxy holders in the proxy card to vote shares represented by properly executed proxy cards for the election of each of Alison Tjosvold Milhous and Vaidehi Joshi.

PROPOSAL 2: RATIFICATION OF APPOINTMENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

At the Annual Meeting, our stockholders will be asked to ratify the appointment of Rosenberg Rich Baker Berman P.A. (“RRBB P.A.”) as our independent registered public accounting firm for the fiscal year ending March 31, 2025. Representatives of RRBB P.A. are expected to be present at the virtual Annual Meeting and will have the opportunity to make statements if they desire to do so and to respond to appropriate questions. RRBB P.A. has served as our independent registered public accounting firm since August 31, 2023.

In the event our stockholders fail to ratify the appointment of RRBB P.A., the Audit Committee of the Board (the “Audit Committee”) will reconsider its appointment. In addition, even if our stockholders ratify the appointment, the Audit Committee in its discretion may direct the appointment of a different independent registered public accounting firm at any time during the year if it believes that a change would be in the best interests of the Company and its stockholders.

Change in Certifying Accountant

On July 18, 2023, Mayer Hoffman McCann P.C. (“MHM”) informed us and the Audit Committee that it would not stand for re-election as our registered public accounting firm for the audit of our financial statements for the fiscal year ending March 31, 2024. MHM served as our independent registered public accounting firm from February 8, 2011 through August 10, 2023.

The audit reports of MHM on our financial statements for the fiscal years ended March 31, 2023 and 2022 did not contain an adverse opinion or a disclaimer of opinion, and were not qualified or modified as to uncertainty, audit scope or accounting principles, except for an explanatory paragraph regarding the existence of substantial doubt about our ability to continue as a going concern in the report for the fiscal year ended March 31, 2023.

During our two most recent fiscal years ended March 31, 2023 and 2022 and the subsequent period through July 18, 2023, there were no (a) disagreements, within the meaning of Item 304(a)(1)(iv) of Regulation S-K promulgated under the Securities Exchange Act of 1934, as amended (“Regulation S-K”), and the related instructions thereto, with MHM on any matter of accounting principles or practices, financial statement disclosure or auditing scope or procedure, which disagreements, if not resolved to the satisfaction of MHM, would have caused it to make reference to the subject matter of the disagreements in connection with its reports, or (b) reportable events within the meaning of Item 304(a)(1)(v) of Regulation S-K and the related instructions thereto.

Audit and Non-Audit Fees

Our Audit Committee is responsible for, and has approved, the engagement of RRBB P.A. as our independent registered public accounting firm for the fiscal year ending March 31, 2025.

During fiscal year ended March 31, 2024 (“Fiscal 2024”), the Audit Committee met with MHM during the first quarter and RRBB P.A. on a quarterly or more frequent basis thereafter. At such times, the Audit Committee reviewed the services performed by RRBB P.A. and MHM, as well as the fees charged for such services. Substantially all MHM’s personnel, who work under the control of MHM shareholders, are employees of wholly-owned subsidiaries of CBIZ, Inc., which provides personnel and various services to MHM in an alternative practice structure.

The following table sets forth the fees for services provided and billed by RRBB P.A., relating to Fiscal 2024 and Fiscal 2023.

	Fiscal Year 2024	Fiscal Year 2023
Audit fees	\$ 175,000	\$ —
Audit-related fees	—	—
Tax fees	—	—
All other fees	—	—
Total	<u>\$ 175,000</u>	<u>\$ —</u>

The following table sets forth the fees for services provided and billed by MHM and its associated entity CBIZ MHM, LLC, relating to Fiscal 2024 and Fiscal 2023.

	Fiscal Year 2024	Fiscal Year 2023
Audit fees	\$ 240,732	\$ 567,930
Audit-related fees	—	—
Tax fees	18,375	26,670
All other fees	—	—
Total	<u>\$ 259,107</u>	<u>\$ 594,600</u>

Audit Fees: For the fiscal years ended March 31, 2024 and 2023, the audit fees billed by our independent registered public accounting firm were for professional services rendered for audits and quarterly reviews of our consolidated financial statements, and assistance with reviews of registration statements and documents filed with the SEC.

Audit-Related Fees: For the fiscal years ended March 31, 2024 and 2023, there were no audit-related fees billed by our independent registered public accounting firm, other than the fees described above.

Tax Fees: For the fiscal years ended March 31, 2024 and 2023, the tax-related fees billed by an associated entity of our independent registered public accounting firm pertained to services related to tax return preparation and tax planning services.

All Other Fees: For the fiscal years ended March 31, 2024 and 2023, there were no fees billed by our independent registered public accounting firm for other services, other than the fees described above.

Policy on Audit Committee Pre-Approval of Audit and Permitted Non-Audit Services of Independent Registered Public Accounting Firm

The Audit Committee has determined that all services provided by RRBB P.A. to date are compatible with maintaining the independence of such audit firm. The charter of the Audit Committee requires advance approval of all auditing services and permitted non-audit services (including the fees and terms thereof) to be performed for the Company by our independent registered public accounting firm, subject to any exception permitted by law or regulation. The Audit Committee has delegated to the Chair of the Audit Committee authority to approve permitted services, provided that the Chair reports any decisions to the Audit Committee at its next scheduled meeting.

Vote Required

If a quorum is present, the affirmative vote of a majority of the votes cast on this proposal at the Annual Meeting is required for ratification of the appointment of our independent registered public accounting firm. Abstentions will be counted as present for purposes of determining the presence of a quorum but will not be considered as votes cast for or against the proposal and will therefore have no effect on the outcome of the vote.

Although ratification is not required by our Bylaws or otherwise, the Board is submitting this proposal as a matter of good corporate governance. If stockholders do not ratify the appointment of RRBB P.A., the Audit Committee and the Board would consider what, if any, action to take. Even if the appointment is ratified, the Audit Committee, in its discretion, may direct the appointment of a different independent registered public accounting firm at any time.

during the fiscal year if it is determined that such a change would be in the best interests of Organovo and its stockholders.

Board Recommendation

THE BOARD OF DIRECTORS UNANIMOUSLY RECOMMENDS THAT THE STOCKHOLDERS VOTE FOR THE RATIFICATION OF THE APPOINTMENT OF ROSENBERG RICH BAKER BERMAN P.A. AS THE COMPANY'S INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM FOR THE FISCAL YEAR ENDING MARCH 31, 2025.

PROPOSAL 3: ADVISORY VOTE TO APPROVE COMPENSATION OF NAMED EXECUTIVE OFFICERS

The Board is providing stockholders with the opportunity to cast an advisory vote on the compensation of our named executive officers. This proposal, commonly known as a “Say-on-Pay” proposal, gives you, as a stockholder, the opportunity to endorse or not endorse our executive compensation program and the compensation paid to our named executive officers as reported in this Proxy Statement.

The “Say-on-Pay” vote is advisory, and therefore not binding on the Compensation Committee or the Board. Although the vote is non-binding, the Compensation Committee and the Board will review the voting results, seek to determine the cause or causes of any significant negative voting, and take them into consideration when making future decisions regarding executive compensation.

The Compensation Committee and the Board have designed our executive compensation program to attract and retain talented executives, to motivate them to achieve our key financial, operational, and strategic goals, and to reward them for superior performance. They also designed our compensation program to align our executive officers’ interests with those of our stockholders by rewarding their achievement of the specific corporate and individual goals approved by our Compensation Committee. The performance goals set by the Compensation Committee are focused on achieving our commercialization objectives, increasing long-term stockholder value, and advancing our product development and technology platform. Stockholders are encouraged to read the “Executive Compensation” section of this Proxy Statement for a more detailed discussion of how our compensation program reflects the Company’s core objectives and aligns our executive officers’ interests with those of our stockholders.

Vote Required

The Board believes the Company’s executive compensation program uses appropriate structures and sound pay practices that are effective in achieving our core compensation objectives. Accordingly, the Board recommends that you vote in favor of the following resolution:

“RESOLVED, that the stockholders of Organovo Holdings, Inc. approve, on an advisory basis, the compensation of the Company’s named executive officers as disclosed in the Company’s 2024 Proxy Statement pursuant to the Securities and Exchange Commission’s compensation disclosure rules, including the Executive Compensation section.”

If a quorum is present, the proposal to approve, on an advisory basis, the compensation of the Company’s named executive officers requires the affirmative vote of a majority of the votes cast on this proposal at the Annual Meeting. Abstentions and broker non-votes will each be counted as present for purposes of determining the presence of a quorum. Abstentions and broker non-votes will not be considered as votes cast for or against the proposal and will therefore have no effect on the outcome of the vote.

Board Recommendation

THE BOARD OF DIRECTORS UNANIMOUSLY RECOMMENDS THAT THE STOCKHOLDERS VOTE FOR THE APPROVAL, ON AN ADVISORY BASIS, OF THE COMPENSATION OF OUR NAMED EXECUTIVE OFFICERS.

PROPOSAL 4: APPROVAL OF AMENDMENT AND RESTATEMENT OF ORGANOVO HOLDINGS, INC. 2022 EQUITY PLAN TO INCREASE THE NUMBER OF SHARES RESERVED FOR ISSUANCE THEREUNDER BY 1,775,000 SHARES

We are asking our stockholders to approve an amendment and restatement of the Organovo Holdings, Inc. 2022 Equity Incentive Plan (the “2022 Plan” and as amended and restated, the “A&R 2022 Plan”) to increase the number of shares reserved for issuance thereunder by 1,775,000 shares.

As of August 30, 2024, excluding the requested share reserve increase, 445,966 shares remain available for issuance under the 2022 Plan, 1,598,426 shares were subject to outstanding awards under the 2022 Plan and 432,046 shares were subject to outstanding awards under the 2012 Plan.

Our Board initially adopted the 2022 Plan on July 25, 2022 and our stockholders approved the 2022 Plan on October 12, 2022. 1,363,000 shares were initially authorized for issuance under the 2022 Plan, plus any shares underlying awards under the 2012 Plan (as defined below) that, on or after October 12, 2022, expire or otherwise terminate without having been exercised or issued in full or are forfeited to or repurchased by the Company due to failure to vest, with the maximum number of shares to be added to the 2022 Plan equal to 1,241,460 shares.

On October 3, 2024, our Compensation Committee approved, and we are submitting to our stockholders for approval, an amendment to the 2022 Plan to increase the maximum number of shares authorized for issuance under the 2022 Plan by 1,775,000 shares from 1,236,738 shares to 3,011,738 shares, plus any shares underlying awards under the 2012 Plan (as defined below) that, on or after October 12, 2022, expire or otherwise terminate without having been exercised or issued in full or are forfeited to or repurchased by the Company due to failure to vest, with the maximum number of shares to be added to the 2022 Plan equal to 1,241,460 shares.

The Company also maintains the Organovo Holdings, Inc. 2012 Equity Incentive Plan (the “2012 Plan”) and the Organovo Holdings, Inc. 2021 Inducement Equity Incentive Plan (the “2021 Plan”) (collectively with the 2022 Plan, the “Existing Equity Plans”), which permit the issuance of equity incentive awards to plan participants, including the Company’s employees, directors and consultants. Following adoption of the 2022 Plan, no additional shares of the Company’s common stock were available for new awards under the 2012 Plan, though, pursuant to the terms of the 2022 Plan, any shares of the Company’s common stock underlying awards under the 2012 Plan that are forfeited or repurchased by the Company or expire unexercised will return to the 2022 Plan. As of August 30, 2024, 1,000 shares of our common stock are reserved for issuance under the 2021 Plan. As of August 30, 2024, a total of 2,030,472 shares of the Company’s common stock were subject to outstanding awards granted under the Existing Equity Plans.

Why Stockholders Should Vote to Approve the Amendment and Restatement of the 2022 Plan to Increase the Number of Shares Reserved for Issuance Thereunder

Equity Incentive Awards are an Important Part of Our Compensation Philosophy. The Board believes that the future success of the Company depends on our ability to attract and retain the best available employees and that the ability to grant equity awards is a necessary and powerful recruiting and retention tool for the Company. The Company’s personnel are our most valuable assets. We believe that equity awards motivate high levels of performance, align the interests of our personnel and stockholders by giving our personnel an opportunity to hold an ownership stake in the Company, and provide an effective means of recognizing their contributions to the success of the Company.

Reasonable Share Request. The additional number of shares we are requesting under the A&R 2022 Plan is 1,775,000, which we believe will be sufficient for equity compensation awards over approximately the next 4 years, and that such number of shares is reasonable and consistent with general market practices. This view is based on several assumptions, including that our grant practices under the A&R 2022 Plan will be consistent with our historical practices and usage, and is dependent on a number of other factors that are difficult to predict or beyond our control, including the price of our common stock underlying future grants, our hiring activity, forfeitures of

outstanding awards and other circumstances that may require us to change our equity grant practices. These underlying assumptions and factors cannot be predicted with certainty, and to the extent they change, the number of shares requested may not last for the estimated period.

The following table summarizes the awards outstanding and shares available for grant under the Existing Incentive Plans as of August 30, 2024, and the proposed increase in shares authorized for issuance under the A&R 2022 Plan:

	<u>As of August 30, 2024</u>
Total number of shares of common stock subject to outstanding stock options	1,835,366
Weighted-average exercise price of outstanding stock options	\$ 1.96
Weighted-average remaining term of outstanding stock options in years	9.02
Total number of shares of common stock subject to Restricted Stock Units	239,034
Total number of shares available for grant under the Existing Incentive Plans ⁽¹⁾	453,038
Total number of shares of common stock outstanding	15,364,076
Per-share closing price of common stock as reported on Nasdaq Capital Market	\$ 0.58
Total number of shares proposed for new issuance under the A&R 2022 Plan	1,775,000

(1) As of August 30, 2024, there were 452,038 shares available for grant under the 2022 Plan, and 1,000 shares available for grant under the 2021 Plan.

We Have Used our 2022 Plan Responsibly and Intend to Use the A&R 2022 Plan Responsibly. We recognize the dilutive impact of our equity compensation on our stockholders and continuously strive to balance this concern with the competition for talent. If approved, the new shares reserved under the A&R 2022 Plan would represent approximately 12% of our 15,365,826 outstanding shares as of September 23, 2024. Our Board believes the potential dilution to stockholders is reasonable and sustainable to meet our business goals. The 1,775,000 shares newly reserved for issuance under the A&R Plan are expected to provide us with sufficient shares to cover the awards to be granted over the next 4 years, assuming we continue to grant awards consistent with our historical usage and current practices, as reflected in our recent historical burn rate under the 2022 Plan as discussed below, and noting that future circumstances may require us to change our current equity grant practices. If the A&R 2022 Plan is approved, the share reserve under the A&R 2022 Plan could last for a longer or shorter period of time, depending upon our future equity grant practices, which we cannot predict with any degree of certainty at this time. In determining the share reserve for the A&R 2022 Plan, the Compensation Committee and the Board took into account, among other things, our stock price and volatility, share usage, burn rate and the existing terms of our outstanding awards.

Gross burn rate can be used by some to assess a company's use of equity compensation. Gross burn rate is defined as the number of shares underlying equity awards granted in a given fiscal year (excluding any RSUs assumed in acquisitions) divided by the number of shares of weighted average common stock outstanding ("CSO").

Potential actual dilution to stockholders is often measured by analyzing the net burn rate. Net burn rate is defined as (i) the number of shares underlying equity awards granted in a given fiscal year minus shares subject to outstanding equity awards forfeited during the year and returned to the plan, divided by (ii) CSO. This measure indicates the rate at which we actually create potential future stockholder dilution. We have managed our net burn rate under the Existing Incentive Plans to (3%) in Fiscal 2024, 2% in Fiscal 2023, and 6% in Fiscal 2022. The burn rate in Fiscal 2024 is due to annual grants to the Board and employees, as well as grants to new hires, which was offset by, among other things, the voluntary forfeiture of 312,918 unvested stock options by our Executive Chairman. The burn rate in Fiscal 2023 is due to annual grants to the Board and employees, as well as grants to new hires. The burn rate in Fiscal 2022 is due to annual grants to the Board, executive officers, employees, as well as grants to new hires.

The following table shows our gross and net burn rate over the past three fiscal years under the Existing Incentive Plans and the average CSO of those three years under the Existing Incentive Plans.

	Fiscal 2024	Fiscal 2023	Fiscal 2022	Average
Restricted stock units (“RSUs”) granted ⁽¹⁾	117,642	117,642	—	78,428
Performance-based restricted stock units (“PSUs”) granted but not earned	—	—	—	—
PSUs earned	—	—	12,229	4,076
Options granted ⁽²⁾	184,158	255,474	498,546	312,726
Performance options granted but not earned	—	—	37,500	12,500
Performance options earned	—	—	37,500	12,500
Total awards granted ⁽³⁾	301,800	373,116	585,775	420,230
Weighted average common stock outstanding	9,144,922	8,713,032	8,703,596	8,853,850
Gross Burn Rate	3 %	2 %	7 %	5 %
Cancellations/Forfeitures of Options	593,384	6,092	40,000	213,159
Forfeitures of PSUs	—	—	—	—
Forfeitures of RSUs	—	—	—	—
Net Burn Rate	(3) %	2 %	6 %	2 %

(1) Excludes PSUs.

(2) Excludes performance options.

(3) Includes all categories above.

Key Features Designed to Protect Stockholders’ Interests

We believe the 2022 Plan’s design reflects our commitment to strong corporate governance and our desire to preserve stockholder value as demonstrated by the following 2022 Plan features:

- **Maximum Number of Shares/No Annual “Evergreen” Provision.** The maximum number of shares available for issuance under the 2022 Plan is fixed and cannot be increased without stockholder approval. There is no annual “evergreen” whereby the number of shares available under the 2022 Plan will be automatically increased each year.
- **Award Design Flexibility.** Different kinds of awards may be granted under the 2022 Plan, giving us the flexibility to design our equity incentives to complement the other elements of compensation and to support our attainment of strategic goals.
- **Performance-Based Awards.** The 2022 Plan permits the grant of performance-based stock awards that are payable only upon the attainment of specified performance criteria.
- **Liberal Definition of Change in Control.** The 2022 Plan’s definition of a change-in-control transaction provides that any award benefits triggered by such a transaction are contingent upon the actual consummation of the transaction, not merely its approval by our Board or stockholders.
- **Single-Trigger Vesting Acceleration upon a Change in Control for Employees and Consultants.** Awards under the 2022 Plan will be treated in a change in control (as defined in the 2022 Plan) in the manner determined by the administrator, and except for awards granted to our non-employee directors for their service as non-employee directors, the terms of the 2022 Plan provide for no automatic vesting of awards upon a change in control unless the award is not assumed or substituted.
- **Repricing is Not Allowed Without Stockholder Approval.** The 2022 Plan does not permit awards to be repriced or exchanged for other awards unless stockholders approve the repricing or exchange.
- **Clawback.** Each award under the 2022 Plan and any other incentive compensation paid to a participant will be subject to our clawback policy that was in effect when the 2022 Plan was adopted and any clawback policy that we establish or amend to comply with applicable laws, and the administrator may require a participant to forfeit, return, or reimburse all or a portion of the award or other compensation

and any amounts paid under the award or other compensation to comply with such clawback policy or applicable laws.

- **No Tax Gross-ups.** The 2022 Plan does not provide for any tax gross-ups.
- **No Liberal Share Counting or Recycling.** Shares used to pay the exercise price or purchase price of an award granted under the 2022 Plan or to satisfy tax withholding obligations for an award granted under the 2022 Plan will not become available for future grant under the 2022 Plan.
- **Fungible Share Counting.** The 2022 Plan provides that each share issued pursuant to a full value award reduces the number of shares available for grant under the 2022 Plan by 1.15 shares.
- **Limited Transferability.** Awards under the 2022 Plan generally may not be sold, pledged, assigned, hypothecated, transferred, or disposed of in any manner, unless otherwise approved by the administrator (on such terms as the administrator deems appropriate) or required by applicable laws.
- **Reasonable Annual Limits on Non-Employee Director Compensation.** The 2022 Plan sets limits on the total compensation that a non-employee director may receive for service as a non-employee director during each fiscal year.
- **No Dividends on Unvested Awards.** No dividends or other distributions may be paid with respect to any shares underlying the unvested portion of an Award.
- **Minimum Vesting Requirement.** The 2022 Plan provides that Awards (other than cash-based Awards) may vest no earlier than the first anniversary of the grant date (or the date of commencement of employment or service, in the case of a grant made in connection with a participant's commencement of employment or service), subject to certain exceptions set forth in the 2022 Plan relating to (i) substituted awards, (ii) Shares delivered in lieu of fully vested cash obligations, (iii) Awards granted to non-employee directors that are not covered by clause (ii) above and that vest on the earlier of the one-year anniversary of the grant date and the day prior to the next Annual Meeting of Stockholders that occurs before such first anniversary, and (iv) Awards with respect to a maximum of 5% of the number of Shares authorized for issuance under the 2022 Plan.

Summary of the 2022 Plan

The following paragraphs summarize the principal features of the A&R 2022 Plan and its operation. However, this summary is not a complete description of the provisions of the A&R 2022 Plan and is qualified in its entirety by the specific language of the A&R 2022 Plan. A copy of the A&R 2022 Plan is provided as Annex A to this proxy statement.

Purpose of the 2022 Plan

We adopted the 2022 Plan to attract and retain the best available personnel for positions of substantial responsibility, to provide additional incentives to employees, directors and consultants, and to promote the success of our business. These incentives can be provided through the grant of stock options, stock appreciation rights, restricted stock, restricted stock units, performance units, and performance shares.

Shares Available for Issuance

Our stockholders are being asked to approve an increase in the number of shares available for issuance under the 2022 Plan by 1,775,000 shares. If we substitute equity awards for equity awards of acquired entities in connection with mergers, reorganizations, separations, or other transactions as described in the 2022 Plan, the grant of such substituted awards will not decrease the number of shares available for issuance under the 2022 Plan. Shares may be authorized, but unissued, or reacquired common stock. For purposes of the 2022 Plan, each share issued with respect to Awards, other than stock options or stock appreciation rights, will be counted against the aggregate share reserve as 1.15 shares. Each share issued with respect to a stock option or stock appreciation right will be counted against the aggregate share reserve as one share.

If an award granted under the 2022 Plan expires without having been exercised in full or is forfeited to or repurchased by us, then the expired, unexercised, forfeited, or repurchased shares subject to that award will become available for future grant or sale under the 2022 Plan. Upon exercise of a stock appreciation right settled in shares, the gross number of shares covered by the portion of the stock appreciation right so exercised will cease to be available under the 2022 Plan. Shares actually issued under the 2022 Plan under any award will not be returned to the 2022 Plan and will not become available for future grant or sale under the 2022 Plan; provided, however, that if unvested shares of restricted stock, restricted stock units, performance shares or performance units are repurchased by us or are forfeited to us, such shares will become available for future grant under the 2022 Plan. Shares used to pay the exercise price of an award or to satisfy tax withholding obligations related to an award will not become available for future grant or sale under the 2022 Plan. If an award is paid in cash rather than shares, such payment will not reduce the number of shares available for issuance under the 2022 Plan.

In the event of certain dividends or other distributions (whether in the form of cash, shares, other securities, or other property), recapitalization, stock split, reverse stock split, reorganization, merger, consolidation, split-up, spin-off, combination, repurchase or exchange of shares or other securities or other change in the corporate structure affecting our shares, the Plan administrator, in order to prevent diminution or enlargement of the benefits or potential benefits intended to be made available under the 2022 Plan, will adjust the number and class of shares that may be delivered under the 2022 Plan, and/or the number, class and price of shares of stock subject to outstanding awards, and the award grant limitations discussed above.

During the term of the 2022 Plan, we will at all times reserve and keep available a number of shares sufficient to satisfy the requirements of the 2022 Plan.

Limitations on Awards to Non-Employee Directors

The 2022 Plan also provides that no non-employee director may be paid compensation for service as a non-employee director in their capacity as a director that, in the aggregate, exceeds \$400,000 for any fiscal year of ours, increased to \$800,000 for the non-employee director for our fiscal year in which he or she joins our board of directors as a non-employee director. For these purposes, compensation includes equity awards (including any awards issued under the 2022 Plan), with the value of such equity awards measured based on their grant date fair value (determined under U.S. generally accepted accounting principles), and any other compensation (such as cash retainers or fees) for director service. Any award granted to a participant while he or she was an employee or a consultant (other than a non-employee director) will not count for this limitation.

Minimum Vesting Requirements

Any Awards that are payable in shares of our common stock under the 2022 Plan will vest no earlier than the first anniversary of the grant date of the Award (or the date of commencement of employment or service, in the case of a grant made in connection with a participant's commencement of employment or service), except that this limitation will not apply to: (i) substituted awards; (ii) shares of our common stock delivered in lieu of fully vested cash obligations; (iii) Awards granted to non-employee directors that are not covered by clause (ii) above and that vest on the earlier of the first anniversary of the grant date or the day prior to the next Annual Meeting of Stockholders that occurs before such first anniversary; and (iv) awards with respect to a maximum of 5% of the share reserved (subject to adjustment under the 2022 Plan). The administrator may also provide for accelerated vesting or exercisability of an award, including in connection with a participant's retirement, death, disability or in connection or following with a change in control.

Administration

Our Board, any committee of individuals satisfying applicable laws appointed by our Board, or any duly authorized committee of our Board will be the "administrator" of the 2022 Plan. Different administrators may administer the 2022 Plan with respect to different groups of service providers. To make grants to certain officers and key employees, the members of the committee must qualify as "non-employee directors" under Rule 16b-3 of the Securities Exchange Act of 1934, as amended (the "Exchange Act").

Subject to the terms of the 2022 Plan, the administrator has the authority to make any determinations and perform any actions that it deems necessary or advisable to administer the 2022 Plan, such as the authority to: determine the fair market value of a share, select the service providers who will receive awards; determine the number of shares covered by each award and the terms of each award; approve forms of award agreements for use with the 2022 Plan; interpret, modify or amend each award (subject to the repricing restrictions of the 2022 Plan), including to accelerate vesting or waive forfeiture restrictions; interpret the 2022 Plan; and delegate ministerial duties to any of our employees. The administrator may allow a participant to defer the receipt of payment of cash or delivery of shares otherwise due to such participant. The administrator may make rules and regulations relating to the 2022 Plan, including rules, regulations, and sub-plans to facilitate compliance with applicable non-U.S. laws, easing the administration of the 2022 Plan, and/or taking advantage of tax-favorable treatment of awards granted to service providers outside the U.S., and may make all other determinations deemed necessary or advisable for administering the 2022 Plan.

Eligibility

All types of awards, other than incentive stock options, may be granted to our non-employee directors and to employees and consultants of ours or any parent or subsidiary corporation of ours. Incentive stock options may be granted only to employees of ours or any parent or subsidiary corporation of ours. As of September 23, 2024, we had approximately nineteen employees (including one employee director), five non-employee directors and two consultants that would be eligible to participate in the 2022 Plan.

Stock Options

An option gives a participant the right to purchase a specified number of shares for a fixed exercise price during a specified period. Each option granted under the 2022 Plan will be evidenced by an award agreement specifying the number of shares subject to the option and the other terms of the option, consistent with the 2022 Plan.

The exercise price per share of each option may not be less than the fair market value of a share on the date of grant (except, in the case of a nonstatutory stock option, as otherwise required by applicable laws). However, any incentive stock option granted to a person who at the time of grant owns stock representing more than 10% of the total combined voting power of all classes of our stock or any parent or subsidiary corporation of ours (a “10% stockholder”) must have an exercise price per share equal to at least 110% of the fair market value of a share on the date of grant. The aggregate fair market value of the shares (determined on the grant date) covered by incentive stock options which first become exercisable by any participant during any calendar year also may not exceed \$100,000. For this purpose, the fair market value of a share is generally the closing sales price of our stock, as reported on the primary stock exchange on which it is traded. On September 23, 2024, the closing price of a share on Nasdaq was \$0.47.

Options will be exercisable at such times or under such conditions as determined by the administrator and set forth in the award agreement. When a participant’s service ends, the unvested portion of the participant’s option generally expires. The vested portion of the option will remain exercisable for the period following the end of the participant’s service that was determined by the administrator and specified in the participant’s award agreement, and if no such period was specified in the award agreement, the vested portion of the option will remain exercisable for: (i) three months following the end of the participant’s service provider status for reasons other than death or disability or (ii) 12 months following the end of the participant’s service provider status due to death or disability. In addition, a participant’s award agreement may provide for an extension of the post-service exercise period if the participant’s service ends for reasons other than his or her death or disability and the exercise of the option following the termination of service would result in liability under Section 16(b) of the Exchange Act or would violate the registration requirements under the Securities Act of 1933, as amended (the “Securities Act”).

The term of an option will be specified in the award agreement, but the term of an option may not be more than 10 years (or five years for an incentive stock option granted to a 10% stockholder).

The administrator will determine the acceptable form(s) of consideration for exercising an option. An option will be deemed exercised when we receive the notice of exercise and full payment for the shares to be exercised, together with any amounts necessary to satisfy withholding obligations for tax-related items. At any time after the grant of an

option, the administrator has the discretion to accelerate the time at which the option will vest or become exercisable.

Stock Appreciation Rights

A stock appreciation right gives a participant the right to receive the appreciation in the value of a share between the date an award is granted and the date it is exercised. Upon exercise of a stock appreciation right, the holder of the award will be entitled to receive an amount determined as the product of: (i) the difference between the fair market value of a share on the date of exercise and the exercise price per share and (ii) the number of shares covered by the exercised portion of the stock appreciation right. We may pay that amount in cash, shares, or a combination of both. Each stock appreciation right granted under the 2022 Plan will be evidenced by an award agreement specifying the exercise price and the other terms of the award.

The exercise price per share of each stock appreciation right may not be less than the fair market value of a share on the date of grant, unless otherwise required by applicable laws.

