

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM 10-K/A
(Amendment No. 1)

(Mark One)

- ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934
For the Fiscal Year Ended March 31, 2023
OR
 TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934
For the Transition Period from _____ to _____
Commission File No. 001-35996

ORGANOVO HOLDINGS, INC.

(Exact name of registrant as specified in its charter)

Delaware

(State or other jurisdiction of incorporation or organization)

27-1488943

(IRS Employer Identification No.)

11555 Sorrento Valley Rd, Suite 100
San Diego, CA

(Address of principal executive offices)

92121

(Zip code)

Registrant's telephone number, including area code: 858-224-1000

Securities registered pursuant to Section 12(b) of the Act:

Title of each class	Trading Symbol	Name of each exchange on which registered
Common Stock, par value \$0.001 per share	ONVO	The Nasdaq Capital Market

Securities registered pursuant to section 12(g) of the Act: None

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. Yes No

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Act. Yes No

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes No

Indicate by check mark whether the registrant has submitted electronically every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T (§ 232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit such files). Yes No

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

Large accelerated filer
Non-accelerated filer

Accelerated filer
Smaller reporting company
Emerging growth company

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 13(a) of the Exchange Act.

Indicate by check mark whether the registrant has filed a report on and attestation to its management's assessment of the effectiveness of its internal control over financial reporting under Section 404(b) of the Sarbanes-Oxley Act (15 U.S.C. 7262(b)) by the registered public accounting firm that prepared or issued its audit report.

If the registrant's securities are registered pursuant to Section 12(b) of the Act, indicate by check mark whether the registrant's financial statements included in the report reflect the correction of an error to previously issued financial statements.

Indicate by check mark whether any of those error corrections are restatements that required a recovery analysis of incentive-based compensation received by any of the registrant's executive officers during the relevant recovery period pursuant to §240.10D-1(b).

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act). Yes No

The aggregate market value of the voting and non-voting common equity held by non-affiliates based on the closing stock price as reported on the Nasdaq Global Market on September 30, 2022, the last trading day of the registrant's second fiscal quarter, was \$16,721,329. For purposes of this computation only, shares of common stock held by each executive officer, director, and 10% or greater stockholders have been excluded in that such persons may be deemed affiliates.

The number of outstanding shares of the registrant's common stock, as of June 1, 2023 was 8,716,953.

DOCUMENTS INCORPORATED BY REFERENCE

None.

Auditor Firm Id: 199

Auditor Name: Mayer Hoffman McCann P.C.

Auditor Location: San Diego, CA

EXPLANATORY NOTE

Organovo Holdings, Inc. (“Organovo,” the “Company,” “we,” “our” or “us”) is filing this Amendment No. 1 on Form 10-K/A (this “Amendment”) to its Annual Report on Form 10-K for the fiscal year ended March 31, 2023 (“Fiscal 2023”), as filed with the Securities and Exchange Commission (the “SEC”) on July 14, 2023 (the “Original Form 10-K”).

The purpose of this Amendment is solely to disclose the information required in Part III (Items 10, 11, 12, 13 and 14) of Form 10-K, which information was previously omitted from the Original Form 10-K in reliance on General Instruction G(3) to Form 10-K. Accordingly, we hereby amend and restate in its entirety Part III of the Original Form 10-K.

In addition, pursuant to the rules of the SEC, Item 15 of Part IV has been amended and restated in its entirety to include the currently dated certifications of the Company’s principal executive officer and principal financial officer required under Section 302 of the Sarbanes-Oxley Act of 2002. Because no financial statements have been included in this Amendment and this Amendment does not contain or amend any disclosure with respect to Items 307 and 308 of Regulation S-K, paragraphs 3, 4 and 5 of the certifications have been omitted. In addition, this Amendment does not include the certificate under Section 906 of the Sarbanes-Oxley Act of 2002 as no financial statements are being filed with this Amendment.

Except as described above or as otherwise expressly provided by the terms of this Amendment, no other changes have been made to the Original Form 10-K. Except as otherwise indicated herein, this Amendment continues to speak as of the date of the Original Form 10-K, and we have not updated the disclosure contained therein to reflect any events that occurred subsequent to the filing date of the Original Form 10-K. This Amendment should be read in conjunction with the Original Form 10-K and with our filings with the SEC subsequent to the filing date of the Original Form 10-K.

Organovo Holdings, Inc.
Annual Report on Form 10-K
For the Year Ended March 31, 2023
TABLE OF CONTENTS

	<u>Page</u>
<u>PART III</u>	
Item 10. <u>Directors, Executive Officers and Corporate Governance</u>	2
Item 11. <u>Executive and Director Compensation</u>	9
Item 12. <u>Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters</u>	19
Item 13. <u>Certain Relationships and Related Transactions, and Director Independence</u>	21
Item 14. <u>Principal Accountant Fees and Services</u>	22
<u>PART IV</u>	
Item 15. <u>Exhibits and Financial Statement Schedules</u>	24

PART III

Item 10. Directors, Executive Officers and Corporate Governance.

Board of Directors Information

Our Board of Directors is comprised of six directors. Our Board is divided into three classes, with one class standing for election each year for a three-year term. There are currently two Class I directors, two Class II directors, and two Class III directors.

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

Information About Our Directors

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

<u>Name</u>	<u>Age⁽¹⁾</u>	<u>Position(s)</u>	<u>Director Class</u>
Keith Murphy	51	Director and Executive Chairman	Class III
Adam Stern	59	Director	Class III
Douglas Jay Cohen	52	Lead Independent Director	Class II
David Gobel	70	Director	Class II
Alison Tjosvold Milhous	44	Director	Class I
Vaidehi Joshi	37	Director and Director of Discovery Biology	Class I

(1) As of July 27, 2023.

Class III Directors Continuing in Office Until the 2023 Annual Meeting of Stockholders

Keith Murphy, Director and Executive Chairman, re-joined our Board in July 2020 and has served as our Executive Chairman since September 2020. Mr. Murphy is the Chief Executive Officer and Chairman of Viscient Biosciences, Inc. (“Viscient”), a private company that he founded in 2017 that is focused on drug discovery and development utilizing 3D tissue technology and multi-omics (genomics, transcriptomics, metabolomics). Mr. Murphy previously served as the President and Chief Executive Officer of Organovo from February 2012 through April 2017, and as Chairman from February 2012 through August 2017. Mr. Murphy also previously served as President, Chief Executive Officer, and Chairman of Organovo, Inc., Organovo’s primary operating company prior to its going-public transaction, from August 2007 to February 2012. Prior to founding Organovo, Mr. Murphy served in various roles at Amgen, Inc. from August 1997 to July 2007 including as Global Operations Leader for the osteoporosis/bone cancer drug Prolia/Xgeva (denosumab). Prior to joining Amgen, Mr. Murphy served at Alkermes, Inc., a biotechnology company, from July 1993 to July 1997, where he played a role on the development team for their first approved product, Nutropin (hGH) Depot. Mr. Murphy served as a member of the board of directors of Kintara Therapeutics, Inc. from August 2020 to February 2022, and served on its compensation committee and nominating and corporate governance committee. He holds a B.S. in Chemical Engineering from MIT and is an alumnus of the UCLA Anderson School of Management.

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

Adam Stern, Director, re-joined our Board in July 2020. Mr. Stern is currently the Chief Executive Officer of SternAegis Ventures, the private equity group at Aegis Capital Corp. responsible for venture capital and private equity financing, and has been the Head of Private Equity Banking at Aegis Capital Corp., a full-service investment

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

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

Class I Directors Continuing in Office until the 2024 Annual Meeting of Stockholders

Alison Tjosvold Milhous, Director, has served on our Board since September 2020. She has 20 years of audit and technical accounting experience and is a certified public accountant. She is currently the Vice President of Accounting at Erasca, Inc., a clinical-stage precision oncology company. Prior to joining Erasca, she was an independent consultant assisting public and private companies with accounting and reporting needs primarily within the life sciences and technology industries. Ms. Milhous was previously an audit partner at Grant Thornton LLP from August 2015 through September 2019 and held various positions with increasing responsibility at Grant Thornton from June 2002 as an audit associate through July 2015 as an audit senior manager. She began her career in June 2000 at Arthur Andersen LLP. Ms. Milhous served on the membership committee of Athena San Diego, a professional women's leadership organization with a STEM focus, from August 2012 through September 2019 and was on the Pinnacle steering committee from September 2013 through April 2015. Ms. Milhous received a Bachelor of Science degree in Business Administration with a dual concentration in Accounting and Finance from California State Polytechnic University, San Luis Obispo.

