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

FORM S-8
REGISTRATION STATEMENT
UNDER
THE SECURITIES ACT OF 1933

Organovo Holdings, Inc.
(Exact name of registrant as specified in its charter)

Delaware
(State or other jurisdiction of
incorporation or organization)

27-1488943
(I.R.S. Employer
Identification No.)

11555 Sorrento Valley Rd., Suite 100
San Diego, CA 92121
(Address of Principal Executive Offices) (Zip Code)

Organovo Holdings, Inc. 2022 Equity Incentive Plan
(Full title of the plan)

Keith Murphy
Executive Chairman
Organovo Holdings, Inc.
11555 Sorrento Valley Rd., Suite 100
San Diego, CA 92121
(858) 224-1000
(Name, address and telephone number, including area code, of agent for service)

Copies to:

Jeffrey T. Hartlin, Esq.
Paul Hastings LLP
1117 S. California Avenue
Palo Alto, California 94304
(650) 320-1800

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, smaller reporting company, or an emerging growth company. See the definitions of “large accelerated filer,” “accelerated filer,” “smaller reporting company” and “emerging growth company” in Rule 12b-2 of the Exchange Act.

Large accelerated filer	<input type="checkbox"/>	Accelerated filer	<input type="checkbox"/>
Non-accelerated filer	<input checked="" type="checkbox"/>	Smaller reporting company	<input checked="" type="checkbox"/>
		Emerging growth company	<input type="checkbox"/>

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 7(a)(2)(B) of the Securities Act.

EXPLANATORY NOTE

Organovo Holdings, Inc. (the “Registrant”) has prepared this registration statement (this “Registration Statement”) in accordance with the requirements of Form S-8 under the Securities Act of 1933, as amended (the “Securities Act”), to register 1,236,738 shares of the Registrant’s common stock, \$0.001 par value per share (“Common Stock”), reserved for issuance under the Organovo Holdings, Inc. 2022 Equity Incentive Plan (the “2022 Plan”). On October 12, 2022, the stockholders of the Registrant approved the 2022 Plan, which supersedes and replaces the Organovo Holdings, Inc. 2012 Equity Incentive Plan.

PART I

INFORMATION REQUIRED IN THE SECTION 10(a) PROSPECTUS

The document(s) containing the information specified in Part I will be sent or given to participants in the 2022 Plan as specified by Rule 428(b)(1) of the Securities Act. Such documents are not being filed with the Securities and Exchange Commission (the “SEC”) either as part of this Registration Statement or as prospectuses or prospectus supplements pursuant to Rule 424 of the Securities Act. Such documents and the documents incorporated by reference in this Registration Statement pursuant to Item 3 of Part II hereof, taken together, constitute a prospectus that meets the requirements of Section 10(a) of the Securities Act.

PART II

INFORMATION REQUIRED IN THE REGISTRATION STATEMENT

ITEM 3. INCORPORATION OF DOCUMENTS BY REFERENCE.

The following documents filed by the Registrant with the SEC are hereby incorporated by reference into this Registration Statement:

- The Registrant’s Annual Report on [Form 10-K](#) for the fiscal year ended March 31, 2022, filed with the SEC on June 10, 2022;
- The Registrant’s Quarterly Report on [Form 10-Q](#) for the quarterly period ended June 30, 2022, filed with the SEC on August 11, 2022;
- The information specifically incorporated by reference into the Registrant’s Annual Report on Form 10-K for the fiscal year ended March 31, 2022 from the Registrant’s revised definitive proxy statement on [Schedule 14A](#), filed with the SEC on September 22, 2022;
- The Registrant’s Current Reports on Form 8-K filed with the SEC on [September 6, 2022](#) and [October 14, 2022](#); and
- The description of the Registrant’s common stock set forth in the Registrant’s Registration Statement on [Form 8-A](#) (File No. 001-35996), filed with the SEC on July 26, 2016, including any amendments or reports filed for the purpose of updating such description.

All other reports and other documents subsequently filed by the Registrant pursuant to Sections 13(a), 13(c), 14 or 15(d) of the Securities Exchange Act of 1934, as amended (the “Exchange Act”), prior to the filing of a post-effective amendment which indicates that all securities offered hereby have been sold or which deregisters all securities then remaining unsold, shall be deemed to be incorporated by reference into this Registration Statement and to be a part of this Registration Statement from the date of the filing of such reports and documents, except as to any portion of any future annual or quarterly report to stockholders or document or current report furnished under Items 2.02 or 7.01 of Form 8-K that is not deemed filed under such provisions.

For the purposes of this Registration Statement, any statement contained in a document incorporated or deemed to be incorporated by reference herein shall be deemed to be modified or superseded to the extent that a statement contained herein or in any other subsequently filed document that also is or is deemed to be incorporated by reference herein modifies or supersedes such statement. Any such statement so modified or superseded shall not be deemed, except as so modified or superseded, to constitute a part of this Registration Statement.

You should rely only on the information provided or incorporated by reference in this Registration Statement or any related prospectus. The Registrant has not authorized anyone to provide you with different information. You should not assume that the information in this Registration Statement or any related prospectus is accurate as of any date other than the date on the front of the document.

You may contact the Registrant in writing or orally to request copies of the above-referenced filings, without charge (excluding exhibits to such documents unless such exhibits are specifically incorporated by reference into the information incorporated into this Registration Statement). Requests for such information should be directed to:

Organovo Holdings, Inc.
11555 Sorrento Valley Rd., Suite 100
San Diego, CA 92121
(858) 224-1000
Attn: Executive Chairman

ITEM 4. DESCRIPTION OF SECURITIES.

Not applicable.

ITEM 5. INTERESTS OF NAMED EXPERTS AND COUNSEL.

Not applicable.

ITEM 6. INDEMNIFICATION OF DIRECTORS AND OFFICERS.

Section 102 of the General Corporation Law of the State of Delaware (the "DGCL") permits a corporation to eliminate or limit the personal liability of directors of a corporation to the corporation or its stockholders for monetary damages for a breach of fiduciary duty as a director, except where the director breached his duty of loyalty to the corporation or its stockholders, failed to act in good faith, engaged in intentional misconduct or knowingly violated a law, authorized the payment of a dividend or approved a stock repurchase or redemption in violation of the DGCL or derived an improper personal benefit. The Registrant's certificate of incorporation, as amended, provides that no director of the Registrant shall be personally liable to it or its stockholders for monetary damages for any breach of fiduciary duty as a director, notwithstanding any provision of law imposing such liability, except to the extent that the DGCL prohibits the elimination or limitation of liability of directors for breaches of fiduciary duty.

Section 145 of the DGCL provides that a corporation has the power to indemnify a director, officer, employee or agent of the corporation, or a person serving at the request of the corporation for another corporation, partnership, joint venture, trust or other enterprise in related capacities against expenses (including attorneys' fees), judgments, fines and amounts paid in settlement actually and reasonably incurred by the person in connection with an action, suit or proceeding to which he or she was or is a party or is threatened to be made a party to any threatened, pending or completed action, suit or proceeding by reason of such position, if such person acted in good faith and in a manner he or she reasonably believed to be in or not opposed to the best interests of the corporation, and, in any criminal action or proceeding, had no reasonable cause to believe his or her conduct was unlawful, except that, in the case of actions brought by or in the right of the corporation, no indemnification shall be made with respect to judgments, fines and amounts paid in settlement in connection with such action, suit or proceeding or with respect to any claim, issue or matter as to which such person shall have been adjudged to be liable to the corporation unless and only to the extent that the Court of Chancery or other adjudicating court determines that, despite the adjudication of liability but in view of all of the circumstances of the case, such person is fairly and reasonably entitled to indemnity for such expenses which the Court of Chancery or such other court shall deem proper. The Registrant's bylaws, as amended, provide that the Registrant will indemnify each person who was or is a party or threatened to be made a party to any threatened, pending or completed action, suit or proceeding (other than an action by or in the right of the Registrant) by reason of the fact that he or she is or was a director or officer of the Registrant, or is or was serving, at the Registrant's request as a director, officer, employee or agent of another corporation, partnership, joint venture, trust or other enterprise (all such persons being referred to as an

“Indemnitee”), against expenses (including, attorneys’ fees), judgments, fines, and amounts paid in settlement actually and reasonably incurred in connection with such action, suit or proceeding, if such Indemnitee acted in good faith and in a manner he or she reasonably believed to be in, or not opposed to, the Registrant’s best interests, and, with respect to any criminal action or proceeding, he or she had no reasonable cause to believe his or her conduct was unlawful. The Registrant’s bylaws, as amended, also provide that the Registrant will indemnify any Indemnitee who was or is a party to an action or suit by or in the right of the Registrant to procure a judgment in the Registrant’s favor by reason of the fact that the Indemnitee is or was, a director or officer, or is or was serving, or has agreed to serve, at the Registrant’s request as a director, officer, employee or agent of another corporation, partnership, joint venture, trust or other enterprise, against expenses (including, attorneys’ fees) actually and reasonably incurred by such Indemnitee in connection with the defense or settlement of such action or suit, if the Indemnitee acted in good faith and in a manner he or she reasonably believed to be in, or not opposed to, the Registrant’s best interests, except that no indemnification shall be made with respect to any claim, issue or matter as to which such person shall have been adjudged to be liable to the Registrant, unless, and only to the extent, that the Court of Chancery or the court in which such action or suit was brought determines, despite the adjudication of liability but in view of all the circumstances, he or she is entitled to indemnification of such expenses which the Court of Chancery or such other court shall deem proper. Notwithstanding the foregoing, to the extent that any Indemnitee has been successful, on the merits or otherwise, he or she will be indemnified against expenses (including, attorneys’ fees) actually and reasonably incurred in connection therewith. Expenses must be advanced to an Indemnitee under certain circumstances.

The Registrant has entered into indemnification agreements with each of its directors and executive officers that may be broader than the specific indemnification provisions contained in the DGCL. These indemnification agreements require the Registrant, among other things, to indemnify its directors and executive officers against liabilities that may arise by reason of their status or service. These indemnification agreements also require the Registrant to advance all expenses incurred by the directors and executive officers in investigating or defending any such action, suit or proceeding, subject to certain exceptions.

The Registrant’s bylaws, as amended, provide that the Registrant may purchase and maintain insurance on behalf of any person who is or was a director, officer, employee or agent of the Registrant or is or was serving at the request of the Registrant as a director, officer, employee or agent of another corporation, partnership, joint venture, trust or other enterprise against any liability asserted against him or her in any such capacity, or arising out of his or her status as such, whether or not the Registrant would have the power to indemnify such person against such liability under the DGCL. The Registrant has obtained insurance under which, subject to the limitations of the insurance policies, coverage is provided to the Registrant’s directors and executive officers against loss arising from claims made by reason of breach of fiduciary duty or other wrongful acts as a director or executive officer, including claims relating to public securities matters, and to the Registrant with respect to payments that may be made by the Registrant to these directors and executive officers pursuant to the Registrant’s indemnification obligations or otherwise as a matter of law.

ITEM 7. EXEMPTION FROM REGISTRATION CLAIMED.

Not applicable.

ITEM 8. EXHIBITS.