Stock appreciation rights will be exercisable at such times or under such conditions as determined by the administrator and set forth in the award agreement, but will in any event not have a term of greater than 10 years. The terms relating to the period of exercise of stock appreciation rights following the termination of a participant's service are similar to those for options described above. At any time after the grant of a stock appreciation right, the administrator has the discretion to accelerate the time at which the stock appreciation right will vest or become exercisable.

Restricted Stock Awards

Awards of restricted stock are rights to acquire or purchase shares that vest under the terms established by the administrator in its sole discretion. Unless the administrator provides otherwise, participants holding shares of restricted stock will have voting rights with respect to such shares without regard to vesting. After an award of restricted stock has been granted, the administrator has the discretion to reduce or waive any restrictions and to accelerate the time at which any restrictions will lapse or be removed.

Restricted Stock Units

A restricted stock unit represent a right to receive cash or shares if the performance goals or other vesting criteria set by the administrator are achieved or the restricted stock unit otherwise vests. Each award of restricted stock units granted under the 2022 Plan will be evidenced by an award agreement specifying the number of shares subject to the award and other terms of the award.

The administrator may set vesting conditions based upon the achievement of company-wide, divisional, business unit or individual goals (such as continued employment or service), applicable U.S. or non-U.S. federal or state securities laws, or any other basis determined by the administrator, in its discretion.

After an award of restricted stock units has been granted, the administrator has the discretion to reduce or waive any restrictions or vesting criteria that must be met to receive a payout or to accelerate the time at which any restrictions will lapse or be removed. A participant will forfeit any unearned restricted stock units on the date specified in the participant's award agreement. The administrator in its sole discretion may pay earned restricted stock units in cash, shares, or a combination of both.

Performance Units and Performance Shares

Performance units and performance shares are awards that will result in a payment to a participant only if performance goals established by the administrator are achieved or the awards otherwise vest. Performance units will have an initial value established by the administrator on or before the date of grant. Each performance share will have an initial value equal to the fair market value of a share on the grant date. Performance units and performance

shares will result in a payment to a participant only if the performance goals or other vesting criteria set by the administrator are achieved or the awards otherwise vest.

Each award of performance units or performance shares granted under the 2022 Plan will be evidenced by an award agreement specifying the performance period and other terms of the award. The administrator may set vesting criteria based upon the achievement of company-wide, divisional, business unit or individual goals (such as continued employment or service), applicable U.S. or non-U.S. federal or state securities laws, or any other basis determined by the administrator, in its discretion.

After an award of performance units or performance shares has been granted, the administrator has the discretion to accelerate, reduce or waive any performance objectives or other vesting provisions for such performance units or performance shares.

The administrator has the discretion to pay earned performance units or performance shares in the form of cash, shares (which will have an aggregate fair market value equal to the earned performance units or performance shares at the close of the performance period), or a combination of both.

A participant will forfeit any performance units or performance shares not earned and not vested as of the date specified in the participant's award agreement.

Transferability of Awards

Unless otherwise specified by the administrator or required by applicable laws, awards are not transferable other than by will or by the laws of descent or distribution. The administrator may permit an award to be transferred (i) under a domestic relations order, official marital settlement agreement, or other divorce or separation agreement, or (ii) to the extent permitted by Form S-8 under the Securities Act and any other applicable laws. Any individual or entity to whom an award is transferred will be subject to all of the terms and conditions applicable to the participant who transferred the award, including the terms and conditions in the 2022 Plan and the award agreement. If an award is unvested, then the service of the participant will continue to determine whether the award will vest and when it will terminate.

Dissolution or Liquidation

In the event of our proposed dissolution or liquidation, the administrator will notify each participant as soon as practicable prior to the effective date of such proposed transaction. An award will terminate immediately prior to consummation of such proposed action to the extent the award has not been previously exercised.

Merger or Change in Control

The 2022 Plan provides that, in the event of a merger or change in control, each award will be treated as the administrator determines without a participant's consent. The administrator will not be required to treat all awards, all awards held by a participant, all awards of the same type, or all portions of awards the same in the transaction.

If an option or stock appreciation right (or its applicable portion) is not assumed or substituted for, the administrator will notify the participant in writing or electronically that the option or stock appreciation right will be exercisable for a period of time determined by the administrator, in its sole discretion, and the option or stock appreciation right (or its applicable portion) will terminate upon the expiration of such period.

For awards granted to each of our non-employee directors, in the event of a change in control, (i) the non-employee director will fully vest in and have the right to exercise all of his or her outstanding options and stock appreciation rights, (ii) all restrictions on the non-employee director's restricted stock and restricted stock units will lapse, and (iii) with respect to the non-employee director's awards with performance-based vesting, all performance goals or other vesting criteria will be deemed achieved at target levels and all other terms and conditions will be deemed met, unless specifically provided otherwise under the applicable award agreement.

Forfeiture Events

Each award under the 2022 Plan and any other compensation paid or payable to a participant (including, but not limited to, equity awards issued outside of the 2022 Plan) will be subject to any clawback policy of ours, and the administrator also may specify in an award agreement that the participant's rights, payments and benefits regarding an award will be subject to reduction, cancellation, forfeiture, recoupment, reimbursement or reacquisition upon the occurrence of certain specified events. An award will be subject to the company's clawback policy in effect when the award is granted and any other clawback policy of ours as established and/or amended to comply with applicable laws (such as under the listing standards of any national securities exchange or association on which our securities are listed or as required by the Dodd-Frank Wall Street Reform and Consumer Protection Act). The administrator may require a participant to forfeit, return, or reimburse all or a portion of the award and any amounts paid under the award to comply with such clawback policy or applicable laws.

No recovery of compensation under a clawback policy or otherwise will constitute an event that triggers or contributes to any right of a participant to resign for "good reason" or "constructive termination" (or similar term) under any agreement with us or any of our parent or subsidiary corporations, unless the 2022 Plan provisions described in the prior paragraph specifically are mentioned and waived in an award agreement or other document.

Termination or Amendment

The administrator may amend, alter, suspend, or terminate the 2022 Plan at any time, provided that no amendment may be made without stockholder approval to the extent approval is necessary to comply with any applicable laws. No amendment, alteration, suspension, or termination may materially impair the rights of any participant with respect to his or her outstanding awards unless mutually agreed otherwise between the participant and the administrator. The 2022 Plan will continue until terminated by the administrator, but no incentive stock option may be granted after the tenth anniversary of the 2022 Plan's adoption by our board of directors.

Notwithstanding the prior paragraph, the Administrator may amend the terms of any one or more awards without an affected participant's consent even if it does materially impair the participant's rights, subject to the limitations of applicable laws, if any, if such amendment is done (i) in a manner expressly permitted under the 2022 Plan; (ii) to maintain the qualified status of the award as an incentive stock option under Section 422 of the Internal Revenue Code of 1986, as amended (the "Code"); (iii) to change the terms of an incentive stock option, if such change results in impairment of the award only because it impairs the qualified status of the award as an incentive stock option under Section 422 of the Code; (iv) to clarify the manner of exemption from, or to bring the award into compliance with, Section 409A of the Code; or (v) to comply with other applicable laws.

Summary of U.S. Federal Income Tax Consequences

The following summary is intended only as a general guide to the U.S. federal income tax consequences of participation in the 2022 Plan. The summary is based on existing U.S. laws and regulations, and there can be no assurance that those laws and regulations will not change. The summary is not complete and does not discuss the tax consequences upon a participant's death, or the income tax laws of any municipality, state, or non-U.S. country in which a participant may reside. Tax consequences for any particular participant may vary based on individual circumstances.

Incentive Stock Options

A participant recognizes no taxable income for regular income tax purposes because of the grant or exercise of an option that qualifies as incentive stock option under Section 422 of the Code. If a participant exercises the option and then later sells or otherwise disposes of the shares acquired through the exercise the option after both the two-year anniversary of the date the option was granted and the one-year anniversary of the exercise, the participant will recognize a capital gain or loss equal to the difference between the sale price of the shares and the exercise price.

However, if the participant disposes of such shares either on or before the two-year anniversary of the date of grant or on or before the one-year anniversary of the date of exercise (a "disqualifying disposition"), any gain up to the

excess of the fair market value of the shares on the date of exercise over the exercise price generally will be taxed as ordinary income. However, if the proceeds from the disqualifying disposition are less than the fair market value of the shares on the date of exercise, the amount of ordinary income recognized by the participant will not exceed the gain, if any, realized on the sale. Any gain in excess of the amount of ordinary income recognized by the participant will be a capital gain. If a loss is recognized, there will be no ordinary income, and such loss will be a capital loss. Any capital gain or loss will be long-term if the shares have been held for more than 12 months and otherwise will be short-term.

For purposes of the alternative minimum tax, the difference between the option exercise price and the fair market value of the shares on the exercise date is treated as an adjustment item in computing the participant's alternative minimum taxable income in the year of exercise. In addition, special alternative minimum tax rules may apply to certain subsequent disqualifying dispositions of the shares or provide certain basis adjustments or tax credits.

Nonstatutory Stock Options

A participant generally recognizes no taxable income as the result of the grant of a nonstatutory stock option. However, upon exercising the option with respect to any shares, the participant normally recognizes ordinary income equal to the amount that the fair market value of such shares on such date exceeds the exercise price for such shares. If the participant is an employee, such ordinary income generally is subject to withholding of income and employment taxes. Upon the sale of the shares acquired by exercising a nonstatutory stock option, any gain or loss (based on the difference between the sale price and the fair market value on the exercise date) will be taxed as capital gain or loss, long-term if the shares have been held for more than 12 months and otherwise short-term.

Stock Appreciation Rights

A participant generally recognizes no taxable income as the result of the grant of a stock appreciation right. However, upon exercising the stock appreciation right with respect to any shares, the participant normally recognizes ordinary income equal to the amount that the fair market value of such shares on such date exceeds the exercise price for such shares, regardless of whether the stock appreciation right is settled in cash or shares. If the participant is an employee, such ordinary income generally is subject to withholding of income and employment taxes. Upon the sale of the shares acquired by exercising a stock appreciation right, any gain or loss (based on the difference between the sale price and the fair market value on the exercise date) will be taxed as capital gain or loss, long-term if the shares have been held for more than 12 months and otherwise short-term.

Restricted Stock Awards

A participant acquiring shares of restricted stock generally will recognize ordinary income as the shares subsequently vest, in an amount equal to the excess of the fair market value of the shares on the vesting date over the purchase price paid by the participant for such shares (if any). If the participant is an employee, such ordinary income generally is subject to withholding of income and employment taxes. The participant may elect, under Section 83(b) of the Code, to accelerate the ordinary income tax event to the date of acquisition of the shares by filing an election with the Internal Revenue Service no later than thirty days after the date the shares are acquired. Upon the sale of shares acquired under a restricted stock award, any gain or loss, based on the difference between the sale price and the fair market value on the date the ordinary income tax event occurs, will be taxed as capital gain or loss, long-term, with respect to any share, if more than 12 months has elapsed since the share vested or, if the participant elected to accelerate income recognition to the date of acquisition, since the share was acquired, and otherwise short-term.

Restricted Stock Unit Awards

There are no immediate tax consequences of receiving an award of restricted stock units. A participant who is awarded restricted stock units generally will recognize ordinary income equal to the fair market value of shares issued to such participant at the end of the applicable vesting period or, if later, the settlement date elected by the administrator or a participant. If the participant is an employee, such ordinary income generally is subject to withholding of income. Any additional gain or loss recognized upon any later disposition of any shares received will be taxed as capital gain or loss, long-term if the shares have been held for more than 12 months and otherwise

short-term. Furthermore, regardless of when settlement occurs, the participant is subject to employment tax withholding on the date restricted stock units vest based on fair market value of the shares covered by such units on the date of vesting.

Performance Shares and Performance Unit Awards

Taxation of performance shares is the same as described above for restricted stock awards, and taxation of performance unit awards is the same as described above for restricted stock unit awards.

Section 409A

Section 409A provides certain requirements for non-qualified deferred compensation arrangements with respect to an individual's deferral and distribution elections and permissible distribution events. Awards granted under the 2022 Plan with a deferral feature will be subject to the requirements of Section 409A. If an award is subject to and fails to satisfy the requirements of Section 409A, the recipient of that award may recognize ordinary income on the amounts deferred under the award, when vested, which may be before the compensation is actually or constructively received. Also, if an award subject to Section 409A violates Section 409A's provisions, Section 409A imposes an additional 20% federal income tax on compensation recognized as ordinary income and potentially penalties and interest on such deferred compensation.

Tax Effect for Us

We generally will be entitled to a tax deduction in connection with an award under the 2022 Plan equal to the ordinary income realized by a participant when the participant recognizes such income (for example, the exercise of a nonstatutory stock option or the disqualifying disposition of shares acquired through the exercise of an incentive stock option) except to the extent such deduction is limited by applicable provisions of the Code. Special rules limit the deductibility of compensation paid to our chief executive officer and other "covered employees" as determined under Section 162(m) and applicable guidance. Under Section 162(m), the annual compensation paid to any of these specified executives will be deductible only to the extent that it does not exceed \$1,000,000.

THE SUMMARY ABOVE IS ONLY A SUMMARY OF THE EFFECT OF U.S. FEDERAL INCOME TAXATION ON PARTICIPANTS AND US WITH RESPECT TO AWARDS UNDER THE 2022 PLAN. IT IS NOT INTENDED TO BE COMPLETE AND MAY NOT DISCUSS THE IMPACT OF EMPLOYMENT OR OTHER TAX REQUIREMENTS, THE TAX CONSEQUENCES OF A PARTICIPANT'S DEATH, OR THE PROVISIONS OF THE INCOME TAX LAWS OF ANY MUNICIPALITY, STATE, OR NON-U.S. COUNTRY IN WHICH THE PARTICIPANT MAY RESIDE.

New Plan Benefits

The number of awards that a participant may receive under the A&R 2022 Plan is in the discretion of the Administrator and therefore cannot be determined in advance. For illustrative purposes only, the following table sets forth the aggregate number of shares subject to equity awards granted under the 2022 Plan during Fiscal 2024 to (i) our named executive officers, (ii) all current executive officers (including our Executive Chairman), as a group, (iii)

all directors who are not executive officers, as a group, and (iv) all employees who are not executive officers, as a group (even if not currently outstanding).

Name of Individual or Group and Position	Number of Shares Subject to Options	Weighted-Average Per Share Exercise Price	Number of Shares Subject to Stock Awards	Dollar Value of Shares Subject to Stock Awards ⁽¹⁾
Keith Murphy, Executive Chairman	—	\$ —	19,607	\$ 11,372
Tom Hess, Chief Financial Officer	—	\$ —	—	\$ —
Thomas Jurgensen, Former General Counsel and Corporate Secretary	—	\$ —	—	\$ —
Jeffrey Miner, Former Chief Scientific Officer	40,000	\$ 1.43	—	\$ —
All current executive officers, as a group (Two persons)	—	\$ —	19,607	\$ 11,372
All current directors who are not current executive officers, as a group (Five persons)	—	\$ —	98,035	\$ 56,860
All employees who are not current executive officers, as a group	110,911	\$ 1.80	—	\$ —

(1) Amounts reflect the fair value of the stock as of March 31, 2024, the last day of Fiscal 2024.

All future grants under the 2022 Plan are within the discretion of the Board and the benefits of such grants are, therefore, not determinable.

Equity Compensation Plan Information

The following table sets forth additional information with respect to the shares of common stock that may be issued upon the exercise of options and other rights under our existing equity compensation plans and arrangements in effect as of March 31, 2024. The information includes the number of shares covered by, and the weighted average exercise price of, outstanding options and the number of shares remaining available for future grant, excluding the shares to be issued upon exercise of outstanding options.

Plan category	(A) Number of securities to be issued upon exercise/vesting of outstanding options, warrants, units and rights	(B) Weighted-average exercise price of outstanding options, warrants, units and rights	(C) Number of securities available for future issuance under Equity Compensation Plans (excluding securities reflected in column (A))
Equity compensation plans approved by security holders ⁽¹⁾	770,649 ⁽²⁾	\$ 4.38	1,686,250 ⁽³⁾
Equity compensation plans not approved by security holders ⁽⁴⁾	50,000 ⁽⁵⁾	\$ 2.75	1,000 ⁽⁶⁾

(1) Includes the 2012 Plan, the 2022 Plan and the ESPP.

(2) Includes stock options to purchase 648,007 shares of common stock with a per share weighted-average exercise price of \$6.62. Also includes 122,642 restricted stock units with no exercise price.

(3) Includes 45,000 shares of common stock available for purchase under the ESPP as of March 31, 2024.

(4) Includes the 2021 Plan.

(5) Includes 50,000 stock options with a per share exercise price of \$2.75 granted pursuant to the 2021 Plan.

(6) Includes 1,000 shares of common stock reserved for issuance pursuant to the 2021 Plan.

Vote Required

If a quorum is present, the affirmative vote of a majority of the votes cast on this proposal at the Annual Meeting is required to approve the amendment and restatement of the 2022 Plan to increase the number of shares reserved for issuance thereunder by 1,775,000 shares. Abstentions and broker non-votes will each be counted as present for purposes of determining the presence of a quorum. Abstentions and broker non-votes will not be considered as votes cast for or against the proposal and will therefore have no effect on the outcome of the vote.

Board Recommendation

THE BOARD OF DIRECTORS UNANIMOUSLY RECOMMENDS THAT THE STOCKHOLDERS VOTE FOR THE APPROVAL OF THE AMENDMENT AND RESTATEMENT OF THE ORGANOVO HOLDINGS, INC. 2022 EQUITY INCENTIVE PLAN TO INCREASE THE NUMBER OF SHARES RESERVED FOR ISSUANCE THEREUNDER BY 1,775,000 SHARES.

PROPOSAL 5: APPROVAL OF THE REVERSE STOCK SPLIT

We are asking our stockholders to approve a third amendment to our Certificate of Incorporation (the “Amendment”) that would effect a reverse stock split of our issued and outstanding common stock at a ratio within the range of 1-for-5 and 1-for-20 (or any number in between), to be effected in the sole discretion of the Board at any time prior to November 20, 2025, without reducing the authorized number of shares of common stock and without further approval or authorization of our stockholders (the “Reverse Stock Split”).

Our Board, on September 9, 2024, unanimously adopted resolutions approving, declaring advisable and recommending to our stockholders for their approval the Amendment and the Reverse Stock Split.

The Reverse Stock Split will also affect outstanding options and warrants, as described in “—*Effects of the Reverse Stock Split on Outstanding Equity Awards and Plans*” and “—*Effects of the Reverse Stock Split on Outstanding Warrants*” below, respectively. Approval of this proposal will grant the Board the authority and sole discretion, without further action by our stockholders, to carry out the Reverse Stock Split any time after the approval of the Amendment but prior to November 20, 2025, the one-year anniversary of the Annual Meeting, with the exact exchange ratio and timing to be determined at the discretion of the Board and set forth in a public announcement. Even if our stockholders approve this proposal, our Board may determine in its discretion not to effect the Reverse Stock Split and to abandon the Amendment to implement the Reverse Stock Split prior to the time the Amendment is filed and becomes effective.

If the Board determines that effecting the Reverse Stock Split is in our best interest, the Reverse Stock Split will become effective upon the filing of the Amendment with the Secretary of State of the State of Delaware (the “Delaware Secretary of State”). The Amendment will set forth the number of shares to be combined into one share of common stock within the limits set forth in this proposal. Except for adjustments that may result from the treatment of fractional shares as described below, each stockholder will hold the same percentage of our outstanding common stock immediately following the Reverse Stock Split as such stockholder holds immediately prior to the Reverse Stock Split.

If the Board elects to effect the Reverse Stock Split, following stockholder approval, for Reverse Stock Split in the range of 1-for-5 to 1-for-20 (or any number in between), the number of issued and outstanding shares of common stock would be reduced in accordance with a reverse stock split ratio selected by the Board from among those set forth in this proposal. Except for adjustments that may result from the treatment of fractional shares as described below, each stockholder will hold the same percentage of outstanding common stock immediately following the Reverse Stock Split as such stockholder held immediately prior to the Reverse Stock Split. The par value of the common stock would remain unchanged at \$0.001 per share. The Reverse Stock Split would not change the number of authorized shares of common stock. There are currently no specific plans, arrangements, agreements or understandings for the issuance of the additional authorized but unissued and unreserved shares of common stock that would be created by the Reverse Stock Split.

The text of the proposed Amendment to effect the Reverse Stock Split is included as [Annex B](#). This text is subject to revision to include such changes as may be required by the Secretary of State of the State of Delaware and as our Board deems necessary and advisable to effect the Reverse Stock Split. Stockholders are urged to carefully read [Annex B](#).

Reasons for the Reverse Stock Split

Maintain our Listing on the Nasdaq Capital Market

Our common stock is currently listed on the Nasdaq Capital Market under the symbol “ONVO.” The continued listing requirements of the Nasdaq Capital Market require, among other things, that our common stock must maintain a minimum bid price of \$1.00 per share, as set forth in Nasdaq Listing Rule 5550(a)(2) (“Rule 5550(a)(2)”).

On July 28, 2024, we received a written notice (the “Notice”) from Listing Qualifications Staff of the Nasdaq Stock Market LLC (“Nasdaq”) indicating that, based upon the closing bid price of our common stock for the last 30

consecutive business days, we no longer met the requirement to maintain a minimum bid price of \$1 per share, as set forth in Rule 5550(a)(2).

In accordance with Nasdaq Listing Rule 5810(c)(3)(A), we have been provided with an initial period of 180 calendar days, or until January 14, 2025, to regain compliance. In order to regain compliance with the minimum bid price requirement, the closing bid price of our common stock must be at least \$1.00 per share for a minimum of ten consecutive business days within this 180-day period. The Notice provides that the Nasdaq staff will provide written confirmation to us if we regain compliance with Rule 5550(a)(2).

If we do not regain compliance with Rule 5550(a)(2) by January 14, 2025, we may be eligible for an additional compliance period of 180 calendar days. To qualify, we would be required to meet the continued listing requirement for market value of publicly held shares and all other initial listing standards for the Nasdaq Capital Market, with the exception of the bid price requirement, and would need to provide written notice to Nasdaq of our intention to cure the bid price deficiency during the second compliance period. However, if it appears to the Nasdaq staff that we will not be able to cure the deficiency, or if we are otherwise not eligible, Nasdaq would notify us that our securities will be subject to delisting. In the event of such a notification, we may appeal the Nasdaq staff's determination to delist its securities, but there can be no assurance the Nasdaq staff would grant any request for continued listing.

As of the date hereof, we have not regained compliance with the minimum bid price requirement since the closing bid price of the common stock has not been at least \$1.00 per share for a minimum of ten consecutive business days. To cure the deficiency, we may conduct the Reverse Stock Split for which we are seeking stockholder approval in this Proxy Statement. On September 23, 2024, the closing price of the common stock as reported on the Nasdaq Capital Market was \$0.47 per share.

Our Board determined that the continued listing of our common stock on the Nasdaq Capital Market is beneficial for our stockholders. Our Board believes that maintaining our listing on the Nasdaq Capital Market provides a broader market for the common stock and facilitates the use of the common stock in financing and other transactions. We expect the Reverse Stock Split, if effected, to facilitate the continuation of such listing. We cannot assure you, however, that the Reverse Stock Split, if effected, will result in an increase in the per share price of the common stock, or if it does, how long the increase would be sustained, if at all, or whether the increase will be proportional to the reverse stock split ratio.

If our stockholders approve the Reverse Stock Split Proposal, our Board in its sole discretion will determine whether to effect the Reverse Stock Split. Our Board reserves the right to elect not to effect a reverse stock split, including any or all reverse stock split ratios within the proposed range, if it determines, in its sole discretion, that implementing a reverse stock split is not in the best interest of the Company and its stockholders.

If our stockholders do not approve the Reverse Stock Split Proposal, the Company may be delisted from Nasdaq due to our failure to maintain a minimum bid price for the common stock of \$1.00 per share as required by Rule 5550(a)(2). Reducing the number of our issued and outstanding shares of common stock should, absent other factors, increase the per share market price of the common stock, although we cannot provide any assurance that, following the Reverse Stock Split, our minimum bid price would remain over the minimum bid price requirement of Nasdaq.

The Board has considered the potential harm to the Company and its stockholders should Nasdaq delist the common stock from the Nasdaq Capital Market. Delisting could adversely affect the liquidity of the common stock because alternatives, such as the OTCQB or the Pink Market maintained by OTC Markets Group Inc., are generally considered to be less liquid and less efficient markets. An investor likely would find it less convenient to sell, or to obtain accurate quotations in seeking to buy, the common stock on an over-the-counter market. Many investors likely would not buy or sell the common stock due to difficulty in accessing over-the-counter markets, policies preventing them from trading in securities not listed on a national exchange or other reasons. In addition, as a delisted security, the common stock would be subject to SEC rules as a "penny stock," which impose additional disclosure requirements on broker-dealers. The regulations relating to penny stocks, coupled with the typically higher cost per trade to the investor of penny stocks due to factors such as broker commissions generally representing a higher percentage of the price of a penny stock than of a higher-priced stock, would further limit the ability of investors to trade in the common stock. In addition, delisting could harm our ability to raise capital through alternative financing sources on terms acceptable to us, or at all, and may result in the potential loss of confidence by investors, suppliers, customers and employees and fewer business development opportunities. For these reasons

and others, delisting would adversely affect the liquidity, trading volume and price of the common stock, causing the value of an investment in us to decrease and having an adverse effect on our business, financial condition and results of operations, including our ability to attract and retain qualified employees and to raise capital. The Board believes that the Reverse Stock Split is a potentially effective means for us to maintain compliance with the rules of Nasdaq and to avoid, or at least mitigate, the likely adverse consequences of the common stock being delisted from Nasdaq by producing the immediate effect of increasing the bid price of the common stock.

Stock Price Volatility

We understand that a higher stock price may increase the acceptability of the common stock to investors who may not find shares of common stock attractive at the current market price due to the trading volatility often associated with stocks below certain prices.

Transaction Costs

Investors also may be dissuaded from purchasing stocks below certain prices because the brokerage commissions, as a percentage of the total transaction value, tend to be higher for such low-priced stocks.

Stock Price Requirements

We understand that many brokerage houses and institutional investors have internal policies and practices that either prohibit them from investing in low-priced stocks or tend to discourage individual brokers from recommending low-priced stocks to their customers or by restricting or limiting the ability to purchase such stocks on margin.

Effective Time of the Reverse Stock Split

If this proposal is approved and our Board determines to effect the Reverse Stock Split, the Reverse Stock Split would become effective on the date of the filing with the office of the Delaware Secretary of State of, and at the time specified in (the “Effective Time”), the Amendment. Except as explained above with respect to fractional shares, at the Effective Time, all shares of common stock issued and outstanding immediately prior thereto will be, automatically and without any action on the part of the stockholders, combined and converted into new shares of common stock in accordance with the reverse stock split ratio determined by the Board following the Annual Meeting. If the Board decides not to implement any of the Reverse Stock Split on or before November 20, 2025, further stockholder approval would be required prior to implementing any reverse stock split.

Board Discretion to Implement or Abandon the Reverse Stock Split

Our Board believes that stockholder approval of a range of Reverse Stock Split ratios (rather than a single exchange ratio) is in the best interests of our stockholders because it provides the Board with the flexibility to achieve the desired results of the Reverse Stock Split and because it is not possible to predict market conditions at the time the Reverse Stock Split would be implemented. If our stockholders approve this proposal, the Reverse Stock Split will be effected, if at all, only upon the Board’s determination that the Reverse Stock Split is in the best interests of our stockholders at that time.

Notwithstanding approval of the Reverse Stock Split by our stockholders, the Board may, in its sole discretion (without further action by our stockholders), abandon the proposed Amendment and determine, prior to the effectiveness of any filing with the Delaware Secretary of State, not to effect the Reverse Stock Split, as permitted under Section 242(c) of the General Corporation Law of the State of Delaware (the “DGCL”). By voting in favor of the Reverse Stock Split, you are also expressly authorizing the Board to determine not to proceed with, and to abandon, the Reverse Stock Split if it should so decide. If the Board decides not to implement any of the Reverse Stock Split on or before November 20, 2025, further stockholder approval would be required prior to implementing any reverse stock split.

In determining whether to proceed with the Reverse Stock Split, following receipt of stockholder approval, our Board may consider numerous factors including:

- the historical and projected performance of our common stock;
- our actual and projected financial performance;
- general economic and other related conditions prevailing in our industry and in the marketplace;
- the projected impact of the Reverse Stock Split ratio on trading liquidity in our common stock;

- our ability to maintain the listing of our common stock on the Nasdaq Capital Market;
- our market capitalization before and after the Reverse Stock Split;
- the per share price of the common stock immediately prior to the Reverse Stock Split; and
- the potential devaluation of our market capitalization as a result of the Reverse Stock Split.

Determination of the Reverse Stock Split Ratio

Our Board intends to select a reverse stock split ratio that it believes would be most likely to achieve the anticipated benefits of the Reverse Stock Split. The selection of the reverse stock split ratio will be based on several factors, including, among other factors:

- our ability to maintain the listing of our common stock on the Nasdaq Capital Market;
- the per share price of the common stock immediately prior to the Reverse Stock Split;
- the expected stability of the per share price of the common stock following the Reverse Stock Split;
- the likelihood that the Reverse Stock Split will result in increased marketability and liquidity of the common stock;
- the anticipated impact of the Reverse Stock Split on our ability to raise additional financing;
- which split ratio would result in the greatest overall reduction in our administrative costs;
- general economic conditions and other related conditions prevailing in our industry and in the marketplace; and
- our market capitalization before and after the Reverse Stock Split.

We believe that granting our Board the authority to set the ratio for the Reverse Stock Split is essential because it allows us to take these factors into consideration and to react to changing market conditions. If the Board chooses to implement the Reverse Stock Split, we will make a public announcement regarding the determination of the reverse stock split ratio.

