

**UNITED STATES
SECURITIES AND EXCHANGE COMMISSION**

Washington, DC 20549

Form 10-Q

QUARTERLY REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the quarterly period ended September 30, 2015

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 Number 001-35996

Organovo Holdings, Inc.

(Exact name of registrant as specified in its charter)

Delaware

(State or other jurisdiction of
incorporation or organization)

6275 Nancy Ridge Drive, Suite 110,
San Diego, CA 92121

(Address of principal executive offices and zip code)

27-1488943

(I.R.S. Employer
Identification No.)

(858) 224-1000

(Registrant's telephone number, including area code)

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 and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted 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 and post such files). Yes No

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

Large accelerated filer	<input type="checkbox"/>	Accelerated filer	<input checked="" type="checkbox"/>
Non-accelerated filer	<input type="checkbox"/> (Do not check if a smaller reporting company)	Smaller reporting company	<input type="checkbox"/>

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

As of October 30, 2015, a total of 92,413,710 shares of the registrant's Common Stock, \$0.001 par value, were outstanding.

INDEX

PART I. FINANCIAL INFORMATION

Item 1.	<u>Financial Statements</u>	3
	<u>Condensed Consolidated Balance Sheets as of September 30, 2015 (Unaudited) and March 31, 2015 (Audited)</u>	3
	<u>Unaudited Condensed Consolidated Statements of Operations for the Three and Six Months Ended September 30, 2015 and 2014</u>	4
	<u>Unaudited Condensed Consolidated Statements of Cash Flows for the Six Months Ended September 30, 2015 and 2014</u>	5
	<u>Notes to Unaudited Condensed Consolidated Financial Statements</u>	7
Item 2.	<u>Management’s Discussion and Analysis of Financial Condition and Results of Operations</u>	20
Item 3.	<u>Quantitative and Qualitative Disclosures About Market Risk</u>	26
Item 4.	<u>Controls and Procedures</u>	26

PART II. OTHER INFORMATION

Item 1.	<u>Legal Proceedings</u>	27
Item 1A.	<u>Risk Factors</u>	27
Item 2.	<u>Unregistered Sales of Equity Securities and Use of Proceeds</u>	27
Item 3.	<u>Defaults Upon Senior Securities</u>	27
Item 4.	<u>Mine Safety Disclosure</u>	27
Item 5.	<u>Other Information</u>	27
Item 6.	<u>Exhibits</u>	29

ITEM 1. FINANCIAL STATEMENTS

Organovo Holdings, Inc.
Condensed Consolidated Balance Sheets
(in thousands except for share data)

	September 30, 2015	March 31, 2015
	(Unaudited)	(Audited)
Assets		
Current Assets		
Cash and cash equivalents	\$ 76,863	\$ 50,142
Accounts receivable	180	—
Inventory	68	66
Prepaid expenses and other current assets	714	1,054
Total current assets	77,825	51,262
Fixed assets, net	3,633	2,042
Restricted cash	79	79
Other assets, net	139	106
Total assets	<u>\$ 81,676</u>	<u>\$ 53,489</u>
Liabilities and Stockholders' Equity		
Current Liabilities		
Accounts payable	\$ 567	\$ 1,387
Accrued expenses	2,421	2,257
Deferred rent	1,112	759
Deferred revenue	1,402	227
Capital lease obligation	—	5
Warrant liabilities	16	126
Total current liabilities	5,518	4,761
Deferred revenue, net of current portion	7	32
Capital lease obligation, net of current portion	—	—
Total liabilities	\$ 5,525	\$ 4,793
Commitments and Contingencies (Note 4)		
Stockholders' Equity		
Common stock, \$0.001 par value; 150,000,000 shares authorized, 92,327,772 and 81,536,724 shares issued and outstanding at September 30, 2015 and March 31, 2015, respectively	92	82
Additional paid-in capital	218,102	170,909
Accumulated deficit	(142,043)	(122,295)
Total stockholders' equity	76,151	48,696
Total Liabilities and Stockholders' Equity	<u>\$ 81,676</u>	<u>\$ 53,489</u>

The accompanying notes are an integral part of these condensed consolidated financial statements.

Organovo Holdings, Inc.
Unaudited Condensed Consolidated Statements of Operations
(in thousands except share and per share data)

	Three Months Ended September 30, 2015	Three Months Ended September 30, 2014	Six Months Ended September 30, 2015	Six Months Ended September 30, 2014
Revenues				
Product and service	\$ 187	—	\$ 396	—
Collaborations	19	45	33	114
Grants	95	5	178	35
Total Revenues	301	50	607	149
Selling, general, and administrative expenses	6,846	5,777	11,468	9,472
Research and development expenses	4,739	3,229	8,881	6,043
Loss from Operations	(11,284)	(8,956)	(19,742)	(15,366)
Other Income (Expense)				
Change in fair value of warrant liabilities	9	94	(28)	64
Loss on disposals of fixed assets	—	(3)	—	(3)
Interest income	18	7	25	14
Total Other Income (Expense)	27	98	(3)	75
Income Tax Expense	—	—	(3)	—
Net Loss	\$ (11,257)	\$ (8,858)	\$ (19,748)	\$ (15,291)
Net loss per common share—basic and diluted	\$ (0.12)	\$ (0.11)	\$ (0.23)	\$ (0.19)
Weighted average shares used in computing net loss per common share—basic and diluted	92,385,150	78,933,884	87,715,217	78,589,521

The accompanying notes are an integral part of these condensed consolidated financial statements.

Organovo Holdings, Inc.
Unaudited Condensed Consolidated Statements of Cash Flows
(in thousands)

	Six Months Ended September 30, 2015	Six Months Ended September 30, 2014
Cash Flows From Operating Activities		
Net loss	\$ (19,748)	\$ (15,291)
Adjustments to reconcile net loss to net cash used in operating activities:		
Loss on disposal of fixed assets	—	3
Depreciation and amortization	324	208
Change in fair value of warrant liabilities	28	(64)
Stock-based compensation	3,952	3,634
Amortization of warrants issued for services	(105)	469
Increase (decrease) in cash resulting from changes in:		
Accounts receivable	(180)	(30)
Inventory	(2)	(7)
Prepaid expenses and other assets	337	113
Accounts payable	(820)	204
Accrued expenses	164	737
Deferred rent	(21)	223
Deferred revenue	1,150	124
Net cash used in operating activities	<u>(14,921)</u>	<u>(9,677)</u>
Cash Flows From Investing Activities		
Purchases of fixed assets	(1,550)	(576)
Proceeds from disposals of fixed assets	14	—
Purchases of intangible assets	(35)	-
Net cash used in investing activities	<u>(1,571)</u>	<u>(576)</u>
Cash Flows From Financing Activities		
Proceeds from issuance of common stock and exercise of warrants, net	43,137	16,291
Proceeds from exercise of stock options	81	188
Principal payments on capital lease obligations	(5)	(4)
Net cash provided by financing activities	<u>43,213</u>	<u>16,475</u>
Net Increase (Decrease) in Cash and Cash Equivalents	26,721	6,222
Cash and Cash Equivalents at Beginning of Period	50,142	48,167
Cash and Cash Equivalents at End of Period	<u>\$ 76,863</u>	<u>\$ 54,389</u>
Supplemental Disclosure of Cash Flow Information:		
Interest	\$ —	\$ —
Income Taxes	\$ (3)	\$ —

The accompanying notes are an integral part of these condensed consolidated financial statements.

Supplemental Disclosure of Noncash Investing and Financing Activities (\$ in thousands):

During the six months ended September 30, 2015 and 2014, the warrant liability was reduced by approximately \$138 and \$55, respectively, as a result of warrant exercises.

During the six months ended September 30, 2015 and 2014, approximately \$374 and \$47, respectively, of leasehold improvements were funded by the Company's landlord as a lease incentive. The Company capitalized these costs as property, plant and equipment, with a corresponding increase in deferred rent that will be amortized over the remaining lease term.

The accompanying notes are an integral part of these condensed consolidated financial statements.