Exhibit Number	Description
3.1	<u>Certificate of Incorporation of Organovo Holdings, Inc. (Delaware) (previously filed as Exhibit 3.1 to the Registrant’s Current Report on Form 8-K, as filed with the SEC on February 3, 2012).</u>
3.2	<u>Certificate of Amendment of Certificate of Incorporation of Organovo Holdings, Inc. (incorporated by reference from Exhibit 3.1 to the Registrant’s Current Report on Form 8-K, as filed with the SEC on July 27, 2018).</u>
3.3	<u>Certificate of Second Amendment of Certificate of Incorporation of Organovo Holdings, Inc. (incorporated by reference from Exhibit 3.1 to the Registrant’s Current Report on Form 8-K, as filed with the SEC on August 17, 2020).</u>

- 3.4 [Bylaws of Organovo Holdings, Inc. \(Delaware\) \(incorporated by reference from Exhibit 3.2 to the Registrant's Current Report on Form 8-K, as filed with the SEC on February 3, 2012\).](#)
- 3.5 [Amendment to Organovo Holdings, Inc. Bylaws, dated October 10, 2019 \(incorporated by reference from Exhibit 99.1 to the Registrant's Current Report on Form 8-K, as filed with the SEC on October 11, 2019\).](#)
- 3.6 [Amendment to Bylaws of Organovo Holdings, Inc., dated September 29, 2021 \(incorporated by reference from Exhibit 3.1 to the Company's Current Report on Form 8-K, as filed with the SEC on October 1, 2021\).](#)
- 4.1 [Organovo Holdings, Inc. 2022 Equity Incentive Plan \(incorporated by reference from Exhibit 10.1 to the Registrant's Current Report on Form 8-K filed on October 14, 2022 and incorporated herein by reference\).](#)
- 4.2* [Form of Global Stock Option Award Agreement under the Organovo Holdings, Inc. 2022 Equity Incentive Plan.](#)
- 4.3* [Form of Global Restricted Stock Unit Award Agreement under the Organovo Holdings, Inc. 2022 Equity Incentive Plan.](#)
- 5.1* [Opinion of Paul Hastings LLP.](#)
- 23.1* [Consent of Mayer Hoffman McCann P.C., Independent Registered Public Accounting Firm.](#)
- 23.2* [Consent of Paul Hastings LLP \(included in Exhibit 5.1\).](#)
- 24.1* [Power of Attorney is contained on the signature page.](#)
- 107* [Calculation of Filing Fee Table](#)

* Filed herewith.

ITEM 9. UNDERTAKINGS.

(a) The Registrant hereby undertakes:

(1) To file, during any period in which offers or sales are being made, a post-effective amendment to this Registration Statement:

(i) To include any prospectus required by Section 10(a)(3) of the Securities Act;

(ii) To reflect in the prospectus any facts or events arising after the effective date of this Registration Statement (or the most recent post-effective amendment thereof) which, individually or in the aggregate, represent a fundamental change in the information set forth in this Registration Statement. Notwithstanding the foregoing, any increase or decrease in volume of securities offered (if the total dollar value of securities offered would not exceed that which was registered) and any deviation from the low or high end of the estimated maximum offering range may be reflected in the form of prospectus filed with the SEC pursuant to Rule 424(b) if, in the aggregate, the changes in volume and price represent no more than a 20 percent change in the maximum aggregate offering price set forth in the "Calculation of Registration Fee" table in the effective registration statement; and

(iii) To include any material information with respect to the plan of distribution not previously disclosed in this Registration Statement or any material change to such information in this Registration Statement;

Provided, however, that:

(A) paragraphs (a)(1)(i) and (a)(1)(ii) do not apply if the information required to be included in a post-effective amendment by those paragraphs is contained in reports filed with or furnished to the SEC by the Registrant pursuant to Section 13 or Section 15(d) of the Exchange Act that are incorporated by reference in this Registration Statement.

(2) That, for the purpose of determining any liability under the Securities Act, each such post-effective amendment shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial *bona fide* offering thereof.

(3) To remove from registration by means of a post-effective amendment any of the securities being registered which remain unsold at the termination of the offering.

(b) The Registrant hereby undertakes that, for purposes of determining any liability under the Securities Act, each filing of the Registrant's annual report pursuant to Section 13(a) or Section 15(d) of the Exchange Act that is incorporated by reference in this Registration Statement shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial *bona fide* offering thereof.

(h) Insofar as indemnification for liabilities arising under the Securities Act may be permitted to directors, officers and controlling persons of the Registrant pursuant to the foregoing provisions, or otherwise, the Registrant has been advised that in the opinion of the SEC such indemnification is against public policy as expressed in the Securities Act and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the Registrant of expenses incurred or paid by a director, officer or controlling person of the Registrant in the successful defense of any action, suit or proceeding) is asserted by such director, officer or controlling person in connection with the securities being registered, the Registrant will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by it is against public policy as expressed in the Securities Act and will be governed by the final adjudication of such issue.

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, as amended, the Registrant certifies that it has reasonable grounds to believe that it meets all of the requirements for filing on Form S-8 and has duly caused this Registration Statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of San Diego, State of California, on October 25, 2022.

Organovo Holdings, Inc.

By: /s/ Keith Murphy

Name: Keith Murphy

Title: Executive Chairman

POWER OF ATTORNEY

KNOW ALL PERSONS BY THESE PRESENTS, that each person whose signature appears below constitutes and appoints Keith Murphy, Thomas Hess and Thomas Jurgensen, and each or any one of them, as his or her true and lawful attorneys-in-fact and agent, with full power of substitution and resubstitution, for him or her and in his or her name, place and stead, in any and all capacities, to sign any and all amendments (including post-effective amendments) to this Registration Statement, and to file the same, with all exhibits thereto, and other documents in connection therewith, with the Securities and Exchange Commission, granting unto said attorneys-in-fact and agents, and each of them, full power and authority to do and perform each and every act and thing requisite and necessary to be done in connection therewith, as fully to all intents and purposes as he or she might or could do in person, hereby ratifying and confirming all that said attorneys-in-fact and agents, or any of them, or their or his or her substitutes or substitute, may lawfully do or cause to be done by virtue hereof.

Pursuant to the requirements of the Securities Act of 1933, this Registration Statement has been signed by the following persons in the capacities and on the dates indicated.

SIGNATURE	TITLE	DATE
<u>/s/ Keith Murphy</u> Keith Murphy	Executive Chairman <i>(Principal Executive Officer)</i>	October 25, 2022
<u>/s/ Thomas Hess</u> Thomas Hess	President and Chief Financial Officer <i>(Principal Financial and Accounting Officer)</i>	October 25, 2022
<u>/s/ Adam K. Stern</u> Adam K. Stern	Director	October 25, 2022
<u>/s/ Douglas Cohen</u> Douglas Cohen	Director	October 25, 2022
<u>/s/ David Gobel</u> David Gobel	Director	October 25, 2022
<u>/s/ Vaidehi Joshi</u> Vaidehi Joshi	Director	October 25, 2022
<u>/s/ Alison Milhous</u> Alison Milhous	Director	October 25, 2022

ORGANOVO HOLDINGS, INC.
2022 EQUITY INCENTIVE PLAN
GLOBAL STOCK OPTION AWARD AGREEMENT

Unless otherwise defined herein, the terms defined in the Organovo Holdings, Inc., 2022 Equity Incentive Plan (the “Plan”) will have the same defined meanings in this Notice of Grant of Stock Option (the “Notice of Grant”), the Terms and Conditions of Stock Option Grant, attached hereto as Exhibit A and the Addendum, attached hereto as Exhibit B, all of which are made a part of this document (together, the “Award Agreement”).

NOTICE OF STOCK OPTION GRANT

Participant has been granted an Option to purchase Common Stock of the Company, subject to the terms and conditions of the Plan and this Award Agreement, as follows:

Participant	_____
Grant Number	_____
Date of Grant	_____
Vesting Commencement Date	_____
Number of Shares Granted	_____
Exercise Price per Share	\$ _____
Total Exercise Price	\$ _____
Type of Option	[Incentive Stock Option][Nonstatutory Stock Option]
Term/Expiration Date	_____

Vesting Schedule:

Subject to any acceleration provisions contained in the Plan or set forth below, this Option will be exercisable, in whole or in part, in accordance with the following schedule:

[INSERT VESTING SCHEDULE].

Termination Period:

This Option will be exercisable for three months after Participant ceases to be a Service Provider, unless such termination is due to Participant's death or Disability, in which case this Option will be exercisable for 12 months after Participant ceases to be a Service Provider. Notwithstanding the foregoing sentence, in no event may this Option be exercised after the Term/Expiration Date as provided above and may be subject to earlier termination as provided in Section 14(c) of the Plan.

By Participant's signature and the signature of the Company's representative below, or by Participant's acceptance of this Award Agreement via the Company's designated online acceptance procedures, Participant and the Company agree that this Option is granted under and governed by the terms and conditions of the Plan and this Award Agreement. Participant has reviewed the Plan and this Award Agreement in their entirety, has had an opportunity to obtain the advice of counsel prior to executing this Award Agreement and fully understands all provisions of the Plan and this Award Agreement. Participant expressly acknowledges the information provided in the Addendum related to the collection, processing and use of Participant's personal data by the Company and its Subsidiaries and the transfer of personal data to the recipients mentioned in the Addendum. Participant hereby agrees to accept as binding, conclusive and final all decisions or interpretations of the Administrator upon any questions relating to the Plan and this Award Agreement. Participant further agrees to notify the Company upon any change in the residence address indicated below.

PARTICIPANT

ORGANOVO HOLDINGS, INC.

Signature:

Signature:

Name:

Name:

Title:

Title:

EXHIBIT A

TERMS AND CONDITIONS OF GLOBAL STOCK OPTION GRANT

1. **Grant of Option.** The Company hereby grants to the Participant named in the Notice of Grant (“Participant”) an option (the “Option”) to purchase the number of Shares, as set forth in the Notice of Grant, at the exercise price per Share set forth in the Notice of Grant (the “Exercise Price”), subject to all of the terms and conditions in this Award Agreement and the Plan, which is incorporated herein by reference. Subject to Section 17(c) of the Plan, in the event of a conflict between the terms and conditions of the Plan and the terms and conditions of this Award Agreement, the terms and conditions of the Plan will prevail.

If designated in the Notice of Grant as an Incentive Stock Option (“ISO”), this Option is intended to qualify as an ISO under Section 422 of the Code. However, if this Option is intended to be an Incentive Stock Option, to the extent required by the \$100,000 rule of Code Section 422(d), it will be treated as a Nonstatutory Stock Option (“NSO”). Further, if for any reason this Option (or portion thereof) will not qualify as an ISO, then, to the extent of such nonqualification, such Option (or portion thereof) will be regarded as an NSO granted under the Plan. In no event will the Administrator, the Company or any Parent or Subsidiary or any of their respective employees or directors have any liability or obligation to reimburse, indemnify or hold harmless Participant (or any other person) due to the failure of the Option to qualify for any reason as an ISO.

2. **Vesting Schedule.** Except as provided in Section 3, the Option awarded by this Award Agreement will vest in accordance with the vesting provisions set forth in the Notice of Grant. Shares scheduled to vest on a certain date or upon the occurrence of a certain condition will not vest in Participant in accordance with any of the provisions of this Award Agreement, unless Participant will have been continuously a Service Provider from the Date of Grant until the date such vesting occurs, together with any applicable tax withholding. For the avoidance of doubt, if Participant ceases to be a Service Provider prior to any scheduled vesting date, Participant will not earn or be entitled to any pro-rated vesting for any portion of time before the respective vesting date during which Participant was a Service Provider, nor will Participant be entitled to any compensation for lost vesting.
3. **Administrator Discretion.** The Administrator, in its discretion, may accelerate the vesting of the balance, or some lesser portion of the balance, of the unvested Option at any time, subject to the terms of the Plan. If so accelerated, such Option will be considered as having vested as of the date specified by the Administrator.
4. **Exercise of Option.**
 - (a) **Right to Exercise.** This Option may be exercised only within the term set out in the Notice of Grant and may be exercised during such term only in accordance with the Plan and the terms of this Award Agreement.
 - (b) **Method of Exercise.** This Option is exercisable in a manner and pursuant to such procedures as the Administrator may determine, which will state the election to

exercise the Option, the number of Shares in respect of which the Option is being exercised (the “Exercised Shares”) and such other representations and agreements as may be required by the Company. The Exercise Notice will be completed by Participant and delivered to the Company. The Exercise Notice will be accompanied by payment of the aggregate Exercise Price as to all Exercised Shares together with any Tax-Related Items. This Option will be deemed to be exercised upon receipt by the Company of such fully executed Exercise Notice accompanied by the aggregate Exercise Price and any Tax-Related Items.