Certain Risks and Potential Disadvantages Associated with the Reverse Stock Split

Before voting on this proposal, stockholders should consider the following risks associated with effecting the Reverse Stock Split:

- Although we expect that the Reverse Stock Split will result in an increase in the market price of our common stock, we cannot assure you that the Reverse Stock Split, if effected, will increase the market price of our common stock in proportion to the reduction in the number of shares of our common stock outstanding or result in a permanent increase in the market price. The effect that the Reverse Stock Split may have upon the market price of our common stock cannot be predicted with any certainty, and the history of similar reverse stock splits for companies in similar circumstances to ours is varied. The market price of our common stock is dependent on many factors, including our progress in our tissue development programs, business and financial performance, general market conditions, prospects for future growth and other factors detailed from time to time in the reports we file with the SEC. Accordingly, the total market capitalization of our common stock after the proposed Reverse Stock Split may be lower than the total market capitalization before the proposed Reverse Stock Split and, in the future, the market price of our common stock following the Reverse Stock Split may not exceed or remain higher than the market price prior to the proposed Reverse Stock Split.
- Even if our stockholders approve the Reverse Stock Split and the Reverse Stock Split is effected, there can be no assurance that we will continue to meet the continued listing requirements of the Nasdaq Capital Market.

- The Reverse Stock Split may result in some stockholders owning “odd lots” of less than 100 shares of common stock on a post-split basis. These odd lots may be more difficult to sell, or require greater transaction costs per share to sell, than shares in “round lots” of even multiples of 100 shares.
- Although the Reverse Stock Split will not, by itself, have any immediate dilutive effect on stockholders, the proportion of shares owned by stockholders relative to the number of shares authorized for issuance will decrease because the number of authorized shares of common stock would remain unchanged. As a result, additional authorized shares of common stock would become available for issuance at such times and for such purposes as the Board may deem advisable without further action by stockholders, except as required by applicable law or stock exchange rules. To the extent that additional authorized shares of common stock are issued in the future, such shares could be dilutive to existing stockholders of the Company by decreasing such stockholders’ percentage of equity ownership in the Company. See “—Potential Anti-Takeover Effect” below for more information on potential anti-takeover effects of the Reverse Stock Split.
- Although our Board believes that the decrease in the number of shares of common stock outstanding as a consequence of the Reverse Stock Split and the anticipated increase in the market price of common stock could encourage interest in our common stock and possibly promote greater liquidity for stockholders, such liquidity could also be adversely affected by the reduced number of shares outstanding after the Reverse Stock Split.
- The Reverse Stock Split may be viewed negatively by the market and, consequently, could lead to a decrease in our overall market capitalization. If the per share market price of the common stock does not increase in proportion to the reverse stock split ratio, then the value of the Company, as measured by our market capitalization, will be reduced.

Principal Effects of the Reverse Stock Split

Effects of the Reverse Stock Split on Issued and Outstanding Shares. If the Reverse Stock Split is effected, it will reduce the total number of issued and outstanding shares of the common stock, including any shares held by the Company as treasury shares, by a reverse stock split ratio of 1-for-5 to 1-for-20. Accordingly, each of our stockholders will own fewer shares of the common stock as a result of the Reverse Stock Split. However, the Reverse Stock Split will affect all stockholders uniformly and will not affect any stockholder’s percentage ownership interest in the Company, except to the extent that the Reverse Stock Split would result in an adjustment to a stockholder’s ownership of the common stock due to the treatment of fractional shares in the Reverse Stock Split. Therefore, voting rights and other rights and preferences of the holders of the common stock will not be affected by the Reverse Stock Split (other than as a result of the treatment of fractional shares). The common stock issued pursuant to the Reverse Stock Split will remain fully paid and nonassessable, and the par value per share of the common stock will remain \$0.001.

As of the Record Date, approximately 15,365,826 shares of the common stock were outstanding and no shares of our preferred stock, with par value of \$0.0001 per share (the “Preferred Stock”), were outstanding. For purposes of illustration, if the Reverse Stock Split is effected at a ratio of 1-for-5, the number of issued and outstanding shares of the common stock after the Reverse Stock Split would be approximately 3,073,165 shares (other than as a result of the treatment of fractional shares), and if the Reverse Stock Split is effected at a ratio of 1-for-20, the number of issued and outstanding shares of the common stock after the Reverse Stock Split would be approximately 768,291 shares (other than as a result of the treatment of fractional shares).

Effects of the Reverse Stock Split on Outstanding Warrants. As of the Record Date, the Company has outstanding (i) common warrants to purchase 6,562,500 shares of common stock, each of which entitle the holder to purchase one share of common stock (the “Common Warrants”) and (ii) pre-funded warrants to purchase 2,630,000 shares of common stock, each of which entitle the holder to purchase one share of common stock at an exercise price of \$0.001 per share (the “Pre-Funded Warrants”).

Pursuant to the terms of Common Warrants, the exercise price will be proportionately reduced and the number of shares of common stock issuable upon exercise of the Common Warrant will be proportionately increased, such that the aggregate exercise price of the Common Warrant shall remain unchanged. The Company will not issue fractional shares upon the exercise of the Common Warrants but rather the number of shares of common stock to be issued shall be rounded down to the nearest whole number.

Pursuant to the terms of the Pre-Funded Warrants, the exercise price shall be multiplied by a fraction of which the numerator shall be the number of shares of common stock (excluding treasury shares, if any) outstanding immediately before the Reverse Stock Split and of which the denominator shall be the number of shares of common stock outstanding immediately after the Reverse Stock Split, and the number of shares issuable upon exercise of the Pre-Funded Warrant shall be proportionately adjusted such that the aggregate exercise price of the Pre-Funded Warrant remains unchanged. The Company will not issue fractional shares upon exercise of the Pre-Funded Warrants but shall, at its election, either pay a cash adjustment in respect of such final fraction in an amount equal to such fraction multiplied by the exercise price (as adjusted) or round up to the next whole share of common stock.

Effects of the Reverse Stock Split on Outstanding Equity Awards and Plans. If the Reverse Stock Split is effected, the terms of equity awards granted under the 2012 Plan, the 2021 Plan, the 2022 Plan, our 2023 Employee Stock Purchase Plan (the “ESPP” and together with the 2012 Plan, the 2021 and the 2022 Plan, the “Equity Plans”), including the price per share covered by each outstanding award and the number of shares covered by each outstanding award will be proportionately adjusted to maintain their economic value, subject to adjustments for any fractional shares as described herein. In addition, the total number of shares of the common stock that may be the subject of future grants under the Equity Plans, as well as any plan limits on the size of such grants will be adjusted and proportionately decreased as a result of the Reverse Stock Split.

Effects of the Reverse Stock Split on Voting Rights. Proportionate voting rights and other rights of the holders of the common stock would not be affected by the Reverse Stock Split (other than as a result of the treatment of fractional shares). For example, a holder of 1% of the voting power of the outstanding common stock immediately prior to the effective time of the Reverse Stock Split would continue to hold 1% of the voting power of the outstanding common stock after the Reverse Stock Split (other than as a result of the treatment of fractional shares).

Effects of the Reverse Stock Split on Authorized Share Capital. The total number of shares of capital stock that we are authorized to issue will not be affected by the Reverse Stock Split and will remain at 225,000,000 shares, consisting of 200,000,000 shares of common stock and 25,000,000 shares of Preferred Stock.

Effects of the Reverse Stock Split on the Number of Shares of Common Stock Available for Future Issuance. By reducing the number of shares outstanding without reducing the number of shares of available but unissued common stock, the Reverse Stock Split will increase the number of authorized but unissued shares. The Board believes the increase is appropriate for use to fund the future operations of the Company. Although the Company does not have any pending acquisitions for which shares are expected to be used, the Company may also use authorized shares in connection with the financing of future acquisitions.

Although the Reverse Stock Split would not have any dilutive effect on our stockholders, the Reverse Stock Split without a reduction in the number of shares authorized for issuance would reduce the proportion of shares owned by our stockholders relative to the number of shares authorized for issuance, giving the Board an effective increase in the authorized shares available for issuance, in its discretion. The Board from time to time may deem it to be in the best interests of the Company to enter into transactions and other ventures that may include the issuance of shares of the common stock. If the Board authorizes the issuance of additional shares subsequent to the Reverse Stock Split, the dilution to the ownership interest of our existing stockholders may be greater than would occur had the Reverse Stock Split not been effected.

Illustration of Certain Hypothetical Effects of the Reverse Stock Split

The following table contains approximate information relating to the common stock, as of August 30, 2024, before and after giving effect to a hypothetical Reverse Stock Split of one-for-five (1-for-5), one-for-twelve (1-for-12) and one-for-twenty (1-for-20). However, the sample reverse stock split ratios in the table are examples. If stockholder approval of the proposed amendment is received, the Board will have the sole discretion, on or before November 20, 2025, to elect, as it determines to be in the best interests of the Company and its stockholders, whether to effect a reverse stock split and, if so, the number of shares —5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, and 20 -of the common stock — that will be combined into one share of the common stock. The table below does not include the 25,000,000 shares of Preferred Stock authorized (all of which are undesignated and none of which are outstanding) under the Certificate of Incorporation. The Reverse Stock Split would have no effect on our Preferred Stock. The figures below do not give effect to the treatment of fractional shares.

	Pre-Reverse Stock Split	Post-Reverse Stock Split		
		1-for-5	1-for-12	1-for-20
Number of authorized shares of common stock	200,000,000	200,000,000	200,000,000	200,000,000
Number of outstanding shares of common stock	15,364,076	3,072,815	1,280,329	768,203
Number of shares of common stock reserved for issuance upon exercise of outstanding stock options under the Company's equity plans	1,841,438	368,287	153,453	92,071
Number of shares of common stock reserved for issuance upon vesting of outstanding restricted stock units	239,034	47,806	19,919	11,951
Number of shares of common stock reserved for issuance for future awards under Company's equity plans	446,966	89,393	37,247	22,348
Number of shares of common stock reserved for issuance for future awards under our Employee Stock Purchase Plan	45,000	9,000	3,750	2,250
Number of shares reserved for issuance upon exercise of common warrants	6,562,500	1,312,500	546,875	328,125
Number of shares reserved for issuance upon exercise of pre-funded warrants	2,630,000	526,000	219,166	131,500
Number of authorized and unreserved shares of Common stock not outstanding	172,870,986	194,574,199	197,739,251	198,643,552

Potential Anti-Takeover Effect

An additional effect of the Reverse Stock Split would be to increase the relative amount of authorized but unissued shares of common stock, which may, under certain circumstances, be construed as having an anti-takeover effect. Although not designed or intended for such purposes, the effect of the increased available shares might be to make more difficult or to discourage an attempt to take over or otherwise acquire control of the Company (for example, by permitting issuances that would dilute the stock ownership of a person or entity seeking to effect a change in the composition of the Board or contemplating a tender offer or other change in control transaction). In addition, our Certificate of Incorporation and our Bylaws include provisions that may have an anti-takeover effect. These provisions, among things, permit the Board to issue preferred stock with rights senior to those of the common stock without any further vote or action by the stockholders, provide that special meetings of stockholders may only be called by our Board and some of our officers, and do not provide for cumulative voting rights, which could make it more difficult for stockholders to effect certain corporate actions and may delay or discourage a change in control.

Our Board is not presently aware of any attempt, or contemplated attempt, to acquire control of the Company and the Reverse Stock Split Proposal is not part of any plan by our Board to recommend or implement a series of anti-takeover measures.

Accounting Matters

The Reverse Stock Split will not affect the par value per share of common stock, which will remain unchanged at \$0.001 per share. The stockholders' equity, in the aggregate, will remain unchanged. At the effective time of the Reverse Stock Split, the stockholders' equity will reflect the following: (i) the stated capital on our balance sheet attributable to the common stock, which consists of the par value per share of the common stock multiplied by the aggregate number of shares of the common stock issued and outstanding, will be reduced in proportion to the ratio of the Reverse Stock Split; and (ii) correspondingly, the additional paid-in capital account, which consists of the difference between the stated capital and the aggregate amount paid upon issuance of all currently outstanding shares of common stock, will be credited with the amount by which the stated capital is reduced. After the Reverse Stock Split, net income or loss per share and the other per share amounts will be increased because there will be

fewer shares of our common stock outstanding. In future financial statements, net income or loss per share and other per share amounts for periods ending before the Reverse Stock Split would be recast to give retroactive effect to the Reverse Stock Split. Additional adjustments will be made to these accounts as a result of any rounding to avoid the existence of fractional shares.

Mechanics of the Reverse Stock Split

Exchange of Stock Certificates

As soon as practicable after the effective date of the Reverse Stock Split, stockholders will be notified that the Reverse Stock Split has been effected. Continental Stock Transfer & Trust Company, our transfer agent, will act as the exchange agent for purposes of implementing the exchange of stock certificates. Holders of pre-split shares of common stock will be asked to surrender to the exchange agent certificates representing pre-split shares of common stock in exchange for certificates representing post-split shares of common stock in accordance with the procedures to be set forth in a letter of transmittal that will be delivered to our stockholders. No new certificates will be issued to a stockholder until the stockholder has surrendered to the exchange agent his, her or its outstanding certificate(s) together with the properly completed and executed letter of transmittal. In connection with the Reverse Stock Split, the CUSIP number for the common stock will change from its current CUSIP number. This new CUSIP number will appear on any new stock certificates issued representing post-split shares. **STOCKHOLDERS SHOULD NOT DESTROY ANY STOCK CERTIFICATES AND SHOULD NOT SUBMIT THEIR STOCK CERTIFICATES UNTIL THEY RECEIVE A TRANSMITTAL FORM FROM OUR EXCHANGE AGENT. STOCKHOLDERS ARE ENCOURAGED TO PROMPTLY SURRENDER CERTIFICATES TO THE EXCHANGE AGENT FOLLOWING RECEIPT OF TRANSMITTAL FORMS IN ORDER TO AVOID HAVING SHARES POSSIBLY BECOMING SUBJECT TO ESCHATE LAWS.**

Stockholders whose shares of common stock are held by their stockbroker do not need to submit old share certificates for exchange. These shares will automatically reflect the new quantity of shares based on the selected reverse stock split ratio. Beginning on the effective date of the Reverse Stock Split, each certificate representing pre-split shares of common stock will be deemed for all corporate purposes to evidence ownership of post-split shares of common stock.

Effect on Registered "Book-Entry" Holders of Common Stock

Holders of common stock may hold some or all of their common stock electronically in book-entry form ("street name") under the direct registration system for securities. These stockholders will not have stock certificates evidencing their ownership. They are, however, provided with a statement reflecting the number of shares of common stock registered in their accounts. If you hold registered common stock in book-entry form, you do not need to take any action to receive your post-split shares, if applicable.

Treatment of Fractional Shares

No fractional shares will be issued in connection with the Reverse Stock Split. Stockholders of record who otherwise would be entitled to receive fractional shares will be entitled to an amount in cash (without interest or deduction) equal to the fraction of one share to which such stockholder would otherwise be entitled multiplied by the closing price of the Common Stock on the Nasdaq Capital Market on the last trading day immediately preceding the Effective Time. Except for the right to receive the cash payment in lieu of fractional shares, stockholders will not have any voting, dividend or other rights with respect to the fractional shares they would otherwise be entitled to receive.

As of the Record Date, there were approximately 84 stockholders of record of the common stock. Upon stockholder approval of the Reverse Stock Split Proposal, if the Board elects to implement the Reverse Stock Split, the Company does not expect that cashing out fractional stockholders would significantly reduce the number of stockholders of record. Reducing the number of post-split stockholders, however, is not the purpose of this proposal.

Stockholders should be aware that, under the escheat laws of the various jurisdictions where stockholders may reside, where we are domiciled, and where the funds will be deposited, sums due for fractional interests that are not timely claimed after the effective date of the Reverse Stock Split may be required to be paid to the designated agent for each such jurisdiction, unless correspondence has been received by us or the exchange agent concerning

ownership of such funds within the time permitted in such jurisdiction. Thereafter, stockholders otherwise entitled to receive such funds will have to seek to obtain them directly from the state to which they were paid.

With respect to awards granted under the Equity Plans, the number of shares of the common stock issuable thereunder will be rounded down to the nearest whole share of the common stock, in order to comply with the requirements of Sections 409A and 424 of the U.S. Internal Revenue Code of 1986, as amended (the “Code”).

No Dissenters’ or Appraisal Rights

Under the DGCL, our stockholders do not have a right to dissent and are not entitled to appraisal rights with respect to the proposed Amendment to the Certificate of Incorporation to effect the Reverse Stock Split, and we will not independently provide our stockholders with any such right.

Regulatory Approvals

The Reverse Stock Split will not be consummated, if at all, until after approval of our stockholders is obtained. We are not obligated to obtain any governmental approvals or comply with any state or federal regulations in order to effect the Reverse Stock Split other than the filing of the applicable certificate of amendment to the Certificate of Incorporation with the Secretary of State of the State of Delaware and receipt of a notice of effectiveness from the Financial Industry Regulatory Authority.

U.S. Federal Income Tax Considerations

The following discussion is a general summary of certain U.S. federal income tax consequences of the proposed Reverse Stock Split that may be relevant to U.S. holders and non-U.S. holders (each as defined below) of the common stock, but does not purport to be a complete analysis of all potential tax effects. The effects of other U.S. federal tax laws, such as estate and gift tax laws, and any applicable state, local or non-U.S. tax laws are not discussed. This discussion is based on the Code, Treasury regulations promulgated thereunder (the “Treasury Regulations”), judicial decisions, and published rulings and administrative pronouncements of the U.S. Internal Revenue Service (the “IRS”), in each case in effect as of the date hereof. These authorities may change or be subject to differing interpretations. Any such change or differing interpretation may be applied retroactively in a manner that could adversely affect a holder of the common stock. We have not sought and will not seek an opinion of counsel or any rulings from the IRS regarding the matters discussed below. There can be no assurance that the IRS or a court will not take a contrary position to that discussed below regarding the tax consequences of the proposed Reverse Stock Split.

This discussion is limited to holders that hold the common stock as “capital assets” within the meaning of Section 1221 of the Code (generally, property held for investment). This discussion does not address all U.S. federal income tax consequences relevant to a holder’s particular circumstances, including the impact of the Medicare contribution tax on net investment income or the alternative minimum tax. In addition, it does not address consequences relevant to holders subject to special rules, including, without limitation: persons that are not U.S. holders (as defined below); persons subject to the alternative minimum tax; U.S. holders (as defined below) whose functional currency is not the U.S. dollar; persons holding the common stock as part of a hedge, straddle or other risk reduction strategy or as part of a conversion transaction or other integrated investment; banks, insurance companies, and other financial institutions; real estate investment trusts or regulated investment companies; brokers, dealers or traders in securities; corporations that accumulate earnings to avoid U.S. federal income tax; S corporations, partnerships or other entities or arrangements treated as partnerships or pass-through entities for U.S. federal income tax purposes (and investors therein); tax-exempt organizations or governmental organizations; persons deemed to sell the common stock under the constructive sale provisions of the Code; persons who hold or receive the common stock pursuant to the exercise of any employee stock option or otherwise as compensation; tax-qualified retirement plans; and holders that hold or have held, directly, indirectly or constructively pursuant to attribution rules, more than 5% of the shares of common stock at any time during the five-year period ending on the date of the consummation of the Reverse Stock Split.

If an entity treated as a partnership for U.S. federal income tax purposes holds the common stock, the tax treatment of a partner in the partnership will depend on the status of the partner, the activities of the partnership and certain determinations made at the partner level. Accordingly, partnerships holding the common stock and the partners in such partnerships should consult their tax advisors regarding the U.S. federal income tax consequences to them.

THIS DISCUSSION IS FOR INFORMATIONAL PURPOSES ONLY AND IS NOT INTENDED AS TAX ADVICE. HOLDERS OF THE COMMON STOCK SHOULD CONSULT THEIR TAX ADVISORS WITH RESPECT TO THE APPLICATION OF THE U.S. FEDERAL INCOME TAX LAWS TO THEIR PARTICULAR SITUATIONS AS WELL AS ANY TAX CONSEQUENCES OF THE REVERSE STOCK SPLIT ARISING UNDER OTHER U.S. FEDERAL TAX LAWS (INCLUDING ESTATE AND GIFT TAX LAWS), UNDER THE LAWS OF ANY STATE, LOCAL OR NON-U.S. TAXING JURISDICTION OR UNDER ANY APPLICABLE TAX TREATY.

Tax Consequences to U.S. Holders

For purposes of this discussion, a “U.S. holder” is a beneficial owner of the common stock who is for U.S. federal income tax purposes: (i) an individual who is a citizen or resident of the United States; (ii) a corporation (or other entity treated as a corporation for U.S. federal income tax purposes) created or organized under the laws of the United States, any state thereof, or the District of Columbia; (iii) an estate, the income of which is subject to U.S. federal income taxation regardless of its source; or (iv) a trust (a) the administration of which is subject to the primary supervision of a U.S. court and that has one or more United States persons that have the authority to control all substantial decisions of the trust or (b) that has made a valid election under applicable Treasury Regulations to be treated as a United States person. The proposed Reverse Stock Split is expected to be treated as a recapitalization for U.S. federal income tax purposes. Therefore, except as described below with respect to cash received in lieu of fractional shares, no gain or loss will be recognized upon the proposed reverse stock split. Accordingly, the aggregate tax basis of the U.S. holder in the new shares should equal the U.S. holder’s aggregate tax basis in its pre-split shares of the common stock (excluding the portion of the tax basis that is allocable to any fractional share), and the holding period for the post-split shares of common stock should include the holding period for the pre-split shares of common stock. Holders of shares of the 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 treatment of a U.S. holder who receives cash in lieu of a fractional share of the common stock pursuant to the proposed Reverse Stock Split is unclear. Such U.S. holder may recognize capital gain or loss in an amount equal to the difference between the amount of cash received and the portion of the U.S. holder’s tax basis in the pre-split shares of common stock that is allocated to such fractional share of the common stock. Such capital gain or loss will be long-term capital gain or loss if the U.S. holder has held the pre-split shares of common stock for more than one year as of the effective date of the proposed Reverse Stock Split. The deductibility of capital losses is subject to limitations. However, cash received by a U.S. holder in lieu of fractional shares could be treated as a dividend for U.S. federal income tax purposes instead of capital gain. We recommend that U.S. holders of our common stock consult their own tax advisors to determine the extent to which their receipts of cash in lieu of fractional shares could be treated as dividends.

Payments of cash made in lieu of a fractional share of the common stock may, under certain circumstances, be subject to information reporting and U.S. “backup withholding.” To avoid backup withholding, each holder of our shares of the common stock that does not otherwise establish an exemption should furnish its taxpayer identification number and comply with the applicable certification procedures. Backup withholding is not an additional tax and any amounts withheld will be allowed as a credit against the holder’s U.S. federal income tax liability and may entitle such holder to a refund, provided that required information is timely furnished to the IRS.

Tax Consequences to Non-U.S. Holders

Generally, a beneficial owner of our common stock that is neither a U.S. holder nor a partnership (or an entity treated as a partnership for U.S. federal income tax purposes) (a “non-U.S. holder”) should not recognize any gain or loss upon the Reverse Stock Split.

The treatment of a non-U.S. holder who receives cash in lieu of a fractional share of the common stock pursuant to the proposed Reverse Stock Split is unclear. If such non-U.S. holder were to recognize capital gain or loss such gain or loss should also generally not be subject to U.S. federal income or withholding tax unless (a) such gain or loss is effectively connected with the non-U.S. holder’s conduct of a trade or business in the United States (and, if required by an applicable income tax treaty, is attributable to a U.S. permanent establishment maintained by the non-U.S. holder), (b) the non-U.S. holder is a nonresident alien individual present in the United States for 183 days or more during the taxable year of the Reverse Stock Split and certain other conditions are met, or (c) our common stock constitutes a U.S. real property interest by reason of our status as U.S. real property holding corporation (“USRPHC”) for U.S. federal income tax purposes at any time within the shorter of the five-year period preceding

the Reverse Stock Split and the non-U.S. holder's holding period for our common stock. However, because the determination of whether we are a USRPHC depends on the fair market value of our U.S. real property interests relative to the fair market value of our other business assets, there can be no assurance that we are not or were not at any time a USRPHC. Gain described in clause (a) above generally will be subject to U.S. federal income tax on a net income basis in the same manner as if the non-U.S. holder were a U.S. holder. A non-U.S. holder that is a foreign corporation also may be subject to a branch profits tax at a rate of 30% (or such lower rate specified by an applicable income tax treaty) on such effectively connected gain, as adjusted for certain items. A non-U.S. holder described in clause (b) above will be subject to U.S. federal income tax at a rate of 30% (or, if applicable, a lower treaty rate) on the gain realized with respect to cash received in lieu of a fractional share, which may be offset by certain U.S. source capital losses, even though the non-U.S. holder is not considered a resident of the United States. With respect to clause (c) above, if we are a USRPHC, a Non-U.S. holder may qualify for an exemption if our common stock is regularly traded on an established securities market and the non-U.S. holder does not actually or constructively hold more than 5% of such regularly traded common stock at any time within the shorter of the five-year period preceding the Reverse Stock Split and the non-U.S. holder's holding period for our common stock. If no exemption is available and we are a USRPHC, a Non-U.S. holder's cash received in lieu of a fractional share will generally be subject to withholding at a rate of 15% and such Non-U.S. holder will generally be taxed on any gain in the same manner as gain that is effectively connected with the conduct of a U.S. trade or business, except that the branch profits tax generally should not apply to such gain. Non-U.S. holders should consult with their tax advisors on the availability of any exemption in the event we are or become a USRPHC. However, cash received by a non-U.S. holder in lieu of fractional shares could be treated as a dividend for U.S. federal income tax purposes (which could be subject to U.S. federal income or withholding tax) instead of capital gain. Non-U.S. holders of our common stock should consult their own tax advisors to determine the extent to which their receipts of cash in lieu of fractional shares could be treated as dividends.

In general, backup withholding and information reporting will not apply to payments of cash in lieu of a fractional share of our common stock to a non-U.S. holder pursuant to the Reverse Stock Split if the non-U.S. holder certifies under penalties of perjury that it is a non-U.S. holder, and the applicable withholding agent does not have actual knowledge to the contrary. Under certain circumstances the amount of cash paid to a non-U.S. holder in lieu of a fractional share of our common stock, the name and address of the beneficial owner and the amount, if any, of tax withheld may be reported to the IRS.

Vote Required

If a quorum is present, the affirmative vote of a majority of the votes cast on this proposal at the Annual Meeting is required to approve an amendment to the Company's Certificate of Incorporation, as amended, to effect, in the sole discretion of the Board at any time on or before November 20, 2025, a reverse stock split of the Company's common stock, at a ratio to be determined by the Board within a range of 1-to-5 to 1-to-20 (or any number in between), without reducing the authorized number of shares of Company's common stock and without further approval or authorization of our stockholders. Abstentions will be counted as present for purposes of determining the presence of a quorum but will not be considered as votes cast for or against the proposal and will therefore have no effect on the outcome of the vote.

Board Recommendation

THE BOARD OF DIRECTORS UNANIMOUSLY RECOMMENDS THAT THE STOCKHOLDERS VOTE FOR THE APPROVAL OF THE AMENDMENT TO THE SECOND AMENDED AND RESTATED CERTIFICATE OF INCORPORATION, AS AMENDED, TO EFFECT, IN THE SOLE DISCRETION OF THE BOARD OF DIRECTORS, AT ANY TIME ON OR BEFORE NOVEMBER 20, 2024, A REVERSE STOCK SPLIT OF THE COMMON STOCK AT A RATIO TO BE DETERMINED BY THE BOARD OF DIRECTORS, WITHIN A RANGE OF 1-FOR-5 TO 1-FOR-20 (OR ANY NUMBER IN BETWEEN), WITHOUT REDUCING THE AUTHORIZED NUMBER OF SHARES OF THE COMMON STOCK, AND WITHOUT FURTHER APPROVAL OR AUTHORIZATION OF OUR STOCKHOLDERS.

BOARD OF DIRECTORS INFORMATION

Our Board of Directors is comprised of six directors. Our Board is divided into three classes, with one class standing for election each year for a three-year term. There are currently two Class I directors, two Class II directors, and two Class III directors. Our Class I directors, whose term will expire at our Annual Meeting, are Alison Tjosvold Milhous and Vaidehi Joshi.

The Board has nominated Alison Tjosvold Milhous and Vaidehi Joshi for election at the Annual Meeting as Class I directors, for a three-year term expiring at the 2027 Annual Meeting of Stockholders. Directors are elected by a plurality of the votes cast on this proposal at the Annual Meeting. Because this is an uncontested election of directors, each of Ms. Milhous and Ms. Joshi will be elected to the Board under the plurality voting standard if she receives any vote “FOR” her election. Each of Ms. Milhous and Ms. Joshi have indicated her willingness to serve if elected, but if either should be unable or unwilling to stand for election, the shares represented by proxies may be voted for a substitute as the Board may designate, unless a contrary instruction is indicated in the proxy. However, pursuant to the Company’s corporate governance guidelines, in an uncontested election, if a nominee receives a greater number of votes “withheld” than votes “for” such nominee’s election, then such nominee must tender such nominee’s resignation to the Board. The Nominating and Corporate Governance Committee will then determine whether the Board should accept or reject such director nominee’s resignation and will submit a recommendation to the Board for prompt consideration by the Board. The Board will then review the Nominating and Corporate Governance Committee’s recommendation and accept or reject the director nominee’s resignation within 100 days following certification of the stockholder vote for the Annual Meeting.

In addition to the information set forth below regarding our directors and our director nominees and the skills that led our Board to conclude that these individuals should serve as directors, we also believe that all of our directors and director nominees have a reputation for integrity, honesty and adherence to the highest ethical standards. We believe they each have demonstrated business acumen and an ability to exercise sound judgment, as well as a commitment of service to our Company and to their Board duties.