Notes to Unaudited Condensed Consolidated Financial Statements

Note 1. Description of Business and Summary of Significant Accounting Policies

Nature of operations and basis of presentation

References in these notes to the unaudited condensed consolidated financial statements to “Organovo Holdings, Inc.,” “Organovo Holdings,” “we,” “us,” “our,” “the Company” and “our Company” refer to Organovo Holdings, Inc. and its consolidated subsidiaries. The Company is an early commercial stage company, focused on developing and commercializing functional three-dimensional (3D) human tissues that can be employed in drug discovery and development, biological research, and as therapeutic implants for the treatment of damaged or degenerating tissues and organs.

Since its inception, the Company has devoted its efforts primarily to developing and commercializing a platform technology and functional human tissues that can be employed in drug discovery and development, biological research, and as therapeutic implants for the treatment of damaged or degenerating tissues and organs. The Company has also focused efforts on raising capital and building infrastructure. In November 2014, the Company announced the full commercial release of its first product, the exVive3D™ Human Liver Tissue for use in toxicology and other preclinical drug testing. As of September 30, 2015, the Company has not yet realized significant revenues from its planned principal operations. The Company’s activities are subject to significant risks and uncertainties including failing to successfully develop products and services based on its technology and to achieve the market acceptance necessary to generate sufficient revenues and to achieve and sustain profitability.

The accompanying interim condensed consolidated financial statements have been prepared by the Company, without audit, in accordance with the instructions to Form 10-Q and, therefore, do not necessarily include all information and footnotes necessary for a fair statement of its financial position, results of operations, stockholders’ equity and cash flows in accordance with generally accepted accounting principles (“GAAP”). The balance sheet at March 31, 2015 is derived from the Company’s audited balance sheet at that date.

In the opinion of management, the unaudited financial information for the interim periods presented reflects all adjustments, which are only normal and recurring, necessary for a fair statement of the Company’s financial position, results of operations, stockholders’ equity and cash flows. These financial statements should be read in conjunction with the financial statements included in the Company’s Annual Report filed on Form 10-K for the year ended March 31, 2015 filed with the Securities and Exchange Commission (the “SEC”) on June 9, 2015. Operating results for interim periods are not necessarily indicative of operating results for the Company’s fiscal year ending March 31, 2016.

NYSE MKT Listing

On July 9, 2013, the Company announced that its common stock had been approved for listing on the NYSE MKT. Shares began trading on the NYSE MKT on July 11, 2013 under the symbol “ONVO”. Prior to that time, the Company’s shares were quoted on the OTC QX.

Liquidity

As of September 30, 2015, the Company had an accumulated deficit of approximately \$142.0 million. The Company also had negative cash flows from operations of approximately \$14.9 million during the six months ended September 30, 2015.

Through September 30, 2015, the Company has financed its operations primarily through the sale of convertible notes, the private placement of equity securities, the public offering of common stock, and through revenue derived from grants, product sales, collaborative research agreements and research service agreements. Based on its current operating plan and available cash resources, the Company has sufficient resources to fund its business for at least the next twelve months.

On June 23, 2015, the Company closed an underwritten public offering in which it sold an aggregate of 10,838,750 shares of common stock and raised gross proceeds of approximately \$46.1 million. The Company’s future capital needs will depend on the revenues it generates through its commercialization efforts and the cash it elects to spend to pursue its product development efforts and implement its business plan. As a result, the Company cannot predict with certainty when it may be required to secure additional capital to fund its future operations.

The Company intends to cover its future operating expenses through cash on hand, through revenue derived from grants, product sales, collaborative research agreements and research services agreements and through the issuance of additional equity or debt securities. Depending on market conditions, we cannot be sure that additional financing will be available when needed or that, if available, financing will be obtained on terms favorable to us or to our stockholders.

Having insufficient funds may require us to delay, scale back, or eliminate some or all of our development programs or relinquish rights to our technology on less favorable terms than we would otherwise choose. Failure to obtain adequate financing could eventually adversely affect our ability to operate as a going concern. If we raise additional funds from the issuance of equity securities, substantial dilution to our existing stockholders would likely result. If we raise additional funds by incurring debt financing, the terms of the debt may involve significant cash payment obligations as well as covenants and specific financial ratios that may restrict our ability to operate our business.

Use of estimates

The preparation of the financial statements in conformity with accounting principles generally accepted in the United States requires management to make estimates and assumptions that affect certain reported amounts and disclosures. Accordingly, actual results could differ from those estimates. Significant estimates used in preparing the condensed consolidated financial statements include those assumed in computing the valuation of warrants, revenue recognized under the proportional performance model, the valuation of stock-based compensation expense, and the valuation allowance on deferred tax assets.

Financial instruments

For certain of the Company's financial instruments, including cash and cash equivalents, accounts receivable, inventory, prepaid expenses and other current assets, accounts payable, accrued expenses, deferred revenue and capital lease obligations, the carrying amounts are generally considered to be representative of their respective fair values because of the short-term nature of those instruments.

Cash and cash equivalents

The Company considers all highly liquid investments with original maturities of 90 days or less to be cash equivalents.

Derivative financial instruments

The Company does not use derivative instruments to hedge exposures to cash flow, market or foreign currency.

The Company reviews the terms of convertible debt and equity instruments it issues to determine whether there are derivative instruments, including an embedded conversion option that is required to be bifurcated and accounted for separately as a derivative financial instrument. In circumstances where a host instrument contains more than one embedded derivative instrument, including a conversion option, that is required to be bifurcated, the bifurcated derivative instruments are accounted for as a single, compound derivative instrument. Also, in connection with the sale of convertible debt and equity instruments, the Company may issue freestanding warrants that may, depending on their terms, be accounted for as derivative instrument liabilities, rather than as equity.

Derivative instruments are initially recorded at fair value and are then revalued at each reporting date with changes in the fair value reported as non-operating income or expense. When the convertible debt or equity instruments contain embedded derivative instruments that are to be bifurcated and accounted for as liabilities, the total proceeds allocated to the convertible host instruments are first allocated to the fair value of all the bifurcated derivative instruments. The remaining proceeds, if any, are then allocated to the convertible instruments themselves, usually resulting in those instruments being recorded at a discount from their face value.

The discount from the face value of the convertible debt, together with the stated interest on the instrument, is amortized over the life of the instrument through periodic charges to interest expense, using the effective interest method.

Restricted cash

As of September 30, 2015 and March 31, 2015, the Company had approximately \$78,800 of restricted cash deposited with a financial institution. The entire amount is held in certificates of deposit to support a letter of credit agreement related to the Company's facility lease.

Inventory

Inventories are stated at the lower of the cost or market (first-in, first-out). Inventory consisted of approximately \$68,000 and \$66,000 in raw materials as of September 30, 2015 and March 31, 2015, respectively, net of reserves. The Company provides inventory allowances based on excess or obsolete inventories determined based on anticipated use in the final product. The reserve for obsolete inventory at September 30, 2015 and March 31, 2015 was approximately \$32,000 and \$31,000, respectively.

Fixed assets and depreciation

Property and equipment are carried at cost. Expenditures that extend the life of the asset are capitalized and depreciated. Depreciation and amortization are provided using the straight-line method over the estimated useful lives of the related assets or, in the case of leasehold improvements, over the lesser of the useful life of the related asset or the remaining lease term. The estimated useful lives of the fixed assets range between three and seven years.

Impairment of long-lived assets

In accordance with authoritative guidance, the Company reviews its long-lived assets, including property and equipment and other assets, for impairment whenever events or changes in circumstances indicate that the carrying amounts of the assets may not be fully recoverable. To determine recoverability of its long-lived assets, the Company evaluates whether future undiscounted net cash flows will be less than the carrying amount of the assets and adjusts the carrying amount of its assets to fair value. Management has determined that no impairment of long-lived assets has occurred through September 30, 2015.