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

Vaidehi Joshi, Director, has served on our Board since March 2022 and as our Director of Discovery Biology since April 2022. Since November 2020, Ms. Joshi has served as Director of Discovery Biology at Viscient Biosciences, Inc., where she leads bioprinting as well as medicinal chemistry efforts for the drug discovery program for NASH and the pulmonary 3D model development program. She served in previous roles at Viscient Biosciences, Inc. between October 2019 to November 2020. Ms. Joshi was previously employed at Organovo, Inc., from March 2012 through August 2019, working her way up from Research Associate to Scientist II. Ms. Joshi has over a decade of experience in early-stage biotech companies developing unique therapeutic solutions and cutting-edge research products and cell-based therapies. In 2010, Ms. Joshi completed her master's in biomedical engineering from University of California Los Angeles, with a specialization in Tissue Engineering and Biomaterials.

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

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

Douglas Jay Cohen, Lead Independent Director, has served on our Board since September 2020 and has served as our Lead Independent Director since September 2022. He has served as president and Chief Executive Officer of IR Medtek LLC since January 2019, a medical device company developing a non-invasive probe for cancer detection by primary care physicians using a technology licensed from the Ohio State University. Prior to IR Medtek, Mr. Cohen served as President and Chief Executive Officer of Beacon Street Innovations, an advanced technology printing company, from September 2016 to present. From January 1994 to September 2016, Mr. Cohen served as Vice President of Operations and Engineering at Screen Machine Industries, an industrial and construction

heavy equipment manufacturer. As an active investor in startup companies, Mr. Cohen has invested in more than 20 biotech startups in the past 10 years, including investing in Organovo in 2013 and maintaining a position in the company ever since. Mr. Cohen received a B.S. from the Massachusetts Institute of Technology.

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

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

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

No Family Relationships

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

Executive Officers

The following persons are our current executive officers and hold the positions set forth opposite their names as of July 28, 2023:

Name	Age	Position
Keith Murphy	51	Executive Chairman
Thomas Hess	59	President and Chief Financial Officer
Jeffrey Miner	61	Chief Scientific Officer
Thomas Jurgensen	66	General Counsel and Corporate Secretary

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

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

Jeffrey Miner, Chief Scientific Officer, joined us in September 2020. Dr. Miner has held management and executive leadership positions in pharmaceutical and life sciences companies for more than 20 years. He has extensive biotech and pharmaceutical experience spanning discovery, preclinical, translational and clinical development. He currently serves as co-founder and Chief Scientific Officer for Viscient, a position he has held since June 2017. Prior to co-founding Viscient, Dr. Miner was Executive Director of Biology at AstraZeneca from January 2013 to January 2017, and Senior Director of Ardea Biosciences, a member of the AstraZeneca group, from January 2008 to January 2013. From 1993 to December 2007, he held positions of increasing responsibility, including Head of Molecular and Cellular Biology, at Ligand Pharmaceuticals. Dr. Miner has also been a Faculty Advisor and Molecular Biology Institute Associate at San Diego State University since 2005 and has served as a Board Member of the Scientific Advisory Board for ARTA Bioscience since 2008. Dr. Miner completed a post-doctoral fellowship at the University of California San Francisco in 1993 on glucocorticoid receptor gene regulation in Keith Yamamoto’s laboratory. He received his Ph.D. in Microbiology in 1989 from Oregon State University conducting graduate research in Virology in Dennis Hruby’s laboratory and he received his B.S. degree in Biology from The College of Idaho in 1984. Dr. Miner has drug discovery experience in the Inflammation, Oncology, Endocrine, Hepatology and Cardiovascular therapeutic areas and his work has led to, or enhanced, the development of multiple marketed medicines. His target areas of expertise include Nuclear Receptors, Kinases and Transporters. He has published more than 70 peer-reviewed articles and book chapters and is an inventor on multiple patents.

Thomas Jurgensen, General Counsel and Corporate Secretary, joined us in September 2020. Mr. Jurgensen has more than 30 years of corporate, transactional and intellectual property legal experience and is licensed to practice in California, Colorado, Minnesota and before the United States Patent and Trademark Office. Prior to joining us, Mr. Jurgensen was in private practice with Optima Law Group, APC in San Diego, California, serving as its Managing Shareholder since he founded the firm in February 2011 until May 2021. Optima Law Group serves a diverse base of life science and technology clients with a focus on early stage and emerging companies and also has offices in Boulder, Colorado. He previously served as Managing Shareholder and President of Catalyst Law Group in San Diego, California, from December 2003 to December 2010. From January 2001 to December 2003, he practiced corporate and intellectual property law with the firm of Blanchard, Krasner and French in La Jolla, California, while also serving as the Acting General Counsel of Ligand Pharmaceuticals, Inc. Prior to that, Mr. Jurgensen served as Vice President and General Counsel for The Salk Institute for Biological Studies in La Jolla, California, from January 1999 to December 2000; Vice President, General Counsel and Corporate Secretary for Molecular

Biosystems, Inc. in San Diego, California, from February 1997 to November 1998; and Assistant General Counsel at Ligand Pharmaceuticals, Inc. in San Diego, California, from March 1993 to February 1997. Mr. Jurgensen also was an Intellectual Property Attorney at Minnesota Mining and Manufacturing (3M) in St. Paul, Minnesota, and an Associate Attorney with the law firm of Merchant and Gould, PA in Minneapolis, Minnesota. Mr. Jurgensen has been a founder of numerous technology companies including Allylix, Inc. He has served in a number of executive roles at both private and public companies, including as CEO, President, Vice President, General Counsel and Secretary, and has served and still serves on selected private company boards of directors. Mr. Jurgensen received a Bachelor of Science degree in Biology with a Chemistry minor from the University of Wisconsin River Falls in May 1981. He then received his Master of Science degree in Animal Ecology from Iowa State University in Ames, Iowa, in December 1985 and conducted research in southern Chile under grants from the National Science Foundation and the Organization of American States. He received his law degree from the University of Oregon School of Law in May 1989 and was awarded Order of the Coif and served as Managing Editor on the Journal of Environmental Law and Litigation.

Code of Business Conduct

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

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

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

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

Consideration of Director Nominees

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

backgrounds on the Board. Our Board will be responsible for selecting candidates for election as directors based on the recommendation of the Nominating and Corporate Governance Committee.

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

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

Delinquent Section 16(a) Reports

Section 16(a) of the Exchange Act requires our officers and directors, and persons who own more than 10% of a registered class of our equity securities, to file reports of ownership and changes in ownership with the SEC. Officers, directors, and greater than 10% stockholders are required by SEC regulations to furnish us with copies of all Section 16(a) forms they file. Based solely upon a review of the copies of such forms and amendments thereto, we believe that, during Fiscal 2023, none of our officers, directors, and greater than 10% beneficial owners failed to file on a timely basis the reports required by Section 16(a), with the exception of a late Form 4 for each of Keith Murphy, Thomas Jurgensen, and Jeffrey Miner to report the grant of options that was due on September 2, 2022 but was not filed until October 20, 2022.

Item 11. Executive Compensation.

The following discussion is designed to provide our stockholders with an understanding of our compensation philosophy and objectives as well as an overview of the analysis that our Compensation Committee performed in setting the compensation of our executive officers for Fiscal 2023 (i.e., the period from April 1, 2022 to March 31, 2023).

This discussion summarizes the Compensation Committee's determination of how and why, in addition to what, compensation actions were taken for our Principal Executive Officer and our two other most highly compensated executive officers serving as of the end of Fiscal 2023, as follows:

- Keith Murphy, our Executive Chairman and Principal Executive Officer;
- Thomas Jurgensen, our General Counsel and Corporate Secretary; and
- Jeffrey Miner, our Chief Scientific Officer.

These three individuals are collectively referred to in this Annual Report on Form 10-K as our "named executive officers".

Recent "Say-on-Pay" Votes

Our recent stockholder advisory votes, commonly referred to as a "Say-on-Pay" vote, to approve the compensation of our named executive officers for Fiscal 2022 (i.e., the period from April 1, 2021 to March 31, 2022) was approved by our stockholders, with approximately 92% of stockholder votes cast in favor of the proposal.