Information About Our Directors

The following sets forth information regarding the business experience of our director nominees and our current directors:

<u>Name</u>	<u>Age⁽¹⁾</u>	<u>Position(s)</u>	<u>Director Class</u>
Keith Murphy	52	Director and Executive Chairman	Class III
Adam Stern	60	Director	Class III
Douglas Jay Cohen	53	Lead Independent Director	Class II
David Gobel	71	Director	Class II
Alison Tjosvold Milhous	45	Director	Class I
Vaidehi Joshi	38	Director and Director of Discovery Biology	Class I

(1) As of August 20, 2024.

Board Diversity Matrix

The table below provides an enhanced disclosure regarding the diversity of our Board members and nominees. Each of the categories listed in the below table has the meaning as it is used in Nasdaq Rule 5605(f).

Board Diversity Matrix (As of August 20, 2024)				
Board Size:				
Total Number of Directors	6			
	Female	Male	Non-Binary	Did Not Disclose Gender
Gender Identity:				
Directors	2	2	0	2
Number of Directors who Identify in any of the Categories Below:				
African American or Black	0	0	0	0
Alaskan Native or Native American	0	0	0	0
Asian	1	0	0	0
Hispanic or Latinx	0	0	0	0
Native Hawaiian or Pacific Islander	0	0	0	0
White	1	2	0	0
Two or More Races or Ethnicities	0	0	0	0
LGBTQ+	0	0	0	0
Did Not Disclose Demographic Background	0	0	0	2

Nominees as Class I Directors Continuing in Office Until the 2027 Annual Meeting of Stockholders

Alison Tjosvold Milhous, Director, has served on our Board since September 2020. She has 20 years of audit and technical accounting experience and is a certified public accountant. She is currently the Vice President of Accounting at Erasca, Inc., a clinical-stage precision oncology company. Prior to joining Erasca, she was an independent consultant assisting public and private companies with accounting and reporting needs primarily within the life sciences and technology industries. Ms. Milhous was previously an audit partner at Grant Thornton LLP from August 2015 through September 2019 and held various positions with increasing responsibility at Grant Thornton from June 2002 as an audit associate through July 2015 as an audit senior manager. She began her career in June 2000 at Arthur Andersen LLP. Ms. Milhous received a Bachelor of Science degree in Business Administration with a dual concentration in Accounting and Finance from California State Polytechnic University, San Luis Obispo.

We believe Ms. Milhous’ extensive financial and accounting experience and her experience providing audit and consulting services to life sciences companies qualify her to serve as a member of our Board.

Vaidehi Joshi, Director, has served on our Board since March 2022 and as our Director of Discovery Biology since April 2022. Ms. Joshi has over a decade of experience in early-stage biotech companies developing unique therapeutic solutions, cutting-edge research products, and cell-based therapies. Since November 2020, Ms. Joshi has

served as Director of Discovery Biology at Viscient Biosciences, Inc., where she leads the MASH small molecule drug discovery program as well as 3D model development for other tissue programs. Prior to joining Viscient, Ms. Joshi worked her way up at Organovo, Inc., where she led the pre-clinical research program for the design, development, and manufacture of 3D bioprinted therapeutic human liver tissues targeted towards the treatment of inborn errors of metabolism and genetic diseases. She received her Bachelor of Engineering in Biotechnology at the Rashtriya Vidyalaya College of Engineering (RVCE) in Bangalore, India and received a Master of Science in Biomedical Engineering from University of California, Los Angeles (UCLA), with a specialization in Tissue Engineering and Biomaterials. While at UCLA, her focus was on primary intestinal epithelial stem cell isolations and 3D cultures for intestinal tissue regeneration for short gut syndrome. Ms. Joshi is an experienced speaker, panelist, and presenter at several biomedical conferences both in the U.S and internationally. Ms. Joshi has co-authored several published peer reviewed articles, and is an inventor on multiple Organovo patents and patent applications.

We believe Ms. Joshi's extensive scientific background, previous experience in the biotechnology field, and her educational experience qualify her to serve as a member of our Board.

Class II Directors Continuing in Office Until the 2025 Annual Meeting of Stockholders

Douglas Jay Cohen, Lead Independent Director, has served on our Board since September 2020 and has served as our Lead Independent Director since September 2022. He has served as president and Chief Executive Officer of IR Medtek LLC since January 2019, a medical device company developing a non-invasive probe for cancer detection by primary care physicians using a technology licensed from the Ohio State University. Prior to IR Medtek, Mr. Cohen served as President and Chief Executive Officer of Beacon Street Innovations, an advanced technology printing company from September 2016 to present. From January 1994 to September 2016, Mr. Cohen served as Vice President of Operations and Engineering at Screen Machine Industries, an industrial and construction heavy equipment manufacturer. As an active investor in startup companies, Mr. Cohen has invested in more than 20 biotech startups in the past 10 years, including investing in Organovo in 2013 and maintaining a position in the company ever since. Mr. Cohen received a B.S. from the Massachusetts Institute of Technology.

We believe Mr. Cohen's experience in the life sciences industry, his experience in managing emerging growth companies and his experience in developing business strategies qualifies him to serve as a member of our Board.

David Gobel, Director, has served on our Board since September 2020. He has served as Chief Executive Officer of Methuselah Fund LLC since December 2016 and as Chief Executive Officer of Methuselah Foundation since September 2001, promoting increasing the healthy human lifespan by various means including: performance prizes, targeted grant making, education, and the creation/funding of biotech startups. Mr. Gobel became Chief Venture Strategist at Transportation Security Administration from January 2009 until March 2013, where he was responsible for strategic planning, innovation management and creation of a novel Venture Capital capability for TSA and then Department of Homeland Security by partnering with In-Q-Tel. Mr. Gobel was a member of the board of Volumetric Biotechnologies, a company that focuses on the development of bioholographic human tissue printing, from April 2018 to January 2020. Since July 2018, Mr. Gobel served as member of the board for Turn Bio, and since May 2020 as chairman of the board of Turn Bio. Mr. Gobel served as a board member of Leucadia Therapeutics from October 2015 to August 2022, and as an independent founding board member of Oisin Therapeutics since December 2014.

We believe Mr. Gobel's previous services as chief executive officer for other biotechnology companies, his experience and expertise with human tissue printing companies and his extensive board experience qualify him to serve as a member of our Board.

Class III Directors Continuing in Office Until the 2026 Annual Meeting of Stockholders

Keith Murphy, Director and Executive Chairman, re-joined our Board in July 2020 and has served as our Executive Chairman since September 2020. Mr. Murphy is the Chief Executive Officer and Chairman of Viscient Biosciences, Inc. ("Viscient"), a private company that he founded in 2017 that is focused on drug discovery and development utilizing 3D tissue technology and multi-omics (genomics, transcriptomics, metabolomics). Mr. Murphy previously served as the President and Chief Executive Officer of Organovo from February 2012 through

April 2017, and as Chairman from February 2012 through August 2017. Mr. Murphy also previously served as President, Chief Executive Officer, and Chairman of Organovo, Inc., Organovo's primary operating company prior to its going-public transaction, from August 2007 to February 2012. Prior to founding Organovo, Mr. Murphy served in various roles at Amgen, Inc. from August 1997 to July 2007 including as Global Operations Leader for the osteoporosis/bone cancer drug Prolia/Xgeva (denosumab). Prior to joining Amgen, Mr. Murphy served at Alkermes, Inc., a biotechnology company, from July 1993 to July 1997, where he played a role on the development team for their first approved product, Nutropin (hGH) Depot. Mr. Murphy served as a member of the board of directors of Kintara Therapeutics, Inc. from August 2020 to February 2022, and served on its compensation committee and nominating and corporate governance committee. He holds a B.S. in Chemical Engineering from MIT and is an alumnus of the UCLA Anderson School of Management.

We believe Mr. Murphy's previous experience in the biotechnology field, especially in developing novel products, his experience and expertise with our 3D bioprinting technology and product development opportunities and strategy, and his educational experience qualify him to be a member of our Board of Directors.

Adam Stern, Director, re-joined our Board in July 2020. Mr. Stern is currently the Chief Executive Officer of SternAegis Ventures, the private equity group at Aegis Capital Corp. responsible for venture capital and private equity financing, and has been the Head of Private Equity Banking at Aegis Capital Corp., a full-service investment banking firm, since December 2012. Prior to SternAegis, Mr. Stern served as Senior Managing Director at Spencer Trask Ventures, Inc., a private equity and venture firm, from 1997 to 2012, where he managed the structured finance group focusing primarily on technology and life sciences companies. From 1989 to 1997, Mr. Stern was at Josephthal & Co., Inc., Members of the New York Stock Exchange, where he served as Head of Private Equity and Managing Director. He has been a FINRA licensed securities broker since 1987 and a Registered General Securities Principal since 1991. Mr. Stern previously served as a director of Organovo from February 2012 to June 2013. Mr. Stern is a current director at DarioHealth Corp. (Nasdaq: DRIO), privately held Amplifica Holdings, Group, Inc., and Aerami Therapeutics Holdings Inc. Mr. Stern is a former director of Adgero Biopharmaceuticals Holdings, Matinas BioPharma Holdings, Inc. (NYSE: MTNB), Hydrofarm Holdings Group Inc. (Nasdaq: HYFM), InVivo Therapeutics, Inc. (Nasdaq: NVIV) and PROLOR Biotech prior to its sale in 2013 to Opko Health, Inc. (Nasdaq: OPK). Mr. Stern graduated with a Bachelor of Arts degree from the University of South Florida in 1987.

We believe Mr. Stern's extensive experience in corporate finance, his expertise in the life sciences industries and his previous experience as a member of our Board qualify him to be a member of our Board of Directors.

No Family Relationships

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

CORPORATE GOVERNANCE

Overview

We are committed to maintaining high standards of business conduct and corporate governance, which we believe are fundamental to the overall success of our business, serving our stockholders well and maintaining our integrity in the marketplace. Our Corporate Governance Guidelines and Code of Business Conduct, together with our Certificate of Incorporation, Bylaws and the charters of our Board committees (as applicable), form the basis for our corporate governance framework. As discussed below, our Board has established four standing committees to assist it in fulfilling its responsibilities to the Company and its stockholders: the Audit Committee, the Compensation Committee, the Nominating and Corporate Governance Committee of the Board (the “Nominating and Corporate Governance Committee”) and the Science and Technology Committee of the Board (the “Science and Technology Committee”). The references to our website address below do not constitute incorporation by reference of the information contained at or available on our website.

Corporate Governance Guidelines

Our corporate governance guidelines (the “Corporate Governance Guidelines”) are designed to facilitate the effective corporate governance of our Company. Our Corporate Governance Guidelines cover topics including, but not limited to, director qualification criteria, director responsibilities, director compensation, director orientation and continuing education, communications from stockholders to the Board, succession planning and the annual evaluations of the Board and its committees. Our Corporate Governance Guidelines are reviewed periodically by the Nominating and Corporate Governance Committee and amended by our Board when appropriate. The full text of our Corporate Governance Guidelines is available on our website at www.organovo.com.

Code of Business Conduct

We have adopted the Organovo Holdings, Inc. Code of Business Conduct (the “Code of Business Conduct”) that applies to all of our officers, directors, employees and consultants. Among other matters, our Code of Business Conduct is designed to deter unlawful or unethical behavior and to promote the following:

- Prohibiting conflicts of interest (including protecting corporate opportunities);
- Protecting our confidential and proprietary information and that of our customers and vendors;
- Treating our employees, customers, suppliers and competitors fairly;
- Encouraging full, fair, accurate, timely and understandable disclosure;
- Protecting and properly using company assets;
- Conducting research activities with honesty, objectivity, transparency and accountability;
- Complying with laws, rules and regulations (including insider trading laws); and
- Encouraging the reporting of any unlawful or unethical behavior.

Any waiver of the Code of Business Conduct for our executive officers, directors or employees may be made only by our Nominating and Corporate Governance Committee and will be promptly disclosed on our website. We have posted a copy of our Code of Business Conduct, and intend to post amendments to this code, on our website as permitted under SEC rules and regulations. The full text of our Code of Business Conduct is available on our website at www.organovo.com.

Board Independence

Our shares of common stock are listed for trading on the Nasdaq Capital Market. As a result, our Board utilizes the definition of “independence” as that term is defined by the listing standards of The Nasdaq Stock Market LLC and the rules and regulations of the SEC, including the additional independence requirements for members of our Audit Committee and the Compensation Committee. Our Board considers a director “independent” when the director is

not an officer or employee of the Company or its subsidiaries, does not have any relationship which would, or could reasonably appear to, materially interfere with the independent judgment of such director, and the director otherwise meets the independence requirements under the listing standards of the Nasdaq Capital Market and the rules and regulations of the SEC. Our Board has reviewed the materiality of any relationship that each of our directors has with the Company, either directly or indirectly. Based on this review, our Board has affirmatively determined that the following four of our six current directors qualify as “independent” directors: Douglas Jay Cohen, David Gobel, Alison Tjosvold Milhous and Adam Stern. Keith Murphy and Vaidehi Joshi do not qualify as an independent director. Mr. Murphy currently serves as our Executive Chairman and as Chief Executive Officer of Viscient, which has made payments to the Company in sufficient amounts to qualify as related party transactions leading to director non-independence. Please see the section “Certain Relationships and Related Transactions” for additional information. Ms. Joshi is currently our Director of Discovery Biology.

Board Leadership Structure

Our Bylaws provide our Board with flexibility to combine or separate the positions of Chairman of the Board and Chief Executive Officer in accordance with its determination that utilizing one or the other structure would be in the best interests of our Company and its stockholders. At present, we do not have a Chief Executive Officer. Mr. Murphy serves as the Executive Chairman of the Board and Mr. Thomas Hess serves as our President and Chief Financial Officer. Our Board has determined that this structure is in the best interests of the Company and its stockholders at this time.

Our Board believes that having Mr. Murphy serve as Executive Chairman is beneficial because he is the director who is most familiar with our business and industry, possesses detailed and in-depth knowledge of the issues, opportunities and challenges facing us and is therefore best positioned to ensure that the Board’s time and attention are focused on the most critical matters. Our independent directors bring experience, oversight and expertise from outside the Company and industry, while Mr. Murphy, as Executive Chairman, brings Company-specific experience and expertise. The Board believes that its current structure also facilitates information flow between management and the Board, which is essential to effective governance.

Effective September 15, 2022, our Board appointed Mr. Cohen as our lead independent director (the “Lead Independent Director”). The Lead Independent Director ensures that (i) our Board operates independently of management, (ii) our independent directors continue to provide effective oversight of our management and key issues related to strategy, risk and integrity, and (iii) our directors and stockholders have an independent leadership contact.

As the Lead Independent Director, Mr. Cohen has the following duties and responsibilities:

- Calling and presiding over executive sessions of the independent directors to cover the agenda of review and feedback of non-independent director and management performance and any topics on which the non-independent Board members are conflicted;
- Advising our non-independent directors on behalf of our Board, as appropriate, of discussions and feedback from executive sessions;
- Serving as a liaison for relevant issues between the independent directors, our Executive Chairman, and senior management to report on or raise matters;
- Reviewing Board schedules and agendas in collaboration with our Executive Chairman while seeking input from the other Board members;
- Consulting with team members and providing alternative paths for awareness of company issues, and reporting any findings to independent board members during executive sessions;
- Advising on the selection of the Chairs of our Board committees;

- Being available for communication with stockholders, as appropriate; and
- Performing such other duties and responsibilities as may be delegated to the Lead Independent Director by our Board from time to time.

We currently believe that having a Lead Independent Director creates an environment that is more conducive to objective evaluation and oversight of management's performance, increasing management accountability and improving the ability of our Board to monitor whether management's actions are in the best interests of our Company and our stockholders.

Board Committees

Our Board has established an Audit Committee, a Compensation Committee, a Nominating and Corporate Governance Committee and a Science and Technology Committee. The following table provides membership information as of the date hereof.

	Audit Committee	Compensation Committee	Nominating and Corporate Governance Committee	Science and Technology Committee
Independent Director				
Adam Stern	Member	Member		
Douglas Jay Cohen	Member	Member	Chair	
David Gobel		Chair	Member	Member
Alison Tjosvold Milhous	Chair		Member	
Non-Independent Directors				
Keith Murphy				Member
Vaidehi Joshi				Chair

Compensation Committee. Our Compensation Committee currently consists of Mr. Gobel (Chair), Mr. Cohen and Mr. Stern. The functions of the Compensation Committee include the approval of the compensation offered to our executive officers and recommending to the full Board the compensation to be offered to our non-employee directors. Additionally, in accordance with Nasdaq listing standards, the Compensation Committee evaluates the independence of each compensation consultant, outside counsel and advisor retained by or providing advice to the Compensation Committee. The Board has determined that each member of the Compensation Committee is an "independent director" under Nasdaq listing standards and the applicable rules and regulations of the SEC. In addition, the existing and planned future members of the Compensation Committee qualify as "non-employee directors" for purposes of Rule 16b-3 under the Securities Exchange Act of 1934, as amended (the "Exchange Act"). The Compensation Committee may delegate authority to one or more members of the Compensation Committee or to one or more of our executives of the Company, and may form and delegate authority to one or more subcommittees and to one or more committees of executives of the Company, except that the Compensation Committee may not delegate authority to approve compensation for our Chief Executive Officer or our other Section 16 and other executive officers to any person or committee (other than to a subcommittee consisting exclusively of at least three members of the Compensation Committee). Our Compensation Committee has the authority to engage the services of compensation consultants, outside counsel, experts and other advisors as it deems appropriate to assist it in the performance of its functions. The Compensation Committee engaged the services of Anderson Pay Advisors, a compensation consulting firm, beginning on October 1, 2020, and renewed on an annual basis, as its independent compensation consultant, to assist it in evaluating our overall executive compensation program and practices. The Compensation Committee is governed by a written charter approved by the Board of Directors, a copy of which is available on our website at www.organovo.com.

On July 29, 2021, our Compensation Committee established a sub-committee, the Equity Award Committee, and delegated to the Equity Award Committee the power and authority, separately but concurrently with the power and authority of our Compensation Committee, to grant discretionary equity awards under the Organovo Holdings, Inc. 2012 Equity Incentive Plan to our employees (other than executives and directors), consultants or advisors of our Company. On November 9, 2022, our Compensation Committee extended the Equity Award Committee's power

and authority to include granting discretionary equity awards, with certain limitations, under the Organovo Holdings, Inc. 2022 Equity Incentive Plan. During Fiscal 2024, the Equity Award Committee exercised its authority to grant equity awards by written consent two times.

Audit Committee. Our Audit Committee currently consists of Ms. Milhous (Chair), Mr. Cohen and Mr. Stern. The functions of the Audit Committee include the retention of our independent registered public accounting firm, reviewing and approving the planned scope, proposed fee arrangements and results of the Company's annual audit, reviewing the adequacy of the Company's accounting and financial controls and reviewing the independence of the Company's independent registered public accounting firm. The Board has determined that each member of the Audit Committee is an "independent director" under the Nasdaq listing standards, is financially literate under Nasdaq listing standards, and at least one member has financial sophistication under Nasdaq listing standards. The Board has also determined that Ms. Milhous is an "audit committee financial expert" within the applicable definition of the SEC. The Audit Committee is governed by a written charter approved by the Board of Directors, a copy of which is available on our website at www.organovo.com.

Nominating and Corporate Governance Committee. Our Nominating and Corporate Governance Committee currently consists of Mr. Cohen (Chair), Mr. Gobel and Ms. Milhous. The functions of the Nominating and Corporate Governance Committee include the identification, recruitment and nomination of candidates for the Board and its committees, making recommendations to the Board concerning the structure, composition and functioning of the Board and its committees (including the reporting channels through which the Board receives information and the quality and timeliness of the information), developing and recommending to the Board corporate governance guidelines applicable to the Company and annually reviewing and recommending changes (as necessary or appropriate), overseeing the annual evaluation of the Board's effectiveness and performance, and periodically conducting an individual evaluation of each director. The Board has determined that each member of the Nominating and Corporate Governance Committee is an "independent director" under the Nasdaq listing standards and the applicable rules and regulations of the SEC. The Nominating and Corporate Governance Committee is governed by a written charter approved by the Board of Directors, a copy of which is available on our website at www.organovo.com.

Science and Technology Committee. Our Science and Technology Committee currently consists of Ms. Joshi (Chair), Keith Murphy and David Gobel. The functions of the Science and Technology Committee include to periodically examine management's direction and investment in the Company's research and development and technology initiatives and strategy. The Science and Technology Committee functions as a broadly knowledgeable and objective group to consider and report to the Board on matters relating to the investment in our research and development and technology initiatives, which include reviewing, evaluating and advising the Board regarding the long-term strategic goals and objectives and quality and direction of our research and development and technology initiatives.

Board and Committee Attendance

During the fiscal year ended March 31, 2024, all directors attended 75% or more of the aggregate of the meetings of the Board and of each of the Board committees on which they served. The Board met five times and acted by written consent ten times during the fiscal year ended March 31, 2024; the Audit Committee met four times and acted by written consent one time during the fiscal year ended March 31, 2024; the Compensation Committee met two times and acted by written consent four times during the fiscal year ended March 31, 2024; the Nominating and Corporate Governance Committee met one time and acted by written consent two times during the fiscal year ended March 31, 2024; and the Science and Technology Committee met one time during the fiscal year ended March 31, 2024.

Director Attendance at the Annual Meeting

We believe the Annual Meeting provides a good opportunity for our directors to hear any feedback that our stockholders may desire to share with the Company and the Board. As a result, we encourage our directors to attend our Annual Meetings. We reimburse our directors for the reasonable expenses they may incur in attending the Annual Meeting. At the 2023 Annual Meeting of Stockholders, all of our then serving directors were in attendance.

Executive Sessions

Executive sessions of our independent directors are held at each regularly scheduled meeting of our Board and at other times they deem necessary. The Board's policy is to hold executive sessions without the presence of management, with our Executive Chairman in attendance. Our Board committees also generally meet in executive session at the end of each committee meeting.

Board Oversight of Risk

Our Board is actively involved in the oversight of risks that could affect our Company. The Board as a whole has responsibility for risk oversight of the Company's risk management policies and procedures, with specific reviews of certain areas being conducted by the relevant Board committee. The Board satisfies this responsibility through reports by each committee chair to the Board regarding the committee's considerations and actions, as well as through regular reports directly from the member or members of management responsible for oversight of particular risks within the Company. Specifically, the Board committees address the following risk areas:

- The Compensation Committee is responsible for overseeing the management of risks related to the Company's executive compensation plans and arrangements.
- The Audit Committee discusses with management the Company's major financial risk exposures, regulatory and compliance matters and the steps management has taken to monitor and control such exposures.
- The Nominating and Corporate Governance Committee is responsible for overseeing the Company's compliance with good corporate governance practices, including the requirements established by the SEC and the Nasdaq Capital Market.

The Board encourages management to promote a corporate culture that incorporates risk management into the Company's day-to-day business operations.

Compensation Committee Interlocks and Insider Participation

No member of our Compensation Committee has at any time been our employee. None of our executive officers serves, or has served during the last fiscal year, as a member of the board of directors or compensation committee of any other entity that has one or more executive officers serving as a member of our Board or our Compensation Committee.

Stock Ownership Guidelines

All of our executive officers and directors are subject to stock ownership guidelines approved by the Board within five years of most recently starting employment or becoming a director. Our Chief Executive Officer is required to beneficially hold a number of shares of the Company's common stock with a value equal to five times his base salary. All other executive officers that are full-time employees of the Company are required to hold a number of shares with a value equal to three times their base salary. Directors (other than the Chief Executive Officer or any executive officers) are required to beneficially hold a number of shares of the Company's common stock with a value equal to four times the annual cash retainer paid to them for service as a member of our Board. For purposes of the guidelines, the shares deemed held include, among others, shares held directly or in joint accounts with certain family members, vested stock options (based on a value determined under the guidelines) and unvested restricted stock units or restricted stock awards subject to time-based vesting. Our guidelines were adopted in June of 2013 and revised in July of 2022. All of our current executive officers or directors commenced their most recent services with us within the last four years and therefore none of our current executive officers or directors are currently required to meet a threshold requirement under the guidelines as it has not yet been five years since any employee recently commenced employment or any director became a director.

Succession Planning

The Corporate Governance Guidelines provide for an annual succession planning process for the Company's Chief Executive Officer and its other executives and key employees.

Consideration of Director Nominees

General. In evaluating nominees for membership on our Board, our Nominating and Corporate Governance Committee applies the Board membership criteria set forth in our Corporate Governance Guidelines. Under these criteria, the Nominating and Corporate Governance Committee takes into account many factors, including an individual's business experience and skills (including skills in core areas such as operations, management, technology, relevant industry knowledge (e.g., research tools, contract research services, therapeutics, drug discovery, reimbursement, medical/surgical), accounting and finance, regulatory matters and clinical trials, leadership, strategic planning and international markets), independence, judgment, professional reputation, integrity and ability to represent the best interests of the Company and its stockholders. In addition, the Nominating and Corporate Governance Committee will consider the ability of the nominee to commit sufficient time and attention to the activities of the Board, as well as the absence of any potential conflicts with the Company's interests. The Nominating and Corporate Governance Committee does not assign specific weights to particular criteria and no particular criterion is necessarily applicable to all prospective nominees. The Board does not have a formal policy with respect to diversity of nominees. Rather, our Nominating and Corporate Governance Committee considers these Board membership criteria as a whole and seeks to achieve diversity of occupational and personal backgrounds on the Board. Our Board will be responsible for selecting candidates for election as directors based on the recommendation of the Nominating and Corporate Governance Committee.

Our Nominating and Corporate Governance Committee regularly assesses the appropriate size of our Board, and whether any vacancies on our Board are expected due to retirement or other reasons. In the event that vacancies are anticipated, or otherwise arise, the Committee will consider various potential nominees who may come to the attention of the Committee through current Board members, professional search firms, stockholders or other persons. Each potential nominee brought to the attention of the Committee, regardless of who recommended such potential nominee, is considered on the basis of the criteria set forth in our Corporate Governance Guidelines.

Stockholder Nominees. The Nominating and Corporate Governance Committee will review a reasonable number of candidates for director recommended by a single stockholder who has held more than 1.0% of our common stock for more than one year and who satisfies the notice, information and consent provisions set forth in our Bylaws and Rule 14a-19 of the Exchange Act ("Rule 14a-19"). The Board will use the same evaluation criteria and process for director nominees recommended by stockholders as it uses for other director nominees. A stockholder wishing to formally nominate an individual for election to the Board must do so by following the procedures described in the Bylaws and Rule 14a-19. For information concerning stockholder proposals, see "Stockholder Proposals for 2025 Annual Meeting" below in this Proxy Statement.

Communications with the Board of Directors

The Board desires that the views of stockholders will be heard by the Board, its committees, the Lead Independent Director or any other individual directors, as applicable, and that appropriate responses will be provided to stockholders on a timely basis. Stockholders wishing to formally communicate with the Board, the independent directors as a group, the Lead Independent Director or any other individual director may send communications directly to the Company at 11555 Sorrento Valley Rd., Suite 100, San Diego, CA 92121, Attention: Corporate Secretary. All clearly marked written communications, other than unsolicited advertising or promotional materials, are logged and copied, and forwarded to the director(s) to whom the communication was addressed. Please note that the foregoing communication procedure does not apply to (i) stockholder proposals pursuant to Exchange Act Rule 14a-8 and communications made in connection with such proposals or (ii) service of process or any other notice in a legal proceeding.

Plurality Plus Standard for Director Elections

Pursuant to the Company's corporate governance guidelines, in an uncontested election (an election in which the number of persons properly nominated to serve as director does not exceed the number of directors to be elected), if a nominee receives a greater number of votes "withheld" than votes "for" such nominee's election, then such nominee must tender such nominee's resignation to the Board. The Nominating and Corporate Governance Committee will then determine whether the Board should accept or reject such director nominee's resignation and will submit a recommendation to the Board for prompt consideration by the Board. The Board will then review the Nominating and Corporate Governance Committee's recommendation and accept or reject the director nominee's resignation within 100 days following certification of the stockholder vote for the stockholder meeting at which the election of directors was held where the nominee received a greater number of votes "withheld" than votes "for" such nominee's election.

DIRECTOR COMPENSATION

Our directors play a critical role in guiding our strategic direction and overseeing the management of our Company. Ongoing developments in corporate governance and financial reporting have resulted in an increased demand for such highly qualified and productive public company directors. The many responsibilities and risks and the substantial time commitment of being a director of a public company require that we provide adequate incentives for our directors' continued performance by paying compensation commensurate with our directors' workload. Our directors are compensated based upon their respective levels of Board participation and responsibilities, including service on Board committees.

Our director compensation is overseen by the Compensation Committee, which makes recommendations to our Board on the appropriate structure for our director compensation program and the appropriate amount of compensation. Our Board is responsible for final approval of our director compensation program and the compensation paid to our directors.

In connection with establishing our director compensation for Fiscal 2024, the Compensation Committee retained Anderson Pay Advisors ("Anderson") as its independent compensation consultant. With the assistance of Anderson, the Board and Compensation Committee conducted a formal review of our director compensation and incentive programs relative to the same peer group used in benchmarking the compensation for our executive officers.

Fiscal 2024 Director Compensation Framework

For Fiscal 2024, our amended and restated director cash and equity compensation framework, which was adopted by the Board in November 2022, provided to both non-employee and employee directors annual cash retainers for Board service and for service as the chair or member of one of the standing Board committees. Our directors are not entitled to any Board meeting fees or Board committee meeting fees.

Annual Cash Retainers. For Fiscal 2024, each of our directors was eligible to receive an annual cash retainer of \$66,300 for Board membership.

