UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM	8-K
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CURRENT REPORT
Pursuant to Section 13 or 15(d)
of the Securities Exchange Act of 1934

Date of Report (Date of Earliest Event Reported): August 17, 2016

ORGANOVO HOLDINGS, INC.

(Exact name of registrant as specified in its charter)

Delaware (State or other jurisdiction of incorporation) Commission File Number: 001-35996

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

6275 Nancy Ridge Drive, Suite 110
San Diego, CA 92121
(Address of principal executive offices, including zip code)

 $(858)\ 224\text{-}1000$ (Registrant's telephone number, including area code)

(Former name or former address, if changed since last report)

ck the appropriate box below if the Form 8-K filing is intended to simultaneously satisfy the filing obligation of the registrant under any of the following risions:
Written communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425)
Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12)
Pre-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b))
Pre-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240.13e-4(c))

Item 5.02 Departure of Directors or Certain Officers; Election of Directors; Appointment of Certain Officers; Compensatory Arrangements of Certain Officers.

(d)

On August 17, 2016, the Board of Directors (the "Board") of Organovo Holdings, Inc. (the "Company"), based on the recommendation of the Nominating and Corporate Governance Committee, authorized and approved: (i) an increase in the size of the Board from six (6) to seven (7) members, (ii) the appointment of Richard Maroun and Mark Kessel as Class 3 and Class 2 directors, respectively, and (iii) the appointment of Kirk Malloy as Lead Independent Director, each effective immediately. In addition, the Board appointed Mr. Maroun to the Audit and Compensation Committees and Mr. Kessel to the Nominating and Corporate Governance and the Science and Technology Committees, respectively.

Mr. Kessel is a partner of Symphony Capital, LLC, a private equity firm he co-founded in 2002 that invests in biopharmaceutical company clinical development programs. He is also Of Counsel at Shearman & Sterling and a member of the firm's capital markets group. Previously, from 1971 to 2001, Mr. Kessel held various roles at Shearman & Sterling, including as managing partner leading the international law firm's day-to-day operations. He helped build the firm, serving as a leader in the healthcare, biopharmaceutical, agricultural biotech, high-tech, and financial services practices. He also established the firm's San Francisco office, serving as its managing partner and turning it into the leader in M&A, capital markets, corporate governance, and intellectual property and licensing issues. Mr. Kessel has previously served on several public biopharmaceutical company boards.

Mr. Maroun is an executive partner at Frazier Healthcare Partners, a private equity and venture capital firm specializing in healthcare-focused investments. Before joining Frazier in 2015, Mr. Maroun was senior vice president and general counsel of Aptalis Pharmaceuticals from 2012 to 2014. He has also held numerous senior executive roles for APP Pharmaceuticals, Abraxis BioScience and American BioScience Inc. Mr. Maroun has worked with major financial organizations and independent law firms, and has held both legal and financial positions with companies including Merrill Lynch, Deloitte & Touche and McDonough, Holland & Allen. Mr. Maroun currently serves on the board of Leiter's Enterprises, a private portfolio company of Frazier Healthcare Partners, and the Board of Trustees of John Caroll University.

In appointing Messrs. Maroun and Kessel, the Board considered their capital markets, corporate governance, operational and strategic management expertise and their leadership experience across the life sciences sector. In addition, the Company determined that Messrs. Maroun and Kessel have a reputation for integrity, honesty and adherence to the highest ethical standards and that each has demonstrated business acumen and an ability to exercise sound judgment, as well as a commitment of service to the Company and the Board.

The Company's non-employee director compensation program for fiscal 2017 includes an annual cash retainer of \$50,000, plus additional cash retainers for service on the Board's standing committees. Under this program, Messrs. Maroun and Kessel received an initial grant of (i) a stock option award to purchase 18,500 shares of the Company's common stock with an exercise price of \$4.35 per share, the closing price of the Company's common stock on the Nasdaq Stock Market on the date of grant (each an "Initial Option Award"), and (ii) a restricted stock unit award for 7,500 shares of the Company's common stock (each an "Initial RSU Award", and together with the Initial Option Awards, the "Initial Awards"). Each Initial Award will vest quarterly over three years measured from a vesting start date of August 15, 2016, subject to accelerated vesting in the event of a change of control. Additionally, each of Messrs.

Maroun and Kessel received an annual grant of (i) a stock option award to purchase 18,500 shares of the Company's common stock with an exercise price of \$4.35 per share (each an "Annual Option Award") and (ii) a restricted stock unit award for 7,500 shares of the Company's common stock (each an "Annual RSU Award", and together with the Annual Option Awards, the "Annual Awards"). Each Annual Award will vest on the earlier of August 15, 2017 or the 2017 annual meeting of stockholders, subject to accelerated vesting in the event of a change of control. Each Initial and Annual Award is subject to the terms and conditions of the Company's 2012 Equity Incentive Plan, and each Initial Option Award and Annual Option Award is subject to a Stock Option Award Agreement and each Initial RSU Award and Annual RSU Award is subject to a Restricted Stock Unit Award Agreement, each in the forms previously approved by the Board for issuance to the Company's non-employee directors. The Company's form of Non-Employee Director Stock Option Award Agreement was filed with the Securities and Exchange Commission on June 9, 2015 as Exh