5. **Method of Payment.** Payment of the aggregate Exercise Price will be by any of the following, or a combination thereof, at the election of Participant:
- (a) cash;
 - (b) check or wire transfer;
 - (c) 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; or
 - (d) surrender of other Shares which (i) will be valued at their fair market value on the date of exercise, and (ii) must be owned free and clear of any liens, claims, encumbrances, or security interests, if accepting such Shares, in the sole discretion of the Administrator, will not result in any adverse accounting consequences to the Company.
6. **Responsibility for Taxes.** Notwithstanding any contrary provision of this Award Agreement, no Shares will be issued to Participant, unless and until satisfactory arrangements (as determined by the Administrator) will have been made by Participant with respect to the payment of Tax-Related Items. Participant acknowledges that, regardless of any action taken by the Company or, if different, the Parent or Subsidiary employing or retaining Participant (the “Employer”), the ultimate liability for all Tax-Related Items is and remains Participant’s sole responsibility and may exceed the amount, if any, actually withheld by the Company or the Employer. Participant further acknowledges that the Company and/or the Employer (i) make no representations or undertakings regarding the treatment of any Tax-Related Items in connection with any aspect of the Option, including, but not limited to, the grant, vesting or exercise of the Option, the subsequent sale of Shares acquired pursuant to the exercise of the Option, and (ii) does not commit to and are under no obligation to structure the terms of the grant or any aspect of the Option to reduce or eliminate Participant’s liability for Tax-Related Items or achieve any particular tax result. Further, if Participant is subject to Tax-Related Items in more than one jurisdiction, Participant acknowledges that the Company and/or the Employer (or former employer, as applicable) may be required to withhold or account for Tax-Related Items in more than one jurisdiction.

The Administrator, in its sole discretion and pursuant to such procedures as it may specify from time to time, may permit or require Participant to satisfy such Tax-Related Items, in

whole or in part (without limitation) by (a) paying cash, (b) electing to have the Company withhold otherwise deliverable Shares, (c) selling a sufficient number of such Shares otherwise deliverable to Participant through such means as the Company may determine in its sole discretion (whether through a broker or otherwise) and without further consent from Participant, (d) electing to have the Company or the Employer withhold from Participant's wages or other cash compensation payable to Participant or (e) any other method of withholding determined by the Company and permitted by Applicable Laws and the Plan. To the extent determined appropriate by the Company in its discretion, it will have the right (but not the obligation) to satisfy any withholding obligations or rights with regard to Tax-Related Items by means of method (b) above and, until determined otherwise by the Company, this will be the method by which such withholding obligations or rights with regard to Tax-Related Items are satisfied; provided, however, that if Participant is a Section 16 officer of the Company under the Exchange Act, the Company will, in all cases, satisfy any Tax-Related Items by means of method (b) above, unless the use of such withholding method is problematic under applicable tax or securities law or has materially adverse accounting consequences, in which case the obligation for Tax-Related Items may be satisfied by one or a combination of the other methods above.

The Company may withhold or account for Tax-Related Items by considering statutory or other withholding rates, including minimum or maximum rates applicable in Participant's jurisdiction(s). In the event of over-withholding, Participant may receive a refund of any over-withheld amount in cash (with no entitlement to the equivalent in Shares), or if not refunded, Participant may be able to seek a refund from the local tax authorities. In the event of under-withholding, Participant may be required to pay additional Tax Related Items directly to the applicable tax authority. If the obligation for Tax-Related Items is satisfied by withholding in Shares, for tax purposes, Participant will be deemed to have been issued the full number of Shares subject to the exercise of the Option, notwithstanding that a number of the Shares is held back solely for the purpose of paying the Tax-Related Items.

The Company may refuse to deliver the Shares or the proceeds of the sale of Shares if Participant fails to comply with Participant's obligations for Tax-Related Items.

7. **Notice of Disqualifying Disposition of ISO Shares.** If the Option granted to Participant herein is an ISO, and if Participant sells or otherwise disposes of any of the Shares acquired pursuant to the ISO on or before the later of (i) the date two years after the Date of Grant, or (ii) the date one year after the date of exercise, Participant will immediately notify the Company in writing of such disposition. Participant agrees that Participant may be subject to income tax withholding by the Company on the compensation income recognized by Participant.
8. **Rights as Stockholder.** Neither Participant nor any person claiming under or through Participant will have any of the rights or privileges of a stockholder of the Company in respect of any Shares deliverable hereunder unless and until such Shares have been issued, recorded on the records of the Company or its transfer agents or registrars, and delivered to Participant. After such issuance, recordation and delivery, Participant will have all the

rights of a stockholder of the Company with respect to voting such Shares and receipt of dividends and distributions on such Shares.

9. **No Guarantee of Continued Service.** PARTICIPANT ACKNOWLEDGES AND AGREES THAT THE VESTING OF OPTIONS PURSUANT TO THE VESTING SCHEDULE HEREOF IS EARNED ONLY BY CONTINUING AS A SERVICE PROVIDER AND NOT THROUGH THE ACT OF BEING HIRED, BEING GRANTED THIS OPTION, OR ACQUIRING SHARES HEREUNDER. PARTICIPANT FURTHER ACKNOWLEDGES AND AGREES THAT THIS AWARD AGREEMENT, THE TRANSACTIONS CONTEMPLATED HEREUNDER, AND THE VESTING SCHEDULE SET FORTH HEREIN DO NOT CONSTITUTE AN EXPRESS OR IMPLIED PROMISE OF CONTINUED ENGAGEMENT AS A SERVICE PROVIDER FOR THE VESTING PERIOD, FOR ANY PERIOD, OR AT ALL, AND WILL NOT INTERFERE IN ANY WAY WITH PARTICIPANT'S RIGHT OR THE RIGHT OF THE COMPANY (OR THE PARENT OR SUBSIDIARY EMPLOYING OR RETAINING PARTICIPANT) TO TERMINATE PARTICIPANT'S RELATIONSHIP AS A SERVICE PROVIDER AT ANY TIME, WITH OR WITHOUT CAUSE.
10. **Nature of Grant.** By accepting the Award, Participant acknowledges, understands and agrees that:
- (a) the grant of the Option is exceptional, voluntary and occasional and does not create any contractual or other right to receive future grants of Option, or benefits in lieu of Option, even if Option have been granted in the past;
 - (b) all decisions with respect to future Option or other grants, if any, will be at the sole discretion of the Company;
 - (c) the Option grant and Participant's participation in the Plan shall not be interpreted as forming an employment or service contract with the Company, the Employer or any Parent or Subsidiary;
 - (d) Participant is voluntarily participating in the Plan;
 - (e) the Option and the Shares subject to the Option, and the income from and value of same, are not intended to replace any pension rights or compensation;
 - (f) the Option and the Shares subject to the Option, and the income from and value of same, are not part of normal or expected compensation for purposes of, including but not limited to, calculating any severance, resignation, termination, redundancy, dismissal, end-of-service payments, bonuses, long-service awards, holiday pay, pension or retirement or welfare benefits or similar payments;
 - (g) the future value of the underlying Shares is unknown, indeterminable and cannot be predicted with certainty;
 - (h) if the underlying Shares do not increase in value after the Date of Grant, the Option will have no value;

- (i) if Participant exercises the Option and acquires Shares, the value of such Shares may increase or decrease in value, even below the Exercise Price;
- (j) no claim or entitlement to compensation or damages shall arise from forfeiture of the Option resulting from the termination of Participant as a Service Provider (for any reason whatsoever, whether or not later found to be invalid or in breach of Applicable Laws in the jurisdiction where Participant is employed or rendering services or the terms of Participant's employment or service agreement, if any);
- (k) unless otherwise agreed with the Company, the Option and the Shares subject to the Option, and the income from and value of same, are not granted as consideration for, or in connection with, any service Participant may provide as a director of any Subsidiary;
- (l) for purposes of the Option, Participant's status as a Service Provider will be considered terminated as of the date Participant is no longer actively providing services to the Company or any Parent or Subsidiary (regardless of the reason for such termination and whether or not later found to be invalid or in breach of Applicable Laws in the jurisdiction where Participant is employed or rendering services or the terms of Participant's employment or service agreement, if any) and Participant's right to vest in the Option under the Plan, if any, will terminate as of such date and will not be extended by any notice period (e.g., Participant's period of service would not include any contractual notice period or any period of "garden leave" or similar period mandated under Applicable Laws in the jurisdiction where Participant is employed or rendering services or the terms of Participant's employment or service agreement, if any); the Administrator shall have the exclusive discretion to determine when Participant is no longer actively providing services for purposes of Participant's Option (including whether Participant may still be considered to be providing services while on a leave of absence);
- (m) the Option and the benefits evidenced by this Award Agreement do not create any entitlement to have the Option or any such benefits transferred to, or assumed by, another company nor to be exchanged, cashed out or substituted for, in connection with any corporate transaction affecting the Shares; and
- (n) if Participant provides services outside the United States:
 - (i) the Option and the Shares subject to the Option, and the income from and value of same, are not part of normal or expected compensation for any purposes; and
 - (ii) neither the Company, the Employer nor any Parent or Subsidiary shall be liable for any foreign exchange rate fluctuation between Participant's local currency and the United States Dollar that may affect the value of the Option or of any amounts due to Participant pursuant to the settlement of the Option or the subsequent sale of any Shares acquired upon settlement.

11. **No Advice Regarding Grant.** The Company is not providing any tax, legal or financial advice, nor is the Company making any recommendations regarding Participant's participation in the Plan, or Participant's acquisition or sale of the underlying Shares. Participant should consult with Participant's own personal tax, legal and financial advisors regarding Participant's participation in the Plan before taking any action related to the Plan.
12. **Address for Notices.** Any notice to be given to the Company under the terms of this Award Agreement will be addressed to the Company at Organovo Holdings, Inc., 440 Stevens Avenue, Suite 200, Solana Beach, CA 92075, U.S.A., or at such other address as the Company may hereafter designate in writing.
13. **Non-Transferability of Option.** This Option may not be transferred in any manner otherwise than by will or by the laws of descent or distribution and may be exercised during the lifetime of Participant only by Participant. The terms of the Plan and this Award Agreement (including the exhibits hereto) will be binding upon the executors, administrators, heirs, successors and assigns of Participant.
14. **Binding Agreement.** Subject to the limitation on the transferability of this grant contained herein, this Award Agreement will be binding upon and inure to the benefit of the heirs, legatees, legal representatives, successors and assigns of the parties hereto.
15. **Additional Conditions to Issuance of Stock.** If at any time the Company will determine, in its discretion, that the listing, registration, qualification or rule compliance of the Shares upon any securities exchange, under any U.S. or non-U.S. federal, state or local law, the Code and related regulations, or under the rulings or regulations of the United States Securities and Exchange Commission or any other governmental regulatory body, or the clearance, consent or approval of the United States Securities and Exchange Commission or any other governmental regulatory authority is necessary or desirable as a condition to the purchase by, or issuance of Shares to, Participant (or his or her estate) hereunder, such purchase or issuance will not occur unless and until such listing, registration, qualification, rule compliance, clearance, consent or approval will have been completed, effected or obtained free of any conditions not acceptable to the Company. The Company will make all reasonable efforts to meet the requirements of any such U.S. or non-U.S. federal, state or local law or securities exchange and to obtain any such consent or approval of any such governmental authority or securities exchange. Assuming such compliance, for U.S. federal income tax purposes the Exercised Shares will be considered transferred to Participant on the date the Option is exercised with respect to such Exercised Shares.
16. **Tax Consequences.** Participant has reviewed with its own tax advisors the U.S. and non-U.S. federal, state and local tax consequences of participating in the Plan and the transactions contemplated by this Award Agreement. With respect to such matters, Participant relies solely on such advisors and not on any statements or representations of the Company or any of its agents, written or oral. Participant understands that Participant (and not the Company) shall be responsible for Participant's own liability for Tax-Related Items that may arise as a result of Participant's participation in the Plan or the transactions contemplated by this Award Agreement.