Fair value measurement

Financial assets and liabilities are measured at fair value, which is defined as the exchange price that would be received for an asset or paid to transfer a liability (an exit price) in the principal or most advantageous market for the asset or liability in an orderly transaction between market participants on the measurement date. Valuation techniques used to measure fair value must maximize the use of observable inputs and minimize the use of unobservable inputs. The following is a fair value hierarchy based on three levels of inputs, of which the first two are considered observable and the last unobservable, that may be used to measure fair value:

- Level 1 — Quoted prices in active markets for identical assets or liabilities.
- Level 2 — Inputs other than Level 1 that are observable, either directly or indirectly, such as quoted prices for similar assets or liabilities; quoted prices in markets that are not active; or other inputs that are observable or can be corroborated by observable market data for substantially the full term of the assets or liabilities.
- Level 3 — Unobservable inputs that are supported by little or no market activity and that are significant to the fair value of the assets or liabilities.

The Company has issued warrants, of which some are classified as derivative liabilities as a result of the terms in the warrants that provide for down-round protection in the event of a dilutive issuance. The Company uses Level 3 inputs for its valuation methodology for the warrant derivative liabilities. The estimated fair values were determined using a Monte Carlo option pricing model based on various assumptions (see Note 2). The Company's derivative liabilities are adjusted to reflect estimated fair value at each period end, with any decrease or increase in the estimated fair value being recorded in other income or expense accordingly, as adjustments to the fair value of derivative liabilities. Various factors are considered in the pricing models the Company uses to value the warrants, including the Company's current stock price, the remaining life of the warrants, the volatility of the Company's stock price, and the risk-free interest rate. Future changes in these factors may have an impact on the computed fair value of the warrant liability.

The estimated fair values of the liabilities measured on a recurring basis are as follows:

	Fair Value Measurements at September 30 and March 31, 2015 (in thousands):			
	Balance at September 30, 2015	Quoted Prices in Active Markets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Other Unobservable Inputs (Level 3)
Warrant liability	\$ 16	—	—	\$ 16
	Balance at March 31, 2015	Quoted Prices in Active Markets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Other Unobservable Inputs (Level 3)
Warrant liability	\$ 126	—	—	\$ 126

The following table presents the activity for liabilities measured at estimated fair value using unobservable inputs for the six months ended September 30, 2015:

Fair Value Measurements Using Significant Unobservable Inputs (Level 3)

	Warrant Derivative Liability (in thousands)
Balance at March 31, 2015	\$ 126
Issuances	—
Adjustments to estimated fair value	28
Warrant liability removal due to settlements	(138)
Warrant liability reclassified to equity	—
Balance at September 30, 2015	\$ 16

Research and development

Research and development expenses, including direct and allocated expenses, consist of independent research and development costs, as well as costs associated with sponsored research and development. Research and development costs are expensed as incurred.

Income taxes

Deferred income taxes are recognized for the tax consequences in future years for differences between the tax basis of assets and liabilities and their financial reporting amounts at each year end based on enacted tax laws and statutory tax rates applicable to the periods in which the differences are expected to affect taxable income. Valuation allowances are established when necessary to reduce deferred tax assets to the amount expected to be realized. Income tax expense is the combination of the tax payable for the year and the change during the year in deferred tax assets and liabilities.

Revenue recognition

The Company's revenues are derived from research service agreements, product sales, collaborative research agreements, and grants from the National Institutes of Health ("NIH"), U.S. Treasury Department and private not-for-profit organizations.

The Company recognizes revenue when the following criteria have been met: (i) persuasive evidence of an arrangement exists; (ii) services have been rendered or product has been delivered; (iii) price to the customer is fixed and determinable; and (iv) collection of the underlying receivable is reasonably assured.

Billings to customers or payments received from customers are included in deferred revenue on the balance sheet until all revenue recognition criteria are met. As of September 30, 2015 and March 31, 2015, the Company had approximately \$1,409,000 and \$259,000, respectively, in deferred revenue related to its grants, collaborative research programs and research service agreements.

Revenue arrangements with multiple deliverables

The Company follows ASC 605-25 *Revenue Recognition – Multiple-Element Arrangements* for revenue arrangements that contain multiple deliverables. Judgment is required to properly identify the accounting units of the multiple deliverable transactions and to determine the manner in which revenue should be allocated among the accounting units. Moreover, judgment is used in interpreting the commercial terms and determining when all criteria of revenue recognition have been met for each deliverable in order for revenue recognition to occur in the appropriate accounting period. For multiple deliverable agreements, consideration is allocated at the inception of the agreement to all deliverables based on their relative selling price. The relative selling price for each deliverable is determined using vendor-specific objective evidence (“VSOE”) of selling price or third-party evidence of selling price if VSOE does not exist. If neither VSOE nor third-party evidence of selling price exists, the Company uses its best estimate of the selling price for the deliverable.

While changes in the allocation of the arrangement consideration between the units of accounting will not affect the amount of total revenue recognized for a particular sales arrangement, any material changes in these allocations could impact the timing of revenue recognition, which could affect the Company’s results of operations.

The Company periodically receives license fees for non-exclusive research licensing associated with funded research projects. License fees under these arrangements are recognized over the term of the contract or development period as it has been determined that such licenses do not have stand-alone value.

Product revenue

The Company recognizes product revenue at the time of shipment to the customer, provided all other revenue recognition criteria have been met. To date, the Company has not recognized significant revenue from commercial product sales.

As our commercial sales increase, we expect to establish a reserve for estimated product returns that will be recorded as a reduction to revenue. This reserve will be maintained to account for future return of products sold in the current period. The reserve will be reviewed quarterly and will be estimated based on an analysis of our historical experience related to product returns.

Revenue from research service agreements

For research service agreements that contain only a single or primary deliverable, the Company defers any up-front fees collected from customers, and recognizes revenue for the delivered element only when it determines there are no uncertainties regarding customer acceptance. For agreements that contain multiple deliverables, the Company follows ASC 605-25 as described above. During the six months ended September 30, 2015, the Company received a \$1,000,000 up-front fee from a customer. As there were no delivered elements during the first two quarters, this amount remains in deferred revenue as of September 30, 2015.

Research and development revenue under collaborative agreements

The Company’s collaboration revenue consists of license and collaboration agreements that contain multiple elements, including non-refundable up-front fees, payments for reimbursement of third-party research costs, payments for ongoing research, payments associated with achieving specific development milestones and royalties based on specified percentages of net product sales, if any. The Company considers a variety of factors in determining the appropriate method of revenue recognition under these arrangements, such as whether the elements are separable, whether there are determinable fair values and whether there is a unique earnings process associated with each element of a contract.

The Company recognizes revenue from research funding under collaboration agreements when earned on a “proportional performance” basis as research services are provided or substantive milestones are achieved. We recognize revenue that is contingent upon the achievement of a substantive milestone in its entirety in the period in which the milestone is achieved. A milestone is considered substantive when the consideration payable to us for the milestone (i) is consistent with our performance necessary to achieve the milestone or the increase in value to the collaboration resulting from our performance, (ii) relates solely to our past performance and (iii) is reasonable relative to all of the other deliverables and payments within the arrangement. In making this assessment, we consider all facts and circumstances relevant to the arrangement, including factors such as the risks that must be overcome to achieve the milestone, the level of effort and investment required to achieve the milestone and whether any portion of the milestone consideration is related to future performance or deliverables.

The Company initially defers revenue for any amounts billed or payments received in advance of the services being performed, and recognizes revenue pursuant to the related pattern of performance, using the appropriate method of revenue recognition based on its analysis of the related contractual element(s).

Grant revenues

During August 2013, the Company was awarded a research grant by a private, not-for-profit organization for up to \$251,700, contingent on go/no-go decisions made by the grantor at the completion of each stage of research as outlined in the grant award. Revenues from the grant are based upon internal costs incurred that are specifically covered by the grant, plus an additional rate that provides funding for overhead expenses. Revenue is recognized when the Company incurs expenses that are related to the grant. Revenue recognized under this grant was approximately \$21,000 and \$30,000 for the three and six months ended September 30, 2015, respectively. Revenue recognized under this grant was approximately \$5,000 and \$35,000 for the three and six months ended September 30, 2014, respectively.