Following our 2022 Annual Meeting, our Executive Chairman, General Counsel, and Chief Financial Officer initiated significant stockholder engagement efforts in the second half of Fiscal 2023 (i.e., April 1, 2022 to March 31, 2023) to establish continuous monitoring of how our investors vote, obtain their views on key corporate governance and disclosure matters and determine how best to respond to feedback each year going forward. Specifically, we reached out to our stockholders representing over 95% of our institutional stock holdings (or approximately 26% of our then outstanding shares) multiple times. None of the stockholders indicated a need or desire to engage with the Company to discuss or express any concerns.

Going forward, we plan to continue to:

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

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

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

Compensation Philosophy and Objectives

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

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

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

Use of Market Data and Benchmarking

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

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

For Fiscal 2023, the Compensation Committee engaged Anderson, an independent compensation consultant, as the Compensation Committee’s advisor reporting directly to the chair of the Compensation Committee. The Compensation Committee determined that no conflict of interest exists that would preclude Anderson from serving as an independent consultant to the Compensation Committee.

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

For Fiscal 2023, based on recommendations from Anderson, our Compensation Committee determined that our peer group should be modified to better reflect our current market valuation as well as the growing importance of our therapeutics program to our overall business model. With input from Anderson, our Compensation Committee added a group of companies focused on technology platforms, with comparable size, revenues, market valuations, and stage of leading drug candidate. Our Compensation Committee also replaced some of the companies previously included in our peer group because their market valuations had grown too high for direct comparison to our Company, and/or their business focus had become less relevant for direct comparison to our Company. Our Compensation Committee then used the compensation data from this revised peer group in setting executive compensation for Fiscal 2023.

The peer group for Fiscal 2023 included:

Advaxis	Celsion Corporation	Onconova Therapeutics, Inc.
Allena Pharmaceuticals*	Cidara Therapeutics, Inc.	OncoSec Medical Incorporated
Aprea Therapeutics, Inc.	CytRx Corporation	Pulmatrix, Inc.
aTyr Pharma, Inc.	Evoke Pharma, Inc.	Regulus Therapeutics Inc.
Bellicum Pharmaceuticals, Inc.	Idera Pharmaceuticals, Inc.	Seelos Therapeutics, Inc.
Brickell Biotech, Inc.	NightHawk Biosciences, Inc.	Soligenix, Inc.
Capricor Therapeutics, Inc.	Ocuphire Pharma, Inc.	Synthetic Biologics, Inc.

* Indicates addition to peer group from Fiscal 2022.

Determination of Executive Compensation

In addition to peer group data, the Compensation Committee considered relevant publicly available market data and surveys and the compensation reports it received from Anderson. The Compensation Committee also reviewed and considered the compensation recommendations of our Executive Chairman, the Company's overall performance during Fiscal 2023, the Company's financial status and operating runway, each executive officer's responsibilities and contribution to the Company's achievement of the Fiscal 2023 corporate goals, and each executive officer's individual performance during Fiscal 2023. With respect to new hires, our Compensation Committee considered the executive officer's background and historical compensation in lieu of prior year performance in addition to benchmark data for the newly hired executive's position.

Commitment to Good Compensation Governance Practices

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

- **Annual Advisory Vote on the Compensation of our Named Executive Officers** – We provide our stockholders with the ability to vote annually on the compensation of our named executive officers.
- **Independent Compensation Consultant** – The Compensation Committee engaged Anderson during Fiscal 2023 to serve as its independent compensation consultant. Anderson did not provide any other services to the Company during the periods it served as a consultant to the Compensation Committee.
- **Performance and Incentive Based** – Approximately 40% of the Total Direct Compensation our executive officers can earn is performance and incentive based, thereby aligning the interests of our executive officers with our stockholders' interests.
- **Compensation Risk Assessment** – The Compensation Committee oversees and evaluates an annual risk assessment of the Company's compensation program. The Compensation Committee believes that the performance goals established for incentives do not encourage excessive risk-taking or have the potential to encourage behavior that may have a material adverse effect on the Company.
- **Prohibitions on Hedging, Pledging and Margin Activities** – Our insider trading policy prohibits hedging transactions by Company employees. Under the policy, all short-term, speculative or hedging transactions in Organovo securities are prohibited by all employees. In addition, the policy specifically prohibits the use of Organovo securities for pledging and margin activities.
- **No Single Trigger Change in Control Vesting**- We do not provide for the acceleration of vesting solely upon the occurrence of a change in control in our equity awards for our directors and executive officers.
- **No Excise Tax Gross Ups** – We do not include excise tax gross ups for any change in control payments.
- **Director and Executive Officer Stock Ownership Guidelines** – We have adopted stock ownership guidelines that require each director and executive officer to accumulate and hold a specified value of our stock within five years of most recently starting employment with us or becoming a director.

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

Components of Executive Compensation

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

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

For Fiscal 2023, the Compensation Committee approved an approximate 6% cost of living adjustment for our executive officers compared to Fiscal 2022, including Mr. Jurgensen and Dr. Miner.

Pursuant to the terms of our consulting agreement with Multi Dimensional Bio Insight LLC (“MDBI”), a biotechnology consulting firm through which we retain Mr. Murphy, MDBI has the right, on an annual basis, to increase hourly consultant rates by up to 4%. From January 1, 2021 to May 1, 2022, the hourly rate for Mr. Murphy’s services was \$375, which was increased to \$413 effective May 1, 2022 and remained the same throughout the remainder of Fiscal 2023. The cash amount paid to MDBI increased from \$430,073 for Fiscal 2022 to \$543,781 for Fiscal 2023, with approximately a 19% increase in Mr. Murphy’s hours for Fiscal 2023 as compared to Fiscal 2022.

The base salaries of our named executive officers for Fiscal 2023 as compared to Fiscal 2022 are set forth in the following table:

Name and Title	Fiscal 2023 Base Salary	Fiscal 2022 Base Salary
Keith Murphy, <i>Executive Chairman</i> ⁽¹⁾	\$ 543,781	\$ 430,073
Thomas Jurgensen, <i>General Counsel and Corporate Secretary</i>	381,262	360,000
Jeffrey Miner, <i>Chief Scientific Officer</i>	238,292	225,000

(1) Mr. Murphy was appointed our Executive Chairman on September 15, 2020. The Company retains Mr. Murphy through MDBI, a biotechnology consulting firm, pursuant to the terms of a consulting agreement, pursuant to which Company has agreed to pay MDBI \$375-390 per hour of services provided by Mr. Murphy, with an annual increase in rates by up to 4%. The amounts reported under “Fiscal 2023 Base Salary” and “Fiscal 2022 Base Salary” are comprised of the actual amounts paid to MDBI for its consulting services. Mr. Murphy did not directly receive a base salary from the Company in Fiscal 2023 or Fiscal 2022. Mr. Murphy’s increase in base salary was primarily due to additional time commitment of Mr. Murphy in his consulting role as Executive Chairman of the Company.

Performance-Based Cash Incentive Awards. Our executive compensation program includes an annual performance-based cash incentive award, which provides our executive officers with an annual cash incentive opportunity as a percentage of their base salaries based upon the achievement of corporate and individual performance goals evaluated and approved by the Compensation Committee. For Fiscal 2023, the Compensation Committee determined that the annual target bonus opportunity expressed as a percentage of base salary for each of Mr. Jurgensen and Dr. Miner should be 40% of each of their respective base salaries. For Fiscal 2023, the Company

also adopted an objectives and key results goal-setting framework (“OKRs”) used by individuals, teams, and the Company to define measurable goals and track their outcomes, originally developed and implemented by Andrew Grove at Intel. See: <http://www.whatmatters.com>. Each executive officer is eligible to receive an increase in his target bonus amount based on the achievement of individual and corporate OKRs.

As of the date of the filing of this Annual Report on Form 10-K, the Compensation Committee has not yet determined the annual cash bonus amounts, if any, that will be awarded to our eligible named executive officers, Mr. Jurgensen and Dr. Miner, for Fiscal 2023. We expect the Compensation Committee to assess 2023 performance and determine the 2023 annual cash bonus awards for Mr. Jurgensen and Dr. Miner by September 2023. Once such annual cash bonus amounts, if any, have been determined, we will, in accordance with SEC rules and regulations, file a Current Report on Form 8-K or otherwise disclose the 2023 annual cash bonus amount within four business days after the Compensation Committee has assessed 2023 performance and determined the 2023 annual cash bonus awards for Mr. Jurgensen and/or Dr. Miner.