In addition, each of our directors are eligible to receive the applicable annual retainers set forth below for serving as committee chairs and for service as a member of a Board committee, with total cash compensation for each director not to exceed \$105,000 per fiscal year:

Position	Audit Committee	Compensation Committee	Nominating and Corporate Governance Committee	Science and Technology Committee
Committee Chair	\$ 25,500	\$ 25,500	\$ 25,500	\$ 25,500
Committee Member (excluding Chair)	\$ 15,300	\$ 15,300	\$ 15,300	\$ 15,300

No additional meeting fees were paid to our directors for Fiscal 2024.

Equity Awards. In addition, in November 2023, each director received a restricted stock unit award with respect to 19,607 shares of common stock (a value of approximately \$27,200), which will vest in full on the earlier of (i) November 17, 2024 or (ii) the date of our Annual Meeting, subject to acceleration in the event of a change of control.

Reimbursement. Our directors are entitled to reimbursement for their reasonable travel and lodging expenses for attending Board and Board committee meetings.

Director Compensation Table

The following table sets forth the compensation earned and paid to each member of our Board for service as a director during Fiscal 2024:

Name	Fees Earned or Paid in Cash (\$)	Stock Awards (\$)(1)	Option Awards (\$)	All Other Compensation (\$)	Total (\$)
Douglas Jay Cohen	\$ 105,000	\$ 27,254	\$ —	\$ —	\$ 132,254
David Gobel	105,000	27,254	—	—	132,254
Alison Tjosvold Milhous	105,000	27,254	—	—	132,254
Adam Stern	96,900	27,254	—	—	121,154
Keith Murphy	81,600	27,254	—	—	108,854 ⁽²⁾
Vaidehi Joshi	91,800	27,254	—	—	119,054

(1) These amounts represent the grant date fair value of time-based restricted stock unit awards granted by the Board, determined in accordance with FASB ASC Topic 718. All awards are amortized over the vesting life of the award. For the assumptions used in our valuations, see “Note 7 – Stockholders’ Equity” of our notes to consolidated financial statements in the Annual Report on Form 10-K for the year ended March 31, 2024, as filed with the SEC on May 31, 2024.

(2) Comprised solely of the compensation received by Mr. Murphy for his service as a member of the Board. Mr. Murphy’s additional compensation for Fiscal 2024 is included in the section entitled “Summary Compensation Table” on page 59 of this Proxy Statement.

EXECUTIVE OFFICERS

The following persons are our executive officers as of the date of this Proxy Statement and hold the positions set forth opposite their names as of August 20, 2024:

Name	Age	Position
Keith Murphy	52	Executive Chairman
Thomas Hess	60	President and Chief Financial Officer

See the section entitled “Board of Directors Information”, above, for a description of the business experience and educational background of Mr. Murphy.

Thomas Hess, President and Chief Financial Officer, joined us in October 2021. Mr. Hess is currently employed by Danforth Advisors, LLC (“Danforth”), a professional financial consulting services firm. He has over twenty years of experience and has been with Danforth since September 2021. Mr. Hess recently served as Chief Financial Officer and Senior Vice President of Finance of Genomind, Inc., until his retirement in May 2021. From September 2011 until its sale in April 2014, Mr. Hess served as Chief Financial Officer and Executive Vice President of Finance of The Keane Organization. Mr. Hess also previously served in various other capacities including, but not limited to, Chief Financial Officer and Senior Vice President of Yaupon Therapeutics, Inc.; Chief Financial Officer and Vice President, Finance of Adolor Corporation; Corporate Controller of Vicuron Pharmaceuticals, Inc.; and Senior Manager, Accounting and Audit of KPMG. Mr. Hess received his B.S. in accounting from The Pennsylvania State University and his MBA from Katz Graduate School of Business, University of Pittsburgh and is a Certified Public Accountant in the State of Pennsylvania. He currently serves on the Alumni Council of Penn State.

SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT

The following tables set forth certain information regarding the beneficial ownership of our common stock as of September 23, 2024 by (i) each of our directors and named executive officers (as disclosed in this Proxy Statement); (ii) all of our current executive officers and directors as a group; and (iii) to our knowledge (based solely on our review of Schedules 13D and 13G filed with the SEC, as applicable), each holder of more than 5% of our common stock. Unless otherwise indicated in the table or the footnotes to the following table, each person named in the table has sole voting and investment power and such person's address is c/o Organovo Holdings, Inc., 11555 Sorrento Valley Rd., Suite 100, San Diego, CA 92121.

We determined the number of shares of common stock beneficially owned by each person under rules promulgated by the SEC, based on information obtained from Company records and filings with the SEC on or before September 23, 2024. In cases of holders who are not directors or named executive officers, Schedules 13G or 13D filed with the SEC, as applicable (and, consequently, ownership reflected here), often reflect holdings as of a date prior to September 23, 2024. The information is not necessarily indicative of beneficial ownership for any other purpose. Under these rules, beneficial ownership includes any shares as to which the individual or entity has sole or shared voting power or investment power and also any shares which the individual or entity had the right to acquire within 60 days of September 23, 2024. These shares, however, are not deemed outstanding for the purpose of computing the percentage ownership of any other person or entity.

Applicable percentages are based on 15,365,826 shares of common stock outstanding as of September 23, 2024, as adjusted as required by the rules promulgated by the SEC. We have deemed shares of our common stock subject to stock options that are currently exercisable or exercisable within 60 days of September 23, 2024, or issuable pursuant to restricted stock units that are subject to vesting conditions expected to occur within 60 days of September 23, 2024, to be outstanding and to be beneficially owned by the person holding the stock option or restricted stock units for the purpose of computing the percentage ownership of that person. We did not deem these shares outstanding, however, for the purpose of computing the percentage ownership of any other person or entity.

Name of Beneficial Owner	Beneficial Ownership ⁽¹⁾		Percent of Common Shares
	Number of Common Shares		
Directors and Named Executive Officers			
Keith Murphy	143,034	(2)	*
Douglas Jay Cohen	103,714	(3)	*
Alison Tjosvold Milhous	91,714	(4)	*
Adam Stern	91,714	(4)	*
David Gobel	72,107	(5)	*
Vaidehi Joshi	78,609	(6)	*
Jeffrey Miner (7)	26,500	(8)	*
Thomas Hess	—		*
Thomas Jurgensen (9)	—		*
All current executive officers and directors as a group (7 persons)	580,892	(10)	3.72%
Five Percent Holders			
Armistice Capital Master Fund Ltd	1,705,417	(11)	9.99%

* Less than one percent.

- (1) Beneficial ownership of shares and percentage ownership are determined in accordance with the rules of the SEC. Unless otherwise indicated and subject to community property laws where applicable, the individuals named in the table above have sole voting and investment power with respect to all shares of our common stock shown as beneficially owned by them.
- (2) Represents 123,034 shares of common stock held by Mr. Murphy and 20,000 shares subject to options that are immediately exercisable or exercisable within 60 days of September 23, 2024.
- (3) Represents 49,214 shares of common stock held by Mr. Cohen, 2,000 shares held by Mr. Cohen's children and 52,500 shares subject to options that are immediately exercisable or exercisable within 60 days of September 23, 2024.
- (4) Represents 39,214 shares of common stock held and 52,500 shares subject to options that are immediately exercisable or exercisable within 60 days of September 23, 2024.
- (5) Represents 19,607 shares of common stock held and 52,500 shares subject to options that are immediately exercisable or exercisable within 60 days of September 23, 2024.
- (6) Represents 39,214 shares of common stock held and 39,395 shares subject to options that are immediately exercisable or exercisable within 60 days of September 23, 2024.
- (7) Dr. Miner's employment with the Company was terminated as of August 25, 2023 in connection with the Company's reduction in force announced on August 18, 2023.

- (8) Represents 26,500 shares subject to options that are immediately exercisable or exercisable within 60 days of September 23, 2024.
- (9) Mr. Jurgensen's employment with the Company was terminated as of August 25, 2023 in connection with the Company's reduction in force announced on August 18, 2023.
- (10) Comprised of shares included under "Directors and Named Executive Officers" other than Dr. Miner and Mr. Jurgensen, as neither is currently an executive officer.
- (11) Consists solely of shares of common stock issuable upon exercise of a pre-funded warrant (the "Pre-Funded Warrant"), which is currently exercisable, except to the extent such exercise is restricted by a blocker provision which restricts the exercise of such warrant if, as a result of such exercise, the holder, together with its affiliates and any other person whose beneficial ownership of shares of common stock would be aggregated with the holder's for purposes of Section 13(d) of the Exchange Act would beneficially own in excess of 9.99% of the outstanding shares of common stock, as such percentage ownership is determined in accordance with the terms of the warrant (the "Beneficial Ownership Limitation"). Excludes (i) 924,583 shares of common stock issuable upon exercise of the Pre-Funded Warrant, which is currently exercisable, but such shares have been excluded because the exercise thereof is restricted by the Warrant Beneficial Ownership Limitation and (ii) 6,250,000 shares of common stock issuable upon the exercise of a common warrant, which is currently exercisable, except to the extent such exercise is restricted by a blocker provision which restricts the exercise of such warrant if, as a result of such exercise, the holder, together with its affiliates and any other person whose beneficial ownership of shares of common stock would be aggregated with the holder's for purposes of Section 13(d) of the Exchange Act would beneficially own in excess of 4.99% of the outstanding shares of common stock, as such percentage ownership is determined in accordance with the terms of the warrant. The reported securities are directly held by Armistice Capital Master Fund Ltd., a Cayman Islands exempted company (the "Master Fund"), and may be deemed to be beneficially owned by: (i) Armistice Capital, LLC ("Armistice Capital"), as the investment manager of the Master Fund; and (ii) Steven Boyd, as the Managing Member of Armistice Capital. The address of Armistice Capital Master Fund Ltd. is c/o Armistice Capital, LLC, 510 Madison Avenue, 7th Floor, New York, NY 10022.

Delinquent Section 16(a) Reports

Section 16(a) of the Exchange Act requires our officers and directors, and persons who own more than 10% of a registered class of our equity securities, to file reports of ownership and changes in ownership with the SEC. Officers, directors, and greater than 10% stockholders are required by SEC regulations to furnish us with copies of all Section 16(a) forms they file. Based solely upon a review of the copies of such forms and amendments thereto, we believe that, during Fiscal 2024, none of our officers, directors, and greater than 10% beneficial owners failed to file on a timely basis the reports required by Section 16(a).

EXECUTIVE COMPENSATION

The following discussion is designed to provide our stockholders with an understanding of our compensation philosophy and objectives as well as an overview of the analysis that our Compensation Committee performed in setting the compensation of our executive officers for Fiscal 2024 (i.e., the period from April 1, 2023 to March 31, 2024).

This discussion summarizes the Compensation Committee's determination of how and why, in addition to what, compensation actions were taken for our named executive officers, as follows:

- Keith Murphy, our Executive Chairman and Principal Executive Officer;
- Thomas Hess, our Chief Financial Officer and Principal Financial Officer;
- Thomas Jurgensen, our former General Counsel and Corporate Secretary⁽¹⁾; and
- Jeffrey Miner, our former Chief Scientific Officer⁽²⁾.

- (1) Mr. Jurgensen's employment with the Company was terminated as of August 25, 2023 in connection with Company's reduction in force announced on August 18, 2023.
- (2) Dr. Miner's employment with the Company was terminated as of August 25, 2023 in connection with Company's reduction in force announced on August 18, 2023.

Other than Mr. Murphy, Mr. Hess was the only executive officer serving at the end of Fiscal 2024. These four individuals are collectively referred to in this Proxy Statement as our "named executive officers".

Recent "Say-on-Pay" Votes

Our recent stockholder advisory votes, commonly referred to as a "Say-on-Pay" vote, to approve the compensation of our named executive officers for the period from April 1, 2022 to March 31, 2023 ("Fiscal 2023") was approved by our stockholders, with approximately 85% of stockholder votes cast in favor of the proposal.

During Fiscal 2024, our Executive Chairman, former General Counsel, and Chief Financial Officer maintained significant stockholder engagement efforts to monitor how our investors vote, obtain their views on key corporate governance and disclosure matters and determine how best to respond to feedback each year going forward. Specifically, we reached out to our stockholders representing over 95% of our institutional stock holdings (or approximately 26% of our then outstanding shares) multiple times. None of the stockholders indicated a need or desire to engage with the Company to discuss or express any concerns.

Going forward, we plan to continue to:

- at least annually, reach out to institutional stockholders representing a majority of the shares held by our institutional stockholders; and
- invite them to engage and participate in calls to discuss our executive compensation programs, their feedback and questions and how we may best address them.

One or more members of executive management are expected to be active participants on all such calls, as will one or more members of our Compensation Committee. All such feedback will be shared with our Board.

In evaluating potential changes to our executive compensation programs' structure and disclosure, the Compensation Committee will closely examine, and aim to understand further, our stockholders' feedback, including any common themes from our stockholders' feedback. The Compensation Committee will also seek the advice of independent compensation consultants with respect to the design of our executive compensation program.

Compensation Philosophy and Objectives

Our executive compensation program focuses on creating alignment between our stockholders and executive officers by including both performance- and incentive-based compensation elements. Our compensation package also combines both short- and long-term components (cash and equity, respectively) at the levels the Compensation

Committee determined to be appropriate to motivate, reward, and retain our executive officers. Our executive compensation program is designed to achieve the following key objectives:

- Attract, retain, and reward talented executives and motivate them to contribute to the Company’s success and to build long-term stockholder value;
- Establish financial incentives for executives to achieve our key financial, operational, and strategic goals;
- Enhance the relationship between executive pay and stockholder value by utilizing long-term equity incentives; and
- Recognize and reward executives for superior performance.

Use of Market Data and Benchmarking

The Compensation Committee endeavors to set compensation at competitive levels. In order to do this, the Compensation Committee compares our compensation packages with the packages offered by other peer companies that are similarly situated, and with which we compete for talent. Selection criteria includes:

- Industry, specifically biotechnology and medical research,
- Company focus, with an emphasis on technology platforms,
- Stage of leading drug candidate, with an emphasis on Phase II/III,
- Market capitalization, targeting less than \$100 million,
- Number of employees, targeting less than 50 employees, and
- Location, specifically nationwide.

For Fiscal 2024, the Compensation Committee engaged Anderson, an independent compensation consultant, as the Compensation Committee’s advisor reporting directly to the chair of the Compensation Committee. The Compensation Committee determined that no conflict of interest exists that would preclude Anderson from serving as an independent consultant to the Compensation Committee.

The Compensation Committee requested Anderson conduct a review and analysis of our executive compensation programs as compared against competitive benchmarks. This included a benchmarking analysis against prevailing market practices of a peer group of comparable companies approved by the Compensation Committee and broader industry trends and benchmarks. The analysis included a review of the “Total Direct Compensation” (which includes salary, cash incentives, and equity awards) of our executive officers, and was based on an assessment of market trends covering available public information as well as proprietary information provided by Anderson.

For Fiscal 2024, based on recommendations from Anderson, our Compensation Committee determined that our peer group should be modified to better reflect our current market valuation as well as the growing importance of our therapeutics program to our overall business model. With input from Anderson, our Compensation Committee added a group of companies focused on technology platforms, with comparable size, revenues, market valuations, and stage of leading drug candidate. Our Compensation Committee also replaced some of the companies previously included in our peer group because their market valuations had grown too high for direct comparison to our Company, and/or their business focus had become less relevant for direct comparison to our Company. Our Compensation Committee then used the compensation data from this revised peer group in setting executive compensation for Fiscal 2024.

The peer group for Fiscal 2024 included:

Aceragen*	Cohbar Inc.*	Onconova Therapeutics, Inc.
Aligos Therapeutics, Inc.*	Fresh Tracks Therapeutics Inc.*	OncoSec Medical Incorporated
Aprea Therapeutics, Inc.	Galectin Therapeutics Inc.*	Pulmatrix, Inc.
aTyr Pharma, Inc.	Galmed Pharmaceuticals Ltd.*	Regulus Therapeutics Inc.
Ayala Pharmaceuticals*	Hepion Pharmaceuticals, Inc.*	Seelos Therapeutics, Inc.
Bellicum Pharmaceuticals, Inc.	Imunon, Inc.*	Soligenix, Inc.
Capricor Therapeutics, Inc.	LadRx Corp*	Theriva Biologics, Inc.*

* Indicates addition to peer group from Fiscal 2023.

Determination of Executive Compensation

In addition to peer group data, the Compensation Committee considered relevant publicly available market data and surveys and the compensation reports it received from Anderson. The Compensation Committee also reviewed and considered the compensation recommendations of our Executive Chairman, the Company's overall performance during Fiscal 2024, the Company's financial status and operating runway, each executive officer's responsibilities and contribution to the Company's achievement of the Fiscal 2024 corporate goals, and each executive officer's individual performance during Fiscal 2024. With respect to new hires, our Compensation Committee considered the executive officer's background and historical compensation in lieu of prior year performance in addition to benchmark data for the newly hired executive's position.

Commitment to Good Compensation Governance Practices

In designing our executive compensation program, our Compensation Committee intends to create alignment between our stockholders and executive officers and to implement good compensation governance by:

- ***Annual Advisory Vote on the Compensation of our Named Executive Officers*** – We provide our stockholders with the ability to vote annually on the compensation of our named executive officers.
- ***Independent Compensation Consultant*** – The Compensation Committee engaged Anderson during Fiscal 2024 to serve as its independent compensation consultant. Anderson did not provide any other services to the Company during the periods it served as a consultant to the Compensation Committee.
- ***Performance and Incentive Based*** – Previously, approximately 40% of the Total Direct Compensation our executive officers could earn was performance and incentive based, thereby aligning the interests of our executive officers with our stockholders' interests. As our two current executive officers are retained through consulting firms, neither are eligible for performance based compensation.
- ***Compensation Risk Assessment*** – The Compensation Committee oversees and evaluates an annual risk assessment of the Company's compensation program. The Compensation Committee believes that the performance goals established for incentives do not encourage excessive risk-taking or have the potential to encourage behavior that may have a material adverse effect on the Company.
- ***Prohibitions on Hedging, Pledging and Margin Activities***– Our insider trading policy prohibits hedging transactions by Company employees. Under the policy, all short-term, speculative or hedging transactions in Organovo securities are prohibited by all employees. In addition, the policy specifically prohibits the use of Organovo securities for pledging and margin activities.
- ***No Single Trigger Change in Control Vesting***- We do not provide for the acceleration of vesting solely upon the occurrence of a change in control in our equity awards for our directors and executive officers.
- ***No Excise Tax Gross Ups*** – We do not include excise tax gross ups for any change in control payments.
- ***Director and Executive Officer Stock Ownership Guidelines*** – We have adopted stock ownership guidelines that require each director and executive officer to accumulate and hold a specified value of our stock within five years of most recently starting employment with us or becoming a director.

The Compensation Committee believes that the program and policies described above demonstrate the Company's commitment to, and consistent execution of, an effective performance-oriented executive compensation program.

Components of Executive Compensation

The framework established by the Compensation Committee, based on the data provided by Anderson, for our executive compensation program consists of a base salary, performance-based cash incentives and long-term equity-based incentives. The Compensation Committee endeavors to combine these compensation elements to develop a compensation package that provides competitive pay, rewards our executive officers for achieving our commercial, operational and strategic objectives and aligns the interests of our executive officers with those of our stockholders.

Salary. The Compensation Committee has provided, and will continue to provide, our executive officers with a base salary to compensate them for services provided during the fiscal year. In addition to benchmark data from our peer group, our Compensation Committee considers the Company's overall performance during the prior fiscal year, cash burn, the Company's financial status and operating profile, each executive officer's responsibilities and contribution to the achievement of the prior year's corporate goals, and each executive officer's individual performance during the prior fiscal year. The evaluations and recommendations proposed by our Executive Chairman are also considered (other than with respect to determining his own compensation). With respect to new hires, the Compensation Committee considers an executive's background and historical compensation in lieu of prior year performance as well as benchmark data for the new hire's position. Our Compensation Committee evaluates and sets the base salaries for our executives following annual performance evaluations, as well as upon a promotion or other change in responsibility. Our Compensation Committee expects to continue to utilize these policies going forward.

For Fiscal 2024, the Compensation Committee determined that it was in the best interests of the Company and its stockholders to freeze Mr. Jurgensen's and Dr. Miner's salaries for Fiscal 2024 at Fiscal 2023 levels, or \$381,600 for Mr. Jurgensen and \$238,500 for Dr. Miner.

Pursuant to the terms of our consulting agreement with Multi Dimensional Bio Insight LLC ("MDBI"), a biotechnology consulting firm through which we retain Mr. Murphy, MDBI has the right, on an annual basis, to increase hourly consultant rates by up to 4%. From January 1, 2021 to May 1, 2022, the hourly rate for Mr. Murphy's services was \$375, which was increased to \$413 effective May 1, 2022 and remained the same throughout the remainder of Fiscal 2023 and Fiscal 2024. The cash amount paid to MDBI increased from \$543,781 for Fiscal 2023 to \$657,984 for Fiscal 2024, with approximately a 21% increase in Mr. Murphy's hours for Fiscal 2024 as compared to Fiscal 2023.

Pursuant to the terms of our consulting agreement with Danforth Advisors, LLC ("Danforth"), a financial consulting firm through which we retain Mr. Hess, Danforth has the right, on an annual basis, to increase hourly consultant rates by up to 4%. From April 1, 2022 to March 31, 2023, the hourly rate for Mr. Hess' services was \$433, which was increased to \$450 effective January 1, 2024 and remained the same throughout the remainder of Fiscal 2024. The cash amount paid to Danforth decreased from \$269,402 for Fiscal 2023 to \$199,322 for Fiscal 2024, with approximately a 29% decrease in Mr. Hess' hours for Fiscal 2024 as compared to Fiscal 2023.

The base salaries of our named executive officers for Fiscal 2024 as compared to Fiscal 2023 are set forth in the following table:

Name and Title	Fiscal 2024 Base Salary	Fiscal 2023 Base Salary
Keith Murphy, <i>Executive Chairman</i> ⁽¹⁾	\$ 657,984	\$ 543,781
Thomas Hess, <i>Chief Financial Officer</i> ⁽²⁾	199,322	269,402
Thomas Jurgensen, <i>Former General Counsel and Corporate Secretary</i> ⁽³⁾	381,262	381,262
Jeffrey Miner, <i>Former Chief Scientific Officer</i> ⁽⁴⁾	238,292	238,292

(1) Mr. Murphy was appointed our Executive Chairman on September 15, 2020. The Company retains Mr. Murphy through MDBI, a biotechnology consulting firm, pursuant to the terms of a consulting agreement, pursuant to which Company has agreed to pay MDBI \$375-390 per hour of services provided by Mr. Murphy, with an annual increase in rates by up to 4%. The amounts reported under "Fiscal 2024 Base Salary" and "Fiscal 2023 Base Salary" are comprised of the actual amounts paid to MDBI for its consulting services. Mr. Murphy did not directly receive a base salary from the Company in Fiscal 2024 or Fiscal 2023. Mr. Murphy's increase in base salary was primarily due to additional time commitment of Mr. Murphy in his consulting role as Executive Chairman of the Company.

(2) Mr. Hess was appointed our Chief Financial Officer on October 6, 2022. The Company retains Mr. Hess through Danforth, a financial consulting firm, pursuant to the terms of a consulting agreement, pursuant to which Company has agreed to pay Danforth \$400 per hour of

services provided by Mr. Hess, with an annual increase in rates by up to 4%. The amounts reported under “Fiscal 2024 Base Salary” and “Fiscal 2023 Base Salary” are comprised of the actual amounts paid to Danforth for its consulting services. Mr. Hess did not directly receive a base salary from the Company in Fiscal 2024 or Fiscal 2023. Mr. Hess’s decrease in base salary was primarily due to reduced time commitment of Mr. Hess in his consulting role as Chief Financial Officer of the Company.

- (3) Mr. Jurgensen’s employment with the Company was terminated as of August 25, 2023 in connection with Company’s reduction in force announced on August 18, 2023.
- (4) Dr. Miner’s employment with the Company was terminated as of August 25, 2023 in connection with Company’s reduction in force announced on August 18, 2023

Performance-Based Cash Incentive Awards. Our executive compensation program includes an annual performance-based cash incentive award, which provides our executive officers with an annual cash incentive opportunity as a percentage of their base salaries based upon the achievement of corporate and individual performance goals evaluated and approved by the Compensation Committee. For Fiscal 2024, the Compensation Committee determined that the annual target bonus opportunity expressed as a percentage of base salary for each of Mr. Jurgensen and Dr. Miner should be 40% of each of their respective base salaries. The Company continues to use an objectives and key results goal-setting framework (“OKRs”) used by individuals, teams, and the Company to define measurable goals and track their outcomes, originally developed and implemented by Andrew Grove at Intel. See: <http://www.whatmatters.com>. Each executive officer was eligible to receive an increase in his target bonus amount based on the achievement of individual and corporate OKRs. For Fiscal 2024, the Compensation Committee did not award bonuses to Mr. Jurgensen or Dr. Miner.

Mr. Murphy is retained through MDBI, a biotechnology consulting firm, pursuant to the terms of a consulting agreement. As such, Mr. Murphy is not eligible to receive a bonus for services provided during the fiscal year.

Mr. Hess is retained through Danforth, a financial consulting firm, pursuant to the terms of a consulting agreement. As such, Mr. Hess is not eligible to receive a bonus for services provided during the fiscal year.

Equity-Based Incentive Awards. In addition to base salaries and annual performance-based cash incentives, the Compensation Committee has provided long-term, equity-based incentive awards to our executive officers. In determining the size and terms of the awards, the Compensation Committee considered benchmark data from our peer group, publicly available market and survey data and the individual performance of the named executive officers. The Compensation Committee did not grant any awards for Fiscal 2024.

Other Benefits

In order to attract and retain qualified individuals and pay market levels of compensation, we have historically provided, and will continue to provide, our executives with the following benefits:

- **Health Insurance** – We provide each of our executives and their spouses and children the same health, dental, and vision insurance coverage we make available to our other eligible employees.
- **Life and Disability Insurance** – We provide each of our executives with the same life and disability insurance as we make available to our other eligible employees.
- **Pension Benefits** – We do not provide pension arrangements or post-retirement health coverage for our executives or employees. We implemented a 401(k) Plan effective January 1, 2014. We provide a company matching contribution up to 3.5% of compensation for all participants in the 401(k) plan, including our executive officers, to help attract and retain top talent.
- **Nonqualified Deferred Compensation** – We do not provide any nonqualified defined contribution or other deferred compensation plans to any of our employees.
- **Perquisites** – We limit the perquisites that we make available to our executive officers. In certain cases, we have reimbursed our executive officers for their relocation expenses on their initial hire.

Severance Arrangements

As of November 10, 2020, the Company implemented a change in control arrangement, which provides that, in the event an executive is terminated in connection with a Change in Control: the executive will receive (a) in the case of our Executive Chairman, 18 months of base salary or consulting fees, as applicable, and (b) in the case of our other executives, 12 months of base salary.

On September 7, 2023, in connection with Mr. Jurgensen’s termination, the Company entered into a Separation Agreement and General Release (the “Jurgensen Separation Agreement”) with Mr. Jurgensen, to be effective as of September 15, 2023. Pursuant to the Jurgensen Separation Agreement, Mr. Jurgensen released any claims against the Company and the Company paid Mr. Jurgensen an aggregate of \$345,000 (less applicable federal, state, and local withholdings), in three separate installment payments of \$115,000 on or before September 28, 2023, October 16, 2023 and January 5, 2024.

On September 19, 2023, in connection with Dr. Miner’s termination, the Company entered into a Separation Agreement and General Release (the “Miner Separation Agreement”) with Dr. Miner, to be effective as of September 27, 2023. Pursuant to the Miner Separation Agreement, Dr. Miner released any claims against the Company and the Company (i) provided Dr. Miner a consulting contract for a period of six months, pursuant to which the Company paid Dr. Miner an aggregate of \$169,250 for his consulting services, and (ii) granted Dr. Miner a stock option to purchase 40,000 shares of common stock of the Company (the “Option”). The Option will vest as follows: 13,000 shares vested immediately upon issuance, 13,500 shares vested on September 19, 2024, the one year anniversary of the Miner Separation Agreement and 13,500 shares will vest on September 19, 2025, the two year anniversary of the Miner Separation Agreement. The exercise price is equal to the closing price of a share of common stock on the date the Option was approved by the Company’s Board of Directors.

Potential Payments upon Termination or Change in Control

The following table sets forth the amounts payable to each of our named executive officers based on an assumed termination as of March 31, 2024 based upon certain designated events.

Name	Cash Severance (\$)	Health and Other Insurance Benefits (\$)	Stock Options (Unvested and Accelerated) (\$)	Restricted Stock Units (Unvested and Accelerated) (\$)	Fiscal Year 2024 Total (\$)
Keith Murphy					
Termination in connection with a Change in Control	\$ 1,288,560	\$ —	\$ —	\$ —	\$ 1,288,560
Thomas Hess					
Termination in connection with a Change in Control	\$ 936,000	\$ —	\$ —	\$ —	\$ 936,000
Thomas Jurgensen					
Termination in connection with a Change in Control ⁽¹⁾	\$ 345,000	\$ —	\$ —	\$ —	\$ 345,000
Jeffrey Miner					
Termination in connection with a Change in Control ⁽²⁾	\$ 169,250	\$ —	\$ —	\$ —	\$ 169,250

- (1) Mr. Jurgensen’s employment was terminated as of August 25, 2023. Pursuant to the Jurgensen Separation Agreement, the Company paid Mr. Jurgensen an aggregate of \$345,000.
- (2) Dr. Miner’s employment was terminated as of August 25, 2023. Pursuant to the Miner Separation Agreement, for his consulting services, the Company paid Dr. Miner an aggregate of \$169,250, and granted Dr. Miner a stock option to purchase 40,000 shares of common stock of the Company (the “Option”). The Option vests as follows: 13,000 shares vested immediately upon issuance, 13,500 shares vested on September 19, 2024, the one year anniversary of the Miner Separation Agreement, and 13,500 shares will vest on September 19, 2025, the two year anniversary of the Miner Separation Agreement.