During September 2014, the NIH awarded the Company a research grant totaling approximately \$222,000. The grant provides for fixed payments based on the achievement of certain milestones. As such, revenue will be recognized upon completion of substantive milestones. Revenue recognized under this grant was approximately \$74,000 and \$148,000 for the three and six months ended September 30, 2015, respectively. Grant activities did not commence until the third quarter of fiscal 2015 and therefore no revenue was recognized under this grant as of September 30, 2014.

Stock-based compensation

The Company accounts for stock-based compensation in accordance with the Financial Accounting Standards Board's ("FASB") ASC Topic 718, *Compensation — Stock Compensation*, which establishes accounting for equity instruments exchanged for employee services. Under such provisions, stock-based compensation cost is measured at the grant date, based on the calculated fair value of the award, and is recognized as an expense, under the straight-line method, over the employee's requisite service period (generally the vesting period of the equity grant).

The Company accounts for equity instruments, including restricted stock or stock options, issued to non-employees in accordance with authoritative guidance for equity based payments to non-employees. Stock options issued to non-employees are accounted for at their estimated fair value determined using the Black-Scholes option-pricing model. The fair value of options granted to non-employees is re-measured as they vest, and the resulting increase in value, if any, is recognized as expense during the period the related services are rendered. Restricted stock issued to non-employees is accounted for at its estimated fair value as it vests.

Comprehensive income (loss)

Comprehensive income (loss) is defined as the change in equity during a period from transactions and other events and circumstances from non-owner sources. The Company is required to record all components of comprehensive income (loss) in the financial statements in the period in which they are recognized. Net income (loss) and other comprehensive income (loss), including unrealized gains and losses on investments, are reported, net of their related tax effect, to arrive at comprehensive income (loss). For the three and six months ended September 30, 2015 and 2014, respectively, the comprehensive loss was equal to the net loss.

Net loss per share

Basic and diluted net loss per share has been computed using the weighted-average number of shares of common stock outstanding during the period. The weighted-average number of shares used to compute diluted loss per share excludes any assumed exercise of stock options and warrants, the assumed release of restriction of restricted stock units, and shares subject to repurchase as the effect would be anti-dilutive. No dilutive effect was calculated for the three and six months ended September 30, 2015 or 2014, as the Company reported a net loss for each respective period and the effect would have been anti-dilutive. Common stock equivalents excluded from computing diluted net loss per share were approximately 10.5 million for the three and six months ended September 30, 2015, and 7.9 million for the three and six months ended September 30, 2014.

Note 2. Derivative Liability

During 2011 and 2012, the Company issued five-year warrants to purchase its common stock. For certain of these warrants, the exercise price is protected against down-round financing throughout the term of the warrant. Pursuant to ASC 815-15 and ASC 815-40, the fair value of the warrants was recorded as a derivative liability on the issuance dates.

The Company revalues the warrants classified as derivative liabilities as of the end of each reporting period. The estimated fair value of the outstanding warrant liabilities was less than \$0.1 million and approximately \$0.1 million as of September 30, 2015 and March 31, 2015, respectively. The changes in fair value of the derivative liabilities were decreases of approximately \$9,000 and \$94,000 for the three months ended September 30, 2015 and 2014, respectively, and an increase of approximately \$28,000 and a decrease of approximately \$64,000 for the six months ended September 30, 2015 and 2014, respectively, and are included in other income (expense) in the statements of operations.

During the three months ended September 30, 2015 and 2014, no warrants that were classified as derivative liabilities were exercised. During the six months ended September 30, 2015 and 2014, 38,234 and 8,647 warrants, respectively, that were classified as derivative liabilities were exercised. The warrants were revalued as of the settlement dates, and the change in fair value was recognized to earnings.

The derivative liabilities were valued at the end of each reporting period using a Monte Carlo valuation model with the following assumptions:

	September 30, 2015	March 31, 2015	September 30, 2014
Closing price per share of common stock	\$ 2.68	\$ 3.54	\$ 6.37
Exercise price per share	\$ 1.00	\$ 1.00	\$ 1.00
Expected volatility	71.60%	76.80%	76.50%
Risk-free interest rate	0.33%	0.56%	0.58%
Dividend yield	—	—	—
Remaining expected term of underlying securities (years)	1.46	1.96	2.46

Note 3. Stockholders' Equity

Common stock

The Company filed a shelf registration statement on Form S-3 (File No. 333-189995), or the 2013 Shelf, with the SEC on July 17, 2013 authorizing the offer and sale in one or more offerings of up to \$100,000,000 in aggregate of common stock, preferred stock, debt securities, or warrants to purchase common stock, preferred stock or debt securities, or any combination of the foregoing, either individually or as units comprised of one or more of the other securities. This 2013 Shelf was declared effective by the SEC on July 26, 2013.

In May 2008, the Board of Directors of the Company approved the 2008 Equity Incentive Plan (the "2008 Plan"). The 2008 Plan authorized the issuance of up to 1,521,584 common shares for awards of incentive stock options, non-statutory stock options, restricted stock awards, restricted stock award units, and stock appreciation rights. The 2008 Plan terminates on July 1, 2018. No shares have been issued under the 2008 Plan since 2011, and the Company does not intend to issue any additional shares from the 2008 Plan in the future.

In January 2012, the Board of Directors of the Company approved the 2012 Equity Incentive Plan (the "2012 Plan"). The 2012 Plan authorized the issuance of up to 6,553,986 shares of common stock for awards of incentive stock options, non-statutory stock options, stock appreciation rights, restricted stock, restricted stock units, performance units, performance shares, and other stock or cash awards. The Board of Directors and stockholders of the Company approved an amendment to the 2012 Plan in August 2013 to increase the number of shares of common stock that may be issued under the 2012 Plan by 5,000,000 shares. In addition, the Board of Directors and stockholders of the Company approved an amendment to the 2012 Plan in August 2015 to further increase the number of common stock that may be issued under the 2012 Plan by 6,000,000 shares, bringing the aggregate shares issuable under the 2012 Plan to 17,553,986. The 2012 Plan as amended and restated became effective on August 20, 2015 and terminates ten years after such date.

On August 2, 2013, the Company, entered into an Underwriting Agreement with Lazard Capital Markets LLC, acting as representative of the underwriters named in the Underwriting Agreement and joint book-runner with Oppenheimer & Co. Inc., relating to the issuance and sale of 10,350,000 shares of the Company's common stock, which includes the issuance and sale of 1,350,000 shares pursuant to an overallotment option exercised by the Underwriters on August 5, 2013 (the "2013 Offering"). JMP Securities LLC and Maxim Group LLC each acted as co-managers for the 2013 Offering. The price to the public in the 2013 Offering was \$4.50 per share, and the Underwriters purchased the shares from the Company pursuant to the Underwriting Agreement at a price of \$4.23 per share. The net proceeds to the Company from the 2013 Offering were approximately \$43.4 million, after deducting underwriting discounts and commissions and other offering expenses of \$3.2 million payable by the Company, including the Underwriters' exercise of the overallotment option. The transactions contemplated by the Underwriting Agreement closed on August 7, 2013.

In November 2013, the Company entered into an equity distribution agreement with an investment banking firm. Under the terms of the distribution agreement, the Company may offer and sell up to 4,000,000 shares of its common stock, from time to time, through the investment bank in "at the market" offerings, as defined by the SEC, and pursuant to the 2013 Shelf. During the three and six months ended September 30, 2015, the Company issued no shares of common stock in at the market offerings under the distribution agreement. During the three and six months ended September 30, 2014, the Company issued 2,197,768 shares of common stock in at the market offerings under the distribution agreement with net proceeds of \$16.1 million. As of September 30, 2015, the Company has

issued 2,532,180 shares of common stock in at the market offerings under the distribution agreement, with net proceeds of \$19.6 million.

In December 2014, the Company entered into an equity offering sales agreement with another investment banking firm. Under the terms of the sales agreement, the Company may offer and sell shares of its common stock, from time to time, through the investment bank in “at the market” offerings, as defined by the SEC, and pursuant to the 2013 Shelf. During the three and six months ended September 30, 2015, the Company issued no shares of common stock in at the market offerings under the sales agreement. As of September 30, 2015, the Company sold 1,000,000 shares of common stock in at the market offerings under the sales agreement, with net proceeds of approximately \$6.2 million.