Mr. Murphy is retained through MDBI, a biotechnology consulting firm, pursuant to the terms of a consulting agreement. As such, Mr. Murphy is not eligible to receive a bonus for services provided during the fiscal year. The Compensation Committee believes that this situation best serves the Company’s interests because Mr. Murphy is a member of the Board and has strong incentives aligned with stockholders to improve the performance of the Company’s stock in the form of performance-based equity awards granted by Company that trigger upon reaching stock price target.

Equity-Based Incentive Awards. In addition to base salaries and annual performance-based cash incentives, the Compensation Committee has provided long-term, equity-based incentive awards to our executive officers. In determining the size and terms of the awards, the Compensation Committee considered benchmark data from our peer group, publicly available market and survey data and the individual performance of the named executive officers. The Compensation Committee granted the following awards for Fiscal 2023:

Name	Time-Based Option Awards (#)	Performance-Based Option Awards (#)	Stock Awards (#)	Time-Based Option Awards (\$ ⁽¹⁾)	Performance-Based Option Awards (\$)	Stock Awards (\$)	Total (\$)
Keith Murphy	40,000	—	—	\$ 73,921	\$ —	\$ —	\$ 73,921
Thomas Jurgensen	40,000	—	—	73,921	—	—	73,921
Jeffrey Miner	40,000	—	—	73,921	—	—	73,921

(1) These amounts represent the grant date fair value of time-based stock option awards granted by the Company during the periods presented, determined in accordance with FASB ASC Topic 718. All awards are amortized over the vesting life of the award. For the assumptions used in our valuations, see “Note 5 – Stockholders’ Equity” of the Notes to Consolidated Financial Statements in this Annual Report on Form 10-K.

Other Benefits

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

- **Health Insurance** – We provide each of our executives and their spouses and children the same health, dental, and vision insurance coverage we make available to our other eligible employees.
- **Life and Disability Insurance** – We provide each of our executives with the same life and disability insurance as we make available to our other eligible employees.
- **Pension Benefits** – We do not provide pension arrangements or post-retirement health coverage for our executives or employees. We implemented a 401(k) Plan effective January 1, 2014. We provide a company matching contribution up to 3.5% of compensation for all participants in the 401(k) plan, including our executive officers, to help attract and retain top talent.

- **Nonqualified Deferred Compensation** – We do not provide any nonqualified defined contribution or other deferred compensation plans to any of our employees.
- **Perquisites** – We limit the perquisites that we make available to our executive officers. In certain cases, we have reimbursed our executive officers for their relocation expenses on their initial hire.

Severance Arrangement

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

Potential Payments upon Termination or Change in Control

The following table sets forth the amounts payable to each of our current named executive officers based on an assumed termination as of March 31, 2023 based upon certain designated events.

Name	Cash Severance (\$)	Health and Other Insurance Benefits (\$)	Stock Options (Unvested and Accelerated) (\$)	Restricted Stock Units (Unvested and Accelerated) (\$)	Fiscal Year 2022 Total (\$)(1)
Keith Murphy					
Termination in connection with a Change in Control	\$ 1,288,560	\$ —	\$ —	\$ —	\$ 1,288,560
Thomas Jurgensen					
Termination in connection with a Change in Control	\$ 381,263	\$ —	\$ —	\$ —	\$ 381,263
Jeffrey Miner					
Termination in connection with a Change in Control	\$ 238,292	\$ —	\$ —	\$ —	\$ 238,292

Death or Disability Benefits

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

Summary Compensation Table

The following table summarizes the total compensation paid to or earned by each named executive officer for Fiscal 2023 and Fiscal 2022.

Name and Principal Position	Year or Period	Salary (\$)	Bonus (\$)	Stock Awards (\$)	Option Awards (\$) ⁽¹⁾	Non-Equity Incentive Plan Compensation (\$) ⁽²⁾	All Other Compensation (\$)	Total (\$)
Keith Murphy ⁽³⁾	2023	543,781	—	—	73,921	—	3,746 ⁽⁴⁾	621,448
Executive Chairman	2022	430,073	—	—	829,672	—	400	1,260,144
Thomas Jurgensen	2023	381,263	—	—	73,921	— ⁽⁵⁾	10,790 ⁽⁶⁾	465,974
General Counsel and Corporate Secretary	2022	360,000	—	—	264,054	180,000	8,029 ⁽⁶⁾	812,083
Jeffrey Miner	2023	238,292	—	—	73,921	— ⁽⁵⁾	3,540 ⁽⁶⁾	315,753
Chief Scientific Officer	2022	225,000	—	—	443,247	78,750	—	747,027

(1) These amounts represent the grant date fair value of time-based stock option awards granted by the Company during the periods presented, determined in accordance with FASB ASC Topic 718. All awards are amortized over the vesting life of the award. For the assumptions

used in our valuations, see “Note 5 – Stockholders’ Equity” of the Notes to Consolidated Financial Statements in this Annual Report on Form 10-K.

- (2) Includes amounts paid under the Company’s Performance-Based Cash Incentive Award program based on the achievement of corporate and individual performance goals established and measured by the Compensation Committee.
- (3) Mr. Murphy was appointed our Executive Chairman on September 15, 2020. The amounts reported under “Salary” are comprised of the amounts paid to MDBI for its consulting services. Mr. Murphy did not receive a base salary from the Company in Fiscal 2023 or Fiscal 2022. Mr. Murphy also received compensation for services as a member of the Board of Directors, which is included in the section entitled “Director Compensation Table” of this Annual Report on Form 10-K.
- (4) This amount includes \$1,996 for expense reimbursements, \$1,200 for administrative services and \$550 for office rent.
- (5) Does not include for Fiscal 2023 the amount of any annual cash bonus that may be awarded to the named executive officer as the Compensation Committee has not, as of the date of the filing of this Annual Report on Form 10-K, yet determined the annual cash bonus amount, if any, that will be awarded to the named executive officer for Fiscal 2023. See above under “Executive Compensation – Components of Executive Compensation – Performance-Based Cash Incentive Awards” for a discussion of the target bonus amount for the named executive officer for Fiscal 2023. We expect the Compensation Committee to assess 2023 performance and determine the 2023 annual cash bonus award, if any, for the named executive officer by September 2023. Once such annual cash bonus amount, if any, has been determined, we will, in accordance with Securities and Exchange Commission rules and regulations, file a Current Report on Form 8-K or otherwise disclose the 2023 annual cash bonus amount within four business days after the Compensation Committee has assessed 2023 performance and determined the 2023 annual cash bonus award for the named executive officer.
- (6) These amounts consist of matching contributions to the 401(k) Plan made for each named executive officer. The formula for determining the matching contributions is the same for named executive officers as it is for all salaried employees (and are subject to the same statutory maximum). Excludes payments made for the reimbursement of medical insurance premiums and life insurance available for all salaried employees. For more information regarding these benefits, see above under “Other Benefits.”

Outstanding Equity Awards at Fiscal Year End

The following table shows certain information regarding outstanding equity awards as of March 31, 2023 for our named executive officers:

Name	Option Awards				Stock Awards	
	No. of Securities Underlying Unexercised Options (#) Exercisable	No. of Securities Underlying Unexercised Options (#) Unexercisable	Option Exercise Price (\$)	Option Expiration Date	No. of Shares or Units of Stock That Have Not Vested (#)	Market Value of Shares or Units of Stock That Have Not Vested (\$)
Keith Murphy	40,622 ⁽¹⁾	24,378	\$ 7.64	9/15/2030	10,000 ⁽⁵⁾	\$ 21,900
	22,500 ⁽²⁾	22,500	10.27	3/8/2031		
	— ⁽³⁾	60,000	10.27	3/8/2031		
	— ⁽⁴⁾	60,000	10.27	3/8/2031		
	— ⁽⁷⁾	60,000	6.70	10/7/2031		
	— ⁽⁸⁾	60,000	6.70	10/7/2031		
	30,000 ⁽⁹⁾	—	6.70	10/7/2031		
	— ⁽¹⁰⁾	30,000	6.70	10/7/2031		
	5,000 ⁽¹²⁾	35,000	2.36	8/31/2032		
	Thomas Jurgensen	12,500 ⁽¹⁾	7,500	7.64		
19,688 ⁽⁶⁾		15,312	10.27	3/8/2031		
16,258 ⁽¹¹⁾		35,765	6.70	10/7/2031		
5,000 ⁽¹²⁾		35,000	2.36	8/31/2032		
Jeffrey Miner	62,500 ⁽¹⁾	37,500	7.64	9/15/2030		
	— ⁽³⁾	12,500	10.27	3/8/2031		
	— ⁽⁴⁾	12,500	10.27	3/8/2031		
	16,258 ⁽¹¹⁾	35,765	6.70	10/7/2031		
	— ⁽⁷⁾	12,500	6.70	10/7/2031		
	— ⁽⁸⁾	12,500	6.70	10/7/2031		
	7,500 ⁽⁹⁾	—	6.70	10/7/2031		
	— ⁽¹⁰⁾	7,500	6.70	10/7/2031		
5,000 ⁽¹²⁾	35,000	2.36	8/31/2032			

- (1) 25% of the option shares vested and became exercisable on September 15, 2021 and the remaining shares vest in 12 equal quarterly installments thereafter.
- (2) 25% of the option shares vested and became exercisable on March 8, 2022 and the remaining shares vest in 12 equal quarterly installments thereafter.
- (3) The option becomes exercisable, if at all, if the 45-day moving average closing price of Organovo Holdings, Inc.’s common stock on The Nasdaq Stock Market LLC exceeds \$20.00 per share.
- (4) The option becomes exercisable, if at all, if the 45-day moving average closing price of Organovo Holdings, Inc.’s common stock on The Nasdaq Stock Market LLC exceeds \$25.00 per share.