Death or Disability Benefits

The outstanding equity awards held by our executive officers provide such executive officers with accelerated vesting if the executive officer terminates services with the Company as a result of death or disability. In order for an equity award to be eligible for accelerated vesting, the executive officer’s death or disability must occur more than 90 days after the date the equity award was granted. With respect to performance-based equity awards, an executive officer will vest at target levels upon the executive officer’s death or disability.

Summary Compensation Table

The following table summarizes the total compensation paid to or earned by each named executive officer for Fiscal 2024 and Fiscal 2023.

Name and Principal Position	Year or Period	Salary (\$)	Bonus (\$)	Stock Awards (\$)	Option Awards (\$) ⁽¹⁾	Non-Equity Incentive Plan Compensation (\$) ⁽²⁾	All Other Compensation (\$)	Total (\$)
Keith Murphy ⁽³⁾ Executive Chairman	2024	657,984	—	—	—	—	23,152 ⁽⁴⁾	681,136
	2023	543,781	—	—	73,921	—	3,746 ⁽⁴⁾	621,448
Thomas Hess ⁽⁵⁾ Chief Financial Officer	2024	199,322	—	—	—	—	—	199,322
Thomas Jurgensen Former General Counsel and Corporate Secretary	2024	161,446	—	—	—	—	348,454 ⁽⁶⁾	509,900
	2023	381,263	—	—	73,921	—	10,790 ⁽⁷⁾	465,974
Jeffrey Miner Former Chief Scientific Officer	2024	100,904	—	—	46,337 ⁽⁸⁾	—	172,790 ⁽⁹⁾	320,031
	2023	238,292	—	—	73,921	—	3,540 ⁽⁷⁾	315,753

- (1) These amounts represent the grant date fair value of time-based stock option awards granted by the Company during the periods presented, determined in accordance with FASB ASC Topic 718. All awards are amortized over the vesting life of the award. For the assumptions used in our valuations, see “Note 7 – Stockholders’ Equity” of the Notes to Consolidated Financial Statements in the Annual Report on Form 10-K for the year ended March 31, 2024, as filed with the SEC on May 31, 2024.
- (2) Includes amounts paid under the Company’s Performance-Based Cash Incentive Award program based on the achievement of corporate and individual performance goals established and measured by the Compensation Committee.
- (3) Mr. Murphy was appointed our Executive Chairman on September 15, 2020. The amounts reported under “Salary” are comprised of the amounts paid to MDBI for its consulting services. Mr. Murphy did not receive a base salary from the Company in Fiscal 2024 or Fiscal 2023. Mr. Murphy also received compensation for services as a member of the Board of Directors, which is included in the section entitled “Director Compensation Table” on page 49 of this Proxy Statement.
- (4) This amount includes \$14,777 for expense reimbursements, \$1,775 for administrative services and \$6,600 for office rent in Fiscal 2024 and \$1,996 for expense reimbursements, \$1,200 for administrative services and \$550 for office rent in Fiscal 2023.
- (5) Mr. Hess was appointed our Chief Financial Officer on October 6, 2022. The amounts reported under “Salary” are comprised of the amounts paid to Danforth for its consulting services. Mr. Hess did not receive a base salary from the Company in Fiscal 2024. Mr. Hess’ compensation for Fiscal 2023 has been omitted from this table as Mr. Hess was not a named executive officer for Fiscal 2023.
- (6) Pursuant to the Jurgensen Separation Agreement, the Company agreed to pay Mr. Jurgensen an aggregate of \$345,000. In addition, this amount includes \$3,454 in matching contributions to the 401(k) Plan for Fiscal 2024. The formula for determining the matching contributions is the same for named executive officers as it is for all salaried employees (and are subject to the same statutory maximum). Excludes payments made for the reimbursement of medical insurance premiums and life insurance available for all salaried employees. For more information regarding these benefits, see above under “Other Benefits.”
- (7) Consists of matching contributions to the 401(k) Plan. The formula for determining the matching contributions is the same for named executive officers as it is for all salaried employees (and are subject to the same statutory maximum). Excludes payments made for the reimbursement of medical insurance premiums and life insurance available for all salaried employees.
- (8) Pursuant to the Miner Separation Agreement, the Company granted Dr. Miner a stock option to purchase 40,000 shares of common stock, which will vest as follows: 13,000 shares will be vested immediately upon issuance, 13,500 shares will vest on the one year anniversary of the Separation Agreement and 13,500 shares will vest on the two year anniversary of the Separation Agreement.
- (9) Pursuant to the Miner Separation Agreement, the Company agreed to pay Dr. Miner an aggregate of \$169,250 for his consulting services. In addition, this amount includes \$3,540 in matching contributions to the 401(k) Plan for Fiscal 2024. The formula for determining the matching contributions is the same for named executive officers as it is for all salaried employees (and are subject to the same statutory maximum). Excludes payments made for the reimbursement of medical insurance premiums and life insurance available for all salaried employees. For more information regarding these benefits, see above under “Other Benefits.”

Outstanding Equity Awards at Fiscal Year End

The following table shows certain information regarding outstanding equity awards as of March 31, 2024 for our named executive officers:

Name	Option Awards				Stock Awards	
	No. of Securities Underlying Unexercised Options (#) Exercisable	No. of Securities Underlying Unexercised Options (#) Unexercisable	Option Exercise Price (\$)	Option Expiration Date	No. of Shares or Units of Stock That Have Not Vested (#)	Market Value of Shares or Units of Stock That Have Not Vested (\$)
Keith Murphy	15,000 ⁽¹⁾	25,000	\$ 2.36	8/30/2032	5,000 ⁽²⁾	\$ 5,150
Jeffrey Miner	13,000 ⁽³⁾	27,000	7.64	11/13/2033		

- (1) The option shares vest in 16 equal quarterly installments beginning August 31, 2022.
- (2) 25% of the shares subject to the restricted stock unit vested on March 8, 2022 and the remaining shares vest in 12 equal quarterly installments thereafter.
- (3) Pursuant to the Separation Agreement entered into on September 10, 2023 with Dr. Miner, the Company granted Dr. Miner a stock option to purchase 40,000 shares of common stock, which will vest as follows: 13,000 shares will be vested immediately upon issuance beginning November 13, 2023, 13,500 shares will vest on the one year anniversary of the Separation Agreement and 13,500 shares will vest on the two year anniversary of the Separation Agreement.

As of March 31, 2024, neither Mr. Hess nor Mr. Jurgensen held any outstanding equity awards.

ITEM 402(V) PAY VERSUS PERFORMANCE

As required by Section 953(a) of the Dodd-Frank Wall Street Reform and Consumer Protection Act and Item 402(v) of Regulation S-K, we are providing the following disclosure about the relationship between compensation actually paid for our principal executive officer (“PEO”) and non-PEO named executive officers (“Non-PEO NEOs”) and certain financial performance of the Company. As a smaller reporting company, we are permitted to, and have elected to, provide scaled disclosure. The disclosure included in this section does not necessarily align with how the Company or the Compensation Committee view the relationship between the Company's performance and executive compensation. For additional information about our pay for performance compensation philosophy and how we seek to align executive compensation with the Company's performance, please refer to "Executive Compensation" beginning on page 36.

Tabular Disclosure of Pay Versus Performance

The following table presents the pay versus performance information for our named executive officers. The amounts set forth in the table below under the headings "Compensation Actually Paid to PEO" and "Average Compensation Actually Paid to Non-PEO NEOs" have been calculated in a manner consistent with Item 402(v) of Regulation S-K. Use of the term "compensation actually paid" is required by the SEC's rules and, as a result of the calculation methodology required by the SEC, such amounts differ from compensation actually received by such individuals included in the table. Our Executive Chairman is our principal executive officer and is referred to as PEO in the headers of the following tables.

Fiscal Year	Summary Compensation Table Total for PEO ⁽¹⁾ (S)	Compensation Actually Paid to PEO ⁽²⁾ (S)	Average Summary Compensation Table Total for Non-PEO NEOs (S)	Average Compensation Actually Paid to Non-PEO NEOs ⁽²⁾ (S)	Value of Initial Fixed \$100 Investment Based on Total Shareholder Return ("TSR") ⁽³⁾ (S)	Net Loss (in thousands) ⁽⁴⁾ (S)
2024	681,136	595,609	343,084	325,900	10.68	(14,671)
2023	621,448	368,248	390,863	301,185	22.72	(17,259)
2022	1,260,144	(24,883)	779,555	262,422	39.00	(11,448)

(1) Represents the amounts of total compensation reported for Mr. Murphy (our Executive Chairman) for each corresponding year in the "Total" column of the Summary Compensation Table. Please refer to "Executive Compensation - Summary Compensation Table" for additional details.

(2) Represents the amount of compensation actually paid as computed in accordance with Item 402(v) of Regulation S-K. Please refer to the table below for adjustments made to the total compensation for our PEO and average total compensation for our Non-PEO NEOs each year to determine the compensation actually paid:

	PEO			Average of Non-PEO NEOs	
	2024	2023	2022	2023	2022
Summary Compensation Table Total	\$ 681,136	\$ 621,448	\$ 1,260,144	\$ 390,863	\$ 779,555
Less: Grant Date Fair Value of Equity Awards as reported in Summary Compensation Table ^(a)	—	73,921	829,672	73,921	353,651
Adjusted fair value of equity awards					
Fair value at year-end of awards granted during the year that are outstanding and unvested	—	60,894	492,234	60,894	188,923
Change in fair value at year-end of awards granted in prior years that are outstanding and unvested from prior year-end	(56,805)	(47,955)	(1,290,498)	(15,523)	(492,366)
Fair value at vesting date of equity awards granted during the year that vested during the year	—	7,691	62,791	7,691	17,260
Change in fair value at vesting date of equity awards granted in prior years that vested during the year from prior year-end	(28,723)	(199,909)	280,118	(68,819)	122,701

Compensation Actually Paid	\$	595,609	\$	368,248	\$	(24,883)	\$	301,185	\$	262,422
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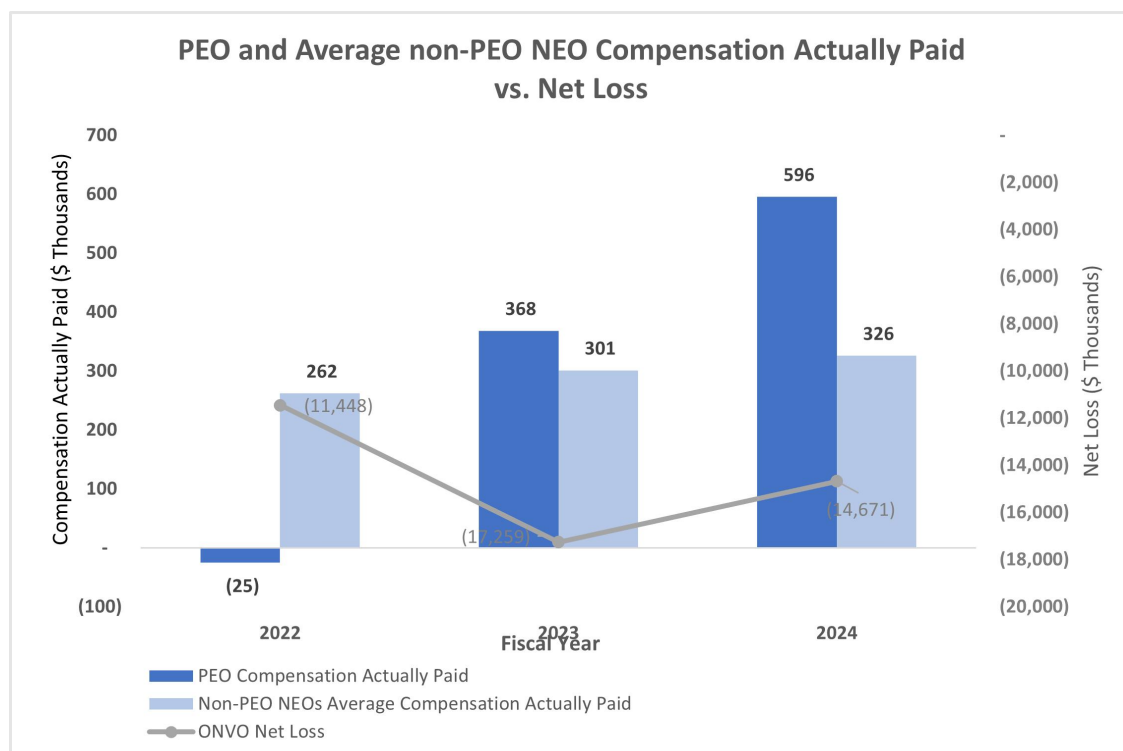
- (a) Represents the total of the amounts reported in the "Stock Awards" and "Option Awards" columns in the Summary Compensation Table for the applicable year.
- (3) TSR is determined based on the value of an initial fixed investment of \$100 on March 31, 2021. Cumulative TSR is calculated by dividing (i) the sum of the cumulative amount of dividends for the measurement period, assuming dividend reinvestment, and the difference between the Company's stock price at the end and the beginning of the measurement period by (ii) the Company's stock price at the beginning of the measurement period.
- (4) Represents the net loss attributable to the Company for each applicable fiscal year as reported in our audited financial statements included in our Annual Reports on Form 10-K for the years ended March 31, 2024 and 2023, as filed with the SEC on May 31, 2024 and July 14, 2023, respectively.

Narrative Disclosure to Pay Versus Performance Table

In accordance with Item 402(v) of Regulation S-K, we are providing the following descriptions of the relationship between the information presented in the Pay Versus Performance table above.

Compensation Actually Paid and Net Loss

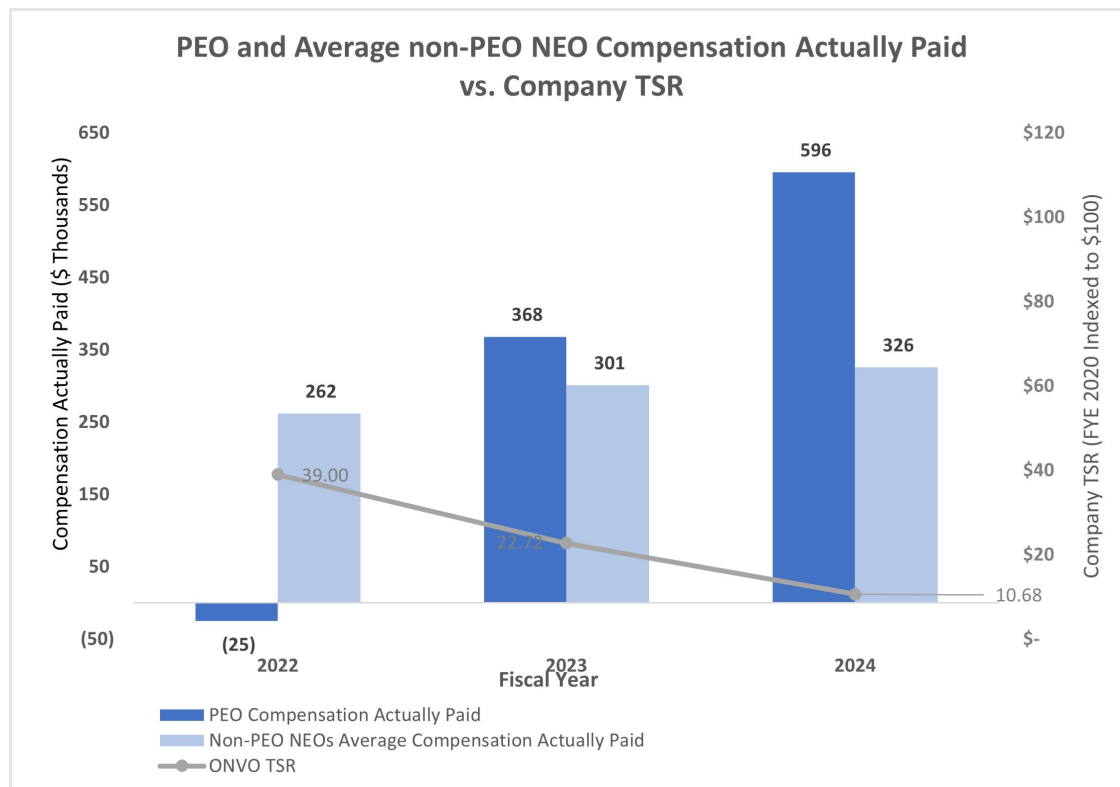
The graph below shows the relationship between the compensation actually paid to our PEO, the average of compensation actually paid to our non-PEO NEOs and our net loss during the two most recently completed fiscal years.



We do not use net loss as a performance measurement in our executive compensation. As a pre-commercial stage company, we do not believe there is any meaningful relationship between our net loss and compensation actually paid to our NEOs during the periods presented.

Compensation Actually Paid and Cumulative TSR

The following graph sets forth the relationship between compensation actually paid to our PEO, the average of compensation actually paid to our non-PEO NEOs and the Company's cumulative TSR over the two most recently completed fiscal years.



All 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 or the Exchange Act 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.

REPORT OF THE AUDIT COMMITTEE

The following is the report of our Audit Committee with respect to our audited financial statements included in our Annual Report on Form 10-K for the fiscal year ended March 31, 2024, filed with the SEC on May 31, 2024. The information contained in this report shall not be deemed to be “soliciting material” or to be “filed” with the SEC, nor shall such information be incorporated by reference into any future filing under the Securities Act or the Exchange Act except to the extent that the Company specifically incorporates it by reference in such filing.

The Audit Committee currently consists of three directors, each of whom is an “independent director” as defined under the listing standards for the Nasdaq Capital Market and the rules and regulations of the SEC. The Audit Committee acts pursuant to a written charter that has been adopted by the Board. A copy of the charter is available on the Company’s website at www.organovo.com.

The Audit Committee oversees our financial reporting process on behalf of the Board. Management has the responsibility for the financial statements and the reporting process, including internal control systems. Our independent registered public accounting firm for the fiscal year ended March 31, 2024, Rosenberg Rich Baker Berman P.A. (“RRBB P.A.”), was responsible for expressing an opinion as to the conformity of our audited financial statements with generally accepted accounting principles.

Review with Management

The Audit Committee reviewed and discussed the audited financial statements with management of the Company.

Review and Discussions with Independent Accountants

The Audit Committee met with RRBB P.A. to review the financial statements included in the Form 10-K. The Audit Committee discussed with a representative of RRBB P.A. the matters required to be discussed by the applicable requirements of the Public Company Accounting Oversight Board (“PCAOB”) and the SEC. In addition, the Audit Committee met with RRBB P.A., with and without management present, to discuss the overall scope of RRBB P.A.’s audit, the results of its examinations and the overall quality of the Company’s financial reporting. The Audit Committee received the written disclosures and the letter from RRBB P.A. required by applicable requirements of the PCAOB regarding RRBB P.A.’s communications with the Audit Committee concerning independence, and has discussed with RRBB P.A. its independence, and satisfied itself as to the independence of RRBB P.A.

Conclusion

Based on the above review, discussions, and representations received, the Audit Committee recommended to the Board of Directors that the audited financial statements for the fiscal year ended March 31, 2024 be included in the Company’s Form 10-K and filed with the SEC.

The Audit Committee of the Board of Directors:

Alison Tjosvold Milhous (Chair)
Douglas Jay Cohen
Adam Stern

CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS

Since April 1, 2023, there have not been any transactions or series of similar transactions to which we were or are a party in which the amount involved exceeded or exceeds the lesser of \$120,000 or one percent of the average of our total assets at fiscal year-end for the last two completed fiscal years, and in which any of our directors or executive officers, any holder of more than 5% of any class of our voting securities or any member of the immediate family of any of the foregoing persons had or will have a direct or indirect material interest, other than (i) the transactions described below and (ii) the compensation arrangements with our executive officers and non-employee directors described in “Executive Compensation” and “Director Compensation,” respectively.

Intercompany Agreement with Viscient

Viscient is an entity for which Keith Murphy, our Executive Chairman and member of our Board, serves as the Chief Executive Officer and President. Dr. Jeffrey Miner, the Company’s former Chief Scientific Officer, is also the Chief Scientific Officer of Viscient, and Thomas Jurgensen, the Company’s former General Counsel, previously served as outside legal counsel to Viscient through his law firm, Optima Law Group, APC. In addition, Messrs. Stern, Cohen and Gobel (through the Methuselah Foundation and the Methuselah Fund) have invested funds through a convertible promissory note in Viscient, but do not serve as an employee, officer or director of Viscient.

On December 28, 2020, the Company entered into an intercompany agreement (the “Intercompany Agreement”) with Viscient and Organovo, Inc., the Company’s wholly-owned subsidiary, which included an asset purchase agreement for certain lab equipment. Pursuant to the Intercompany Agreement, the Company agreed to provide Viscient certain services related to 3D bioprinting technology which includes, but is not limited to, histology services, cell isolation, and proliferation of cells and Viscient agreed to provide the Company certain services related to 3D bioprinting technology, including bioprinter training, bioprinting services, and qPCR assays, in each case on payment terms specified in the Intercompany Agreement and as may be further determined by the parties. In addition, the Company and Viscient each agreed to share certain facilities and equipment, and, subject to further agreement, to each make certain employees available for specified projects for the other party at prices to be determined in good faith by the parties. The Company evaluated the accounting for the Intercompany Agreement and concluded that any services provided by Viscient to the Company will be expensed as incurred, and any compensation for services provided by the Company to Viscient will be considered a reduction of personnel related expenses. Any services provided to Viscient do not fall under Financial Accounting Standards Board Topic 606 (“Revenue from Contracts with Customers”) as the Intercompany Agreement is not a contract with a customer. For the year ended March 31, 2024, the Company provided approximately \$14,000 of histology services to Viscient, respectively. No consulting services from Viscient were incurred for the year ended March 31, 2024.

Related Party Transaction Policy and Procedures

Pursuant to our written Related Party Transaction Policy and Procedures, our executive officers, directors, and principal stockholders, including their immediate family members and affiliates, are prohibited from entering into a related party transaction with us without the prior consent of our Audit Committee or a committee of our independent directors. Any request for us to enter into a transaction with an executive officer, director, principal stockholder, or any of such persons’ immediate family members or affiliates, in which the amount involved exceeds \$120,000, must first be presented to our Audit Committee for review, consideration and approval. In approving or rejecting the proposed agreement, our Audit Committee will consider the relevant facts and circumstances available and deemed relevant, including, but not limited to, the terms of the transaction, the nature of the related party’s interest in the transaction, the significance of the transaction to us and the related party, the nature of the related party’s relationship with us and whether the transaction would be likely to impair (or create an appearance of impairing) the judgement of a director or executive officer to act in our best interest. Our Audit Committee shall approve only those agreements that, in light of known circumstances, are in, or are not inconsistent with, our best interests, as our Audit Committee determines in the good faith exercise of its discretion.

OTHER MATTERS

The Company is not aware of any matter to be acted upon at the Annual Meeting other than the matters described in this Proxy Statement. However, if any other matter properly comes before the Annual Meeting, the proxy holders will vote the proxies thereon in accordance with their best judgment on such matter.

PROXY SOLICITATION

The Company will bear the expenses of calling and holding the Annual Meeting and the soliciting of proxies therefor. This Proxy Statement and the accompanying materials are being mailed and made available to stockholders, in accordance with SEC rules, by providing access to these documents on the internet in addition to mailing printed copies. The Company may consider the engagement of a proxy solicitation firm. Our directors, officers and employees may also solicit proxies by mail, telephone and personal contact, but they will not receive any additional compensation for these activities.

STOCKHOLDER PROPOSALS FOR 2025 ANNUAL MEETING

Stockholders interested in submitting a proposal for consideration at our 2025 Annual Meeting must do so by sending the proposal to our Corporate Secretary at Organovo Holdings, Inc., 11555 Sorrento Valley Rd., Suite 100, San Diego, CA 92121. Under the SEC's proxy rules, the deadline for submission of proposals to be included in our proxy materials for the 2025 Annual Meeting is June 9, 2025, which is not more than 120 days prior to the one-year anniversary of the date on which the Company first mailed its proxy materials or a notice of availability of proxy materials (whichever is earlier) for the Annual Meeting (i.e., October 7, 2025). Accordingly, in order for a stockholder proposal to be considered for inclusion in our proxy materials for the 2025 Annual Meeting, any such stockholder proposal must be received by our Corporate Secretary on or before June 9, 2025, and comply with the procedures and requirements set forth in Rule 14a-8 under the Exchange Act, as well as the applicable requirements of our Bylaws. Any stockholder proposal received after June 9, 2025 will be considered untimely and will not be included in our proxy materials. In addition, stockholders interested in submitting a proposal outside of Rule 14a-8 must properly submit such a proposal in accordance with our Bylaws. Stockholders interested in nominating a person for election as directors must also comply with the regulations under Exchange Act Rule 14a-19 ("Rule 14a-19"), which requires, among other things, that such notice include a statement that such person intends to solicit the holders of shares representing at least 67% of the voting power of shares entitled to vote on the election of directors.

Our Bylaws require advance notice of business to be brought before a stockholders' meeting, including nominations of persons for election as directors. To be timely, notice to our Corporate Secretary must be received at our principal executive offices not later than 5:00 p.m. Pacific Time on the 45th day nor earlier than 9:00 a.m. Pacific Time on the 75th day prior to the one-year anniversary of the date on which the Company first mailed its proxy materials or a notice of availability of proxy materials (whichever is earlier) for the Annual Meeting (i.e., October 7, 2025) and must contain specified information concerning the matters to be brought before such meeting and concerning the stockholder proposing such matters. Therefore, to be presented at our 2025 Annual Meeting, such a proposal must be received by the Company on or after 9:00 a.m. Pacific Time on July 24, 2025 but no later than 5:00 p.m. Pacific Time on August 23, 2025. Additionally, pursuant to Rule 14a-19, nominations of persons for elections as directors must also be postmarked or electronically submitted no later than September 22, 2025. If the date of the 2025 Annual Meeting is advanced by more than 30 days, or delayed by more than 60 days, from the one-year anniversary date of the Annual Meeting, notice must be received no earlier than 5:00 p.m. Pacific Time on the 120th day prior to such Annual Meeting and not later than 5:00 p.m. Pacific Time on the later of (i) the 90th day prior to such Annual Meeting or (ii) the 10th day following the day on which the public announcement of the date of such Annual Meeting is first made.

HOUSEHOLDING OF ANNUAL MEETING MATERIALS

We have adopted "householding," a procedure approved by the SEC under which stockholders who share an address will receive a single copy of the Annual Report for the fiscal year ended March 31, 2024 (the "Annual Report"), Proxy Statement and Notice. This procedure reduces printing costs and mailing fees, while also reducing the environmental impact of the distribution of documents related to the Annual Meeting. If you reside at the same address as another Organovo Holdings, Inc. stockholder and wish to receive a separate copy of the Annual Report,

Proxy Statement and Notice, you may do so by making a written or oral request to: Organovo Holdings, Inc., 11555 Sorrento Valley Rd., Suite 100, San Diego, CA 92121, Attn: Corporate Secretary, telephone (858) 224-1000. Upon your request, we will promptly deliver a separate copy to you. The Annual Report, Proxy Statement and Notice are also available at www.proxyvote.com.

Some brokers household proxy materials, delivering a single Proxy Statement or notice 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 materials 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 copy of the Annual Report, Proxy Statement and Notice, please notify your broker directly. You may also write to: Continental Stock Transfer and Trust, 1 State Street Plaza, 30th Floor, New York, NY 10004, Attention: Stephen Jones, and include your name, the name of your broker or other nominee, and your account number(s). Any stockholders who share the same address and currently receive multiple copies of the Annual Report, Proxy Statement and Notice who wish to receive only one copy in the future may contact their bank, broker, or other holder of record, or Organovo Holdings, Inc. at the contact information listed above, to request information about householding.

ANNUAL REPORT ON FORM 10-K

The Company filed an Annual Report on Form 10-K for the year ended March 31, 2024 with the SEC on May 31, 2024 (the “Annual Report”). A copy of the Company’s Annual Report has been mailed to the stockholders of record and will also be made available (without exhibits), free of charge, to interested stockholders upon written request to Organovo Holdings, Inc., 11555 Sorrento Valley Rd., Suite 100, San Diego, CA 92121, Attention: Corporate Secretary. The Annual Report is not incorporated into this Proxy Statement and is not considered to be proxy soliciting material.

BY ORDER OF THE BOARD OF DIRECTORS

A handwritten signature in black ink, appearing to read "Keith Murphy". The signature is written in a cursive, flowing style.

Keith Murphy
Executive Chairman and Corporate Secretary

ANNEX A

ORGANOVO HOLDINGS, INC.

AMENDED AND RESTATED 2022 EQUITY INCENTIVE PLAN

(As Amended and Restated on _____, 2024)

1. Purpose of the Plan. The purpose of this Plan is to:

- to attract and retain the best available personnel for positions of substantial responsibility,
- to provide additional incentive to Employees, Directors and Consultants, and
- to promote the success of the Company's business.

The Plan permits the grant of Incentive Stock Options, Nonstatutory Stock Options, Restricted Stock, Restricted Stock Units, Stock Appreciation Rights, Performance Units and Performance Shares.