The Company will limit future sales under the 2013 distribution agreement and the 2014 sales agreement to ensure that it does not exceed the maximum amount available for sale under its 2013 Shelf. Based on its use of the 2013 Shelf through September 30, 2015, the Company cannot sell more than an aggregate of \$26,777,785 in shares of common stock under the 2013 distribution agreement and the 2014 sales agreement.

The Company filed a second shelf registration statement on Form S-3 (File No. 333-202382), or the 2015 Shelf, with the SEC on February 27, 2015 authorizing the offer and sale in one or more offerings of up to \$190,000,000 in aggregate of common stock, preferred stock, debt securities, warrants to purchase common stock, preferred stock or debt securities, or any combination of the foregoing, either individually or as units comprising one or more of the other securities. This shelf was declared effective by the SEC on March 17, 2015.

On June 18, 2015, the Company entered into an Underwriting Agreement with Jefferies LLC and Piper Jaffray & Co., acting as representatives of the underwriters named in the 2015 Underwriting Agreement and as joint book-running managers, relating to the issuance and sale of 9,425,000 shares of the Company’s common stock, par value \$0.001 per share (the “2015 Offering”). The price to the public in the 2015 Offering was \$4.25 per share, and the Underwriters have agreed to purchase the shares from the Company pursuant to the 2015 Underwriting Agreement at a price of \$3.995 per share. Under the terms of the 2015 Underwriting Agreement, the Company granted the Underwriters an option, exercisable for 30 days, to purchase up to an additional 1,413,750 shares. The Company issued 10,838,750 shares of common stock pursuant to the 2015 Underwriting Agreement, including shares issuable upon the exercise of the over-allotment option, with net proceeds of approximately \$43.1 million, after deducting underwriting discounts and commissions and expenses payable by the Company. The shares were issued pursuant to the 2015 Shelf.

No warrants were exercised during the three months ended September 30, 2015 and 2014. During the six months ended September 30, 2015 and 2014, the Company issued 30,186 and 110,600 shares of common stock upon exercise of 38,234 and 111,647 warrants, respectively.

Finally, during the three months ended September 30, 2015 and 2014, the Company issued 2,060 and 28,224 shares of common stock upon exercise of 2,060 and 28,224 stock options, respectively. During the six months ended September 30, 2015 and 2014, the Company issued 27,563 and 88,746 shares of common stock upon exercise of 27,563 and 88,746 stock options, respectively.

Restricted stock awards

During the three months ended September 30, 2015 and 2014, there were 100,692 and 103,804 shares of restricted stock, respectively, cancelled related to shares of common stock returned to the Company, at the option of the holders, to cover the tax liability related to the vesting of 187,500 and 190,000 restricted stock units, respectively. During the six months ended September 30, 2015 and 2014, there were 102,951 and 106,105 shares of restricted stock, respectively, cancelled related to shares of common stock returned to the Company, at the option of the holders, to cover the tax liability related to the vesting of 193,750 and 196,250 restricted stock units, respectively. Upon the return of the common stock, an equal number of stock options with immediate vesting were granted to the individuals at the vesting date market value strike price. A summary of the Company’s restricted stock award activity from March 31, 2015 through September 30, 2015 is as follows:

	Number of Shares
Unvested at March 31, 2015	258,750
Granted	—
Vested	(193,750)
Canceled / forfeited	(2,500)
Unvested at September 30, 2015	62,500

The fair value of each restricted common stock award is recognized as stock-based compensation expense over the vesting term of the award. The Company recorded restricted stock-based compensation expense in operating expenses for employees and non-employees of approximately \$74,000 and \$134,000 for the three months ended September 30, 2015 and 2014, respectively, and approximately \$177,000 and \$267,000 for the six months ended September 30, 2015 and 2014, respectively. Stock-based compensation expense included in research and development was \$3,000 and \$4,000 for the three months ended September 30, 2015 and 2014, respectively, and \$3,000 and \$8,000 for the six months ended September 30, 2015 and 2014, respectively. Stock-based compensation expense included in general and administrative expense was \$71,000 and \$130,000 for the three months ended September 30, 2015 and 2014, respectively and \$174,000 and \$259,000 for the six months ended September 30, 2015 and 2014, respectively.

As of September 30, 2015, total unrecognized restricted stock-based compensation expense was approximately \$41,000, which will be recognized over a weighted average period of 0.44 years.

Stock options

Under the 2012 Plan, 692,092 and 290,054 stock options were issued during the three months ended September 30, 2015 and 2014, respectively, and 2,454,733 and 556,855 stock options were issued during the six months ended September 30, 2015 and 2014, respectively, at various exercise prices. The stock options generally vest (i) on the one year anniversary of the grant date, (2) quarterly over a three year period, or (3) over a four-year period, with 25% vesting on either the one year anniversary of employment or the one year anniversary of the vesting commencement date, and the remainder vesting ratably over the remaining term.

A summary of the Company's stock option activity for the six months ended September 30, 2015 is as follows:

	Options Outstanding	Weighted- Average Exercise Price	Aggregate Intrinsic Value
Outstanding at March 31, 2015	7,113,548	\$ 5.21	\$ 4,969,499
Options granted	2,454,733	\$ 4.13	
Options canceled / forfeited	(198,297)	\$ 6.28	
Options exercised	(27,563)	\$ 2.94	\$ 64,477
Outstanding at September 30, 2015	<u>9,342,421</u>	\$ 4.91	\$ 3,319,866
Vested and Exercisable at September 30, 2015	<u>4,265,334</u>	\$ 4.21	\$ 2,715,019

The weighted-average remaining contractual term of options exercisable and outstanding at September 30, 2015 was approximately 7.19 years.

The Company uses the Black-Scholes valuation model to calculate the fair value of stock options. Stock-based compensation expense is recognized over the vesting period using the straight-line method. The fair value of stock options was estimated at the grant date using the following weighted average assumptions:

	Three Months Ended September 30, 2015	Three Months Ended September 30, 2014	Six Months Ended September 30, 2015	Six Months Ended September 30, 2014
Dividend yield	—	—	—	—
Volatility	74.26%	76.30%	74.25%	77.1%
Risk-free interest rate	1.48%	1.66%	1.60%	1.61%
Expected life of options	6.00 years	6.00 years	6.00 years	6.00 years
Weighted average grant date fair value	\$ 1.39	\$ 5.16	\$ 2.70	\$ 5.06

The assumed dividend yield was based on the Company's expectation of not paying dividends in the foreseeable future. Due to the Company's limited historical data, the estimated volatility incorporates the historical and implied volatility of comparable companies whose share prices are publicly available. The risk-free interest rate assumption was based on the U.S. Treasury rates. The weighted average expected life of options was estimated using the average of the contractual term and the weighted average vesting term of the options. Certain options granted to consultants are subject to variable accounting treatment and are required to be revalued until vested.

The total stock option-based compensation recorded as operating expense was approximately \$2,098,000 and \$1,962,000 for the three months ended September 30, 2015 and 2014, respectively, and \$3,775,000 and \$3,367,000 for the six months ended September 30, 2015 and 2014, respectively. Expense included in research and development was \$277,000 and \$281,000 for the three months ended

September 30, 2015 and 2014, respectively, and \$626,000 and \$529,000 for the six months ended September 30, 2015 and 2014, respectively. Expense included in general and administrative was \$1,821,000 and \$1,681,000 for the three months ended September 30, 2015 and 2014, respectively, and \$3,149,000 and \$2,838,000 for the six months ended September 30, 2015 and 2014, respectively.

The total unrecognized compensation cost related to unvested stock option grants as of September 30, 2015 was approximately \$17,150,000 and the weighted average period over which these grants are expected to vest is 2.79 years.