- (5) 25% of the shares subject to the restricted stock unit vested on March 8, 2022 and the remaining shares vest in 12 equal quarterly installments thereafter.
- (6) 25% of the option shares vested and became exercisable on December 31, 2021 and the remaining shares vest in 12 equal quarterly installments thereafter.
- (7) The option becomes exercisable, if at all, if the 45-day moving average closing price of Organovo Holdings, Inc.'s common stock on The Nasdaq Stock Market LLC exceeds \$30.00 per share.
- (8) The option becomes exercisable, if at all, if the 45-day moving average closing price of Organovo Holdings, Inc.'s common stock on The Nasdaq Stock Market LLC exceeds \$35.00 per share.
- (9) The option became exercisable when the Company revenue hit \$1.5 million per year based on three quarters of results.
- (10) The option becomes exercisable, if at all, when the Company closes a 7-figure cash up front deal with a major pharmaceutical company.
- (11) The option shares vest in 16 equal quarterly installments beginning October 7, 2021.
- (12) The option shares vest in 16 equal quarterly installments beginning August 31, 2022.

Director Compensation

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

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

In connection with establishing our director compensation for Fiscal 2023, the Compensation Committee retained Anderson as its independent compensation consultant. With the assistance of Anderson, the Board and Compensation Committee conducted a formal review of our director compensation and incentive programs relative to the same peer group used in benchmarking the compensation for our executive officers.

Fiscal 2023 Director Compensation Framework

In November 2022, our Board adopted an amended and restated director cash and equity compensation framework for Fiscal 2023 (the "New Director Compensation Framework"). The New Director Compensation Framework currently provides to both non-employee and employee directors annual cash retainers for Board service and for service as the chair or member of one of the standing Board committees. Our directors are not entitled to any Board meeting fees or Board committee meeting fees.

Annual Cash Retainers. For Fiscal 2023, each of our directors was eligible to receive an annual cash retainer of \$66,300 for Board membership.

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

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

No additional meeting fees were paid to our directors for Fiscal 2023.

Equity Awards. In addition, in November 2022, each director received a restricted stock unit award with respect to 19,607 shares of common stock (a value of \$30,000), which will vest in full on the earlier of (i) November 10, 2022 or (ii) the date of our next annual meeting of the stockholders, subject to acceleration in the event of a change of control.

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

Director Compensation Table

The following table sets forth the compensation earned and paid to each member of our Board for service as a director during Fiscal 2023:

Name	Fees Earned or Paid in Cash (\$)	Stock Awards \$(1)	Option Awards (\$)	All Other Compensation (\$)	Total (\$)
Douglas Jay Cohen	\$ 105,000	\$ 30,000	\$ —	\$ —	\$ 135,000
David Gobel	105,000	30,000	—	—	135,000
Alison Tjosvold Milhous	135,000 ⁽²⁾	30,000	—	—	165,000
Adam Stern	96,900	30,000	—	—	126,900
Keith Murphy	78,710	30,000	—	—	108,710 ⁽³⁾
Vaidehi Joshi	91,403	30,000	—	—	121,403

- (1) These amounts represent the grant date fair value of time-based restricted stock unit awards granted by the Board, determined in accordance with FASB ASC Topic 718. All awards are amortized over the vesting life of the award. For the assumptions used in our valuations, see “Note 5 – Stockholders’ Equity” of our notes to consolidated financial statements in this Annual Report on Form 10-K.
- (2) Comprised of (i) \$105,000 for service on the Board and committees pursuant to the New Director Compensation Framework and (ii) \$30,000 for service on a special committee of the Board that was established to consider one or more potential transactions with certain third parties.
- (3) Comprised solely of the compensation received by Mr. Murphy for his service as a member of the Board. Mr. Murphy’s additional compensation for Fiscal 2023 is included in the section entitled “Summary Compensation Table” of this Annual Report on Form 10-K.

Compensation Committee Interlocks and Insider Participation

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

Item 12. Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters.

Security Ownership of Certain Beneficial Owners and Management

The following tables set forth certain information regarding the beneficial ownership of our common stock as of July 18, 2023 by (i) each person who, to our knowledge (based solely on our review of Schedules 13D and 13G filed with the SEC, as applicable), beneficially owns more than 5% of our common stock; (ii) each of our directors and named executive officers (as disclosed in this Annual Report on Form 10-K); and (iii) all of our executive officers and directors as a group. Unless otherwise indicated in the table or the footnotes to the following table, each person named in the table has sole voting and investment power and such person's address is c/o Organovo Holdings, Inc., 11555 Sorrento Valley Rd., Suite 100, San Diego, CA 92121.

We determined the number of shares of common stock beneficially owned by each person under rules promulgated by the SEC, based on information obtained from Company records and filings with the SEC on or before July 18, 2023. In cases of holders who are not directors and named executive officers, Schedules 13G or 13D filed with the SEC, as applicable (and, consequently, ownership reflected here), often reflect holdings as of a date prior to July 18, 2023. The information is not necessarily indicative of beneficial ownership for any other purpose. Under these rules, beneficial ownership includes any shares as to which the individual or entity has sole or shared voting power or investment power and also any shares which the individual or entity had the right to acquire within 60 days of July 18, 2023. These shares, however, are not deemed outstanding for the purpose of computing the percentage ownership of any other person or entity.

Applicable percentages are based on 8,718,203 shares of common stock outstanding as of July 18, 2023, as adjusted as required by the rules promulgated by the SEC. We have deemed shares of our common stock subject to stock options that are currently exercisable or exercisable within 60 days of July 18, 2023, or issuable pursuant to restricted stock units that are subject to vesting conditions expected to occur within 60 days of July 18, 2023, to be outstanding and to be beneficially owned by the person holding the stock option or restricted stock units for the purpose of computing the percentage ownership of that person. We did not deem these shares outstanding, however, for the purpose of computing the percentage ownership of any other person or entity.

Name of Beneficial Owner	Beneficial Ownership ⁽¹⁾	
	Number of Common Shares	Percent of Common Shares
5% Stockholders		
Sumitomo Mitsui Trust Holdings, Inc.	454,752 (2)	5.0%
Directors and Named Executive Officers		
Keith Murphy	267,800 (3)	3.0%
Jeffrey Miner	115,261 (4)	1.3%
Douglas Jay Cohen	84,107 (5)	1.0%
David Gobel	72,107 (6)	*
Alison Tjosvold Milhous	72,107 (6)	*
Adam Stern	72,107 (6)	*
Thomas Jurgensen	69,636 (4)	*
Vaidehi Joshi	37,107 (7)	*
All current executive officers and directors as a group (8 persons)	790,232 (8)	8.5%

* Less than one percent.