10-K for the year ended March 31, 2015 and is incorporated herein by reference. The Company's form of Non-Employee Director Restricted Stock Unit Award Agreement was filed with the Securities and Exchange Commission on August 4, 2016 as Exhibit 10.4 to the Company's Quarterly Report on Form 10-Q for the quarter June 30, 2016 and is incorporated by reference herein

The Company also entered into an Indemnification Agreement with each of Messrs. Maroun and Kessel. Each Indemnification Agreement provides for indemnification and advancement of litigation and other expenses to Messrs. Maroun and Kessel to the fullest extent permitted by law for claims relating to their service to the Company or its subsidiaries. The Company's form of indemnification agreement was filed with the Securities and Exchange Commission on February 13, 2012 as Exhibit 10.17 to the Company's Current Report on Form 8-K and is incorporated by reference herein.

There are no family relationships between either of Messrs. Maroun or Kessel and any of the Company's directors or executive officers and neither Messrs. Maroun nor Kessel have any direct or indirect material interest in any transaction required to be disclosed pursuant to Item 404(a) of Regulation S-K. There were no arrangements or understandings by which either of Messrs. Maroun or Kessel was named a director.

(e)

In conjunction with the 2016 Annual Meeting of Stockholders (the "Annual Meeting") of the Company held on August 17, 2016, the Company's stockholders approved the adoption of the 2016 Employee Stock Purchase Plan (the "Plan"), which provides the Company's employees with an opportunity through payroll deductions to purchase shares of the Company's common stock. The stockholders approved the reserve of 1,500,000 shares of common stock for issuance under the Plan. The Plan does not contain an evergreen share increase provision. The foregoing summary of the Plan is not complete and is qualified in its entirety by reference to the full text of the Plan, a copy of which is filed as Exhibit 10.1 to this report and incorporated herein by reference.

Item 5.07 Submission of Matters to a Vote of Security Holders.

The Company held its Annual Meeting on August 17, 2016. Of the 92,391,989 shares of the Company's common stock outstanding as of the record date, 66,922,994 shares, or 72.4%, were represented at the Annual Meeting either in person or by proxy.

In accordance with the Company's Bylaws, the presence of the holders of at least a majority of the outstanding shares of common stock at the Annual Meeting, whether in person or by proxy, constituted a quorum for the transaction of business at the Annual Meeting. Votes "For," "Withheld," "Against," "Abstentions" and "Broker Non-Votes" were each counted as present at the Annual Meeting for purposes of determining the presence of a quorum. Broker Non-Votes are shares held in street name by brokers, banks or other nominees who were present in person or represented by proxy at the Annual Meeting, but which were not voted on a proposal because the brokers, banks or nominees did not have discretionary authority with respect to that proposal and they had not received voting instructions from the beneficial owner prior to the Annual Meeting. Under the Company's Bylaws, the Class II director is elected by a plurality of the votes cast in person or by proxy at the Annual Meeting, which means that the director nominee who received the highest number of "For" votes was elected. Approval of Proposals 2, 3 and 4 each required the affirmative vote of a majority of the votes cast in person or by proxy at the Annual Meeting. Abstentions and Broker Non-Votes are not considered to be votes cast under the Company's Bylaws, and as a result, have no effect on the outcome of the vote on any of the proposals.

A description of each matter voted upon at the Annual Meeting is described in detail in the Company's definitive proxy statement filed with the Securities and Exchange Commission on July 8, 2016. The number of votes cast "For" and "Withheld" and "Against" and the number of "Abstentions" and "Broker Non-Votes" with respect to each matter voted upon are set forth below.

(1) <u>Election of Directors</u>. The Company's stockholders elected Tamar Howson as a Class II director, with the approval of 98.4% of the votes cast, to hold office until the 2019 Annual Meeting of Stockholders and until her respective successor is elected and qualified. The following table shows the tabulation of the votes cast For and Withheld for the election of the director nominee as well as the Broker Non-Votes submitted for the director nominee:

Director	<u>For</u>	<u>Withheld</u>	Broker Non-Votes
Tamar Howson	19,204,615	311,049	47,407,330

(2) <u>Ratification of Auditors</u>. The Company's stockholders ratified the appointment of Mayer Hoffman McCann P.C., with the approval of 97.6% of the votes cast, as the Company's independent registered public accounting firm for the fiscal year ending March 31, 2017. The following table shows the tabulation of the votes cast For and Against this proposal as well as the Abstentions submitted on this proposal:

<u>For</u>	<u>Against</u>	Abstentions
65,340,286	967,576	615,132

(3) <u>Executive Compensation</u>. The Company's stockholders, on a non-binding, advisory basis, approved the compensation of the Company's named executive officers, with the approval of 93.0% of the votes cast, as disclosed in the proxy statement. The following table shows the tabulation of the votes cast For and Against this proposal as well as the Broker Non-Votes and Abstentions submitted on this proposal:

<u>For</u>	Against	Abstentions	Broker Non-Votes
18,153,842	1,022,052	339,770	47,407,330

(4) <u>2016 Employee Stock Purchase Plan</u>. The Company's stockholders approved a 2016 Employee Stock Purchase Plan, including the number of shares of the Company's common stock available for issuance under the Plan of 1,500,000 shares, with the approval of 95.8% of the votes cast. The following table shows the tabulation of the votes cast For and Against this proposal as well as the Abstentions and Broker Non-Votes submitted on this proposal:

For	Against	Abstentions	Broker Non-Votes
18,695,080	517,872	302,711	47,407,331

No other items were presented for stockholder approval at the Annual Meeting.