Warrants

During the three months ended September 30, 2015 and 2014, there were no cashless warrant exercises. During the six months ended September 30, 2015 and 2014, 38,234 and 8,647 warrants, respectively, were exercised through a cashless exercise provision for issuance of 30,186 and 7,600 shares of common stock, respectively. During the three and six months ended September 30, 2014, 0 and 103,000 warrants, respectively, were exercised at prices ranging from \$1.00 to \$2.21 for total proceeds of \$0 and \$224,000, respectively. In addition, during the six months ended September 30, 2015, a warrant that was previously expected to be issued to a service provider and had been expensed in prior periods at its approximate value of \$130,000, was cancelled, and the amount was reversed against operating expense during the period.

Of the warrants exercised during the six months ended September 30, 2015 and 2014, 38,234 and 8,647, respectively were derivative liabilities and were valued at the settlement date. For the six months ended September 30, 2015 and 2014, respectively, approximately \$138,000, and \$55,000, of the warrant liability was removed due to the exercise of these warrants. (See Note 2).

During November 2013 the Company entered into an agreement with a consultant for services. In connection with the agreement, the Company issued 75,000 warrants to purchase common stock, at a price of \$7.36, with a life of five years, to be earned over a twelve month service period. The fair value of the warrants was estimated to be approximately \$404,000, which was recognized as a prepaid asset and has been amortized over the term of the consulting agreement. These warrants were classified as equity instruments because they do not contain any anti-dilution provisions. The Black-Scholes model, using a volatility rate of 96.90% and a risk-free interest rate factor of 0.60%, was used to determine the value. The Company recognized approximately \$101,000 and \$202,000 during the three and six months ended September 30, 2014, respectively, related to these services. As of December 31, 2014, these warrants were fully expensed.

Additionally, during September 2014, the Company issued 50,000 warrants to a consultant in recognition of services previously provided. These warrants were classified as equity instruments because they do not contain any anti-dilution provisions. As of December 31, 2014, the full amount of the warrants related to these services, approximately \$273,000, had been recognized.

During November 2014 the Company entered into an agreement with a consultant for services. In connection with the agreement, the Company issued 145,000 warrants to purchase common stock, at a price of \$6.84, with a life of five years, to be earned over a seventeen month service period ending on March 31, 2016. The final number of vested warrant shares will be determined, at the discretion of management, based on management's judgment of the satisfaction of specific performance metrics prior to the earlier to occur of March 31, 2016 or the termination of the consulting arrangement with the Company. The initial fair value of the warrants was estimated to be approximately \$309,000, which is being revalued and amortized over the term of the consulting agreement. These warrants were classified as equity instruments because they do not contain any anti-dilution provisions. The Black-Scholes model, using a volatility rate of 76.78% and a risk-free interest rate factor of 1.37%, was used to determine the value. The Company recognized an expense reduction of approximately \$9,000 and expense of approximately \$25,000 during the three and six months ended September 30, 2015, respectively, related to these services.

The following table summarizes warrant activity for the six months ended September 30, 2015:

	Warrants	Weighted-Average Exercise Price
Balance at March 31, 2015	1,178,109	\$ 2.59
Granted	—	\$ —
Exercised	(38,234)	\$ 1.00
Cancelled	(37,500)	\$ 7.36
Balance at September 30, 2015	<u>1,102,375</u>	<u>\$ 2.49</u>

The warrants outstanding at September 30, 2015 are exercisable at prices between \$0.85 and \$7.62 per share, and have a weighted average remaining term of approximately 1.89 years.

Common stock reserved for future issuance

Common stock reserved for future issuance consisted of the following at September 30, 2015:

Common stock warrants outstanding	1,102,375
Common stock options outstanding under the 2008 Plan	622,192
Common stock options outstanding and reserved under the 2012 Plan	15,490,660
Total	<u>17,215,227</u>

Preferred stock

The Company is authorized to issue 25,000,000 shares of preferred stock. There are no shares of preferred stock currently outstanding, and the Company has no present plans to issue shares of preferred stock.

Note 4. Commitments and Contingencies

Operating leases

The Company leases office and laboratory space under a non-cancelable operating lease which was entered into in February 2012 and amended in December 2013 and March 2015, and a non-cancelable operating lease entered into on January 9, 2015, with the future minimum lease payments from the leases included below. The Company records rent expense on a straight-line basis over the life of the leases and records the excess of expense over the amounts paid as deferred rent. In addition, one of the leases provides for certain improvements made for the Company's benefit to be funded by the landlord. Such costs, totaling approximately \$518,000 to date, have been capitalized as fixed assets and included in deferred rent.

Rent expense was approximately \$272,000 and \$235,000 for the three months ended September 30, 2015 and 2014, respectively, and \$549,000 and \$470,000 for the six months ended September 30, 2015 and 2014, respectively.

On February 27, 2012, the Company entered into a facilities lease at 6275 Nancy Ridge Drive (the "Original Lease"), San Diego, CA 92121, with occupancy as of July 15, 2012. The base rent under the lease was approximately \$38,800 per month with 3% annual escalators. The lease term was 48 months with an option for the Company to extend the lease at the end of the lease term.

On December 5, 2013, the Company entered into a First Amendment (the "Amendment") to the Original Lease, together with the Amendment, (the "Amended Lease"). Pursuant to the Amendment, the Company expanded the size of its facility by approximately 15,268 square feet (the "Expansion Premises") from approximately 15,539 square feet (the "Original Premises") for a total of approximately 30,807 square feet. The Amended Lease provides for base rent (i) on the Original Premises to continue at approximately \$38,800 per month, with annual escalators, until August 1, 2016, at which point the base rent shall be payable at the same rate per rentable square foot as the Expansion Premises and (ii) on the Expansion Premises of approximately \$38,934 per month, with 3% annual escalators, not to commence until two months after the earlier of (A) the date that the landlord delivers possession of the Expansion Premises to the Company with the work in the Expansion Lab Premises (as defined in the Amendment) substantially complete and (B) the date the landlord could have delivered the Expansion Premises with the work in the Expansion Lab Premises (as defined in the Amendment) substantially complete but for certain delays of the Company. Additionally, the Company has a right of first refusal on adjacent additional premises of approximately 14,500 square feet. The term of the Amended Lease expires on the seven-year anniversary of the earlier of (A) the date that the landlord delivers possession of the Expansion Premises to the Company and (B) the date the landlord could have delivered the Expansion Premises but for certain delays of the Company (the "Expansion Premises Commencement Date"). The Expansion Premises Commencement Date was September 1, 2014. The Company also has the option to terminate the Amended Lease on the 5-year anniversary of the Expansion Premises Commencement Date. The Expansion Premises contains office, laboratory, and clean room areas.

On March 12, 2015, the Company entered into a Second Amendment to the Original Lease (the "Second Amendment"), to adjust the square footage covered by Amended Lease and an additional portion of the building containing approximately 335 rentable square feet ("Second Expansion Premises"). This square footage adjustment was the result of the re-measurement of each suite and the building overall. The net adjustment to overall leased space was an increase of 88 square feet with a corresponding increase in monthly rental payments at the same rate per square foot as the Expansion Premises.

On January 9, 2015, the Company entered into an agreement to lease a second facility consisting of 5,803 rentable square feet of office and lab space located at 6310 Nancy Ridge Drive, San Diego, CA 92121. The term of the lease is 36 months, beginning on

February 1, 2015 and ending on January 31, 2018, with monthly rental payments of approximately \$12,000 commencing on April 1, 2015. In addition, there are annual rent escalations of 3.0% on each 12-month anniversary of the lease commencement date.

Future minimum rental payments required under operating leases that have initial or remaining non-cancelable lease terms in excess of one year as of September 30, 2015, are as follows (in thousands):

Fiscal year ended March 31, 2016	\$	577
Fiscal year ended March 31, 2017		1,157
Fiscal year ended March 31, 2018		1,145
Fiscal year ended March 31, 2019		1,041
Fiscal year ended March 31, 2020		1,072
Thereafter		1,572
Total	\$	<u>6,564</u>

Legal Matters

In addition to commitments and obligations in the ordinary course of business, the Company is subject to various claims and pending and potential legal actions arising out of the normal conduct of its business. The Company assesses contingencies to determine the degree of probability and range of possible loss for potential accrual in its financial statements. Because litigation is inherently unpredictable and unfavorable resolutions could occur, assessing litigation contingencies is highly subjective and requires judgments about future events. When evaluating contingencies, the Company may be unable to provide a meaningful estimate due to a number of factors, including the procedural status of the matter in question, the presence of complex or novel legal theories, and/or the ongoing discovery and development of information important to the matters. In addition, damage amounts claimed in litigation against it may be unsupported, exaggerated or unrelated to possible outcomes, and as such are not meaningful indicators of its potential liability.