2. Definitions. The following definitions are used in this Plan:

- a. "Administrator" means the Board or any of its Committees as will be administering the Plan, in accordance with Section 4 of the Plan.
- b. "Applicable Laws" means the legal and regulatory requirements relating to the administration of equity-based awards and issuance of shares of Common Stock, including under U.S. state corporate laws, U.S. federal and state securities laws, the Code, any stock exchange or quotation system on which the Common Stock is listed or quoted and the applicable laws of any non-U.S. country or jurisdiction where Awards are, or will be, granted under the Plan. Reference to a specific section of an Applicable Law or regulation related to that section shall include such section or regulation, any valid regulation or other official guidance issued under that section, and any comparable provision of any future legislation or regulation amending, supplementing or superseding that section or regulation.
- c. "Award" means, individually or collectively, a grant under the Plan of Options, Stock Appreciation Rights, Restricted Stock, Restricted Stock Units, Performance Units or Performance Shares.
- d. "Award Agreement" means the written or electronic agreement between the Company and Participant setting forth the terms and provisions applicable to an Award granted under the Plan. The Award Agreement is subject to the terms and conditions of the Plan.
- e. "Board" means the Board of Directors of the Company.
- f. "Change in Control" means the occurrence of any of the following events:
 - i. Change in Ownership of the Company. A change in the ownership of the Company which occurs on the date that any one person, or more than one person acting as a group ("Person"), acquires ownership of the stock of the Company that, together with the stock held by such Person, constitutes more than 50% of the total voting power of the stock of the Company; provided, however, that for purposes of this subsection, if any one Person is already considered to own more than 50% of the total voting power of the stock of the Company, the acquisition of additional stock by such Person will not be considered a Change in Control; or
 - ii. Change in Effective Control of the Company. A change in the effective control of the Company which occurs on the date that a majority of members of the Board is replaced during any 12-month period by Directors whose appointment or election is not endorsed by a majority of the members of the Board prior to the date of the appointment or election. For purposes of this subsection (ii), if any Person is considered to be in effective control of the

Company, the acquisition of additional control of the Company by the same Person will not be considered a Change in Control; or

iii. Change in Ownership of a Substantial Portion of the Company's Assets. A change in the ownership of a substantial portion of the Company's assets which occurs on the date that any Person acquires (or has acquired during the 12-month period ending on the date of the most recent acquisition by such Person) assets from the Company that have a total gross fair market value equal to or more than 50% of the total gross fair market value of all of the assets of the Company immediately prior to such acquisition or acquisitions; provided, however, that for purposes of this subsection (iii), the following will not constitute a change in the ownership of a substantial portion of the Company's assets: (A) a transfer to an entity that is controlled by the Company's stockholders immediately after the transfer, or (B) a transfer of assets by the Company to: (1) a stockholder of the Company (immediately before the asset transfer) in exchange for or with respect to the Company's stock, (2) an entity, 50% or more of the total value or voting power of which is owned, directly or indirectly, by the Company, (3) a Person, that owns, directly or indirectly, 50% or more of the total value or voting power of all the outstanding stock of the Company or (4) an entity, at least 50% of the total value or voting power of which is owned, directly or indirectly, by a Person described in subsection (iii)(B)(3). For purposes of this subsection (iii), gross fair market value means the value of the assets of the Company, or the value of the assets being disposed of, determined without regard to any liabilities associated with such assets.

For purposes of this definition, persons will be considered to be acting as a group if they are owners of a corporation that enters into a merger, consolidation, purchase or acquisition of stock, or similar business transaction with the Company.

Further and for the avoidance of doubt, a transaction will not constitute a Change in Control if: (x) its primary purpose is to change the jurisdiction of the Company's incorporation, or (y) its primary purpose is to create a holding company that will be owned in substantially the same proportions by the persons who held the Company's securities immediately before such transaction.

- g. "Code" means the U.S. Internal Revenue Code of 1986.
- h. "Committee" means a committee of Directors or of other individuals satisfying Applicable Laws appointed by the Board, or a duly authorized committee of the Board, in accordance with Section 4 hereof.
- i. "Common Stock" means the common stock of the Company.
- j. "Company" means Organovo Holdings, Inc., a Delaware corporation, or any successor thereto.
- k. "Consultant" means any person, including an advisor, engaged by the Company or a Parent or Subsidiary of the Company to render bona fide services to such entity, provided the services (i) are not in connection with the offer or sale of securities in a capital-raising transaction, and (ii) do not directly promote or maintain a market for the Company's securities, in each case, within the meaning used with respect to Form S-8 promulgated under the Securities Act, and provided, further, that a Consultant will include only those persons to whom the issuance of Shares may be registered under Form S-8 promulgated under the Securities Act.
- l. "Director" means a member of the Board.
- m. "Disability" means total and permanent disability as defined in Section 22(e)(3) of the Code, provided that in the case of Awards other than Incentive Stock Options, the Administrator in its discretion may determine whether a permanent and total disability exists in accordance with uniform and non-discriminatory standards adopted by the Administrator from time to time.
- n. "Employee" means any person, including Officers and Inside Directors, providing services as an employee to the Company or any Parent or Subsidiary of the Company. Neither service as a Director nor payment of a director's fee by the Company will be sufficient to constitute "employment" by the Company.

- o. “Exchange Act” means the U.S. Securities Exchange Act of 1934.
- p. “Exchange Program” means a program under which (i) outstanding Awards are surrendered or cancelled in exchange for awards of the same type (which may have higher or lower exercise prices and different terms), awards of a different type, and/or cash, (ii) Participants would have the opportunity to transfer any outstanding Awards to a financial institution or other person or entity selected by the Administrator and/or (iii) the exercise price of an outstanding Award is reduced. As described in Section 4(i), the Administrator may not institute an Exchange Program.
- q. “Fair Market Value” means, as of any date, the value of Common Stock determined as follows:
- i. If the Common Stock is listed on any established stock exchange or a national market system, including without limitation the Nasdaq Global Select Market, the Nasdaq Global Market or the Nasdaq Capital Market of The Nasdaq Stock Market or the New York Stock Exchange, its Fair Market Value will be the closing sales price for such stock (or, the closing bid, if no sales were reported) as quoted on such exchange or system on the day of determination, as reported by such source as the Administrator deems reliable;
- ii. If the Common Stock is regularly quoted by a recognized securities dealer but selling prices are not reported, the Fair Market Value of a Share will be the mean between the high bid and low asked prices for the Common Stock on the day of determination (or the closing bid, if no sales were reported), as reported by such source as the Administrator deems reliable; or
- iii. In the absence of an established market for the Common Stock, the Fair Market Value will be determined in good faith by the Administrator.
- If the Fair Market Value is to be determined under subsection (i) or (ii) above and the determination date for the Fair Market Value occurs on a day other than a Trading Day, the Fair Market Value will be the price as determined under subsection (i) or (ii) above, as applicable, on the immediately preceding Trading Day, unless otherwise determined by the Administrator. In addition, for purposes of determining the fair market value of shares for any reason other than the determination of the exercise price of Options or Stock Appreciation Rights, fair market value will be determined by the Administrator in a manner compliant with Applicable Laws and applied consistently for such purpose. Note that the determination of fair market value for purposes of withholding Tax-Related Items may be made in the Administrator’s sole discretion subject to Applicable Laws and is not required to be consistent with the determination of Fair Market Value for other purposes.
- r. “Fiscal Year” means the fiscal year of the Company.
- s. “Full-Value Awards” means any Awards that result in the Company transferring the full value of any underlying Share granted pursuant to an Award, but shall not include Options and Stock Appreciation Rights.
- t. “Incentive Stock Option” means an Option that is intended to qualify, and actually qualifies, as an incentive stock option within the meaning of Section 422 of the Code and the regulations promulgated thereunder.
- u. “Inside Director” means a Director who is an Employee.
- v. “Nonstatutory Stock Option” means an Option that by its terms does not qualify or is not intended to qualify as an Incentive Stock Option.
- w. “Officer” means a person who is an officer of the Company within the meaning of Section 16 of the Exchange Act and the rules and regulations promulgated thereunder.
- x. “Option” means a stock option granted pursuant to the Plan.
- y. “Outside Director” means a Director who is not an Employee.
- z. “Parent” means a “parent corporation” of the Company, whether now or hereafter existing, as defined in Section 424(e) of the Code.

- aa. “Participant” means the holder of an outstanding Award.
- bb. “Performance Share” means an Award denominated in Shares which may be earned in whole or in part upon attainment of performance goals or other vesting criteria as the Administrator may determine pursuant to Section 10.
- cc. “Performance Unit” means an Award denominated in Shares or cash, which may be earned in whole or in part upon attainment of performance goals or other vesting criteria as the Administrator may determine and which may be settled for cash, Shares or other securities or a combination of the foregoing pursuant to Section 10.
- dd. “Period of Restriction” means the period (if any) during which the transfer of Shares of Restricted Stock are subject to restrictions and therefore, the Shares are subject to a substantial risk of forfeiture. Such restrictions may be based on the passage of time, the achievement of target levels of performance, or the occurrence of other events as determined by the Administrator.
- ee. “Plan” means this Organovo Holdings, Inc. Amended and Restated 2022 Equity Incentive Plan.
- ff. “Restricted Stock” means Shares issued pursuant to a Restricted Stock award under Section 7 of the Plan, or issued pursuant to the early exercise of an Option.
- gg. “Restricted Stock Unit” means a bookkeeping entry representing an amount equal to the Fair Market Value of one Share, granted pursuant to Section 8. Each Restricted Stock Unit represents an unfunded and unsecured obligation of the Company.
- hh. “Rule 16b-3” means Rule 16b-3 of the Exchange Act or any successor to Rule 16b-3, as in effect when discretion is being exercised with respect to the Plan.
- ii. “Section 16(b)” means Section 16(b) of the Exchange Act.
- jj. “Section 409A” means Section 409A of the Code.
- kk. “Securities Act” means the U.S. Securities Act of 1933.
- ll. “Service Provider” means an Employee, Director or Consultant.
- mm. “Share” means a share of the Common Stock, as adjusted in accordance with Section 14 of the Plan.
- nn. “Stock Appreciation Right” means an Award, granted alone or in connection with an Option, that pursuant to Section 9 is designated as a Stock Appreciation Right.
- oo. “Subsidiary” means a “subsidiary corporation” of the Company whether now or hereafter existing, as defined in Section 424(f) of the Code.
- pp. “Substituted Award” means an Award granted in substitution for an equity award of an acquired entity in connection with a merger, reorganization, separation or other transaction to which Section 424(a) of the Code applies.
- qq. “Tax-Related Items” means any U.S. and non-U.S. federal, state, or local taxes (including, without limitation, income tax, social insurance, payroll tax, fringe benefits tax, payment on account and any other tax-related items) related to a Participant’s participation in the Plan and legally applicable or deemed applicable to the Participant, or have been transferred to the Participant.
- rr. “Trading Day” means a day that the primary stock exchange, national market system, or other trading platform, as applicable, upon which the Common Stock is listed is open for trading.

3. Stock Subject to the Plan.

- a. Stock Subject to the Plan. Subject to the provisions of Section 14 of the Plan, the maximum aggregate number of Shares that may be issued under the Plan is (i) 3,011,738 Shares, plus (ii) any Shares subject to awards granted under the Company’s Amended and Restated 2012 Equity Incentive Plan, as amended, that, on or after the date stockholders initially approve the Plan, expire or otherwise terminate without having been exercised or issued in full or are forfeited to or

repurchased by the Company due to failure to vest, with the maximum number of Shares to be added to the Plan pursuant to clause (ii) equal to 1,367,722 Shares. In addition, Shares may become available for issuance under the Plan pursuant to Section 3(c). The Shares may be authorized, but unissued, or reacquired Common Stock. If the Committee grants Substituted Awards in substitution for equity awards outstanding under a plan maintained by an entity acquired by or consolidated with the Company, the grant of those Substituted Awards will not decrease the number of Shares available for issuance under the Plan.

- b. Share Conversion Ratio. Any Shares that are subject to Options, Stock Appreciation Rights or other Awards that are not Full-Value Awards shall be counted against the numerical limits of Section 3(a) as 1.15 Shares for every one Share subject thereto. To the extent that a Share that was subject to an Award that counted as 1.15 Shares against the Plan reserve pursuant to the preceding sentence is recycled back into the Plan under Section 3(c), the Plan shall be credited with 1.15 Shares.
- c. Lapsed Awards. If an Award expires without having been exercised in full, or, with respect to Restricted Stock, Restricted Stock Units, Performance Units or Performance Shares, is forfeited to or repurchased by the Company, then the unpurchased Shares (or for Awards other than Options or Stock Appreciation Rights, the forfeited or repurchased Shares) that were subject thereto will become available for future grant or sale under the Plan (unless the Plan has terminated). Upon exercise of a Stock Appreciation Right settled in Shares, the gross number of Shares covered by the portion of the Stock Appreciation Right so exercised will cease to be available under the Plan. Shares that actually have been issued under the Plan under any Award will not be returned to the Plan and will not become available for future distribution under the Plan; provided, however, that if unvested Shares of Restricted Stock, Restricted Stock Units, Performance Shares or Performance Units are repurchased by the Company or are forfeited to the Company, such Shares will become available for future grant under the Plan. Shares used to pay the exercise price or purchase price of an Award or to satisfy the tax withholding obligations related to an Award will not become available for future grant or sale under the Plan. To the extent an Award under the Plan is paid out in cash rather than Shares, such cash payment will not reduce the number of Shares available for issuance under the Plan. Notwithstanding the foregoing and, subject to adjustment as provided in Section 14, the maximum number of Shares that may be issued upon the exercise of Incentive Stock Options will equal the aggregate Share number stated in Section 3(a), plus, to the extent allowable under Section 422 of the Code and the Treasury Regulations promulgated thereunder, any Shares that become available for issuance under the Plan pursuant to this Section 3(c).
- d. Share Reserve. The Company, at all times during the term of this Plan, will reserve and keep available such number of Shares as will be sufficient to satisfy the requirements of the Plan.

4. Administration of the Plan.

- a. Procedure.
 - i. General. The Plan will be administered by (A) the Board or (B) a Committee constituted to satisfy Applicable Laws. The Board or Committee will be the Administrator. Different Administrators may administer the Plan with respect to different groups of Service Providers. The Board may retain the authority to concurrently administer the Plan with a Committee and may, at any time, revoke the delegation of some or all authority previously delegated.
 - ii. Rule 16b-3. To the extent desirable to qualify transactions hereunder as exempt under Rule 16b-3, the transactions contemplated hereunder will be structured to satisfy the requirements for exemption under Rule 16b-3.
- b. Powers of the Administrator. Subject to the Plan, any limitations on delegations specified by the Board, and any requirements imposed by Applicable Laws, the Administrator will have the authority, in its sole discretion, to make any determinations and perform any actions deemed necessary or advisable to administer the Plan including to:

- i. determine the Fair Market Value;
 - ii. select the Service Providers to whom Awards may be granted hereunder;
 - iii. determine the number of Shares to be covered by each Award granted hereunder;
 - iv. approve forms of Award Agreements for use under the Plan;
 - v. determine the terms and conditions, not inconsistent with the terms of the Plan, of any Award granted hereunder. The terms and conditions include, but are not limited to, the exercise price, the time or times when Awards may be exercised (which may be based on performance criteria), any vesting acceleration or waiver of forfeiture restrictions and any restriction or limitation regarding any Award or the Shares relating to an Award;
 - vi. establish, amend and rescind rules and regulations and adopt sub-plans relating to the Plan, including rules, regulations and sub-plans for the purposes of facilitating compliance with non-U.S. laws, easing the administration of the Plan and/or taking advantage of tax-favorable treatment for Awards granted to Service Providers outside the U.S.;
 - vii. interpret the Plan and make any decision necessary to administer the Plan;
 - viii. interpret, modify or amend each Award (subject to Section 17(c) of the Plan), including without limitation the discretionary authority to extend the post-termination exercisability period of Awards;
 - ix. allow Participants to satisfy tax withholding obligations in a manner prescribed in Section 15 of the Plan;
 - x. authorize any person to execute on behalf of the Company any instrument required to effect the grant of an Award previously granted by the Administrator;
 - xi. delegate ministerial duties to any of the Company's employees;
 - xii. temporarily suspend the exercisability of an Award if the Administrator deems such suspension to be necessary or appropriate for administrative purposes;
 - xiii. allow a Participant to defer the receipt of the payment of cash or the delivery of Shares that otherwise would be due to the Participant under an Award; and
 - xiv. make all other determinations deemed necessary or advisable for administering the Plan.
- c. Grant Date. The grant date of an Award ("Grant Date") will be the date that the Administrator makes the determination granting such Award or may be a later date if such later date is designated by the Administrator on the date of the determination or under an automatic grant policy. Notice of the determination will be provided to each Participant within a reasonable time after the Grant Date.
- d. Waiver. The Administrator may waive any terms, conditions or restrictions.
- e. Fractional Shares. Except as otherwise provided by the Administrator, any fractional Shares that result from the adjustment of Awards will be cancelled. Any fractional Shares that result from vesting percentages will be accumulated and vested on the date that an accumulated full Share is vested.
- f. Electronic Delivery. The Company may deliver by e-mail or other electronic means (including posting on a website maintained by the Company or its agent) all documents relating to the Plan or any Award and all other documents that the Company is required to deliver to its security holders (including prospectuses, annual reports and proxy statements).
- g. Choice of Law; Choice of Forum. The Plan, all Awards and all determinations made and actions taken under the Plan, to the extent not otherwise governed by the laws of the United States, will be governed by the laws of the State of Delaware without giving effect to principles of conflicts of law. For purposes of litigating any dispute that arises under this Plan, a Participant's acceptance of an Award is his or her consent to the jurisdiction of the State of Delaware, and agreement that

any such litigation will be conducted in Delaware Court of Chancery, or the federal courts for the United States for the District of Delaware, and no other courts, regardless of where a Participant's services are performed.

- h. Effect of Administrator's Decision. The Administrator's decisions, determinations and interpretations will be final and binding on all Participants and any other holders of Awards and will be given the maximum deference permitted by Applicable Laws.
- i. Exchange Program. The Administrator may not institute an Exchange Program.
- 5. Eligibility. Nonstatutory Stock Options, Stock Appreciation Rights, Restricted Stock, Restricted Stock Units, Performance Shares and Performance Units may be granted to Service Providers. Incentive Stock Options may be granted only to Employees.
- 6. Stock Options.

 - a. Grant of Options. Subject to the terms and provisions of the Plan, the Administrator, at any time and from time to time, may grant Options to Service Providers in such amounts as the Administrator determines in its sole discretion.
 - b. Stock Option Agreement. Each Option will be evidenced by an Award Agreement that will specify the exercise price, the number of Shares subject to the Option, the exercise restrictions, if any, applicable to the Option, and such other terms and conditions as the Administrator determines in its sole discretion.
 - c. Limitations. Each Option will be designated in the Award Agreement as either an Incentive Stock Option or a Nonstatutory Stock Option. However, notwithstanding such designation, to the extent that the aggregate Fair Market Value of the Shares with respect to which Incentive Stock Options are exercisable for the first time by the Participant during any calendar year (under all plans of the Company and any Parent or Subsidiary) exceeds \$100,000, such Options will be treated as Nonstatutory Stock Options. For purposes of this Section 6(c), Incentive Stock Options will be taken into account in the order in which they were granted. The Fair Market Value of the Shares will be determined as of the time the Option with respect to such Shares is granted.
 - d. Term of Option. The term of each Option will be stated in the Award Agreement. The term of an Option will be 10 years from the Grant Date or such shorter term as may be provided in the Award Agreement. Moreover, in the case of an Incentive Stock Option granted to a Participant who, at the time the Incentive Stock Option is granted, owns stock representing more than 10% of the total combined voting power of all classes of stock of the Company or any Parent or Subsidiary, the term of the Incentive Stock Option will be five years from the Grant Date or such shorter term as may be provided in the Award Agreement.
 - e. Option Exercise Price and Consideration.

 - i. Exercise Price. The per share exercise price for the Shares to be issued pursuant to exercise of an Option will be determined by the Administrator, subject to the following:

 1. In the case of an Incentive Stock Option

 - a. granted to an Employee who, at the time the Incentive Stock Option is granted, owns stock representing more than 10% of the voting power of all classes of stock of the Company or any Parent or Subsidiary, the per Share exercise price will be no less than 110% of the Fair Market Value per Share on the Grant Date.
 - b. granted to any Employee other than an Employee described in paragraph (A) immediately above, the per Share exercise price will be no less than 100% of the Fair Market Value per Share on the Grant Date.
 2. In the case of a Nonstatutory Stock Option, the per Share exercise price will be determined by the Administrator and may no less than 100% of the Fair Market Value per Share on the Grant Date unless otherwise required by Applicable Laws.

3. Notwithstanding the foregoing, Options may be granted with a per Share exercise price of less than 100% of the Fair Market Value per Share on the Grant Date pursuant to a transaction described in, and in a manner consistent with, Section 424(a) of the Code.

ii. Waiting Period and Exercise Dates. At the time an Option is granted, the Administrator will fix the period within which the Option may be exercised and will determine any conditions that must be satisfied before the Option may be exercised.

iii. Form of Consideration. The Administrator will determine the acceptable form of consideration for exercising an Option, including the method of payment. In the case of an Incentive Stock Option, the Administrator will determine the acceptable form of consideration at the time of grant. Such consideration may consist entirely of: (1) cash; (2) check or wire transfer; (3) promissory note, to the extent permitted by Applicable Laws; (4) other Shares, provided that such Shares have a fair market value on the date of surrender equal to the aggregate exercise price of the Shares as to which such Option will be exercised and provided that accepting such Shares will not result in any adverse accounting consequences to the Company, as the Administrator determines in its sole discretion; (5) consideration received by the Company under a broker-assisted (or other) cashless exercise program (whether through a broker or otherwise) implemented by the Company in connection with the Plan; (6) net exercise, under which Shares are withheld from otherwise deliverable Shares that has been approved by the Board or a Committee; (7) such other consideration and method of payment for the issuance of Shares to the extent permitted by Applicable Laws; or (8) any combination of the foregoing methods of payment.

f. Exercise of Option.

i. Procedure for Exercise; Rights as a Stockholder. Any Option granted hereunder will be exercisable according to the terms of the Plan and at such times and under such conditions as determined by the Administrator and set forth in the Award Agreement. Notwithstanding the foregoing, at any time after the grant of an Option, the Administrator, in its sole discretion, may accelerate the time at which the Option will vest or become exercisable. An Option may not be exercised for a fraction of a Share.

An Option will be deemed exercised when the Company receives: (i) notice of exercise (in accordance with the procedures that the Administrator may specify from time to time) from the person entitled to exercise the Option, and (ii) full payment for the Shares with respect to which the Option is exercised (together with any amounts necessary to satisfy withholding obligations for Tax-Related Items). Full payment may consist of any consideration and method of payment authorized by the Administrator and permitted by the Award Agreement and the Plan. Shares issued upon exercise of an Option will be issued in the name of the Participant or, if requested by the Participant and approved by the Administrator, in the name of the Participant and his or her spouse. Until the Shares are issued (as evidenced by the appropriate entry on the books of the Company or of a duly authorized transfer agent of the Company), no right to vote or receive dividends or any other rights as a stockholder will exist with respect to the Shares subject to an Option, notwithstanding the exercise of the Option. The Company will issue (or cause to be issued) such Shares promptly after the Option is exercised. No adjustment will be made for a dividend or other right for which the record date is prior to the date the Shares are issued, except as provided in Section 14 of the Plan.

Exercising an Option in any manner will decrease the number of Shares thereafter available, both for purposes of the Plan and for sale under the Option, by the number of Shares as to which the Option is exercised.

ii. Termination of Relationship as a Service Provider. If a Participant ceases to be a Service Provider, other than upon the cessation of the Participant's Service Provider status as the result of the Participant's death or Disability, the Participant may exercise his or her Option within such period of time as is specified in the Award Agreement to the extent that the

Option is vested on the date of cessation of the Participant's Service Provider status (but in no event later than the expiration of the term of such Option as set forth in the Award Agreement). In the absence of a specified time in the Award Agreement, the Option will remain exercisable for three months following cessation of the Participant's Service Provider status. Unless otherwise provided by the Administrator, if on the date of cessation of the Participant's Service Provider status the Participant is not vested as to his or her entire Option, the Shares covered by the unvested portion of the Option will revert to the Plan. If, after cessation of the Participant's Service Provider status, the Participant does not exercise his or her Option within the time specified in the Award Agreement or herein, the Option will terminate, and the Shares covered by such Option will revert to the Plan.

iii. Disability of Participant. If a Participant ceases to be a Service Provider as a result of the Participant's Disability, the Participant may exercise his or her Option within such period of time as is specified in the Award Agreement to the extent the Option is vested on the date of cessation of the Participant's Service Provider status (but in no event later than the expiration of the term of such Option as set forth in the Award Agreement). In the absence of a specified time in the Award Agreement, the Option will remain exercisable for 12 months following cessation of the Participant's Service Provider status. Unless otherwise provided by the Administrator, if on the date of cessation of the Participant's Service Provider status the Participant is not vested as to his or her entire Option, the Shares covered by the unvested portion of the Option will revert to the Plan. If, after cessation of the Participant's Service Provider status, the Participant does not exercise his or her Option within the time specified in the Award Agreement or herein, the Option will terminate, and the Shares covered by such Option will revert to the Plan.

iv. Death of Participant. If a Participant dies while a Service Provider, the Option may be exercised following the Participant's death within such period of time as is specified in the Award Agreement to the extent that the Option is vested on the date of death (but in no event may the Option be exercised later than the expiration of the term of such Option as set forth in the Award Agreement), by the Participant's designated beneficiary, provided the Administrator has permitted the designation of a beneficiary and provided such beneficiary has been designated prior to the Participant's death in a form acceptable to the Administrator. If the Administrator has not permitted the designation of a beneficiary or if no such beneficiary has been designated by the Participant, then such Option may be exercised by the personal representative of the Participant's estate or by the person(s) to whom the Option is transferred pursuant to the Participant's will or in accordance with the laws of descent and distribution. In the absence of a specified time in the Award Agreement, the Option will remain exercisable for 12 months following the Participant's death. Unless otherwise provided by the Administrator, if at the time of death, the Participant is not vested as to his or her entire Option, the Shares covered by the unvested portion of the Option will immediately revert to the Plan. If the Option is not so exercised within the time specified in the Award Agreement or herein, the Option will terminate, and the Shares covered by such Option will revert to the Plan.

v. Tolling Expiration. A Participant's Award Agreement may also provide that:

1. if the exercise of the Option following the cessation of the Participant's status as a Service Provider (other than upon the Participant's death or Disability) would result in liability under Section 16(b), then the Option will terminate on the earlier of (A) the expiration of the term of the Option set forth in the Award Agreement, or (B) the 10th day after the last date on which such exercise would result in liability under Section 16(b); or
2. if the exercise of the Option following the cessation of the Participant's status as a Service Provider (other than upon the Participant's death or Disability) would be prohibited at any time solely because the issuance of Shares would violate the registration requirements under the Securities Act, then the Option will terminate on the earlier of (A) the expiration of the term of the Option or (B) the expiration of a

period of 30 days after the cessation of the Participant's status as a Service Provider during which the exercise of the Option would not be in violation of such registration requirements.

7. Restricted Stock.

- a. Grant of Restricted Stock. Subject to the terms and provisions of the Plan, the Administrator, at any time and from time to time, may grant Shares of Restricted Stock to Service Providers in such amounts as the Administrator determines in its sole discretion.
- b. Restricted Stock Agreement. Each Award of Restricted Stock will be evidenced by an Award Agreement that will specify any Period of Restriction, the number of Shares granted, and such other terms and conditions as the Administrator determines in its sole discretion. Unless the Administrator determines otherwise, the Company as escrow agent will hold Shares of Restricted Stock until the restrictions on such Shares have lapsed.
- c. Transferability. Except as provided in this Section 7 of the Award Agreement, Shares of Restricted Stock may not be sold, transferred, pledged, assigned, or otherwise alienated or hypothecated until the end of any applicable Period of Restriction.
- d. Other Restrictions. The Administrator, in its sole discretion, may impose such other restrictions on Shares of Restricted Stock as it may deem advisable or appropriate.
- e. Removal of Restrictions. Except as otherwise provided in this Section 7, Shares of Restricted Stock covered by each Restricted Stock grant made under the Plan will be released from escrow as soon as practicable after the last day of any applicable Period of Restriction or at such other time as the Administrator may determine. Notwithstanding the foregoing, at any time after the grant of an Option, the Administrator, in its sole discretion, may accelerate the time at which any restrictions will lapse or be removed.
- f. Voting Rights. During any applicable Period of Restriction, Service Providers holding Shares of Restricted Stock granted hereunder may exercise full voting rights with respect to those Shares, unless the Administrator determines otherwise.
- g. Return of Restricted Stock to Company. On the date set forth in the Award Agreement, the Restricted Stock for which restrictions have not lapsed will revert to the Company and again will become available for grant under the Plan.

8. Restricted Stock Units.

- a. Grant. Restricted Stock Units may be granted at any time and from time to time as determined by the Administrator. After the Administrator determines that it will grant Restricted Stock Units under the Plan, it will advise the Participant in an Award Agreement of the terms, conditions and restrictions related to the grant, including the number of Restricted Stock Units.
- b. Restricted Stock Unit Agreement. Each Award of Restricted Stock Units will be evidenced by an Award Agreement that will specify vesting criteria, the number of Restricted Stock Units granted and such other terms and conditions as the Administrator determines in its sole discretion.
- c. Vesting Criteria and Other Terms. The Administrator will set vesting criteria in its discretion, which, depending on the extent to which the criteria are met, will determine the number of Restricted Stock Units that will be paid out to the Participant. The Administrator may set vesting criteria based upon the achievement of Company-wide, divisional, business unit or individual goals (including, but not limited to, continued employment or service), applicable U.S. or non-U.S. federal or state securities laws or any other basis determined by the Administrator in its discretion.
- d. Earning Restricted Stock Units. Upon meeting the applicable vesting criteria, the Participant will be entitled to receive a payout as determined by the Administrator. Notwithstanding the foregoing, at any time after the grant of Restricted Stock Units, the Administrator, in its sole discretion, may reduce or waive any vesting criteria that must be met to receive a payout.