Item 7.01 Regulation FD Disclosure.

On August 18, 2016, the Company issued a press release announcing the appointment of Messrs. Maroun and Kessel as directors of the Company. A copy of that press release is furnished as Exhibit 99.1 to this Current Report on Form 8-K and incorporated by reference in this Item 7.01.

The information furnished in this Item 7.01 to this Form 8-K shall not be deemed "filed" for purposes of Section 18 of the Exchange Act or otherwise subject to the liabilities of that section, nor shall it be deemed incorporated by reference into any other filing under the Securities Act of 1933 or the Securities Exchange Act of 1934, except as expressly set forth by specific reference in such a filing.

Item 9.01 Financial Statements and Exhibits.

No.	Description
10.1	2016 Employee Stock Purchase Plan.
99.1	Press release, dated August 18, 2016.

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned hereunto duly authorized.

Date: August 18, 2016

ORGANOVO HOLDINGS, INC.

By: /s/ Keith Murphy

Name: Keith Murphy

Title: Chief Executive Officer and President

Exhibit Index

Exhibit No.	Description
10.1	2016 Employee Stock Purchase Plan.
99.1	Press release, dated August 18, 2016.

ORGANOVO HOLDINGS, INC.

2016 EMPLOYEE STOCK PURCHASE PLAN

SECTION 1. PURPOSE OF THE PLAN.

The Board adopted the Plan effective as of June 22, 2016, contingent on shareholder approval. The purpose of the Plan is to provide Eligible Employees with an opportunity to increase their proprietary interest in the success of the Company by purchasing Stock from the Company on favorable terms and to pay for such purchases through payroll deductions or other approved contributions.

SECTION 2. ADMINISTRATION OF THE PLAN.

- (a) *Committee Composition*. The Committee shall administer the Plan. The Committee shall consist exclusively of one or more members of the Board, who shall be appointed by the Board.
- (b) *Committee Responsibilities*. The Committee shall interpret the Plan and make all other policy decisions relating to the operation of the Plan. The Committee may adopt such rules, guidelines and forms as it deems appropriate to implement the Plan. The Committee's determinations under the Plan shall be final and binding on all persons.

SECTION 3. STOCK OFFERED UNDER THE PLAN.

- (a) *Authorized Shares*. The number of shares of Stock available for purchase under the Plan shall be 1,500,000 shares of the Company's Stock (subject to adjustment pursuant to Subsection (c) below), plus the additional shares described in Subsection (b) below. Shares of Stock issued pursuant to the Plan may be authorized but unissued shares or treasury shares.
- (b) *Anti-Dilution Adjustments*. In the event that any dividend or other distribution (whether in the form of cash, stock or other securities or other property), recapitalization, stock split, reverse stock split, reorganization, merger, consolidation, split-up, spin-off, combination, repurchase, or exchange of stock or other securities of the Company, or other similar change in the corporate structure of the Company affecting the Stock and effected without receipt or payment of consideration by the Company occurs, then in order to prevent dilution or enlargement of the benefits or potential benefits intended to be made available under the Plan, there will be a proportionate adjustment of the number and class of Stock that may be delivered under the Plan, the Purchase Price per share and the number of shares of Stock covered by each option under the Plan which has not yet been exercised, and the numerical limits of Sections 3(a), 3(b)(ii) and 9(c).
- (c) *Reorganizations*. Any other provision of the Plan notwithstanding, in the event of a Corporate Reorganization, the Plan may be continued or assumed by the surviving corporation or its parent corporation. If such acquirer refuses to continue or assume the Plan, then, immediately prior to the effective time of the Corporate Reorganization, any Offering Period then in progress shall terminate, and, a new Purchase Date for each such Offering Period will be set, immediately prior to the effective time of the Corporate Reorganization. In the event a new Purchase Date is set under this Section 3(d), Participants will be given notice of the new Purchase Date. The Plan shall in no event be construed to restrict in any way the Company's right to undertake a dissolution, liquidation, merger, consolidation or other reorganization.

SECTION 4. ENROLLMENT AND PARTICIPATION.

- (a) Offering Periods and Purchase Periods.
- (i) *Base Offering Periods*. The Committee may establish Offering Periods of such frequency and duration as it may from time to time determine as appropriate (the "*Base Offering Periods*"); provided that a Base Offering Period shall in no event be longer than 27 months (or such other period as may be imposed under applicable tax law). The Base Offering Periods are intended to qualify under Code Section 423. Unless changed by the Committee, the Plan

shall operate such that two Base Offering Periods, each of six months' duration and each including a single six-month Purchase Period, will commence on March 1 and September 1 of each year, except that the Committee may determine that the first Base Offering Period applicable to the Eligible Employees of a new Participating Company shall commence on any later date specified by the Committee.