The Company regularly reviews contingencies to determine the adequacy of its accruals and related disclosures. During the period presented, other than as noted below, the Company has not recorded any accrual for loss contingencies associated with such claims or legal proceedings; determined that an unfavorable outcome is probable or reasonably possible; or determined that the amount or range of any possible loss is reasonably estimable. However, the outcome of legal proceedings and claims brought against the Company is subject to significant uncertainty. Therefore, although management considers the likelihood of such an outcome to be remote, if one or more of these legal matters were resolved against the Company in a reporting period, the Company's consolidated financial statements for that reporting period could be materially adversely affected.

Spencer Trask Matter

In June 2013, the Company filed a declaratory relief action against Spencer Trask Ventures ("STV") in the Supreme Court of New York (case #652305/2013) following claims by STV that the Company owed STV additional compensation arising from a warrant tender offer the Company completed in December 2012. The Company requested the court to declare that a Warrant Solicitation Agency Agreement (the "WSAA") the parties had signed in February 2013 was valid and enforceable, and that STV was not entitled to additional compensation on warrants covered by that agreement. In June 2013, STV initiated an arbitration against the Company in which it alleged that the Company had breached the terms of a Placement Agent Agreement (the "PAA") the parties had signed in connection with the private placement financings the Company completed in February and March 2012. STV claimed it was entitled to additional compensation and damages, including a cash fee and warrants to purchase common stock, as a result of the Company's warrant tender offer in December 2012 and its warrant redemption in 2013, and damages for breach of confidentiality provisions in relation to the contacting of warrant holders who participated in the warrant tender offer. The Company denied these allegations, and requested the arbitration panel to award the Company attorneys' fees.

In August, 2015, the parties agreed to globally resolve the pending disputes and voluntarily dismissed their claims with prejudice. In connection with this resolution, the Company made a payment to STV of \$150,000. Although it believes STV's claims are without merit, the Company determined that accepting the settlement offer was in the best interests of the Company and its stockholders because there is no assurance that the arbitrators would award the Company attorneys' fees, which the Company would continue to incur moving forward in the arbitration, and because the Company's counsel offered to waive a portion of its legal fees in order to help effect the settlement. The resolution of this matter did not adversely affect the Company's business, results of operations, liquidity or financial condition.

Note 5. Concentrations

Credit risk

Financial instruments that potentially subject the Company to concentrations of credit risk consist principally of temporary cash investments. The Company maintains cash balances at various financial institutions located in the United States. Accounts at these institutions are secured by the Federal Deposit Insurance Corporation. Balances may exceed federally insured limits. The Company has not experienced losses in such accounts, and management believes that the Company is not exposed to any significant credit risk with respect to its cash and cash equivalents.

Note 6. Recent Accounting Pronouncements

In May 2014, the FASB issued Accounting Standards Update (“ASU”) No. 2014-09, *Revenue from Contracts with Customers*, or ASU 2014-09, which requires an entity to recognize the amount of revenue to which it expects to be entitled for the transfer of promised goods or services to customers. The standard will replace most existing revenue recognition guidance in U.S. GAAP when it becomes effective. The new standard was originally effective for public companies for annual reporting periods beginning after December 15, 2016, with no early application permitted. In August 2015, the FASB issued ASU No. 2015-14 that defers by one year the effective date for all entities, with application permitted as of the original effective date. The updated standard becomes effective for us on April 1, 2018, with early adoption permitted as of April 1, 2017. The standard permits the use of either the retrospective or cumulative effect transition method. We are evaluating the effect that ASU 2014-09 will have on our consolidated financial statements and related disclosures. We have not yet selected a transition method nor have we determined the effect of the standard on our ongoing financial reporting.

In August 2014, the FASB issued ASU 2014-15, *Presentation of Financial Statements—Going Concern—Disclosures of Uncertainties about an entity’s Ability to Continue as a Going Concern* (“ASU 2014-15”). ASU 2014-15 provides new guidance related to management’s responsibility to evaluate whether there is substantial doubt about an entity’s ability to continue as a going concern by incorporating and expanding upon certain principles that are currently in U.S. auditing standards and to provide related footnote disclosures. This new guidance is effective for the annual period ending after December 15, 2016, and for annual periods and interim periods thereafter. The requirements of ASU 2014-15 are not expected to have a significant impact on our consolidated financial statements.

In July 2015, the FASB issued ASU 2015-11, *Inventory (Topic 330): Simplifying the Measurement of Inventory*. The new guidance was issued to more closely align the measurement of inventory in U.S. GAAP with the measurement of inventory in International Financial Reporting Standards. The core principle of this updated guidance is that an entity should measure inventory at the lower of cost or net realizable value. Net realizable value is the estimated selling prices in the ordinary course of business, less reasonably predictable costs of completion, disposal, and transportation. The amendments in ASU 2015-11 apply to inventory that is measured using the first-in, first-out or average cost methods. ASU 2015-11 is effective for annual and interim reporting periods ending after December 15, 2016, including interim periods within those fiscal years and should be applied prospectively. Early adoption is permitted as of the beginning of an interim or annual reporting period. The requirements of ASU 2015-11 are not expected to have a significant impact on our consolidated financial statements.

Note 7. Subsequent Events

Severance and Change in Control Plan

On November 4, 2015, the Company entered into a Severance and Change in Control Plan Participation Agreement (the “Participation Agreement”) with its executive officers and certain key employees pursuant to the Organovo Holdings, Inc. Severance and Change in Control Plan (the “Severance Plan”) approved by the Compensation Committee of the Board of Directors. The Severance Plan establishes the amount of severance payments and benefits payable to the participant in the event of a (i) termination of the participant’s employment by the Company for reasons other than Cause, death or Disability (each as defined in the Severance Plan) or by the participant for Good Reason (as defined in the Severance Plan) and (ii) termination of the participant’s employment by the Company for reasons other than Cause, death or Disability or by the participant for Good Reason six months before or within 12 months after a Change in Control (as defined in the Severance Plan). The Participation Agreement provides that the terms of the Severance Plan supersede and replace any existing employment and severance agreements between the Company and a participant, and any such agreements are immediately terminated. In addition, the Participation Agreement provides that any equity award agreements held by a participant are amended to provide that the terms “Cause”, “Change of Control”, “Disability” and “Good Reason” as defined in the Severance Plan govern the outstanding equity award agreements.

ITEM 2. MANAGEMENT’S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

The following management’s discussion and analysis should be read in conjunction with the Company’s historical consolidated financial statements and the related notes thereto included in our Annual Report on Form 10-K for the fiscal year ended March 31, 2015. The management’s discussion and analysis contains forward-looking statements, such as statements of our plans, objectives, expectations and intentions. Any statements that are not statements of historical fact are forward-looking statements. When used, the words “believe,” “plan,” “intend,” “anticipate,” “target,” “estimate,” “expect” and the like, and/or future tense or conditional constructions such as “will,” “may,” “could,” “should,” or similar expressions, identify certain of these forward-looking statements. These forward-looking statements speak only as of the date of this Quarterly Report on Form 10-Q and are subject to risks and uncertainties, including those described in “Item 1A—Risk Factors” of this Quarterly Report on Form 10-Q that could cause our actual results or events to differ materially from those expressed or implied by such forward-looking statements. Except to the limited extent required by applicable law, the Company does not undertake any obligation to update forward-looking statements to reflect events or circumstances occurring after the date of this Quarterly Report.