17. **Plan Governs.** This Award Agreement is subject to all terms and provisions of the Plan. In the event of a conflict between one or more provisions of this Award Agreement and one or more provisions of the Plan, the provisions of the Plan will govern. Capitalized terms used and not defined in this Award Agreement will have the meaning set forth in the Plan.
18. **Administrator Authority.** The Administrator will have the power to interpret the Plan and this Award Agreement and to adopt such rules for the administration, interpretation and application of the Plan as are consistent therewith and to interpret or revoke any such rules (including, but not limited to, the determination of whether or not any Shares subject to the Option have vested). All actions taken and all interpretations and determinations made by the Administrator in good faith will be final and binding upon Participant, the Company and all other interested persons. Neither the Administrator nor any person acting on behalf of the Administrator will be personally liable for any action, determination or interpretation made in good faith with respect to the Plan or this Award Agreement.
19. **Electronic Delivery and Participation.** The Company may, in its sole discretion, decide to deliver any documents related to the Option or future Awards that may be granted under the Plan by electronic means or request Participant's consent to participate in the Plan by electronic means. Participant hereby consents to receive such documents by electronic delivery and agrees to participate in the Plan through any on-line or electronic system established and maintained by the Company or a third party designated by the Company.
20. **Captions.** Captions provided herein are for convenience only and are not to serve as a basis for interpretation or construction of this Award Agreement.
21. **Agreement Severable.** In the event that any provision in this Award Agreement will be held invalid or unenforceable, such provision will be severable from, and such invalidity or unenforceability will not be construed to have any effect on, the remaining provisions of this Award Agreement.
22. **Entire Agreement; Modifications to the Award Agreement.** The Plan and this Award Agreement (including the exhibits hereto) constitute the entire agreement of the parties on the subjects covered and supersede in their entirety all prior undertakings and agreements of the Company and Participant with respect to the subject matter hereof. Participant expressly warrants that he or she is not accepting this Award Agreement in reliance on any promises, representations or inducements other than those contained herein. Modifications to this Award Agreement can be made only in an express written contract executed by a duly authorized officer of the Company. Notwithstanding anything to the contrary in the Plan or this Award Agreement, the Company reserves the right to revise this Award Agreement as it deems necessary or advisable, in its sole discretion and without the consent of Participant, to comply with Section 409A or to otherwise avoid imposition of any additional tax or income recognition under Section 409A in connection to this Option.
23. **Amendment, Suspension or Termination of the Plan.** By accepting this Award, Participant expressly warrants that he or she has received an Option under the Plan, and has received, read and understood a description of the Plan. Participant understands that

- the Plan is established voluntarily by the Company, is discretionary in nature and may be amended, suspended or terminated by the Company at any time.
24. **Forfeiture or Clawback.** By accepting this Option, Participant agrees that this Option (including any proceeds, gains or other economic benefit received by Participant from a subsequent sale of Shares acquired through the exercise of the Option) will be subject to the provision of Section 16(f) of the Plan with respect to forfeiture or clawback.
 25. **Governing Law and Venue.** This Award Agreement will be governed by the provisions of Section 4(g) of the Plan, which selects Delaware law and venue.
 26. **Language.** Participant acknowledges that he or she is proficient in the English language or has consulted with an advisor who is proficient in the English language, so as to enable Participant to understand the terms of this Award Agreement and the Plan. If Participant has received this Award Agreement or any other document related to the Plan translated into a language other than English and if the meaning of the translated version is different than the English version, the English version will control.
 27. **Imposition of Other Requirements.** The Company reserves the right to impose other requirements on Participant's participation in the Plan, on the Option and on any Shares acquired under the Plan, to the extent the Company determines it is necessary or advisable for legal or administrative reasons, and to require Participant to sign any additional agreements or undertakings that may be necessary to accomplish the foregoing.
 28. **Addendum.** Notwithstanding any provisions in this Award Agreement, the Option shall be subject to any additional terms and conditions set forth in the Addendum for Participant's country. Moreover, if Participant relocates to one of the countries included in the Addendum, the additional terms and conditions for such country will apply to Participant, to the extent the Company determines that the application of such terms and conditions is necessary or advisable for legal or administrative reasons. The Addendum constitutes part of this Award Agreement.
 29. **Waiver.** Participant acknowledges that a waiver by the Company of breach of any provision of this Award Agreement shall not operate or be construed as a waiver of any other provision of this Award Agreement, or of any subsequent breach by Participant or any other Participant.
 30. **Insider-Trading/Market-Abuse Laws.** Participant acknowledges that, depending on Participant's or Participant's broker's country or the country in which the Shares are listed, Participant may be subject to insider-trading restrictions and/or market-abuse laws which may affect Participant's ability to accept, acquire, sell or otherwise dispose of Shares, rights to Shares or rights linked to the value of Shares during such times as Participant is considered to have "inside information" regarding the Company (as defined by the laws or regulations in Participant's country). Local insider-trading laws and regulations may prohibit the cancellation or amendment of orders Participant places before possessing inside information. Furthermore, Participant could be prohibited from (i) disclosing the inside information to any third party (other than on a "need to know" basis) and

(ii) “tipping” third parties or causing them otherwise to buy or sell securities. Participant understands that third parties include fellow employees.

Any restrictions under these laws or regulations are separate from and in addition to any restrictions that may be imposed under any applicable Company insider-trading policy. Participant is responsible for complying with any applicable restrictions and should speak to Participant’s personal legal advisor for further details regarding any applicable insider-trading and/or market-abuse laws in Participant’s country.

31. **Foreign Asset/Account Reporting Requirements**. Participant acknowledges that there may be certain foreign asset and/or account reporting requirements which may affect his or her ability to acquire or hold the Shares acquired under the Plan or cash received from participating in the Plan (including from any dividends paid on the Shares acquired under the Plan) in a brokerage or bank account outside his or her country. Participant may be required to report such accounts, assets or transactions to the tax or other authorities in his or her country. Participant also may be required to repatriate sale proceeds or other funds received as a result of participating in the Plan to his or her country through a designated bank or broker within a certain time after receipt. Participant acknowledges that it is his or her responsibility to be compliant with such regulations, and Participant should speak to his or her personal advisor on this matter.

EXHIBIT B

ADDENDUM TO THE GLOBAL STOCK OPTION AWARD AGREEMENT

Certain capitalized terms used but not defined in this Addendum have the meanings set forth in the Plan and/or the Award Agreement.

TERMS AND CONDITIONS

This Addendum contains additional terms and conditions that govern the Options granted under the Plan to a Participant who resides and/or works in one of the countries listed below.

If Participant is a citizen or resident of a country other than the one in which Participant is currently residing and/or working, transfers employment and/or residency after the Option is granted, or is considered a resident of another country for local law purposes, the terms and conditions of the Option contained herein may not be applicable to Participant, and the Company shall, in its discretion, determine to what extent the terms and conditions contained herein shall apply to Participant.

NOTIFICATIONS

This Addendum contains information regarding exchange controls and certain other issues of which Participant should be aware with respect to participation in the Plan. The information is based on the securities, exchange control and other laws in effect in the respective countries as of [date]. Such laws are often complex and change frequently. As a result, the Company strongly recommends that Participant not rely on the information in this Addendum as the only source of information relating to the consequences of his or her participation in the Plan because the information may be out of date at the time Participant vests in or exercises the Option or sells Shares acquired pursuant thereto.

The information contained herein is general in nature and may not apply to Participant's particular situation, and the Company is not in a position to assure Participant of a particular result. Accordingly, Participant should seek appropriate professional advice as to how the relevant laws in his or her country may apply to his or her situation.

If Participant is a citizen or resident of a country other than the one in which Participant is currently residing and/or working, transfers employment and/or residency after Option is granted, or is considered a resident of another country for local law purposes, the information contained herein may not be applicable to Participant in the same manner.

DATA PRIVACY PROVISIONS FOR ALL PARTICIPANTS

Terms and Conditions

PARTICIPANTS IN THE EUROPEAN UNION / EUROPEAN ECONOMIC AREA / SWITZERLAND / UNITED KINGDOM

(1) **Collection and Usage.** Pursuant to applicable data protection laws, Participant is hereby notified that the Company collects, processes, uses and transfers certain personally-identifiable information about Participant for the legitimate purpose of granting Options and implementing, administering and managing Participant's participation in the Plan. Specifics of the data processing are described below.

(2) **Controller and Representative.** The Company is the controller responsible for the processing of Participant's personal data in connection with the Plan. The Company's representative is [Email address].

(3) **Personal Data Subject to Processing.** The Company collects, processes and uses the following types of personal data about Participant: Participant's name, employee ID, home address and telephone number, work and email address, date of birth, social security number or other tax identification number, social insurance, passport number or other international identification number, salary, nationality, job title, hire date, work country, department, cost center, subsidiary, organization level, expense group, termination date, supervisor, employment status, any shares of stock or directorships held in the Company, details of all Options or any other entitlement to Shares awarded, canceled, settled, vested, unvested or outstanding in Participant's favor, which the Company receives from Participant or the Employer ("Data").

(4) **Purposes and Legal Bases of Processing.** The Company processes Data for the purposes of performing its contractual obligations under this Award Agreement, granting Options, implementing, administering and managing Participant's participation in the Plan and facilitating compliance with applicable tax and securities law. The legal basis for the processing of Data by the Company and the third-party service providers described below is the necessity of the data processing for the Company to perform its contractual obligations under this Award Agreement and for the Company's legitimate business interests of managing the Plan and generally administering employee equity awards.

(5) **Service Providers.** The Company transfers Data to [_____] and certain of its affiliated companies ("[_____]"), which is an independent stock plan administrator with operations, relevant to the Company, in the United States and assists the Company with the implementation, administration and management of the Plan. In the future, the Company may select different service providers and may share Data with such service providers. The Company's stock plan administrators will open an account for Participant to receive and trade Shares. Participant will be asked to agree on separate terms and data processing practices with the service provider, which is a condition of Participant's ability to participate in the Plan. Data will only be accessible by those individuals requiring access to it for purposes of implementing, administering and operating Participant's participation in the Plan. Participant understands that Participant may request a list with the names and addresses of any potential recipients of

Data by contacting Participant's local human resources representative, filling out the individual rights request online form at [____], or by sending an email to [_____].