- (1) Beneficial ownership of shares and percentage ownership are determined in accordance with the rules of the SEC. Unless otherwise indicated and subject to community property laws where applicable, the individuals named in the table above have sole voting and investment power with respect to all shares of our common stock shown as beneficially owned by them.
- (2) Sumitomo Mitsui Trust Holdings, Inc. ("Sumitomo") filed a Schedule 13G/A with the SEC on February 3, 2023, reporting that it had shared voting power with respect to 454,752 shares, shared dispositive power with respect to 454,752 shares and beneficial ownership of an aggregate of 454,752 shares in its capacity as a parent holding company or control person in accordance with Rule 13d-1(b)(1)(ii)(G) under the Exchange Act and as a non-U.S. institution in accordance with Rule 13d-1(b)(1)(ii)(J) under the Exchange Act. Sumitomo's Schedule 13G/A also reported that Nikko Asset Management Co., Ltd. ("NAM") had shared voting power with respect to 454,752 shares, shared dispositive power with respect to 454,752 shares and beneficial ownership of an aggregate of 454,752 shares in its capacity as an investment advisor in accordance with Rule 13d-1(b)(1)(ii)(E) under the Exchange Act, as a parent holding company or control person in accordance with Rule 13d-1(b)(1)(ii)(G) under the Exchange Act and as a non-U.S. institution in accordance with Rule 13d-1(b)(1)(ii)(J) under the

Exchange Act. The securities being reported in the Schedule 13G/A filed by each of Sumitomo and NAM, as parent holding companies, are owned, or may be deemed to be beneficially owned, by their subsidiary Nikko Asset Management Americas, Inc. ("Nikko"), which is classified as an investment advisor in accordance with Rule 13d-1(b)(1)(ii)(E) under the Exchange Act. Sumitomo's address is 1-4-1 Marunouchi, Chiyoda-ku, Tokyo 100-8233, Japan. NAM's address is Midtown Tower, 9-7-1 Akasaka, Minato-ku, Tokyo 107-6242, Japan. Nikko filed a Schedule 13G/A with the SEC on February 10, 2023, reporting that it had shared voting power with respect to 371,410 shares, shared dispositive power with respect to 454,752 shares and beneficial ownership of an aggregate of 454,752 shares in its capacity as an investment advisor in accordance with Rule 13d-1(b)(1)(ii)(E) under the Exchange Act. Nikko's address is 605 Third Avenue, 38th Floor, New York, NY 10158.

- (3) Represents 98,427 shares of common stock held by Mr. Murphy and 169,373 shares subject to options that are immediately exercisable or exercisable within 60 days of July 18, 2023.
- (4) Represents shares subject to options that are immediately exercisable or exercisable within 60 days of July 18, 2023.
- (5) Represents 29,607 shares of common stock held by Mr. Cohen, 2,000 shares held by Mr. Cohen's children and 52,500 shares subject to options that are immediately exercisable or exercisable within 60 days of July 18, 2023.
- (6) Represents 19,607 shares of common stock held and 52,500 shares subject to options that are immediately exercisable or exercisable within 60 days of July 18, 2023.
- (7) Represents 19,607 shares of common stock held and 17,500 shares subject to options that are immediately exercisable or exercisable within 60 days of July 18, 2023.
- (8) Comprised of shares included under "Directors and Named Executive Officers".

Securities Authorized for Issuance Under Equity Compensation Plans.

The following table summarizes information about the Company's equity compensation plans by type as of March 31, 2023:

<u>Plan category</u>	(A) Number of securities to be issued upon exercise/vesting of outstanding options, warrants, units and rights	(B) Weighted-average exercise price of outstanding options, warrants, units and rights	(C) Number of securities available for future issuance under Equity Compensation Plans (excluding securities reflected in column (A))
Equity compensation plans approved by security holders (1)	1,528,934 (2)	\$ 6.62	1,129,897 (3)
Equity compensation plans not approved by security holders (4)	50,000 (5)	\$ 2.75	1,000 (6)

- (1) Includes the 2008 Equity Incentive Plan, the Amended and Restated 2012 Equity Incentive Plan, the 2022 Equity Incentive Plan, and the Employee Stock Purchase Plan (the "ESPP") of the Company.
- (2) Includes stock options to purchase 1,401,217 shares of common stock with a per share weighted-average exercise price of \$6.62. Also includes 127,717 restricted stock units with no exercise price.
- (3) Includes 58,426 shares of common stock available for purchase under the ESPP as of March 31, 2023.
- (4) Includes certain Inducement Award Stock Option Agreements and Inducement Award Performance-Based Restricted Stock Unit Agreements and the 2021 Inducement Equity Incentive Plan of the Company (the "Inducement Plan").
- (5) Includes 50,000 stock options with a per share exercise price of \$2.75 granted pursuant to the Inducement Plan.
- (6) Includes 1,000 shares of common stock reserved for issuance pursuant to the Inducement Plan.

Item 13. Certain Relationships and Related Transactions, and Director Independence.

Board Independence

Our shares of common stock are listed for trading on the Nasdaq Capital Market. As a result, our Board utilizes the definition of “independence” as that term is defined by the listing standards of the Nasdaq Stock Market and the rules and regulations of the SEC, including the additional independence requirements for members of our Audit Committee and the Compensation Committee. Our Board considers a director “independent” when the director is not an officer or employee of the Company or its subsidiaries, does not have any relationship which would, or could reasonably appear to, materially interfere with the independent judgment of such director, and the director otherwise meets the independence requirements under the listing standards of the Nasdaq Capital Market and the rules and regulations of the SEC. Our Board has reviewed the materiality of any relationship that each of our directors has with the Company, either directly or indirectly. Based on this review, our Board has affirmatively determined that the following four of our six current directors qualify as “independent” directors: Douglas Jay Cohen, David Gobel, Alison Tjosvold Milhous and Adam Stern. Keith Murphy and Vaidehi Joshi do not qualify as an independent director. Mr. Murphy currently serves as our Executive Chairman and as Chief Executive Officer of Viscient, which has made payments to the Company in sufficient amounts to qualify as related party transactions leading to director non-independence. Ms. Joshi is currently our Director of Discovery Biology.

Certain Relationships and Related Transactions

Since April 1, 2022, there have not been any transactions or series of similar transactions to which we were or are a party in which the amount involved exceeded or exceeds the lesser of \$120,000 or one percent of the average of our total assets at fiscal year-end for the last two completed fiscal years, and in which any of our directors or executive officers, any holder of more than 5% of any class of our voting securities or any member of the immediate family of any of the foregoing persons had or will have a direct or indirect material interest, other than (i) the transactions described below and (ii) the compensation arrangements with our executive officers and non-employee directors described in “Executive Compensation” and “Director Compensation,” respectively.

Intercompany Agreement with Viscient

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

On December 28, 2020, the Company entered into an intercompany agreement (the “Intercompany Agreement”) with Viscient and Organovo, Inc., the Company’s wholly-owned subsidiary, which included an asset purchase agreement for certain lab equipment. Pursuant to the Intercompany Agreement, the Company agreed to provide Viscient certain services related to 3D bioprinting technology which includes, but is not limited to, histology services, cell isolation, and proliferation of cells and Viscient agreed to provide the Company certain services related to 3D bioprinting technology, including bioprinter training, bioprinting services, and qPCR assays, in each case on payment terms specified in the Intercompany Agreement and as may be further determined by the parties. In addition, the Company and Viscient each agreed to share certain facilities and equipment, and, subject to further agreement, to each make certain employees available for specified projects for the other party at prices to be determined in good faith by the parties. The Company evaluated the accounting for the Intercompany Agreement and concluded that any services provided by Viscient to the Company will be expensed as incurred, and any compensation for services provided by the Company to Viscient will be considered a reduction of personnel related expenses. Any services provided to Viscient do not fall under Financial Accounting Standards Board Topic 606 (“Revenue from Contracts with Customers”) as the Intercompany Agreement is not a contract with a customer. For the years ended March 31, 2023 and 2022, the Company incurred approximately zero and \$47,000 in consulting expenses from Viscient, respectively. Additionally, for the years ended March 31, 2023 and 2022, the Company provided approximately \$59,000 and \$48,000 of histology services to Viscient, respectively.

Related Party Transaction Policy and Procedures

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

Item 14. Principal Accountant Fees and Services.

On July 18, 2023, Mayer Hoffman McCann P.C. ("MHM") informed us and the Audit Committee that it would not stand for re-election as our registered public accounting firm for the audit of our financial statements for the fiscal year ending March 31, 2024. MHM will cease to serve as the Company's independent registered public accounting firm on the earlier of the date a new firm is engaged, the date of the filing of the Company's Quarterly Report on Form 10-Q for the quarterly period ended June 30, 2023 or August 21, 2023.

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

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

Representatives of MHM are expected to be present at the virtual Annual Meeting and will have the opportunity to make statements if they desire to do so and to respond to appropriate questions. MHM has served as our independent registered public accounting firm since February 8, 2011, the date we completed our reverse merger transaction and became a public reporting company.