- (ii) Additional Offering Periods. At the discretion of the Committee, additional Offering Periods (the "Additional Offering Periods") may be conducted under the Plan or, if necessary or advisable, in the sole discretion of the Committee, under a separate sub-plan or sub-plans permitting grants to Eligible Employees of certain Participating Companies (each, a "Sub-Plan"). Such Additional Offering Periods may, but need not, qualify under Code Section 423, and will be designed to achieve desired tax objectives in particular locations outside the United States of America or to comply with local laws applicable to offerings in such foreign jurisdictions. The Committee shall determine the commencement and duration of each Additional Offering Period, and Additional Offering Periods may be consecutive or overlapping. The other terms and conditions of each Additional Offering Period shall be those set forth in this Plan document or in the applicable Sub-Plan, with such changes or additional features as the Committee determines necessary to comply with local law. Each Sub-Plan shall be considered a separate plan from the Plan (the "Statutory Plan"). The total number of Shares authorized to be issued under the Plan as provided in Section 3 above applies in the aggregate to both the Statutory Plan and any Sub-Plan. Unless otherwise superseded by the terms of such Sub-Plan, the provisions of this Plan document shall govern the operation of such Sub-Plan.
- (iii) Separate Offerings. Each Base Offering Period and Additional Offering Period conducted under the Plan or any Sub-Plan is intended to constitute a separate "offering" for purposes of Code Section 423.
- (iv) *Equal Rights and Privileges*. To the extent an Offering Period is intended to qualify under Code Section 423, all participants in such Offering Period shall have the same rights and privileges with respect to their participation in such Offering Period in accordance with Code Section 423 and the regulations thereunder except for differences that may be mandated by local law and are consistent with the requirements of Code Section 423(b)(5).
- (b) [Intentionally Left Blank].
- (c) Enrollment.

In the case of any individual who qualifies as an Eligible Employee on the first day of any Offering Period, he or she may elect to become a Participant on such day by filing the prescribed enrollment form with the Company. The enrollment form shall be filed at the prescribed location at least 10 business days (or such other period as the Committee or its designee may designate) prior to such day.

- (d) Duration of Participation. Once enrolled in the Plan, a Participant shall continue to participate in the Plan until he or she:
- (i) Reaches the end of the Offering Period or Purchase Period, as applicable, in which his or her employee contributions were discontinued under Section 5(c) or 9(b);
- (ii) Is deemed to withdraw from the Plan under Subsection (b) above;
- (iii) Withdraws from the Plan under Section 6(a); or
- (iv) Ceases to be an Eligible Employee.

A Participant whose employee contributions were discontinued automatically under Section 9(b) shall automatically resume participation as described therein. In all other cases, a former Participant may again become a Participant, if he or she then is an Eligible Employee, by following the procedure described in Subsection (c) above.

SECTION 5. EMPLOYEE CONTRIBUTIONS.

- (a) Commencement of Payroll Deductions. A Participant may purchase shares of Stock under the Plan by means of payroll deductions or (if so approved by the Committee with respect to all Participants) other approved contributions in form and substance satisfactory to the Committee. Payroll deductions or other approved contributions shall commence as soon as reasonably practicable after the Company has received the prescribed enrollment form. In jurisdictions where payroll deductions are not permitted under local law, Participants may purchase shares of Stock by making contributions in the form that is acceptable and approved by the Committee.
- (b) *Amount of Payroll Deductions*. An Eligible Employee shall designate on the prescribed enrollment form the portion of his or her Compensation that he or she elects to have withheld for the purchase of Stock. Such portion shall be a whole percentage of the Eligible Employee's Compensation, but not less than 1% nor more than 15%.
- (c) *Reducing Withholding Rate or Discontinuing Payroll Deductions*. If a Participant wishes to reduce his or her rate of payroll withholding, such Participant may do so by filing a new enrollment form with the Company at the prescribed location at any time. The new withholding rate shall be effective as soon as reasonably practicable after the Company has received such form. The new withholding rate may be 0% or any whole percentage of the Participant's Compensation, but not more than his or her old withholding rate. No Participant shall make more than one election under this Subsection (c) during any Purchase Period. (In addition, employee contributions may be discontinued automatically pursuant to Section 9(b).)
- (d) *Increasing Withholding Rate*. If a Participant wishes to increase his or her rate of payroll withholding, such Participant may do so by filing a new enrollment form with the Company at the prescribed location at any time. The new withholding rate may be effective on the first day of the next-upcoming Offering Period in which the Participant participates, provided that the Participant has filed the enrollment form with the Company at the prescribed location at least 10 business days (or such other period as the Committee or its designee may designate) prior to such day. The new withholding rate may be any whole percentage of the Participant's Compensation, but not less than 1% nor more than 15%. An increase in a Participant's rate of payroll withholding may not take effect during an Offering Period.

SECTION 6. WITHDRAWAL FROM THE PLAN.