- e. Form and Timing of Payment. Payment of earned Restricted Stock Units will be made as soon as practicable after the date(s) determined by the Administrator and set forth in the Award Agreement. The Administrator, in its sole discretion, may settle earned Restricted Stock Units only in cash, Shares, or a combination of both.
- f. Cancellation. On the date set forth in the Award Agreement, all unearned Restricted Stock Units will be forfeited to the Company.

9. Stock Appreciation Rights.

- a. Grant of Stock Appreciation Rights. Subject to the terms and conditions of the Plan, a Stock Appreciation Right may be granted to Service Providers at any time and from time to time as will be determined by the Administrator, in its sole discretion.
- b. Stock Appreciation Right Agreement. Each Stock Appreciation Right grant will be evidenced by an Award Agreement that will specify the exercise price, the term of the Stock Appreciation Right (which shall not exceed 10 years), the conditions of exercise, and such other terms and conditions as the Administrator determines in its sole discretion. Notwithstanding the foregoing, at any time after the grant of a Stock Appreciation Right, the Administrator, in its sole discretion, may accelerate the time at which the Stock Appreciation Right will vest or become exercisable.
- c. Number of Shares. The Administrator will have complete discretion to determine the number of Stock Appreciation Rights granted to any Service Provider.
- d. Exercise Price and Other Terms. The per share exercise price for the Shares to be issued pursuant to exercise of a Stock Appreciation Right will be determined by the Administrator and will be no less than 100% of the Fair Market Value per Share on the Grant Date. Otherwise, the Administrator, subject to the provisions of the Plan, will have complete discretion to determine the terms and conditions of Stock Appreciation Rights granted under the Plan.
- e. Expiration of Stock Appreciation Rights. A Stock Appreciation Right granted under the Plan will expire upon the date as determined by the Administrator, in its sole discretion, and set forth in the Award Agreement. Notwithstanding the foregoing, the tolling and expiration rules of Section 6(f) relating to exercise also will apply to Stock Appreciation Rights. Until the Shares are issued (as evidenced by the appropriate entry on the books of the Company or of a duly authorized transfer agent of the Company), no right to vote or receive dividends or any other rights as a stockholder will exist with respect to the Shares subject to a Stock Appreciation Right, notwithstanding the exercise of the Stock Appreciation Right. The Company will issue (or cause to be issued) such Shares promptly after the Stock Appreciation Right is exercised. No adjustment will be made for a dividend or other right for which the record date is prior to the date the Stock Appreciation Rights are issued, except as provided in Section 14 of the Plan.
- f. Payment of Stock Appreciation Right Amount. Upon exercise of a Stock Appreciation Right, a Participant will be entitled to receive payment from the Company in an amount determined as the product of:
 - i. The difference between the Fair Market Value of a Share on the date of exercise over the exercise price; and
 - ii. The number of Shares with respect to which the Stock Appreciation Right is exercised.
At the discretion of the Administrator, the payment upon exercise of a Stock Appreciation Right may be in cash, in Shares of equivalent value or in some combination of both.

10. Performance Units and Performance Shares.

- a. Grant of Performance Units/Shares. Performance Units and Performance Shares may be granted to Service Providers at any time and from time to time, as will be determined by the Administrator, in its sole discretion. The Administrator will have complete discretion in determining the number of Performance Units and Performance Shares granted to each Participant.

- b. Value of Performance Units/Shares. Each Performance Unit will have an initial value that is established by the Administrator on or before the Grant Date. Each Performance Share will have an initial value equal to the Fair Market Value of a Share on the Grant Date.
- c. Performance Objectives and Other Terms. The Administrator will set performance objectives or other vesting provisions (including, without limitation, continued status as a Service Provider) in its discretion which, depending on the extent to which they are met, will determine the number or value of Performance Units/Shares that will be paid out to the Service Providers. The time period during which the performance objectives or other vesting provisions must be met will be called the “Performance Period.” Each Award of Performance Units/Shares will be evidenced by an Award Agreement that will specify the Performance Period, and such other terms and conditions as the Administrator determines in its sole discretion. The Administrator may set performance objectives based upon the achievement of Company-wide, divisional, business unit or individual goals (including, but not limited to, continued employment or service), applicable U.S. or non-U.S. federal or state securities laws, or any other basis determined by the Administrator in its discretion.
- d. Earning of Performance Units/Shares. After the applicable Performance Period has ended, the holder of Performance Units/Shares will be entitled to receive a payout of the number of Performance Units/Shares earned by the Participant over the Performance Period, to be determined as a function of the extent to which the corresponding performance objectives or other vesting provisions have been achieved. Notwithstanding the foregoing, at any time after the grant of a Performance Unit/Share, the Administrator, in its sole discretion, may reduce or waive any performance objectives or other vesting provisions for such Performance Unit/Share.
- e. Form and Timing of Payment of Performance Units/Shares. Payment of earned Performance Units/Shares will be made as soon as practicable after the expiration of the applicable Performance Period. The Administrator, in its sole discretion, may pay earned Performance Units/Shares in the form of cash, in Shares (which have an aggregate Fair Market Value equal to the value of the earned Performance Units/Shares at the close of the applicable Performance Period) or in a combination thereof.
- f. Cancellation of Performance Units/Shares. On the date set forth in the Award Agreement, all unearned or unvested Performance Units/Shares will be forfeited to the Company, and again will be available for grant under the Plan.

11. Award Limitations.

- a. Outside Director Award Limitations. No Outside Director may be paid compensation for service as an Outside Director in their capacity as a Director, that, in the aggregate, exceeds \$400,000, increased to \$800,000 for such Outside Director for the Fiscal Year in which he or she joins the Board as an Outside Director. Compensation includes equity awards, including any Awards issued under this Plan, the value of which will be based on their grant date fair value determined in accordance with U.S. generally accepted accounting principles and any other compensation (including without limitation any cash retainers or fees). Any Awards or other compensation paid or provided to an individual for his or her services as an Employee, or for his or her services as a Consultant (other than as an Outside Director), will not count for purposes of the limitation under this Section 11(a).
- b. Dividends and Other Distributions. No dividends or other distributions shall be paid with respect to any Shares underlying any unvested portion of an Award.
- c. Minimum Vesting Requirements. Notwithstanding any other provision of the Plan to the contrary, Awards granted under the Plan that are payable in shares of Common Stock shall vest no earlier than the first anniversary of the date on which the Award was granted (or the date of commencement of employment or service, in the case of a grant made in connection with a Participant’s commencement of employment or service); provided, that the foregoing minimum vesting requirement does not apply to: (i) Substituted Awards, (ii) shares of Common Stock delivered in lieu of fully vested cash-based obligations, (iii) Awards granted to Outside Directors that are not covered by clause (ii) above and that vest on the earlier of the one-year anniversary of

the date on which the Award was granted and the next annual meeting of stockholders and (iv) Awards with respect to a maximum of 5% of the maximum number of shares of Common Stock that may be granted under the Plan pursuant to Section 3(a) (subject to adjustment under Section 14). Notwithstanding the foregoing minimum vesting requirement, the Administrator may, in its discretion, provide for accelerated vesting or exercisability of an Award, in connection with a Participant's retirement, death, Disability or in connection with or following a Change in Control, in the terms of an Award Agreement or otherwise.

12. Leaves of Absence/Transfer Between Locations. Unless the Administrator provides otherwise or Applicable Laws require otherwise, vesting of Awards will be suspended during any unpaid leave of absence. A Participant will not cease to be an Employee in the case of (i) any leave of absence approved by the Company or the Participant's employer or (ii) transfers between locations of the Company or between the Company, its Parent or any of its Subsidiaries. For purposes of Incentive Stock Options, no such leave may exceed three months, unless reemployment upon expiration of such leave is guaranteed by statute or contract. If reemployment upon expiration of a leave of absence approved by the Company or the Participant's employer is not so guaranteed, then six months following the first day of such leave any Incentive Stock Option held by the Participant will cease to be treated as an Incentive Stock Option and will be treated for tax purposes as a Nonstatutory Stock Option.
13. Transferability of Awards.
- a. General Rule. Unless determined otherwise by the Administrator, or otherwise required by Applicable Laws, an Award may not be sold, pledged, assigned, hypothecated, transferred or disposed of in any manner other than by will or by the laws of descent or distribution and may be exercised, during the lifetime of the Participant, only by the Participant. If the Administrator makes an Award transferable, the Award will be limited by any additional terms and conditions imposed by the Administrator. Any unauthorized transfer of an Award will be void.
 - b. Domestic Relations Orders. If approved by the Administrator, an Award may be transferred pursuant to the terms of a domestic relations order, official marital settlement agreement or other divorce or separation instrument as permitted by Treasury Regulations Section 1.421-1(b)(2). An Incentive Stock Option may be deemed to be a Nonstatutory Stock Option as a result of such transfer.
 - c. Limited Transfers for the Benefit of Family Members. The Administrator may permit an Award or Share issued under this Plan to be assigned or transferred subject to the applicable limitations, set forth in the General Instructions to Form S-8 Registration Statement under the Securities Act, if applicable, and any other Applicable Laws. For the avoidance of doubt, no Award may be assigned or transferred to a third-party financial institution.
 - d. Permitted Transferees. Any individual or entity to whom an Award is transferred will be subject to all of the terms and conditions applicable to the Participant who transferred the Award, including the terms and conditions in this Plan and the Award Agreement. If an Award is unvested, then the service of the Participant will continue to determine whether the Award will vest and when it will terminate.
14. Adjustments; Dissolution or Liquidation; Merger or Change in Control; Death.
- a. Adjustments. In the event that any extraordinary dividend or other extraordinary distribution (whether in the form of cash, Shares, other securities or other property), recapitalization, stock split, reverse stock split, reorganization, merger, consolidation, split-up, spin-off, combination, reclassification, repurchase, or exchange of Shares or other securities of the Company or other change in the corporate structure of the Company affecting the Shares occurs (other than any ordinary dividends or other ordinary distributions), the Administrator, in order to prevent diminution or enlargement of the benefits or potential benefits intended to be made available under the Plan, will adjust the number and class of shares of stock that may be delivered under the Plan and/or the number, class and price of shares of stock covered by each outstanding Award, and the numerical Share limits in Section 3 of the Plan.

- b. Dissolution or Liquidation. In the event of a proposed dissolution or liquidation of the Company, the Administrator will notify each Participant as soon as practicable prior to the effective date of such proposed transaction. To the extent it has not been previously exercised, an Award will terminate immediately prior to the consummation of such proposed action.
- c. Merger or Change in Control. In the event of a merger of the Company with or into another corporation or other entity or a Change in Control, each outstanding Award will be treated as the Administrator determines (subject to the provisions of the following paragraph) without a Participant's consent, including, without limitation, that each Award be assumed or an equivalent option or right substituted by the successor corporation or its Parent. The Administrator will not be obligated to treat all Awards, all Awards held by a Participant, all Awards of the same type or all portions of Awards, similarly. If an Option or Stock Appreciation Right (or portion thereof) is not assumed or substituted for in the event of a merger or Change in Control, the Administrator will notify the Participant in writing or electronically that such Option or Stock Appreciation Right (or its applicable portion) will be exercisable for a period of time determined by the Administrator in its sole discretion, and the Option or Stock Appreciation Right (or its applicable portion) will terminate upon the expiration of such period.

For the purposes of this Section 14(c), an Award will be considered assumed if, following the merger or Change in Control, the Award confers the right to purchase or receive, for each Share subject to the Award immediately prior to the merger or Change in Control, the consideration (whether stock, cash or other securities or property) received in the merger or Change in Control by holders of Common Stock for each Share held on the effective date of the transaction (and if holders were offered a choice of consideration, the type of consideration chosen by the holders of a majority of the outstanding Shares); provided, however, that if such consideration received in the merger or Change in Control is not solely common stock of the successor corporation or its Parent, the Administrator may, with the consent of the successor corporation, provide for the consideration to be received upon the exercise of an Option or Stock Appreciation Right or upon the payout of a Restricted Stock Unit, Performance Unit or Performance Share, for each Share subject to such Award, to be solely common stock of the successor corporation or its Parent equal in fair market value to the per share consideration received by holders of Common Stock in the merger or Change in Control.

Notwithstanding anything in this Section 14(c) to the contrary, and unless otherwise provided in an Award Agreement or other written agreement between the Participant and the Company or any of its Subsidiaries or Parents, as applicable, an Award that vests, is earned or paid-out upon the satisfaction of one or more performance goals will not be considered assumed if the Company or its successor modifies any of such performance goals without the Participant's consent; provided, however, a modification to such performance goals only to reflect the successor corporation's post-Change in Control corporate structure will not be deemed to invalidate an otherwise valid Award assumption.

Notwithstanding anything in this Section 14(c) to the contrary, if a payment under an Award Agreement is subject to Section 409A and if the change in control definition contained in the Award Agreement or other written agreement related to the Award does not comply with the definition of "change in control" for purposes of a distribution under Section 409A, then any payment of an amount that otherwise is accelerated under this Section will be delayed until the earliest time that such payment would be permissible under Section 409A without triggering any penalties applicable under Section 409A.

- d. Outside Director Awards. With respect to Awards granted to Outside Directors for their service as Outside Directors, in the event of a Change in Control, such Participants will fully vest in and have the right to exercise Options and/or Stock Appreciation Rights as to all of the Shares underlying such Awards, including those Shares which would not be vested or exercisable, all restrictions on such Participants' Restricted Stock and Restricted Stock Units will lapse, and, with

respect to such Participants' Awards with performance-based vesting, all performance goals or other vesting criteria will be deemed achieved at 100% of target levels and all other terms and conditions met, unless specifically provided otherwise under the applicable Award Agreements or other written agreements between the Participants and the Company or any of its Subsidiaries or Parents, as applicable.

15. Tax Matters.

- a. Withholding Requirements. Prior to the delivery of any Shares or cash pursuant to an Award (or exercise thereof) or such earlier time as any withholding obligations for Tax-Related Items are due, the Company (or any of its Subsidiaries, Parents or affiliates employing or retaining the services of a Participant, as applicable) will have the power and the right to deduct or withhold, or require a Participant to remit to the Company (or any of its Subsidiaries, Parents or affiliates, as applicable), an amount sufficient to satisfy any Tax-Related Items required to be withheld with respect to such Award (or exercise thereof).
- b. Withholding Arrangements. The Administrator, in its sole discretion and pursuant to such procedures as it may specify from time to time, may permit a Participant to satisfy such withholding obligation for Tax-Related Items, in whole or in part by (without limitation) (i) paying cash, check or other cash equivalents, (ii) electing to have the Company withhold otherwise deliverable Shares having a fair market value equal to the minimum statutory amount applicable in a Participant's jurisdiction or such greater amount as the Administrator may determine (including up to a maximum statutory amount) if such amount would not have adverse accounting consequences, as the Administrator determines in its sole discretion, (iii) delivering to the Company already-owned Shares having a fair market value equal to the minimum statutory amount applicable in a Participant's jurisdiction or such greater amount as the Administrator may determine (including up to a maximum statutory amount), in each case, provided the delivery of such Shares will not result in any adverse accounting consequences, as the Administrator determines in its sole discretion, (iv) selling a sufficient number of Shares otherwise deliverable to the Participant through such means as the Administrator may determine in its sole discretion (whether through a broker or otherwise) to cover the amount of the withholding obligation for Tax-Related Items, (v) having the Company or a Parent or Subsidiary withhold from wages or any other cash amount due or to become due to the Participant and payable by the Company or any Parent or Subsidiary, (vi) any other method of withholding determined by the Administrator or (vii) any combination of the foregoing methods of payment. The withholding amount will be deemed to include any amount which the Administrator agrees may be withheld at the time the election is made, not to exceed the amount determined by using the maximum statutory rates applicable in a Participant's jurisdiction with respect to the Award on the date that the amount of Tax-Related Items to be withheld is to be determined or such greater amount as the Administrator may determine if such amount would not have adverse accounting consequences, as the Administrator determines in its sole discretion. The fair market value of the Shares to be withheld or delivered will be determined as of the date that the amount of Tax-Related Items to be withheld is calculated.
- c. Compliance With Section 409A. Awards will be designed and operated in such a manner that they are either exempt from the application of, or comply with, the requirements of Section 409A such that the grant, payment, settlement or deferral will not be subject to the additional tax or interest applicable under Section 409A, except as otherwise determined in the sole discretion of the Administrator. The Plan and each Award Agreement under the Plan is intended to meet the requirements of Section 409A, or be exempt therefrom, and will be construed and interpreted in accordance with such intent, except as otherwise determined in the sole discretion of the Administrator. To the extent that an Award or payment, or the settlement or deferral thereof, is subject to Section 409A the Award will be granted, paid, settled or deferred in a manner that will meet the requirements of Section 409A, such that the grant, payment, settlement or deferral will not be subject to the additional tax or interest applicable under Section 409A. In no event will the Company or any of its Subsidiaries or Parents have any obligation or liability under the terms of this Plan to reimburse, indemnify, or hold harmless any Participant or any other person in respect

of Awards, for any taxes, interest or penalties imposed, or other costs incurred, as a result of Section 409A.

16. Miscellaneous.

- a. Stockholder Approval and Term of Plan. The Plan became effective on October 12, 2022. The Plan will continue in effect until terminated earlier under Section 17 of the Plan, but no Incentive Stock Options may be granted after 10 years from the date the Plan is adopted by the Board.
- b. Legal Compliance. Shares will not be issued pursuant an Award unless the exercise or vesting of such Award and the issuance and delivery of such Shares will comply with Applicable Laws and will be further subject to the approval of counsel for the Company with respect to such compliance.
- c. Investment Representations. As a condition to the exercise or vesting of an Award, the Company may require the person exercising or vesting in such Award to represent and warrant at the time of any such exercise or vesting that the Shares are being acquired only for investment and without any present intention to sell or distribute such Shares if, in the opinion of counsel for the Company, such a representation is required.
- d. Inability to Obtain Authority. If the Company determines it to be impossible or impracticable to obtain authority from any regulatory body having jurisdiction or to complete or comply with the requirements of any registration or other qualification of the Shares under any U.S. state or federal law or non-U.S. law or under the rules and regulations of the U.S. Securities and Exchange Commission, the stock exchange on which Shares of the same class are then listed or any other governmental or regulatory body, which authority, registration, qualification or rule compliance is deemed by the Company's counsel to be necessary or advisable for the issuance and sale of any Shares hereunder, the Company will be relieved of any liability in respect of the failure to issue or sell such Shares as to which such requisite authority, registration, qualification or rule compliance will not have been obtained.
- e. No Effect on Employment or Service. Neither the Plan nor any Award will confer upon a Participant any right with respect to continuing the Participant's relationship as a Service Provider, nor interfere in any way with the Participant's right or the right of the Company and its Subsidiaries or Parents, as applicable, to terminate such relationship at any time, with or without cause, to the extent permitted by Applicable Laws.
- f. Forfeiture Events. The Administrator may specify in an Award Agreement that the Participant's rights, payments and benefits with respect to an Award will be subject to reduction, cancellation, forfeiture, recoupment, reimbursement or reacquisition upon the occurrence of certain specified events, in addition to any otherwise applicable vesting or performance conditions of an Award. Notwithstanding any provisions to the contrary under this Plan, an Award and any other compensation paid or payable to a Participant (including, but not limited to, equity awards issued outside of this Plan) (such compensation, "Other Compensation") will be subject to the Company's clawback policy in effect as of the adoption of this Plan, and will be subject to any other clawback policy of the Company as may be established and/or amended from time to time to comply with Applicable Laws (including without limitation pursuant to the listing standards of any national securities exchange or association on which the Company's securities are listed or as may be required by the U.S. Dodd-Frank Wall Street Reform and Consumer Protection Act) (the "Clawback Policy"). The Administrator may require a Participant to forfeit, return or reimburse the Company all or a portion of the Award or Other Compensation and any amounts paid thereunder pursuant to the terms of the Clawback Policy or as necessary or appropriate to comply with Applicable Laws. Unless this subsection (f) specifically is mentioned and waived in an Award Agreement or other document, no recovery of compensation under a Clawback Policy or otherwise will constitute an event that triggers or contributes to any right of a Participant to resign for "good reason" or "constructive termination" (or similar term) under any agreement with the Company or any Parent or Subsidiary.

17. Amendment and Termination of the Plan.

- a. Amendment and Termination. The Administrator, at any time, may amend, alter, suspend or terminate the Plan.
- b. Stockholder Approval. The Company will obtain stockholder approval of any Plan amendment to the extent necessary and desirable to comply with Applicable Laws.
- c. Consent of Participants Generally Required. Subject to Section 17(d) below, no amendment, alteration, suspension or termination of the Plan or an Award under it will materially impair the rights of any Participant, unless mutually agreed otherwise between the Participant and the Administrator, which agreement must be in writing and signed by the Participant and the Company. Termination of the Plan will not affect the Administrator's ability to exercise the powers granted to it regarding Awards granted under the Plan prior to such termination.
- d. Exceptions to Consent Requirement.
 - i. A Participant's rights will not be deemed to have been impaired by any amendment, alteration, suspension or termination if the Administrator, in its sole discretion, determines that the amendment, alteration, suspension or termination taken as a whole, does not materially impair the Participant's rights, and
 - ii. Subject to the limitations of Applicable Laws, if any, the Administrator may amend the terms of any one or more Awards without the affected Participant's consent even if it does materially impair the Participant's right if such amendment is done:
 1. in a manner expressly permitted under the Plan;
 2. to maintain the qualified status of the Award as an Incentive Stock Option under Section 422 of the Code;
 3. to change the terms of an Incentive Stock Option, if such change results in impairment of the Award only because it impairs the qualified status of the Award as an Incentive Stock Option under Section 422 of the Code;
 4. to clarify the manner of exemption from, or to bring the Award into compliance with, Section 409A; or
 5. to comply with other Applicable Laws.

ANNEX B

**CERTIFICATE OF THIRD AMENDMENT
TO THE
CERTIFICATE OF INCORPORATION
OF
ORGANOVO HOLDINGS, INC.**

Organovo Holdings, Inc. (the “corporation”), a corporation organized and existing under and by virtue of the General Corporation Law of the State of Delaware (the “DGCL”), does hereby certify that:

- A) The name of this corporation is Organovo Holdings, Inc. and the date on which the Certificate of Incorporation of this corporation was originally filed with the Secretary of State of the State of Delaware was January 27, 2012 (the “Certificate of Incorporation”).
- B) The date on which the first amendment to the Certificate of Incorporation was originally filed with the Secretary of State of the State of Delaware was July 26, 2018.
- C) The date on which the second amendment to the Certificate of Incorporation was originally filed with the Secretary of State of the State of Delaware was August 17, 2020.
- D) This Certificate of Third Amendment to the Certificate of Incorporation was adopted in accordance with Section 242 of the General Corporation Law of the State of Delaware, and has been duly approved by the stockholders of the corporation.
- E) The Certificate of Incorporation of the corporation is hereby amended to add the following paragraph as the last paragraph of Article IV as follows:

“Reverse Stock Split. Upon the Effective Time of this Certificate of Third Amendment to the Certificate of Incorporation (the “Third Amendment”), every [] shares of Common Stock issued and outstanding (or held in treasury) immediately prior to the Effective Time shall be automatically reclassified and combined into one (1) validly issued, fully-paid and non-assessable share of Common Stock. The aforementioned reclassification shall be referred to as the “Reverse Split”.

The Reverse Split shall occur without any further action on the part of the corporation or the stockholders of the corporation and whether or not certificates representing such stockholders’ shares prior to the Reverse Split are surrendered for cancellation. No fractional interest in a share of Common Stock shall be deliverable upon the Reverse Split. All shares of Common Stock (including fractions thereof) issuable upon the Reverse Split held by a stockholder of record prior to the Reverse Split shall be aggregated for purposes of determining whether the Reverse Split would result in the issuance of any fractional share. Any fractional share resulting from such aggregation upon the Reverse Split shall be rounded down to the nearest whole number. Each stockholder of record who would otherwise be entitled to a fraction of a share of Common Stock upon the Reverse Split (after aggregating all fractions of a share to which such stockholder would otherwise be entitled) shall, in lieu thereof, be entitled to receive a cash payment in an amount equal to the product of such fraction to which the stockholder would otherwise be entitled multiplied by the closing price of the corporation’s Common Stock as reported on the Nasdaq Capital Market on the trading day immediately preceding the filing of this Third Amendment with the Secretary of State of the State of Delaware (as adjusted to give effect to the Reverse Split), rounded up to the nearest whole cent. The corporation shall not be obliged to issue certificates evidencing the shares of Common Stock outstanding as a result of the Reverse Split, or cash in lieu of fractional shares, if any, unless and until the certificates evidencing the shares held by a stockholder of record prior to the Reverse Split are either delivered to the corporation or its transfer agent, or the stockholder notifies the corporation or its transfer agent that such certificates have been lost, stolen or destroyed, and executes an agreement satisfactory to the corporation to indemnify the corporation from any loss incurred by it in connection with such certificates.”

- F) THIS CERTIFICATE OF THIRD AMENDMENT TO THE CERTIFICATE OF INCORPORATION SHALL BECOME EFFECTIVE AT 5:00 P.M. (EASTERN TIME) ON __, 202__ (THE “EFFECTIVE TIME”).

IN WITNESS WHEREOF, Organovo Holdings, Inc. has caused this Certificate of Third Amendment to be executed by its duly authorized officer as of __, 202__.

By: _____
Keith Murphy
Executive Chair



ORGANOVO HOLDINGS, INC.
11595 SADDLE CREEK HOLLOW, SUITE 100
SAN DIEGO, CA 92121



SCAN TO
VIEW MATERIALS & VOTE



VOTE BY INTERNET

Before The Meeting - Go to www.proxyvote.com or scan the QR barcode above.

Use the Internet to transmit your voting instructions and for electronic delivery of forms for up until 11:59 p.m. Eastern Time on November 19, 2024. Have your proxy card in hand when you access the web site and follow the instructions to obtain your records and to create an electronic voting instruction form.

During The Meeting - Go to www.virtualshareholdermeeting.com/ONVO2024.

You may attend the meeting via the Internet and vote during the meeting. Have the information that is printed in the box marked by the arrow available and follow the instructions.

VOTE BY PHONE - 1-800-690-6303

Use any touch-tone telephone to transmit your voting instructions up until 11:59 p.m. Eastern Time on November 19, 2024. Have your proxy card in hand when you call and then follow the instructions.

VOTE BY MAIL

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

TO VOTE, MARK BLOCKS BELOW IN BLUE OR BLACK INK AS FOLLOWS:

V58229-P18321

KEEP THIS PORTION FOR YOUR RECORDS
DETACH AND RETURN THIS PORTION ONLY

THIS PROXY CARD IS VALID ONLY WHEN SIGNED AND DATED.

ORGANOVO HOLDINGS, INC.

The Board of Directors recommends you vote FOR the following:

- To elect each of Alison Tjosvold Milhous and Waidhi Joshi as a Class I director to hold office until the 2027 Annual Meeting of Stockholders and until her respective successor is elected and qualified.

Nominees:	For	Withhold
1a. Alison Tjosvold Milhous	<input type="checkbox"/>	<input type="checkbox"/>
1b. Waidhi Joshi	<input type="checkbox"/>	<input type="checkbox"/>

The Board of Directors recommends you vote FOR proposals 2, 3, 4 and 5.

	For	Against	Abstain
2. To ratify the appointment of Rosenberg Rich Baker Bernan PA, as our independent registered public accounting firm for the fiscal year ending March 31, 2025.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. To approve, on an advisory basis, the compensation of the Company's named executive officers.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. To approve the amendment and restatement of the Organovo Holdings, Inc. 2022 Equity Incentive Plan to increase the number of shares reserved for issuance thereunder by 1,775,000 shares.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. To approve an amendment to the Company's Certificate of Incorporation, as amended, to effect, in the sole discretion of the Board of Directors of the Company (the "Board"), at any time on or before November 20, 2025, a reverse stock split of the Company's common stock, par value \$0.001 per share (the "Common Stock"), at a ratio to be determined by the Board within a range of 1-for-5 to 1-for-20 (or any number in between) without reducing the authorized number of shares of Common Stock, and without further approval or authorization of the Company's stockholders.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

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

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

Signature [PLEASE SIGN WITHIN BOX] Date

Signature (Joint Owners) Date

You are cordially invited to attend our 2024 Annual Meeting of Stockholders, to be held virtually via live webcast at www.virtualshareholdermeeting.com/ONVO2024 at 9:00 a.m. Pacific Time on November 20, 2024.

Important Notice Regarding the Availability of Proxy Materials for the Annual Meeting:
The Notice and Proxy Statement and Annual Report are available at www.proxyvote.com.

VS8240-P18331

**ORGANOVO HOLDINGS, INC.
Annual Meeting of Stockholders
November 20, 2024, 9:00 a.m. Pacific Time
This proxy is solicited by the Board of Directors**

The undersigned hereby appoints Keith Murphy and Thomas Hess, or either of them, as proxies, each with the power to appoint his substitute, and hereby authorizes them to represent and to vote, as designated on the reverse side of this proxy, all of the shares of Common Stock of ORGANOVO HOLDINGS, INC. that the undersigned is entitled to vote at the Annual Meeting of Stockholders to be held at 9:00 a.m. Pacific Time on November 20, 2024, via live webcast at www.virtualshareholdermeeting.com/ONVO2024 and any adjournment or postponement thereof.

THIS PROXY, WHEN PROPERLY EXECUTED, WILL BE VOTED IN THE MANNER DIRECTED HEREIN. IF NO SUCH DIRECTION IS MADE, THIS PROXY WILL BE VOTED "FOR" THE NOMINEES FOR THE BOARD OF DIRECTORS LISTED IN PROPOSAL 1 ON THE REVERSE SIDE AND "FOR" PROPOSALS 2, 3, 4 AND 5.

This Proxy is governed by the laws of the State of Delaware.

Continued and to be signed on reverse side