No independent registered public accounting firm has been selected or recommended to our stockholders for election, approval or ratification for fiscal year ended March 31, 2024 as we are in the process of selecting a new independent registered public accounting firm.

Audit and Non-Audit Fees

Substantially all MHM's personnel, who work under the control of MHM shareholders, are employees of wholly-owned subsidiaries of CBIZ, Inc., which provides personnel and various services to MHM in an alternative practice structure.

During Fiscal 2023, the Audit Committee met with MHM on a quarterly or more frequent basis. At such times, the Audit Committee reviewed the services performed by MHM, as well as the fees charged for such services.

The following table sets forth the fees for services provided and billed by MHM and its associated entity CBIZ MHM, LLC, relating to Fiscal 2023 and Fiscal 2022.

	Fiscal Year 2023	Fiscal Year 2022
Audit fees	\$ 471,194	\$ 310,120
Audit-related fees	—	—
Tax fees	26,670	24,764
All other fees	—	—
Total	\$ 497,864	\$ 334,884

Audit Fees: For the fiscal years ended March 31, 2023 and 2022, the aggregate audit fees billed by our independent registered public accounting firm were for professional services rendered for audits and quarterly reviews of our consolidated financial statements, and assistance with reviews of registration statements and documents filed with the SEC.

Audit-Related Fees: For the fiscal years ended March 31, 2023 and 2022, there were no audit-related fees billed by our independent registered public accounting firm, other than the fees described above.

Tax Fees: For the fiscal years ended March 31, 2023 and 2022, the tax-related fees billed by an associated entity of our independent registered public accounting firm pertained to services related to tax return preparation and tax planning services.

All Other Fees: For the fiscal years ended March 31, 2023 and 2022, there were no fees billed by our independent registered public accounting firm for other services, other than the fees described above.

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

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

PART IV

Item 15. Exhibits, Financial Statement Schedules.

(a). The following documents have been filed as part of this Amendment:

1. Consolidated Financial Statements: No financial statements are filed with this Amendment. The financial statements were included in Item 8 of Part II of the Original Form 10-K.
2. Financial Statement Schedules: None.
3. Exhibits: The exhibits listed in the Exhibit Index attached to this report are filed or incorporated by reference as part of this Amendment.

(b). The exhibits listed in the accompanying Exhibit Index are filed or incorporated by reference as part of this Amendment.

EXHIBIT INDEX

<u>Exhibit No.</u>	<u>Description</u>
2.1	<u>Agreement and Plan of Merger and Reorganization, dated as of December 13, 2019, by and among the Company, Opal Merger Sub, Inc. and Tarveda Therapeutics, Inc. (incorporated by reference from Exhibit 2.1 to the Company's Current Report on Form 8-K, as filed with the SEC on December 16, 2019).</u>
2.2	<u>First Amendment to Merger Agreement, dated as of January 26, 2020, by and among the Company, Opal Merger Sub, Inc. and Tarveda Therapeutics, Inc. (incorporated by reference from Exhibit 2.1 to the Company's Current Report on Form 8-K, as filed with the SEC on January 29, 2020).</u>
3.1	<u>Certificate of Incorporation of Organovo Holdings, Inc. (Delaware) (incorporated by reference from Exhibit 3.1 to the Company'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 Company'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 Company's Current Report on Form 8-K as filed with the SEC on August 17, 2020).</u>
3.4**	<u>Amended and Restated Bylaws of Organovo Holdings, Inc., effective as of July 12, 2023.</u>
4.1**	<u>Description of Securities.</u>
10.1+	<u>Organovo, Inc. 2008 Equity Incentive Plan (incorporated by reference from Exhibit 10.14 to the Company's Current Report on Form 8-K, as filed with the SEC on February 13, 2012).</u>
10.2+	<u>Organovo Holdings, Inc. Amended and Restated 2012 Equity Incentive Plan (incorporated by reference from Exhibit 10.1 to the Company's Current Report on Form 8-K, as filed with the SEC on October 6, 2021).</u>
10.3+	<u>Form of Stock Option Award Agreement under the 2012 Equity Incentive Plan (incorporated by reference from Exhibit 10.16 to the Company's Current Report on Form 8-K, as filed with the SEC on February 13, 2012).</u>
10.4+	<u>Form of Indemnification Agreement (incorporated by reference from Exhibit 10.17 to the Company's Current Report on Form 8-K, as filed with the SEC on February 13, 2012).</u>
10.5†	<u>License Agreement dated as of March 24, 2009, by and between Organovo, Inc. and the Curators of the University of Missouri (incorporated by reference from Exhibit 10.23 to the Company's Current Report on Form 8-K, as filed with the SEC on May 11, 2012).</u>
10.6†	<u>License Agreement dated as of March 12, 2010 by and between the Company and the Curators of the University of Missouri (incorporated by reference from Exhibit 10.24 to the Company's Current Report on Form 8-K, as filed with the SEC on May 11, 2012).</u>
10.7†	<u>License Agreement dated as of May 2, 2011, by and between the Company and Clemson University Research Foundation (incorporated by reference from Exhibit 10.25 to the Company's Current Report on Form 8-K, as filed with the SEC on May 11, 2012).</u>
10.8+	<u>Form of Non-Employee Director Stock Option Award Agreement under the 2012 Equity Incentive Plan (incorporated by reference to Exhibit 10.35 to the Company's Annual Report on Form 10-K, as filed with the SEC on June 9, 2015).</u>
10.9+	<u>Form of Executive Stock Option Award Agreement under the 2012 Equity Incentive Plan (incorporated by reference to Exhibit 10.36 to the Company's Annual Report on Form 10-K, as filed with the SEC on June 9, 2015).</u>
10.10+	<u>Organovo Holdings, Inc. Severance and Change in Control Plan (incorporated by reference to Exhibit 10.2 to the Company's Quarterly Report on Form 10-Q, as filed with the SEC on November 9, 2015).</u>

Exhibit No.	Description
10.11+	<u>Amendment to the Organovo Holdings, Inc. Severance and Change in Control Plan, dated May 19, 2020 (incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K, as filed with the SEC on May 20, 2020).</u>
10.12+	<u>Form of Organovo Holdings, Inc. Severance and Change in Control Plan Participation Agreement (incorporated by reference to Exhibit 10.3 to the Company's Quarterly Report on Form 10-Q, as filed with the SEC on November 9, 2015).</u>
10.13+	<u>Form of Restricted Stock Unit Grant Notice and Restricted Stock Unit Agreement (Retention Form) under the 2012 Equity Incentive Plan (incorporated by reference from Exhibit 10.1 to the Company's Quarterly Report on Form 10-Q, as filed with the SEC on August 4, 2016).</u>
10.14+	<u>Form of Employee Restricted Stock Unit Grant Notice and Restricted Stock Unit Agreement under the 2012 Equity Incentive Plan (incorporated by reference from Exhibit 10.3 to the Company's Quarterly Report on Form 10-Q, as filed with the SEC on August 4, 2016).</u>
10.15+	<u>Form of Non-Employee Director Restricted Stock Unit Grant Notice and Restricted Stock Unit Agreement under the 2012 Equity Incentive Plan (incorporated by reference from Exhibit 10.4 to the Company's Quarterly Report on Form 10-Q, as filed with the SEC on August 4, 2016).</u>
10.16+	<u>Organovo Holdings, Inc. 2016 Employee Stock Purchase Plan (incorporated by reference from Exhibit 10.1 to the Company's Current Report on Form 8-K, as filed with the SEC on August 18, 2016).</u>
10.17+	<u>Organovo Holdings, Inc. Inducement Award Stock Option Agreement, dated April 24, 2017 (incorporated by reference from Exhibit 99.1 to the Company's Registration Statement on Form S-8 (File No. 333-217437), as filed with the SEC on April 24, 2017).</u>
10.18+	<u>Organovo Holdings, Inc. Inducement Award Performance-Based Restricted Stock Unit Agreement, dated April 24, 2017 (incorporated by reference from Exhibit 99.2 to the Company's Registration Statement on Form S-8 (File No. 333-217437), as filed with the SEC on April 24, 2017).</u>
10.19+	<u>Organovo Holdings, Inc. Inducement Award Stock Option Agreement, dated August 14, 2018 (incorporated by reference from Exhibit 99.1 to the Company's Registration Statement on Form S-8 (File No. 333-226837), as filed with the SEC on August 14, 2018).</u>
10.20+	<u>Organovo Holdings, Inc. Inducement Award Restricted Stock Unit Agreement, dated August 14, 2018 (incorporated by reference from Exhibit 99.2 to the Company's Registration Statement on Form S-8 (File No. 333-226837), as filed with the SEC on August 14, 2018).</u>
10.21+	<u>Consulting Agreement, dated September 15, 2020, by and between Organovo and Multi Dimensional Bio Insight LLC. (incorporated by reference from Exhibit 10.1 to the Company's Quarterly Report on Form 10-Q, as filed with the SEC on November 5, 2020).</u>
10.22+	<u>Consulting Agreement, dated August 25, 2020, by and between Organovo and Danforth Advisors (incorporated by reference from Exhibit 10.2 to the Company's Quarterly Report on Form 10-Q, as filed with the SEC on November 5, 2020).</u>
10.23+	<u>Amendment No. 5 dated October 4, 2021 to Consulting Agreement dated August 25, 2021 by and between Company and Danforth Advisors LLC (incorporated by reference from Exhibit 10.3 to the Company's Current Report on Form 8-K, as filed with the SEC on October 6, 2021).</u>
10.24+	<u>Offer Letter, dated September 15, 2020, between the Company and Jeffrey N. Miner (incorporated by reference from Exhibit 10.3 to the Company's Quarterly Report on Form 10-Q, as filed with the SEC on November 5, 2020).</u>
10.25+	<u>Engagement Agreement, dated July 23, 2020, by and between Organovo and Optima Law Group of San Diego (incorporated by reference from Exhibit 10.4 to the Company's Quarterly Report on Form 10-Q, as filed with the SEC on November 5, 2020).</u>
10.26	<u>Lease Agreement dated November 23, 2020, between Organovo Holdings, Inc. and San Diego Inspire 1, LLC (Permanent Lease Agreement 176640186.8) (incorporated by reference from Exhibit 10.2 to the Company's Current Report on Form 8-K, as filed with the SEC on November 25, 2020).</u>