- (a) Withdrawal. A Participant may elect to withdraw from the Plan (or, if applicable, from an Offering Period) by filing the prescribed form with the Company at the prescribed location at any time before a Purchase Date. As soon as reasonably practicable thereafter, payroll deductions or other approved contributions shall cease and the entire amount credited to the Participant's Plan Account with respect to such Offering Period shall be refunded to him or her in cash, without interest (except as otherwise required by the laws of the local jurisdiction). No partial withdrawals from an Offering Period shall be permitted.
- (b) *Re-Enrollment After Withdrawal*. A former Participant who has withdrawn from the Plan shall not be a Participant until he or she re-enrolls in the Plan under Section 4(c). Re-enrollment may be effective only at the commencement of an Offering Period.

SECTION 7. CHANGE IN EMPLOYMENT STATUS.

- (a) *Termination of Employment*. Termination of employment as an Eligible Employee for any reason, including death, shall be treated as an automatic withdrawal from the Plan under Section 6(a). (A transfer from one Participating Company to another shall not be treated as a termination of employment provided that each Participating Company is then participating in the same Offering Period.)
- (b) *Leave of Absence*. For purposes of the Plan, employment shall not be deemed to terminate when the Participant goes on a military leave, a sick leave or another bona fide leave of absence, if the leave was approved by the Company in writing. Employment, however, shall be deemed to terminate on the first day following three months after the Participant goes on a leave, unless a contract or statute guarantees his or her right to return to work.

Employment shall be deemed to terminate in any event when the approved leave ends, unless the Participant immediately returns to work.

(c) *Death*. In the event of the Participant's death, the amount credited to his or her Plan Account shall be paid to a beneficiary designated by him or her for this purpose on the prescribed form or, if none, to the Participant's estate. Such form shall be valid only if it was filed with the Company at the prescribed location before the Participant's death.

SECTION 8. PLAN ACCOUNTS AND PURCHASE OF SHARES.

- (a) *Plan Accounts*. The Company shall maintain a Plan Account on its books in the name of each Participant. Whenever an amount is deducted from the Participant's Compensation under the Plan, such amount shall be credited to the Participant's Plan Account. Amounts credited to Plan Accounts shall not be trust funds and may be commingled with the Company's general assets and applied to general corporate purposes. Unless otherwise required by the laws of the local jurisdiction, no interest shall be credited to Plan Accounts.
- (b) Purchase Price. The Purchase Price for each share of Stock purchased on a Purchase Date shall be the lower of:
- (i) 85% of the Fair Market Value of such share on the first day of such Offering Period; or
- (ii) 85% of the Fair Market Value of such share on the Purchase Date.
- (c) *Number of Shares Purchased*. On each Purchase Date, each Participant shall be deemed to have elected to purchase the number of shares of Stock calculated in accordance with this Subsection (c), unless the Participant has previously elected to withdraw from the Offering Period in accordance with Section 6(a). The amount then in the Participant's Plan Account shall be divided by the Purchase Price, and the number of shares that results shall be purchased from the Company with the funds in the Participant's Plan Account. The foregoing number of shares of Stock purchasable by a Participant are subject to the limitations set forth in Section 9. The Committee may determine with respect to all Participants that any fractional share, as calculated under this Subsection (c), shall be (i) rounded down to the next lower whole share or (ii) credited as a fractional share.
- (d) Available Shares Insufficient. In the event that the aggregate number of shares that all Participants elect to purchase with respect to a particular Purchase Period exceeds (i) the number of shares of Stock that were available under Section 3 above for sale under the Plan on the first day of the applicable Offering Period, or (ii) the number of shares that were available under Section 3 above for sale under the Plan on the applicable Purchase Date, then the number of shares to which each Participant is entitled shall be determined by multiplying the number of shares available for issuance by a fraction. The numerator of such fraction is the number of shares that such Participant has elected to purchase, and the denominator of such fraction is the number of shares that all Participants have elected to purchase. The Company may make a pro rata allocation of the shares available on the first day of an applicable Offering Period pursuant to the preceding sentence, notwithstanding any authorization of additional shares for issuance under the Plan by the Company's stockholders subsequent to such date. In the event of a pro-rata allocation under this Section (d), the Committee may determine in its discretion to continue all Offering Periods then in effect or terminate all Offering Periods then in effect pursuant to Section 14.
- (e) *Issuance of Stock*. The shares of Stock purchased by a Participant under the Plan may be registered in the name of such Participant, or jointly in the name of such Participant and his or her spouse as joint tenants with the right of survivorship or as community property (with or without the right of survivorship). The Company may permit or require that shares be deposited directly with a broker designated by the Company or to a designated agent of the Company, and the Company may utilize electronic or automated methods of share transfer. The Company may require that shares be retained with such broker or agent for a designated period of time and/or may establish other procedures to permit tracking of disqualifying dispositions of such shares. (The two preceding sentences shall apply whether or not the Participant is required to pay income tax in the United States.)
- (f) Tax Withholding. To the extent required by applicable federal, state, local or foreign law, a Participant shall make arrangements satisfactory to the Company for the satisfaction of any withholding tax obligations that arise in

connection with the Plan. The Company shall not be required to issue any shares of Stock under the Plan until such obligations, if any, are satisfied.