(6) **International Transfers.** *The Company and its service providers, including, without limitation, [____], operate, relevant to the Company, in the United States, which means that it will be necessary for Data to be transferred to, and processed in, the United States. Participant understands and acknowledges that the United States is not subject to an unlimited adequacy finding by the European Commission and that Data may not have an equivalent level of protection as compared to Participant's country of residence. To provide appropriate safeguards for the protection of Data, Data is transferred to the Company based on data transfer and processing agreements implementing the EU Standard Contractual Clauses. Participant may request a copy of the safeguards used to protect Data by contacting the Company at: [_____]. The Company reserves the right to use a different but adequate data transfer legal mechanism.*

(7) **Data Retention.** *The Company will use Data only as long as is necessary to implement, administer and manage Participant's participation in the Plan, or as required to comply with legal or regulatory obligations, including under tax, securities, exchange control and labor laws. When the Company no longer needs Data, the Company will remove it from its systems according to its retention policies. If the Company keeps data longer, it would be to satisfy legal or regulatory obligations and the Company's legal basis would be relevant laws or regulations.*

(8) **Data Subject Rights.** *To the extent provided by law, Participant has the right to (i) inquire whether and what kind of Data the Company holds about Participant and how it is processed, and to access or request copies of such Data, (ii) request the correction or supplementation of Data that is inaccurate, incomplete or out-of-date in light of the purposes underlying the processing or (iii) obtain the erasure of Data no longer necessary for the purposes underlying the processing or processed in non-compliance with applicable legal requirements. In addition, Participant has, to the extent provided by law, the right to (iv) request the Company to restrict the processing of Data in certain situations where Participant feels its processing is inappropriate, (v) object, in certain circumstances, to the processing of Data for legitimate interests and to (vi) request portability of Data that Participant has actively or passively provided to the Company, where the processing of such Data is based on consent or a contractual agreement with Participant and is carried out by automated means. In case of concerns, Participant also has the right to (vii) lodge a complaint with the competent local data protection authority. To receive additional information regarding Participant's rights, raise any other questions regarding the practices described in this Award Agreement or to exercise his or her rights, Participant should contact the Company at: [_____] (for questions) or [_____] (to exercise rights).*

(9) **Contractual Requirement.** *Participant's provision of Data and its processing as described above is a contractual requirement and a condition to Participant's ability to participate in the Plan. Participant understands that, as a consequence of Participant's refusing to provide Data, the Company may not be able to allow Participant to participate in the Plan, grant Options to Participant or administer or maintain such Options. However, Participant's participation in the Plan and his or her acceptance of this Award Agreement are purely voluntary. While Participant will not receive Options if he or she decides against participating*

in the Plan or providing Data as described above, with the exception of not receiving these benefits, Participant's status as a Service Provider will not be affected in any way. For more information on the consequences of the refusal to provide Data, Participant may contact the Company at: [_____].

PARTICIPANTS OUTSIDE THE EUROPEAN UNION / EUROPEAN ECONOMIC AREA / SWITZERLAND / UNITED KINGDOM

Participant consents to the collection, use and transfer, in electronic or other form, of Participant's personal data as described in this Award Agreement and any other Restricted Stock Unit grant materials by and among, as applicable, the Employer, the Company and any Subsidiary for the exclusive purpose of implementing, administering and managing Participant's participation in the Plan.

Participant understands that the Company and the Employer may hold certain personal information about Participant, including, but not limited to, Participant's name, home address, email address and telephone number, date of birth, social insurance number, passport or other identification number, salary, nationality, job title, any shares of stock or directorships held in the Company, details of all Options or any other entitlement to Shares awarded, canceled, exercised, vested, unvested or outstanding in Participant's favor ("Data"), for the purpose of implementing, administering and managing the Plan.

Participant understands that Data will be transferred to [_____] and certain of its affiliated companies ("[_____]") which is assisting the Company with the implementation, administration and management of the Plan. Participant understands that the recipients of Data may be located in the United States or elsewhere, and that the recipients' country (e.g., the United States) may have different data privacy laws and protections than Participant's country. Participant understands that, if Participant resides outside the U.S., Participant may request a list with the names and addresses of any potential recipients of Data by contacting Participant's local human resources representative, filling out the individual rights request online form at [_____], or by sending an email to [_____]. Participant authorizes the Company and any other possible recipients which may assist the Company (presently or in the future) with implementing, administering and managing the Plan to collect, receive, possess, use, retain, transfer or otherwise process Data, in electronic or other form, for the sole purpose of implementing, administering and managing Participant's participation in the Plan. Participant understands that Data will be held only as long as is necessary to implement, administer and manage Participant's participation in the Plan. Participant understands that, if Participant resides outside the U.S., Participant may, at any time, view Data, request additional information about the storage and processing of Data, require any necessary amendments to Data or refuse or withdraw the consents herein, in any case without cost, by contacting in writing Participant's local human resources representative, filling out the individual rights request online form at [_____], or by sending an email to [_____]. Further, Participant understands that Participant is providing the consents herein on a purely voluntary basis. If Participant does not consent, or if Participant later seeks to revoke Participant's consent, Participant's status as a Service Provider will not be affected; the only consequence of refusing or withdrawing Participant's consent is that the Company would not be able to grant Participant Options or other equity awards or administer or maintain

such awards. Therefore, Participant understands that refusing or withdrawing Participant's consent may affect Participant's ability to participate in the Plan. For more information on the consequences of Participant's refusal to consent or withdrawal of consent, Participant understands that Participant may contact Participant's local human resources representative or send an email to [_____].

ORGANOVO HOLDINGS, INC.

2022 EQUITY INCENTIVE PLAN

GLOBAL RESTRICTED STOCK UNIT AWARD AGREEMENT

Unless otherwise defined herein, the terms defined in the Organovo Holdings, Inc., 2022 Equity Incentive Plan (the “Plan”) will have the same defined meanings in this Global Restricted Stock Unit Award Agreement, the Terms and Conditions of the Global Restricted Stock Unit Grant, attached hereto as Exhibit A and the Addendum, attached hereto as Exhibit B, all of which are made a part of this document (together, the “Award Agreement”).

NOTICE OF RESTRICTED STOCK UNIT GRANT

Participant has been granted the right to receive an Award of Restricted Stock Units, subject to the terms and conditions of the Plan and this Award Agreement, as follows:

Participant: _____

Grant Number: _____

Date of Grant: _____

Vesting Commencement Date: _____

Number of Shares Granted: _____

Vesting Schedule:

Subject to any acceleration provisions contained in the Plan or set forth below, the Restricted Stock Units will vest in accordance with the following schedule:

[INSERT VEST SCHEDULE HERE]

Vesting in each case is subject to Participant continuing to be a Service Provider through the applicable vesting date, as further described in Section 10(j) of the Terms and Conditions of the Global Restricted Stock Unit Grant.

In the event Participant ceases to be a Service Provider for any or no reason before Participant vests in the Restricted Stock Units, the Restricted Stock Units and Participant’s right to acquire any Shares hereunder will immediately terminate.

By Participant’s signature and the signature of the Company’s representative below, or by Participant’s acceptance of this Award Agreement via the Company’s designated online acceptance procedure, Participant and the Company agree that this Award of Restricted Stock Units is granted under and governed by the terms and conditions of the Plan and this Award Agreement. Participant has reviewed the Plan and this Award Agreement in their entirety, has had an opportunity to obtain the advice of counsel prior to executing this Award Agreement and fully understands all provisions of the Plan and this Award Agreement. Participant expressly

acknowledges the information provided in the Addendum related to the collection, processing and use of Participant's personal data by the Company and its Subsidiaries and the transfer of personal data to the recipients mentioned in the Addendum. Participant hereby agrees to accept as binding, conclusive and final all decisions or interpretations of the Administrator upon any questions relating to the Plan and this Award Agreement. Participant further agrees to notify the Company upon any change in the residence address indicated below.

PARTICIPANT

ORGANOVO HOLDINGS, INC.

Signature:

Signature:

Name:

Name:

Title:

Title:

EXHIBIT A

TERMS AND CONDITIONS OF GLOBAL RESTRICTED STOCK UNIT GRANT

1. **Grant.** The Company hereby grants to the individual named in the Notice of Restricted Stock Unit Grant (the “Notice of Grant”) attached as Part I of this Award Agreement (the “Participant”) under the Plan an Award of Restricted Stock Units, subject to all of the terms and conditions in this Award Agreement and the Plan, which is incorporated herein by reference. Subject to Section 17(c) of the Plan, in the event of a conflict between the terms and conditions of the Plan and the terms and conditions of this Award Agreement, the terms and conditions of the Plan will prevail.
2. **Company’s Obligation to Pay.** Each Restricted Stock Unit represents the right to receive a Share on the date it vests. Unless and until the Restricted Stock Units will have vested in the manner set forth in Section 3, Participant will have no right to the payment of any such Restricted Stock Units. Prior to the actual payment of any vested Restricted Stock Units, such Restricted Stock Units will represent an unsecured obligation of the Company, payable (if at all) only from the general assets of the Company. Any Restricted Stock Units that vest in accordance with Sections 3 or 4 will be paid to Participant (or in the event of Participant’s death, to his or her estate) in whole Shares, subject to Participant satisfying any applicable withholding obligations for Tax-Related Items. Subject to the provisions of Section 4, such vested Restricted Stock Units shall be paid in whole Shares as soon as practicable after vesting, but in each such case by March 15 of the calendar year following the year in which the vesting date occurs. In no event will Participant be permitted, directly or indirectly, to specify the taxable year of the payment of any Restricted Stock Units payable under this Award Agreement.
3. **Vesting Schedule.** Except as provided in Section 4, and subject to Section 5, the Restricted Stock Units awarded by this Award Agreement will vest in accordance with the vesting provisions set forth in the Notice of Grant. Restricted Stock Units scheduled to vest on a certain date or upon the occurrence of a certain condition will not vest in Participant in accordance with any of the provisions of this Award Agreement, unless Participant will have been continuously a Service Provider from the Date of Grant until the date such vesting occurs, as further described in Section 10(j). For the avoidance of doubt, if Participant ceases to be a Service Provider prior to any scheduled vesting date, Participant will not earn or be entitled to any pro-rated vesting for any portion of time before the respective vesting date during which Participant was a Service Provider, nor will Participant be entitled to any compensation for lost vesting.
4. **Administrator Discretion.** The Administrator, in its discretion, may accelerate the vesting of the balance, or some lesser portion of the balance, of the unvested Restricted Stock Units at any time, subject to the terms of the Plan. If so accelerated, such Restricted Stock Units will be considered as having vested as of the date specified by the Administrator. The payment of Shares in settlement of any Restricted Stock Units vesting pursuant to this Section 4 shall in all cases be paid at a time or in a manner that is exempt from, or complies with, Section 409A.

Notwithstanding anything in the Plan or this Award Agreement to the contrary, if the vesting of the balance, or some lesser portion of the balance, of the Restricted Stock Units is accelerated in connection with Participant's termination as a Service Provider (provided that such termination is a "separation from service" within the meaning of Section 409A, as determined by the Company), other than due to death, and if (x) Participant is a "specified employee" within the meaning of Section 409A at the time of such termination as a Service Provider and (y) the payment of such accelerated Restricted Stock Units will result in the imposition of additional tax under Section 409A if paid to Participant on or within the six (6) month period following Participant's termination as a Service Provider, then the settlement of such accelerated Restricted Stock Units will not be made until the date six (6) months and one (1) day following the date of Participant's termination as a Service Provider, unless Participant dies following his or her termination as a Service Provider, in which case, the Restricted Stock Units will be settled in Shares to Participant's estate as soon as practicable following his or her death. It is the intent of this Award Agreement that it and all payments and benefits hereunder be exempt from, or comply with, the requirements of Section 409A so that none of the Restricted Stock Units provided under this Award Agreement or Shares issuable thereunder will be subject to the additional tax imposed under Section 409A, and any ambiguities herein will be interpreted to be so exempt or so comply. Each payment payable under this Award Agreement is intended to constitute a separate payment for purposes of Treasury Regulation Section 1.409A-2(b)(2). For purposes of this Award Agreement, "Section 409A" means Section 409A of the Code, and any final Treasury Regulations and U.S. Internal Revenue Service guidance thereunder, as each may be amended from time to time.¹

5. Forfeiture upon Termination of Status as a Service Provider. Notwithstanding any contrary provision of this Award Agreement, the balance of the Restricted Stock Units that have not vested as of the time of Participant's termination as a Service Provider for any or no reason and Participant's right to acquire any Shares hereunder will immediately terminate.
6. Death of Participant. Any distribution or delivery to be made to Participant under this Award Agreement will, if Participant is then deceased, be made to the administrator or executor of Participant's estate. Any such transferee must furnish the Company with (a) written notice of his or her status as transferee, and (b) evidence satisfactory to the Company to establish the validity of the transfer and compliance with any laws or regulations pertaining to said transfer.
7. Responsibility for Taxes. Notwithstanding any contrary provision of this Award Agreement, no Shares will be issued to Participant, unless and until satisfactory arrangements (as determined by the Administrator) will have been made by Participant with respect to the payment of Tax-Related Items. Participant acknowledges that, regardless of any action taken by the Company or, if different, the Parent or Subsidiary employing or retaining Participant (the "Employer"), the ultimate liability for all Tax-Related Items is and remains Participant's sole responsibility and may exceed the amount, if any, actually withheld by the Company or the Employer. Participant further acknowledges that the Company and/or the Employer (i) make no representations or

¹ Section 409A applies to and is relevant only for Participants who are U.S. taxpayers.

undertakings regarding the treatment of any Tax-Related Items in connection with any aspect of the Restricted Stock Units, including, but not limited to, the grant, vesting or settlement of the Restricted Stock Units, the subsequent sale of Shares acquired pursuant to such settlement and the receipt of any dividends or dividend equivalents; and (ii) does not commit to and are under no obligation to structure the terms of the grant or any aspect of the Restricted Stock Units to reduce or eliminate Participant's liability for Tax-Related Items or achieve any particular tax result. Further, if Participant is subject to Tax-Related Items in more than one jurisdiction, Participant acknowledges that the Company and/or the Employer (or former employer, as applicable) may be required to withhold or account for Tax-Related Items in more than one jurisdiction.