Exhibit No.	Description
10.27	<u>Amended and Restated Lease Agreement dated November 23, 2020, between Organovo, Inc., as Tenant, and San Diego Inspire 2, LLC, as Landlord, as amended by First Amendment to Amended & Restated Lease, dated November 17, 2021, between San Diego Inspire 2, LLC, as Landlord, and Organovo, Inc., as Tenant (incorporated by reference from Exhibit 10.1 to the Company's Current Report on Form 8-K, as filed with the SEC on November 19, 2021).</u>
10.28#	<u>Intercompany Agreement, dated December 28, 2020, by and among Organovo Holdings, Inc., Organovo, Inc. and Viscient Biosciences, Inc. (incorporated by reference from Exhibit 10.1 to the Company's Current Report on Form 8-K, as filed with the SEC on December 31, 2020).</u>
10.29+	<u>Offer Letter, dated December 28, 2020, between the Company and Tom Jurgensen (incorporated by reference from Exhibit 10.1 to the Company's Quarterly Report on Form 10-Q, as filed with the SEC on February 8, 2021).</u>
10.30	<u>Sales Agreement, dated March 16, 2018, by and among Organovo Holdings, Inc., H.C. Wainwright & Co., LLC and Jones Trading Institutional Services LLC. (incorporated by reference from Exhibit 10.1 to the Company's Current Report on Form 8-K, as filed with the SEC on March 16, 2018).</u>
10.31+	<u>Organovo Holdings, Inc. 2021 Inducement Equity Incentive Plan (incorporated by reference from Exhibit 10.2 to the Company's Current Report on Form 8-K, as filed with the SEC on March 10, 2021).</u>
10.32+	<u>Form of Stock Option Agreement under the Organovo Holdings, Inc. 2021 Inducement Equity Incentive Plan (incorporated by reference from Exhibit 4.2 to the Company's Registration Statement on Form S-8 (File No. 333-254714), as filed with the SEC on March 25, 2021).</u>
10.33+	<u>Form of Restricted Stock Unit Agreement under the Organovo Holdings, Inc. 2021 Inducement Equity Incentive Plan (incorporated by reference from Exhibit 4.3 to the Company's Registration Statement on Form S-8 (File No. 333-254714), as filed with the SEC on March 25, 2021).</u>
10.34*	<u>Settlement and Patent License Agreement, dated February 22, 2022, by and between Organovo Holdings, Inc. and BICO Group AB.</u>
10.35+	<u>Organovo Holdings, Inc. 2022 Equity Incentive Plan (incorporated by reference from Exhibit 10.1 to the Company's Current Report on Form 8-K, as filed with the SEC on October 14, 2022).</u>
10.36+	<u>Form of Global Stock Option Award Agreement under the Organovo Holdings, Inc. 2022 Equity Incentive Plan (incorporated by reference from Exhibit 4.2 to the Company's Registration Statement on Form S-8 (No. 333-268001), filed with the SEC on October 25, 2022).</u>
10.37+	<u>Form of Global Restricted Stock Unit Award Agreement under the Organovo Holdings, Inc. 2022 Equity Incentive Plan (incorporated by reference from Exhibit 4.2 to the Company's Registration Statement on Form S-8 (No. 333-268001), filed with the SEC on October 25, 2022).</u>
10.38**	<u>Purchase Agreement, dated March 10, 2023, by and between Organovo Holdings, Inc. and Metacrine, Inc.</u>
21.1**	<u>Subsidiaries of Organovo Holdings, Inc.</u>
23.1**	<u>Consent of Independent Registered Public Accounting Firm.</u>
24.1**	<u>Power of Attorney (included on signature page hereto).</u>
31.1**	<u>Certification of Chief Executive Officer Required Under Rule 13a-14(a) and 15d-14(a) of the Securities Exchange Act of 1934, as amended.</u>
31.2**	<u>Certification of Chief Financial Officer Required Under Rule 13a-14(a) and 15d-14(a) of the Securities Exchange Act of 1934, as amended.</u>
31.3*	<u>Certification of Chief Executive Officer Required Under Rule 13a-14(a) and 15d-14(a) of the Securities Exchange Act of 1934, as amended.</u>

Exhibit No.	Description
31.4*	Certification of Chief Financial Officer Required Under Rule 13a-14(a) and 15d-14(a) of the Securities Exchange Act of 1934, as amended.
32.1**	Certifications Required Under Rule 13a-14(b) of the Securities Exchange Act of 1934, as amended, and to 18 U.S.C. Section 1350.
101.INS*	Inline XBRL Instance Document
101.SCH*	Inline XBRL Taxonomy Extension Schema
101.CAL*	Inline XBRL Taxonomy Extension Calculation Linkbase
101.DEF*	Inline XBRL Taxonomy Extension Definition Linkbase
101.LAB*	Inline XBRL Taxonomy Extension Label Linkbase
101.PRE*	Inline XBRL Taxonomy Extension Presentation Linkbase
104	Cover Page Interactive Data File (embedded within the Inline XBRL document)

* Filed herewith.

** Previously filed with the Original Form 10-K.

+ Designates management contracts and compensation plans.

† This Exhibit has been filed separately with the Secretary of the Securities and Exchange Commission without the redaction pursuant to a Confidential Treatment Request under Rule 24b-2 of the Securities Exchange Act of 1934, as amended.

Certain identified information has been omitted pursuant to Item 601(b)(10) of Regulation S-K because such information is both (i) not material and (ii) would likely cause competitive harm to the Registrant if publicly disclosed. The Registrant hereby undertakes to furnish supplemental copies of the unredacted exhibit upon request by the Securities and Exchange Commission.

SIGNATURES

Pursuant to the requirements of the Section 13 or 15(d) of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

ORGANOVO HOLDINGS, INC.

By: /s/ Keith Murphy
Keith Murphy
Executive Chairman

Date: July 31, 2023

CERTIFICATION PURSUANT TO SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002

I, Keith Murphy, Executive Chairman of Organovo Holdings, Inc., certify that:

1. I have reviewed this Amendment No. 1 to the Annual Report on Form 10-K of Organovo Holdings, Inc.; and
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report.

Dated: July 31, 2023

/s/ Keith Murphy

Keith Murphy

Executive Chairman

CERTIFICATION PURSUANT TO SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002

I, Thomas Hess, Chief Financial Officer of Organovo Holdings, Inc., certify that:

1. I have reviewed this Amendment No. 1 to the Annual Report on Form 10-K of Organovo Holdings, Inc.; and
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report.

Dated: July 31, 2023

/s/ Thomas Hess

Thomas Hess

Chief Financial Officer

(Principal Financial Officer)