- (g) *Unused Cash Balances*. Subject to the final sentence of Section 8(c), an amount remaining in the Participant's Plan Account that represents the Purchase Price for any fractional share shall be carried over in the Participant's Plan Account to the next Purchase Period. Any amount remaining in the Participant's Plan Account that represents the Purchase Price for whole shares that could not be purchased by reason of Subsections (c) or (d) above or Section 9(b) shall be refunded to the Participant in cash, without interest (except as otherwise required by the laws of the local jurisdiction).
- (h) Stockholder Approval. Any other provision of the Plan notwithstanding, no shares of Stock shall be purchased under the Plan unless and until the Company's stockholders have approved the adoption of the Plan.

SECTION 9. PLAN LIMITATIONS.

- (a) *Five Percent Limit*. Any other provision of the Plan notwithstanding, no Participant shall be granted a right to purchase Stock under the Plan if such Participant, immediately after his or her election to purchase such Stock, would own stock possessing more than 5% of the total combined voting power or value of all classes of stock of the Company or any parent or Subsidiary of the Company, determined in accordance with applicable tax law.
- (b) *Dollar Limit*. As specified by Code Section 423(b)(8), no Participant shall be entitled to accrue rights to purchase Stock pursuant to any such rights outstanding under the Plan if and to the extent such accrual, when aggregated with (i) rights to purchase Stock accrued under any other right to purchase Stock under the Plan, and (ii) similar rights accrued under other employee stock purchase plans (within the meaning of Code Section 423) of the Company or any Related Corporation, would otherwise permit such Participant to purchase more than \$25,000 worth of Stock of the Company or any Related Corporation (determined on the basis of the Fair Market Value per share on the date such rights are granted, and which, with respect to the Plan, will be determined as of the beginning of the respective Offering Period) for each calendar year such rights are at any time outstanding.
- If a Participant is precluded by this Subsection (b) from purchasing additional Stock under the Plan, then his or her employee contributions shall automatically be discontinued and shall automatically resume at the beginning of the next Offering Period with a scheduled Purchase Date in the next calendar year, provided that he or she is an Eligible Employee at the beginning of such Offering Period.
- (c) *Purchase Period Share Purchase Limit*. Any other provision of the Plan notwithstanding, no Participant shall purchase more than 10,000 shares of Stock with respect to any Purchase Period; provided that the Committee may, for future Offering Periods, increase or decrease in its absolute discretion, the maximum number of shares of Stock that a Participant may purchase during each Purchase Period.

SECTION 10. RIGHTS NOT TRANSFERABLE.

The rights of any Participant under the Plan, or any Participant's interest in any Stock or moneys to which he or she may be entitled under the Plan, shall not be transferable by voluntary or involuntary assignment or by operation of law, or in any other manner other than by beneficiary designation or the laws of descent and distribution. If a Participant in any manner attempts to transfer, assign or otherwise encumber his or her rights or interest under the Plan, other than by beneficiary designation or the laws of descent and distribution, then such act shall be treated as an election by the Participant to withdraw from the Plan under Section 6(a).

SECTION 11. NO RIGHTS AS AN EMPLOYEE.

Nothing in the Plan or in any right granted under the Plan shall confer upon the Participant any right to continue in the employ of a Participating Company for any period of specific duration or interfere with or otherwise restrict in any way the rights of the Participating Companies or of the Participant, which rights are hereby expressly reserved by each, to terminate his or her employment at any time and for any reason, with or without cause.

SECTION 12. NO RIGHTS AS A STOCKHOLDER.

A Participant shall have no rights as a stockholder with respect to any shares of Stock that he or she may have a right to purchase under the Plan until such shares have been purchased on the applicable Purchase Date.

SECTION 13. SECURITIES LAW REQUIREMENTS.

Shares of Stock shall not be issued, and the Company shall have no liability for failure to issue shares of Stock, under the Plan unless the issuance and delivery of such shares comply with (or are exempt from) all applicable requirements of law, including (without limitation) the Securities Act of 1933, as amended, the rules and regulations promulgated thereunder, state securities laws and regulations, and the regulations of any stock exchange or other securities market on which the Company's securities may then be traded.

SECTION 14. AMENDMENT OR DISCONTINUANCE.

- (a) *General Rule*. The Committee, in its sole discretion, may amend, suspend, or terminate the Plan, or any part thereof, at any time and for any reason. If the Plan is terminated, the Committee, in its discretion, may elect to terminate all outstanding Offering Periods either immediately or upon completion of the purchase of shares of Stock on the next Purchase Date, or may elect to permit Offering Periods to expire in accordance with their terms (and subject to any adjustment pursuant to Section 3(c) or (d)). If the Offering Periods are terminated prior to expiration, all amounts then credited to Participants' accounts which have not been used to purchase shares of Stock will be returned to the Participants (without interest thereon, except as otherwise required by the laws of the local jurisdiction) as soon as administratively practicable.
- (b) Committee's Discretion. Without stockholder consent and without limiting Section 14(a), the Committee will be entitled to change the Offering Periods, limit the frequency and/or number of changes in the amount withheld during an Offering Period, establish the exchange ratio applicable to amounts withheld in a currency other than U.S. dollars, permit payroll withholding in excess of the amount designated by a Participant in order to adjust for delays or mistakes in the Company's processing of properly completed withholding elections, establish reasonable waiting and adjustment periods and/or accounting and crediting procedures to ensure that amounts applied toward the purchase of Stock for each Participant properly correspond with amounts withheld from the Participant's Compensation, and establish such other limitations or procedures as it determines in its sole discretion advisable which are consistent with the Plan.
- (c) Accounting Consideration. In the event the Committee determines that the ongoing operation of the Plan may result in unfavorable financial accounting consequences, the Committee may, in its discretion and, to the extent necessary or desirable, modify, amend or terminate the Plan to reduce or eliminate such accounting consequence including, but not limited to:
- (i) Amending the Plan to conform with the safe harbor definition under Financial Accounting Standards Board Accounting Standards Codification Topic 718, including with respect to an Offering Period underway at the time;
- (ii) Altering the Purchase Price for any Offering Period including an Offering Period underway at the time of the change in Purchase Price;
- (iii) Shortening any Offering Period by setting a new Purchase Date, including an Offering Period underway at the time of the Committee's action;
- (iv) Reducing the maximum percentage of Compensation a Participant may elect to set aside as payroll deductions; and
- (v) Reducing the maximum number of shares of Stock a Participant may purchase during any Purchase Period.