The Administrator, in its sole discretion and pursuant to such procedures as it may specify from time to time, may permit or require Participant to satisfy such Tax-Related Items, in whole or in part (without limitation) by (a) paying cash, (b) electing to have the Company withhold otherwise deliverable Shares, (c) selling a sufficient number of such Shares otherwise deliverable to Participant through such means as the Company may determine in its sole discretion (whether through a broker or otherwise) and without further consent from Participant, (d) electing to have the Company or the Employer withhold from Participant's wages or other cash compensation payable to Participant, or (e) any other method of withholding determined by the Company and permitted by Applicable Laws and the Plan. To the extent determined appropriate by the Company in its discretion, it will have the right (but not the obligation) to satisfy any withholding obligations or rights with regard to Tax-Related Items by means of method (b) above and, until determined otherwise by the Company, this will be the method by which such withholding obligations or rights with regard to Tax-Related Items are satisfied; provided, however, that if Participant is a Section 16 officer of the Company under the Exchange Act, the Company will, in all cases, satisfy any Tax-Related Items by means of method (b) above, unless the use of such withholding method is problematic under applicable tax or securities law or has materially adverse accounting consequences, in which case the obligation for Tax-Related Items may be satisfied by one or a combination of the other methods above.

The Company may withhold or account for Tax-Related Items by considering statutory or other withholding rates, including minimum or maximum rates applicable in Participant's jurisdiction(s). In the event of over-withholding, Participant may receive a refund of any over-withheld amount in cash (with no entitlement to the equivalent in Shares), or, if not refunded, Participant may be able to seek a refund from the local tax authorities. In the event of under-withholding, Participant may be required to pay additional Tax-Related Items directly to the applicable tax authority. If the obligation for Tax-Related Items is satisfied by withholding in Shares, for tax purposes, Participant will be deemed to have been issued the full number of Shares subject to the vested Restricted Stock Units, notwithstanding that a number of the Shares is held back solely for the purpose of paying the Tax-Related Items.

If Participant fails to make satisfactory arrangements for the payment of any Tax-Related Items hereunder at the time any applicable Restricted Stock Units otherwise are scheduled to vest pursuant to Sections 3 or 4 or Tax-Related Items related to Restricted Stock Units otherwise are due, Participant will permanently forfeit such Restricted Stock Units and any

right to receive Shares thereunder and the Restricted Stock Units will be returned to the Company at no cost to the Company.

8. Rights as Stockholder. Neither Participant nor any person claiming under or through Participant will have any of the rights or privileges of a stockholder of the Company in respect of any Shares deliverable hereunder unless and until such Shares have been issued, recorded on the records of the Company or its transfer agents or registrars, and delivered to Participant. After such issuance, recordation and delivery, Participant will have all the rights of a stockholder of the Company with respect to voting such Shares and receipt of dividends and distributions on such Shares.
9. No Guarantee of Continued Service. PARTICIPANT ACKNOWLEDGES AND AGREES THAT THE VESTING OF THE RESTRICTED STOCK UNITS PURSUANT TO THE VESTING SCHEDULE HEREOF IS EARNED ONLY BY CONTINUING AS A SERVICE PROVIDER AND NOT THROUGH THE ACT OF BEING HIRED, BEING GRANTED THIS AWARD OF RESTRICTED STOCK UNITS OR ACQUIRING SHARES HEREUNDER. PARTICIPANT FURTHER ACKNOWLEDGES AND AGREES THAT THIS AWARD AGREEMENT, THE TRANSACTIONS CONTEMPLATED HEREUNDER AND THE VESTING SCHEDULE SET FORTH HEREIN DO NOT CONSTITUTE AN EXPRESS OR IMPLIED PROMISE OF CONTINUED ENGAGEMENT AS A SERVICE PROVIDER FOR THE VESTING PERIOD, FOR ANY PERIOD, OR AT ALL, AND WILL NOT INTERFERE IN ANY WAY WITH PARTICIPANT'S RIGHT OR THE RIGHT OF THE COMPANY (OR THE EMPLOYER) TO TERMINATE PARTICIPANT'S RELATIONSHIP AS A SERVICE PROVIDER AT ANY TIME, WITH OR WITHOUT CAUSE.
10. Nature of Grant. By accepting the Award, Participant acknowledges, understands and agrees that:
 - (a) the grant of the Restricted Stock Units is exceptional, voluntary and occasional and does not create any contractual or other right to receive future grants of Restricted Stock Units, or benefits in lieu of Restricted Stock Units, even if Restricted Stock Units have been granted in the past;
 - (b) all decisions with respect to future Restricted Stock Units or other grants, if any, will be at the sole discretion of the Company;
 - (c) the Restricted Stock Unit grant and Participant's participation in the Plan shall not be interpreted as forming an employment or service contract with the Company, the Employer, or any Parent or Subsidiary;
 - (d) Participant is voluntarily participating in the Plan;
 - (e) the Restricted Stock Units and the Shares subject to the Restricted Stock Units, and the income from and value of same, are not intended to replace any pension rights or compensation;

- (f) the Restricted Stock Units and the Shares subject to the Restricted Stock Units, and the income from and value of same, are not part of normal or expected compensation for purposes of, including but not limited to, calculating any severance, resignation, termination, redundancy, dismissal, end-of-service payments, bonuses, long-service awards, holiday pay, pension or retirement or welfare benefits or similar payments;
- (g) the future value of the underlying Shares is unknown, indeterminable and cannot be predicted with certainty;
- (h) no claim or entitlement to compensation or damages shall arise from forfeiture of the Restricted Stock Units resulting from the termination of Participant as a Service Provider (for any reason whatsoever, whether or not later found to be invalid or in breach of employment laws in the jurisdiction where Participant is employed or rendering services or the terms of Participant's employment or service agreement, if any);
- (i) unless otherwise agreed with the Company, the Restricted Stock Units and the Shares subject to the Restricted Stock Units, and the income from and value of same, are not granted as consideration for, or in connection with, any service Participant may provide as a director of any Subsidiary;
- (j) for purposes of the Restricted Stock Units, Participant's status as a Service Provider will be considered terminated as of the date Participant is no longer actively providing services to the Company or any Parent or Subsidiary (regardless of the reason for such termination and whether or not later found to be invalid or in breach of employment laws in the jurisdiction where Participant is employed or rendering services or the terms of Participant's employment or service agreement, if any) and Participant's right to vest in the Restricted Stock Units under the Plan, if any, will terminate as of such date and will not be extended by any notice period (e.g., Participant's period of service would not include any contractual notice period or any period of "garden leave" or similar period mandated under employment laws in the jurisdiction where Participant is employed or rendering services or the terms of Participant's employment or service agreement, if any); the Administrator shall have the exclusive discretion to determine when Participant is no longer actively providing services for purposes of Participant's Restricted Stock Unit grant (including whether Participant may still be considered to be providing services while on a leave of absence);
- (k) the Restricted Stock Units and the benefits evidenced by this Award Agreement do not create any entitlement to have the Restricted Stock Units or any such benefits transferred to, or assumed by, another company nor to be exchanged, cashed out or substituted for, in connection with any corporate transaction affecting the Shares; and
- (l) if Participant provides services outside the United States:

- (i) the Restricted Stock Units and the Shares subject to the Restricted Stock Units, and the income from and value of same, are not part of normal or expected compensation for any purposes; and
 - (ii) neither the Company, the Employer nor any Parent or Subsidiary shall be liable for any foreign exchange rate fluctuation between Participant's local currency and the United States Dollar that may affect the value of the Restricted Stock Units or of any amounts due to Participant pursuant to the settlement of the Restricted Stock Units or the subsequent sale of any Shares acquired upon settlement.
11. No Advice Regarding Grant. The Company is not providing any tax, legal or financial advice, nor is the Company making any recommendations regarding Participant's participation in the Plan, or Participant's acquisition or sale of the underlying Shares. Participant should consult with Participant's own personal tax, legal and financial advisors regarding Participant's participation in the Plan before taking any action related to the Plan.
 12. Address for Notices. Any notice to be given to the Company under the terms of this Award Agreement will be addressed to the Company at Organovo Holdings, Inc., 440 Stevens Avenue, Suite 200, Solana Beach, CA 92075, U.S.A., or at such other address as the Company may hereafter designate in writing.
 13. Grant is Not Transferable. Except to the limited extent provided in Section 6, this grant and the rights and privileges conferred hereby will not be transferred, assigned, pledged or hypothecated in any way (whether by operation of law or otherwise) and will not be subject to sale under execution, attachment or similar process. Upon any attempt to transfer, assign, pledge, hypothecate or otherwise dispose of this grant, or any right or privilege conferred hereby, or upon any attempted sale under any execution, attachment or similar process, this grant and the rights and privileges conferred hereby immediately will become null and void.
 14. Binding Agreement. Subject to the limitation on the transferability of this grant contained herein, this Award Agreement will be binding upon and inure to the benefit of the heirs, legatees, legal representatives, successors and assigns of the parties hereto.
 15. Additional Conditions to Issuance of Stock. If at any time the Company will determine, in its discretion, that the listing, registration, qualification or rule compliance of the Shares upon any securities exchange, under any U.S. or non-U.S. federal, state or local law, the Code and related regulations, or under the rulings or regulations of the United States Securities and Exchange Commission or any other governmental regulatory body, or the clearance, consent or approval of any governmental regulatory authority, is necessary or desirable as a condition to the issuance of Shares to Participant (or his or her estate) hereunder, such issuance will not occur unless and until such listing, registration, qualification, rule compliance, clearance, consent or approval will have been completed, effected or obtained free of any conditions not acceptable to the Company. Where the Company determines that the delivery of any Shares in settlement of any vested Restricted Stock Units will violate U.S. federal securities laws or other Applicable Laws, the

Company will defer delivery until the earliest date at which the Company reasonably anticipates that the delivery of Shares will no longer cause such violation. The Company will make all reasonable efforts to meet the requirements of any such U.S. or non-U.S. federal, state or local law or securities exchange and to obtain any such consent or approval of any such governmental authority or securities exchange.

16. Tax Consequences. Participant has reviewed with its own tax advisors the U.S. and non-U.S. federal, state and local tax consequences of participating in the Plan and the transactions contemplated by this Award Agreement. With respect to such matters, Participant relies solely on such advisors and not on any statements or representations of the Company or any of its agents, written or oral. Participant understands that Participant (and not the Company) shall be responsible for Participant's own liability for Tax-Related Items that may arise as a result of Participant's participation in the Plan or the transactions contemplated by this Award Agreement.
17. Plan Governs. This Award Agreement is subject to all terms and provisions of the Plan. In the event of a conflict between one or more provisions of this Award Agreement and one or more provisions of the Plan, the provisions of the Plan will govern. Capitalized terms used and not defined in this Award Agreement will have the meaning set forth in the Plan.
18. Administrator Authority. The Administrator will have the power to interpret the Plan and this Award Agreement and to adopt such rules for the administration, interpretation and application of the Plan as are consistent therewith and to interpret or revoke any such rules (including, but not limited to, the determination of whether or not any Restricted Stock Units have vested). All actions taken and all interpretations and determinations made by the Administrator in good faith will be final and binding upon Participant, the Company and all other interested persons. No member of the Administrator will be personally liable for any action, determination or interpretation made in good faith with respect to the Plan or this Award Agreement.
19. Electronic Delivery and Participation. The Company may, in its sole discretion, decide to deliver any documents related to the Restricted Stock Units or future Awards that may be granted under the Plan by electronic means or request Participant's consent to participate in the Plan by electronic means. Participant hereby consents to receive such documents by electronic delivery and agrees to participate in the Plan through any on-line or electronic system established and maintained by the Company or a third party designated by the Company.
20. Captions. Captions provided herein are for convenience only and are not to serve as a basis for interpretation or construction of this Award Agreement.
21. Agreement Severable. In the event that any provision in this Award Agreement will be held invalid or unenforceable, such provision will be severable from, and such invalidity or unenforceability will not be construed to have any effect on, the remaining provisions of this Award Agreement.

22. Entire Agreement; Modifications to the Award Agreement. The Plan and this Award Agreement (including the exhibits hereto) constitute the entire agreement of the parties on the subjects covered and supersede in their entirety all prior undertakings and agreements of the Company and Participant with respect to the subject matter hereof. Participant expressly warrants that he or she is not accepting this Award Agreement in reliance on any promises, representations or inducements other than those contained herein. Modifications to this Award Agreement can be made only in an express written contract executed by a duly authorized officer of the Company. Notwithstanding anything to the contrary in the Plan or this Award Agreement, the Company reserves the right to revise this Award Agreement as it deems necessary or advisable, in its sole discretion and without the consent of Participant, to comply with Section 409A or to otherwise avoid imposition of any additional tax or income recognition under Section 409A in connection to this Award of Restricted Stock Units.
23. Amendment, Suspension or Termination of the Plan. By accepting this Award, Participant expressly warrants that he or she has received an Award of Restricted Stock Units under the Plan, and has received, read and understood a description of the Plan. Participant understands that the Plan is established voluntarily by the Company, is discretionary in nature, and may be amended, suspended or terminated by the Company at any time.
24. Forfeiture or Clawback. By accepting this Award, Participant agrees that this Award of Restricted Stock Units (including any proceeds, gains or other economic benefit received by Participant from a subsequent sale of Shares acquired through the Award) will be subject to the provision of Section 16(f) of the Plan with respect to forfeiture or clawback.
25. Governing Law and Venue. This Award Agreement will be governed by the provisions of Section 4(g) of the Plan, which selects Delaware law and venue.
26. Language. Participant acknowledges that he or she is proficient in the English language, or has consulted with an advisor who is proficient in the English language, so as to enable Participant to understand the terms of this Award Agreement and the Plan. If Participant has received this Award Agreement or any other document related to the Plan translated into a language other than English and if the meaning of the translated version is different than the English version, the English version will control.
27. Imposition of Other Requirements. The Company reserves the right to impose other requirements on Participant's participation in the Plan, on the Restricted Stock Units and on any Shares acquired under the Plan, to the extent the Company determines it is necessary or advisable for legal or administrative reasons, and to require Participant to sign any additional agreements or undertakings that may be necessary to accomplish the foregoing.
28. Addendum. Notwithstanding any provisions in this Award Agreement, the Restricted Stock Unit Award shall be subject to any additional terms and conditions set forth in the Addendum for Participant's country. Moreover, if Participant relocates to one of the countries included in the Addendum, the additional terms and conditions for such country will apply to Participant, to the extent the Company determines that the application of such

terms and conditions is necessary or advisable for legal or administrative reasons. The Addendum constitutes part of this Award Agreement.

29. Waiver. Participant acknowledges that a waiver by the Company of breach of any provision of this Award Agreement shall not operate or be construed as a waiver of any other provision of this Award Agreement, or of any subsequent breach by Participant or any other Participant.
30. Insider-Trading/Market-Abuse Laws. Participant acknowledges that, depending on Participant's or Participant's broker's country or the country in which the Shares are listed, Participant may be subject to insider-trading restrictions and/or market-abuse laws, which may affect Participant's ability to accept, acquire, sell or otherwise dispose of Shares, rights to Shares or rights linked to the value of Shares during such times as Participant is considered to have "inside information" regarding the Company (as defined by the laws or regulations in Participant's country). Local insider-trading laws and regulations may prohibit the cancellation or amendment of orders Participant places before possessing inside information. Furthermore, Participant could be prohibited from (i) disclosing the inside information to any third party (other than on a "need to know" basis) and (ii) "tipping" third parties or causing them otherwise to buy or sell securities. Participant understands that third parties include fellow employees.

Any restrictions under these laws or regulations are separate from and in addition to any restrictions that may be imposed under any applicable Company insider-trading policy. Participant is responsible for complying with any applicable restrictions and should speak to Participant's personal legal advisor for further details regarding any applicable insider-trading and/or market-abuse laws in Participant's country.

31. Foreign Asset/Account Reporting Requirements. Participant acknowledges that there may be certain foreign asset and/or account reporting requirements which may affect his or her ability to acquire or hold the Shares acquired under the Plan or cash received from participating in the Plan (including from any dividends paid on the Shares acquired under the Plan) in a brokerage or bank account outside his or her country. Participant may be required to report such accounts, assets or transactions to the tax or other authorities in his or her country. Participant also may be required to repatriate sale proceeds or other funds received as a result of participating in the Plan to his or her country through a designated bank or broker within a certain time after receipt. Participant acknowledges that it is his or her responsibility to be compliant with such regulations, and Participant should speak to his or her personal advisor on this matter.

EXHIBIT B

ADDENDUM TO THE GLOBAL RESTRICTED STOCK UNIT AWARD AGREEMENT

Certain capitalized terms used but not defined in this Addendum have the meanings set forth in the Plan and/or the Award Agreement.

TERMS AND CONDITIONS

This Addendum contains additional terms and conditions that govern the Restricted Stock Units granted under the Plan to a Participant who resides and/or works in one of the countries listed below.

If Participant is a citizen or resident of a country other than the one in which Participant is currently residing and/or working, transfers employment and/or residency after the Restricted Stock Units are granted, or is considered a resident of another country for local law purposes, the terms and conditions of the Restricted Stock Units contained herein may not be applicable to Participant, and the Company shall, in its discretion, determine to what extent the terms and conditions contained herein shall apply to Participant.

NOTIFICATIONS

This Addendum contains information regarding exchange controls and certain other issues of which Participant should be aware with respect to participation in the Plan. The information is based on the securities, exchange control and other laws in effect in the respective countries as of [date]. Such laws are often complex and change frequently. As a result, the Company strongly recommends that Participant not rely on the information in this Addendum as the only source of information relating to the consequences of his or her participation in the Plan because the information may be out of date at the time Participant vests in the Restricted Stock Units or sells Shares acquired pursuant thereto.

The information contained herein is general in nature and may not apply to Participant's particular situation, and the Company is not in a position to assure Participant of a particular result. Accordingly, Participant should seek appropriate professional advice as to how the relevant laws in his or her country may apply to his or her situation.

If Participant is a citizen or resident of a country other than the one in which Participant is currently residing and/or working, transfers employment and/or residency after the Restricted Stock Units are granted, or is considered a resident of another country for local law purposes, the information contained herein may not be applicable to Participant in the same manner.

DATA PRIVACY PROVISIONS FOR ALL PARTICIPANTS

Terms and Conditions

PARTICIPANTS IN THE EUROPEAN UNION / EUROPEAN ECONOMIC AREA / SWITZERLAND / UNITED KINGDOM

(i) Collection and Usage. Pursuant to applicable data protection laws, Participant is hereby notified that the Company collects, processes, uses and transfers certain personally-identifiable information about Participant for the legitimate purpose of granting Restricted Stock Units and implementing, administering and managing Participant's participation in the Plan. Specifics of the data processing are described below.

(ii) Controller and Representative. The Company is the controller responsible for the processing of Participant's personal data in connection with the Plan. The Company's representative is [Email address].

(iii) Personal Data Subject to Processing. The Company collects, processes and uses the following types of personal data about Participant: Participant's name, employee ID, home address and telephone number, work and email address, date of birth, social security number or other tax identification number, social insurance, passport number or other international identification number, salary, nationality, job title, hire date, work country, department, cost center, subsidiary, organization level, expense group, termination date, supervisor, employment status, any shares of stock or directorships held in the Company, details of all Restricted Stock Units or any other entitlement to Shares awarded, canceled, settled, vested, unvested or outstanding in Participant's favor, which the Company receives from Participant or the Employer ("Data").

(iv) Purposes and Legal Bases of Processing. The Company processes Data for the purposes of performing its contractual obligations under this Award Agreement, granting Restricted Stock Units, implementing, administering and managing Participant's participation in the Plan and facilitating compliance with applicable tax and securities law. The legal basis for the processing of Data by the Company and the third-party service providers described below is the necessity of the data processing for the Company to perform its contractual obligations under this Award Agreement and for the Company's legitimate business interests of managing the Plan and generally administering employee equity awards.

(v) Service Providers. The Company transfers Data to [_____] and certain of its affiliated companies ("[_____]"), which is an independent stock plan administrator with operations, relevant to the Company, in the United States and assists the Company with the implementation, administration and management of the Plan. In the future, the Company may select different service providers and may share Data with such service providers. The Company's stock plan administrators will open an account for Participant to receive and trade Shares. Participant will be asked to agree on separate terms and data processing practices with the service provider, which is a condition of Participant's ability to participate in the Plan. Data will only be accessible by those individuals requiring access to it for purposes of implementing, administering and operating Participant's participation in the Plan. Participant understands

that Participant may request a list with the names and addresses of any potential recipients of Data by contacting Participant's local human resources representative, filling out the individual rights request online form at [_____], or by sending an email to [_____].

(vi) *International Transfers.* The Company and its service providers, including, without limitation, [_____], operate, relevant to the Company, in the United States, which means that it will be necessary for Data to be transferred to, and processed in, the United States. Participant understands and acknowledges that the United States is not subject to an unlimited adequacy finding by the European Commission and that Data may not have an equivalent level of protection as compared to Participant's country of residence. To provide appropriate safeguards for the protection of Data, Data is transferred to the Company based on data transfer and processing agreements implementing the EU Standard Contractual Clauses. Participant may request a copy of the safeguards used to protect Data by contacting the Company at: [_____]. The Company reserves the right to use a different but adequate data transfer legal mechanism.

(vii) *Data Retention.* The Company will use Data only as long as is necessary to implement, administer and manage Participant's participation in the Plan, or as required to comply with legal or regulatory obligations, including under tax, securities, exchange control and labor laws. When the Company no longer needs Data, the Company will remove it from its systems according to its retention policies. If the Company keeps data longer, it would be to satisfy legal or regulatory obligations and the Company's legal basis would be relevant laws or regulations.