Such modifications or amendments will not require stockholder approval or the consent of any Plan Participants.

- (d) *Stockholder Approval*. Except as provided in Section 3, any increase in the aggregate number of shares of Stock that may be issued under the Plan shall be subject to the approval of the Company's stockholders. In addition, any other amendment of the Plan shall be subject to the approval of the Company's stockholders to the extent required under Section 14(e) or by any applicable law or regulation.
- (e) *Plan Termination*. The Plan shall terminate automatically 20 years after its adoption by the Board, unless (i) the Plan is extended by the Board and (ii) the extension is approved within 12 months by a vote of the stockholders of the Company.

SECTION 15. DEFINITIONS.

- (a) "Board" means the Board of Directors of the Company, as constituted from time to time.
- (b) "Code" means the Internal Revenue Code of 1986, as amended.
- (c) "Committee" means a committee of the Board, as described in Section 2.
- (d) "Company" means Organovo Holdings, Inc., a Delaware corporation.
- (e) "Compensation" means, unless otherwise determined by the Committee, (i) cash base salary paid to a Participant by a Participating Company plus (ii) any pre-tax contributions made by the Participant under Code Sections 401(k) or 125. "Compensation" shall exclude all cash items other than base salary and shall excluded all non-cash items, moving or relocation allowances, cost-of-living equalization payments, car allowances, tuition reimbursements, imputed income attributable to cars or life insurance, severance pay, fringe benefits, contributions or benefits received under employee benefit plans, income attributable to equity compensation awards of the Company, and similar items. The Committee shall determine whether a particular item is included in Compensation.
- (f) "Corporate Reorganization" means:
- (i) The consummation of a merger or consolidation of the Company with or into another entity or any other corporate reorganization; or
- (ii) The sale, transfer or other disposition of all or substantially all of the Company's assets or the complete liquidation or dissolution of the Company.
- (g) "Eligible Employee" means a common law employee of a Participating Company who is customarily employed for five months or more per calendar year and more than 20 hours per week. The foregoing notwithstanding, an individual shall not be considered an Eligible Employee if his or her participation in the Plan is prohibited by the law of any country that has jurisdiction over him or her. In addition, the Committee may determine prior to the commencement of an Offering Period not to exclude part-time employees or exclude employees whose customary employment is for fewer hours per week or fewer months in a calendar year; provided that such terms are applied in an identical manner to all employees of every Participating Company in such Offering Period.
- (h) "Exchange Act" means the Securities Exchange Act of 1934, as amended.
- (i) "Fair Market Value" means the price at which Stock was last sold in the principal U.S. market for the Stock on the applicable date or, if the applicable date was not a trading day, on the last trading day prior to the applicable date. If Stock is no longer traded on a public U.S. securities market, the Fair Market Value shall be determined by the Committee in good faith on such basis as it deems appropriate. The Committee's determination shall be conclusive and binding on all persons.
- (j) "Offering Period" means any period, including as the context requires Base Offering Periods and Additional Offering Periods, with respect to which the right to purchase Stock may be granted under the Plan, as determined pursuant to Section 4(a).

- (k) "Participant" means an Eligible Employee who participates in the Plan or any Sub-Plan, as provided in Section 4.
- (1) "Participating Company" means (i) the Company and (ii) each present or future Subsidiary designated by the Committee as a Participating Company.
- (m) "Plan" means this Organovo Holdings, Inc. 2016 Employee Stock Purchase Plan, as it may be amended from time to time.
- (n) "Plan Account" means the account established for each Participant pursuant to Section 8(a).
- (o) "Purchase Date" means the last trading day of a Purchase Period.
- (p) "**Purchase Period**" means a period within an Offering Period (which for an Offering Period with only a single Purchase Period would be coterminous with the Offering Period) during which contributions may be made toward the purchase of Stock under the Plan, as determined pursuant to Section 4(a).
- (q) "Purchase Price" means the price at which Participants may purchase Stock under the Plan, as determined pursuant to Section 8(b).
- (r) "Related Corporation" means any "parent corporation" of the Company as defined in Code Section 424(e) or any Subsidiary.
- (s) "Stock" means the Common Stock of the Company.
- (t) "Subsidiary" means any corporation (other than the Company) in an unbroken chain of corporations beginning with the Company, if each of the corporations other than the last corporation in the unbroken chain owns stock possessing 50% or more of the total combined voting power of all classes of stock in one of the other corporations in such chain.