(viii) *Data Subject Rights.* To the extent provided by law, Participant has the right to (i) inquire whether and what kind of Data the Company holds about Participant and how it is processed, and to access or request copies of such Data, (ii) request the correction or supplementation of Data that is inaccurate, incomplete or out-of-date in light of the purposes underlying the processing or (iii) obtain the erasure of Data no longer necessary for the purposes underlying the processing or processed in non-compliance with applicable legal requirements. In addition, Participant has, to the extent provided by law, the right to (iv) request the Company to restrict the processing of Data in certain situations where Participant feels its processing is inappropriate, (v) object, in certain circumstances, to the processing of Data for legitimate interests and to (vi) request portability of Data that Participant has actively or passively provided to the Company, where the processing of such Data is based on consent or a contractual agreement with Participant and is carried out by automated means. In case of concerns, Participant also has the right to (vii) lodge a complaint with the competent local data protection authority. To receive additional information regarding Participant's rights, raise any other questions regarding the practices described in this Award Agreement or to exercise his or her rights, Participant should contact the Company at: [_____] (for questions) or [_____] (to exercise rights).

(ix) *Contractual Requirement.* Participant's provision of Data and its processing as described above is a contractual requirement and a condition to Participant's ability to participate in the Plan. Participant understands that, as a consequence of Participant's refusing to provide Data, the Company may not be able to allow Participant to participate in the Plan, grant Restricted Stock Units to Participant or administer or maintain such Restricted Stock Units. However, Participant's participation in the Plan and his or her acceptance of this Award

Agreement are purely voluntary. While Participant will not receive Restricted Stock Units if he or she decides against participating in the Plan or providing Data as described above, with the exception of not receiving these benefits, Participant's status as a Service Provider will not be affected in any way. For more information on the consequences of the refusal to provide Data, Participant may contact the Company at: [_____].

PARTICIPANTS OUTSIDE THE EUROPEAN UNION / EUROPEAN ECONOMIC AREA / SWITZERLAND / UNITED KINGDOM

Participant consents to the collection, use and transfer, in electronic or other form, of Participant's personal data as described in this Award Agreement and any other Restricted Stock Unit grant materials by and among, as applicable, the Employer, the Company and any Subsidiary for the exclusive purpose of implementing, administering and managing Participant's participation in the Plan.

Participant understands that the Company and the Employer may hold certain personal information about Participant, including, but not limited to, Participant's name, home address, email address and telephone number, date of birth, social insurance number, passport or other identification number, salary, nationality, job title, any shares of stock or directorships held in the Company, details of all Restricted Stock Units or any other entitlement to Shares awarded, canceled, exercised, vested, unvested or outstanding in Participant's favor ("Data"), for the purpose of implementing, administering and managing the Plan.

Participant understands that Data will be transferred to [_____] and certain of its affiliated companies ("[_____]") which is assisting the Company with the implementation, administration and management of the Plan. Participant understands that the recipients of Data may be located in the United States or elsewhere, and that the recipients' country (e.g., the United States) may have different data privacy laws and protections than Participant's country. Participant understands that, if Participant resides outside the U.S., Participant may request a list with the names and addresses of any potential recipients of Data by contacting Participant's local human resources representative, filling out the individual rights request online form at [_____] , or by sending an email to [_____]. Participant authorizes the Company and any other possible recipients which may assist the Company (presently or in the future) with implementing, administering and managing the Plan to collect, receive, possess, use, retain, transfer or otherwise process Data, in electronic or other form, for the sole purpose of implementing, administering and managing Participant's participation in the Plan. Participant understands that Data will be held only as long as is necessary to implement, administer and manage Participant's participation in the Plan. Participant understands that, if Participant resides outside the U.S., Participant may, at any time, view Data, request additional information about the storage and processing of Data, require any necessary amendments to Data or refuse or withdraw the consents herein, in any case without cost, by contacting in writing Participant's local human resources representative, filling out the individual rights request online form at [_____] , or by sending an email to [_____]. Further, Participant understands that Participant is providing the consents herein on a purely voluntary basis. If Participant does not consent, or if Participant later seeks to revoke Participant's consent, Participant's status as a Service Provider will not be affected; the only consequence of refusing or withdrawing Participant's consent is that the Company

would not be able to grant Participant Restricted Stock Units or other equity awards or administer or maintain such awards. Therefore, Participant understands that refusing or withdrawing Participant's consent may affect Participant's ability to participate in the Plan. For more information on the consequences of Participant's refusal to consent or withdrawal of consent, Participant understands that Participant may contact Participant's local human resources representative or send an email to [_____].



October 25, 2022

47901.00001

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

Re: Registration Statement on Form S-8

Ladies and Gentlemen:

We have acted as counsel to Organovo Holdings, Inc., a Delaware corporation (the "**Company**"), in connection with the registration statement on Form S-8 to be filed by the Company with the U.S. Securities and Exchange Commission (the "**Commission**") on or about the date hereof (the "**Registration Statement**") to effect registration under the Securities Act of 1933, as amended (the "**Securities Act**"), of an aggregate of 1,236,738 shares (the "**Shares**") of the Company's common stock, \$0.001 par value per share ("**Common Stock**"), comprised of 1,236,738 shares of Common Stock issuable upon the vesting and exercise of awards to be granted by the Company pursuant to the Company's 2022 Equity Incentive Plan (the "**Equity Plan**").

As such counsel and for purposes of our opinion set forth below, we have examined and relied upon originals or copies, certified or otherwise identified to our satisfaction, of such documents, resolutions, certificates and instruments of the Company and corporate records furnished to us by the Company, and have reviewed certificates of public officials, statutes, records and such other instruments and documents as we have deemed necessary or appropriate as a basis for the opinion set forth below, including, without limitation:

- (i) the Registration Statement;
- (ii) the Certificate of Incorporation of the Company, as amended, certified by the Office of the Secretary of State of the State of Delaware on October 25, 2022;
- (iii) the Bylaws of the Company, as amended, certified by an officer of the Company on October 25, 2022;
- (iv) the Equity Plan and the forms of award agreements related thereto;
- (v) a certificate, dated as of October 25, 2022, from the Office of the Secretary of State of the State of Delaware, as to the existence and good standing of the Company in the State of Delaware (the "**Good Standing Certificate**"); and
- (vi) the resolutions adopted by the board of directors of the Company regarding the Equity Plan and other matters related thereto, as certified by an officer of the Company on July 25, 2022.

In addition to the foregoing, we have made such investigations of law as we have deemed necessary or appropriate as a basis for the opinion set forth in this opinion letter.

Organovo Holdings, Inc.
October 25, 2022
Page 2

In such examination and in rendering the opinion expressed below, we have assumed, without independent investigation or verification: (i) the genuineness of all signatures on all agreements, instruments, corporate records, certificates and other documents submitted to us; (ii) the authenticity and completeness of all agreements, instruments, corporate records, certificates and other documents submitted to us as originals; (iii) that all agreements, instruments, corporate records, certificates and other documents submitted to us as certified, electronic, facsimile, conformed, photostatic or other copies conform to originals thereof, and that such originals are authentic and complete; (iv) the legal capacity and authority of all persons or entities (other than the Company) executing all agreements, instruments, corporate records, certificates and other documents submitted to us; (v) the due authorization, execution and delivery of all agreements, instruments, corporate records, certificates and other documents by all parties thereto (other than the Company); (vi) that no documents submitted to us have been amended or terminated orally or in writing except as has been disclosed to us in writing; (vii) that the statements contained in the certificates and comparable documents of public officials, officers and representatives of the Company and other persons on which we have relied for the purposes of this opinion letter are true and correct; (viii) that there has not been any change in the good standing status of the Company from that reported in the Good Standing Certificate; and (ix) that each of the officers and directors of the Company has properly exercised his or her fiduciary duties. As to all questions of fact material to this opinion letter, and as to the materiality of any fact or other matter referred to herein, we have relied (without independent investigation or verification) upon representations and certificates or comparable documents of officers and representatives of the Company. Our knowledge of the Company and its legal and other affairs is limited by the scope of our engagement, which scope includes the delivery of this opinion letter. We do not represent the Company with respect to all legal matters or issues. The Company may employ other independent counsel and, to our knowledge, handles certain legal matters and issues without the assistance of independent counsel. We have also assumed that the individual issuances, grants, awards or grants of purchase rights under the Equity Plan will be duly authorized by all necessary corporate action of the Company and duly issued, granted or awarded and exercised in accordance with the requirements of law, the Equity Plan and the agreements, forms of instrument, awards and grants duly adopted thereunder.

Based upon the foregoing, and in reliance thereon, and subject to the assumptions, limitations, qualifications and exceptions set forth herein, we are of the opinion that the Shares are duly authorized and, when issued and sold as described in the Registration Statement and in accordance with the Equity Plan and the applicable award agreements or forms of instrument evidencing purchase rights thereunder (including the receipt by the Company of the full consideration therefor), will be validly issued, fully paid and nonassessable.

Without limiting any of the other limitations, exceptions and qualifications stated elsewhere herein, we express no opinion with regard to the applicability or effect of the laws of any jurisdiction other than the General Corporation Law of the State of Delaware, as in effect on the date of this opinion letter.

This opinion letter deals only with the specified legal issues expressly addressed herein, and you should not infer any opinion that is not explicitly stated herein from any matter addressed in this opinion letter.

This opinion letter is rendered solely in connection with the issuance and delivery of the Shares as described in the Registration Statement and in accordance with the terms of the Equity Plan and the applicable award agreement or form of instrument evidencing purchase rights thereunder. This opinion letter is rendered as of the date hereof, and we assume no obligation to advise you or any other person with regard to any change after the date hereof in the circumstances or the law that may bear on the matters set forth herein even if the change may affect the legal analysis or a legal conclusion or other matters in this opinion letter.

Organovo Holdings, Inc.
October 25, 2022
Page 3

We hereby consent to the filing of this opinion letter as Exhibit 5.1 to the Registration Statement. In giving such consent, we do not hereby admit that we are within the category of persons whose consent is required under Section 7 of the Securities Act or the rules or regulations of the Commission thereunder.

Very truly yours,

/s/ Paul Hastings LLP

Consent of Independent Registered Public Accounting Firm

We consent to the incorporation by reference in this Registration Statement on Form S-8 of our report dated June 10, 2022, with respect to the consolidated financial statements of Organovo Holdings, Inc. as of March 31, 2022 and 2021 and for each of the two years in the period ended March 31, 2022, included in its Annual Report on Form 10-K for the year ended March 31, 2022.

/s/ Mayer Hoffman McCann P.C.

San Diego, California
October 25, 2022

Calculation of Filing Fee Table

S-8
(Form Type)

Organovo Holdings, Inc.
(Exact Name of Registrant as Specified in its Charter)

Table 1: Newly Registered Securities

	Security Type	Security Class Title	Fee Calculation Rule	Amount Registered ⁽¹⁾	Proposed Maximum Offering Price Per Unit	Maximum Aggregate Offering Price	Fee Rate	Amount of Registration Fee	
Fees to Be Paid	Equity	Common Stock, par value \$0.0001 per share	457(h)	1,236,738	\$1.72 ⁽²⁾	\$2,127,189.36 ⁽²⁾	0.00011020	\$234.42	
	Total Offering Amounts						\$2,127,189.36	—	\$234.42
	Total Fees Previously Paid						—	—	—
	Total Fee Offsets						—	—	—
	Net Fee Due						—	—	\$234.42

- (1) Pursuant to Rule 416(a) of the Securities Act of 1933, as amended (the “Securities Act”), this Registration Statement shall also cover any additional shares of common stock, \$0.001 par value per share (“Common Stock”), of the Registrant that become issuable under the Organovo Holdings, Inc. 2022 Equity Incentive Plan by reason of any stock dividend, stock split, recapitalization or other similar transaction effected without receipt of consideration that increases the number of the Registrant’s outstanding shares of Common Stock.
- (2) Estimated solely for the purpose of calculating the amount of the registration fee pursuant to Rule 457(c) and Rule 457(h) of the Securities Act. The proposed maximum offering price per share and the proposed maximum aggregate offering price with respect to the shares are calculated based on \$1.72 per share, the average of the high and low prices of the Common Stock, as reported on the Nasdaq Capital Market on October 20, 2022, a date within five business days prior to the filing of this Registration Statement.