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ORGANOVO APPOINTS TWO NEW MEMBERS TO BOARD OF DIRECTORS

SAN DIEGO – August 18, 2016 – Organovo Holdings, Inc. (NASDAQ:ONVO) ("Organovo"), a three-dimensional biology company focused on delivering scientific and medical breakthroughs using its 3D bioprinting technology, today announced that its board of directors has appointed two new members. Mark Kessel, co-founder and partner of Symphony Capital LLC, and Richard Maroun, executive partner at Frazier Healthcare Partners, will join Organovo's board, effective today. The appointments increase the number of Organovo directors to seven.

"Mark and Rick bring tremendous capital markets, corporate governance, operational and strategic management expertise to our organization," said Keith Murphy, chairman and chief executive officer, Organovo. "Their leadership experience across the life sciences sector adds to the strength of our already outstanding board, and I'm confident they'll make significant contributions as we enter our next phase of commercial growth and build value for our shareholders. I'm grateful for their willingness to join the board at such an important time in our organizational development, as well as the ongoing support from all of our directors."

With their addition to the board, Kessel will become a member of the Nominating and Corporate Governance Committee and the Science and Technology Committee, while Maroun will join the Audit and Compensation Committees.

Mark Kessel is a partner of Symphony Capital, LLC, a private equity firm he co-founded in 2002 that invests in biopharmaceutical company clinical development programs. He is also Of Counsel at Shearman & Sterling and a member of the firm's capital markets group. Previously, from 1971 to 2001, Mr. Kessel held various roles at Shearman & Sterling, including as managing partner leading the international law firm's day-to-day operations. He helped build the firm, serving as a leader in the healthcare, biopharmaceutical, agricultural biotech, high-tech, and financial services practices. He also established the firm's San Francisco office, serving as its managing partner and turning it into the leader in M&A, capital markets, corporate governance, and intellectual property and licensing issues. Mr. Kessel has previously served on several public biopharmaceutical company boards.

Richard Maroun is an executive partner at Frazier Healthcare Partners, a private equity and venture capital firm specializing in healthcare-focused investments. Before joining Frazier in 2015, Maroun was senior vice president and general counsel of Aptalis Pharmaceuticals from 2012 to 2014. He has also held numerous senior executive roles for APP Pharmaceuticals, Abraxis BioScience and American BioScience Inc. Mr. Maroun has worked with major financial organizations and independent law firms, and has held both legal and financial positions with companies including Merrill Lynch, Deloitte & Touche and McDonough, Holland & Allen. Mr. Maroun currently serves on the board of Leiter's Enterprises, a private portfolio company of Frazier Healthcare Partners, and the Board of Trustees of John Caroll University.

About Organovo Holdings, Inc.

Organovo designs and creates functional, three-dimensional human tissues for use in medical research and therapeutic applications. The Company develops 3D human tissue models through internal development and in collaboration with pharmaceutical, academic and other partners. Organovo's 3D human tissues have the potential to accelerate the drug discovery process, enabling treatments to be developed faster and at lower cost. The Company's initial product is the exVive3DTM Human Liver Tissue for use in toxicology and other preclinical drug testing. Additional products are in development, with the anticipated release of the exVive3D Human Kidney Tissue scheduled for the third quarter of calendar year 2016. The Company also actively conducts early research on specific tissues for therapeutic use in direct surgical applications. In

addition to numerous scientific publications, the Company's technology has been featured in The Wall Street Journal, Time Magazine, The Economist, Forbes, and numerous other media outlets. Organovo is changing the shape of life science research and transforming medical care. Learn more at www.organovo.com.

Forward-Looking Statements

Any statements contained in this press release that do not describe historical facts constitute forward-looking statements as that term is defined in the Private Securities Litigation Reform Act of 1995. Any forward-looking statements contained herein are based on current expectations, but are subject to a number of risks and uncertainties. The factors that could cause the Company's actual future results to differ materially from current expectations include, but are not limited to, risks and uncertainties relating to the Company's ability to develop, market and sell products and services based on its technology; the expected benefits and efficacy of the Company's products, services and technology; the market acceptance of the Company's products and services; the Company's business, research, product development, regulatory approval, marketing and distribution plans and strategies; the Company's ability to successfully complete the contracts and recognize the revenue represented by the contracts included in its previously reported total contract bookings and secure additional contracted collaborative relationships. These and other factors are identified and described in more detail in the Company's filings with the SEC, including its Annual Report on Form 10-K filed with the SEC on June 9, 2016. You should not place undue reliance on these forward-looking statements, which speak only as of the date that they were made. These cautionary statements should be considered with any written or oral forward-looking statements that the Company may issue in the future. Except as required by applicable law, including the securities laws of the United States, the Company does not intend to update any of the forward-looking statements to conform these statements to reflect actual results, later events or circumstances or to reflect the occurrence of unanticipated events.

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