Basis of Presentation

References in this section to “Organovo Holdings, Inc.,” “Organovo Holdings,” “we,” “us,” “our,” “the Company” and “our Company” refer to Organovo Holdings, Inc. and its consolidated subsidiaries.

On February 8, 2012, Organovo, Inc., a privately held Delaware corporation, merged with and into Organovo Acquisition Corp., a wholly-owned subsidiary of the Company, with Organovo, Inc. surviving the merger as a wholly-owned subsidiary of the Company (the “Merger”). As a result of the Merger, the Company acquired the business of Organovo, Inc., and has continued the business operations of Organovo, Inc.

Organovo, Inc. was founded in Delaware in April 2007. Activities since Organovo, Inc.’s inception through September 30, 2015 have been devoted primarily to technology and product development, raising capital and building infrastructure. As of September 30, 2015, Organovo, Inc. has not realized significant revenues from its planned principal operations.

In addition, in September 2015, we established a wholly-owned subsidiary, Organovo UK, Ltd., to establish a sales presence in Europe. As of September 30, 2015, there has been no significant activity related to this subsidiary.

The condensed consolidated financial statements included in this Form 10-Q have been prepared in accordance with the Securities and Exchange Commission (the “SEC”) instructions to Quarterly Reports on Form 10-Q. Accordingly, the condensed consolidated financial statements presented elsewhere in this Form 10-Q and discussed below are unaudited and do not contain all the information required by U.S. generally accepted accounting principles (“GAAP”) to be included in a full set of financial statements. The audited financial statements for the year ended March 31, 2015, filed with the SEC on Form 10-K on June 9, 2015 include a summary of our significant accounting policies and should be read in conjunction with this Form 10-Q. In the opinion of management, all material adjustments necessary to present fairly the results of operations for such periods have been included in this Form 10-Q. All such adjustments are of a normal recurring nature. The results of operations for interim periods are not necessarily indicative of the results of operations for the entire year.

Overview

We are an early commercial stage company focused on developing and commercializing functional human tissues that can be employed in drug discovery and development, biological research, and as therapeutic implants for the treatment of damaged or degenerating tissues and organs. We intend to introduce a paradigm shift in the approach to the generation of three-dimensional (“3D”) human tissues, by utilizing our proprietary platform technology to create human tissue constructs in 3D that mimic native human tissue composition, architecture, and function. We believe we will leverage our unique 3D human tissue models to improve the current industry standard cell-based and animal model testing approaches to drug discovery and development by creating 3D tissues constructed solely of human cells. We believe our foundational approach to the 3D printing of living tissues, as disclosed in peer-reviewed scientific publications, and the continuous evolution of our core bioengineering technology platform combine to provide us with the opportunity to fill many critical gaps in commercially available preclinical human tissue modeling and tissue transplantation. In November 2014, we announced the commercial release of our first product, the exVive3D™ Human Liver Tissue for use in toxicology and other preclinical drug testing. Initial revenues derived from the product will predominantly be through our research service model, which involves testing compounds provided to us for analysis by our customers. Prior to initiating the service, our technical staff assists customers in determining the extent of testing to be conducted utilizing our exVive3D™ Human Liver Tissue. Testing may include the analysis of one or multiple compounds under various dosing and duration protocols to determine toxicity and metabolic effects of the test compounds on the tissue model. Projects may involve multiple deliverables which are clearly defined and based on pricing as stated in the related customer agreements. Consistent with our revenue recognition policies, revenue related to each deliverable will be recognized when delivered and the period of customer acceptance has been met. Revenue from projects

without multiple deliverables will be recognized when the data package has been delivered to the customer, and the term of customer acceptance has been met. In general, project duration will be in the four to six month range.

In addition to our exVive3D™ Human Liver Tissue, we have entered into collaborative research agreements with pharmaceutical corporations and academic medical centers. We have also secured federal grants, including Small Business Innovation Research grants, to support the development of our technology.

Critical Accounting Policies, Estimates, and Judgments

Our financial statements are prepared in accordance with GAAP. The preparation of these financial statements requires us to make estimates and judgments that affect the reported amounts of assets and liabilities, disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. We continually evaluate our estimates and judgments, the most critical of which are those related to revenue recognition, valuation of long-lived assets and warrant liability, stock-based compensation and the timing of the achievement of collaboration milestones. We base our estimates and judgments on historical experience and other factors that we believe to be reasonable under the circumstances. Materially different results can occur as circumstances change and additional information becomes known. Besides the estimates identified above that are considered critical, we make many other accounting estimates in preparing our financial statements and related disclosures. All estimates, whether or not deemed critical, affect reported amounts of assets, liabilities, revenues and expenses, as well as disclosures of contingent assets and liabilities. These estimates and judgments are also based on historical experience and other factors that are believed to be reasonable under the circumstances. Materially different results can occur as circumstances change and additional information becomes known, even for estimates and judgments that are not deemed critical.

For further information, refer to the Company's audited financial statements and notes thereto included in the Annual Report on Form 10-K for the year ended March 31, 2015, filed with the SEC on June 9, 2015.

Results of Operations

Comparison of the three months ended September 30, 2015 and 2014

Revenues

For the three months ended September 30, 2015, total revenue of \$301,000 was \$251,000 or approximately 502% higher than total revenue for the three months ended September 30, 2014. Product and service revenue of \$187,000 for the second quarter of fiscal 2016 versus \$0 in the second quarter of fiscal 2015 relates to exVive3D™ Human Liver Tissue product and research services, which were launched commercially in November 2014. The majority of revenues for the second quarter of fiscal 2016 were derived from research service agreements related to the exVive3D™ Human Liver Tissue and from research funded by grants, whereas revenues for the second quarter of fiscal 2015 were derived mainly from existing collaborations and from research funded by grants.

Operating Expenses

Overview

Operating expenses increased approximately \$2.6 million, or 29%, from approximately \$9.0 million for the three months ended September 30, 2014 to \$11.6 million for the three months ended September 30, 2015. Of this increase, \$1.5 million relates to increased investment in research and development, while the other \$1.1 million relates to increased selling, general and administrative expense. These increases can be attributed to the Company's continued implementation of its business plan, including hiring additional staff to support research and development initiatives, incremental investments associated with strategic growth and commercialization project initiatives associated with the commercial launch of our exVive3D™ Human Liver Tissue in November 2014, expenses related to operating as a publicly traded corporation, and the expansion of its facility.

Research and Development Expenses

More specifically, research and development expenses increased 47% from approximately \$3.2 million for the three months ended September 30, 2014 to \$4.7 million for the three months ended September 30, 2015, as the Company increased its research staff to support its obligations under existing collaborative research agreements and to expand its product development team and activities commensurate with launching commercial research services associated with the commercial launch of the Company's first product in the third quarter of fiscal 2015. Full-time research and development staffing increased from an average of forty-one full-time employees for the three months ended September 30, 2014 to an average of fifty-seven full-time employees for the three months ended September 30, 2015, resulting in an increase in staffing expense of approximately \$0.7 million, an increase in lab supply costs of \$0.3 million, an increase in facility costs of approximately \$0.3 million, and an increase in consulting services of \$0.2 million.

Selling, General and Administrative Expenses

For the three months ended September 30, 2015, selling, general and administrative expenses were approximately \$6.8 million, an increase of \$1.1 million, or 19%, over expenses in the same period of the previous year of approximately \$5.7 million. This increase was primarily related to an increase in staffing expense of \$0.7 million due to an increase in average administrative headcount from fifteen full-time employees to thirty-six full-time employees to provide strategic infrastructure in developing collaborative relationships and preparation for commercialization of research-derived product introductions, an increase in strategic consulting costs of \$0.3 million, and an increase in stock-based compensation of \$0.1 million.

Other Income (Expense)

Other expense was less than \$0.1 million for the three months ended September 30, 2015 and 2014, respectively, and consisted primarily of gains related to revaluation of warrant derivative liabilities. The majority of the underlying warrants to which the derivative relates have been exercised or converted to equity instruments in previous years, significantly lessening the impact of subsequent changes in our stock price.

Comparison of the six months ended September 30, 2015 and 2014

Revenues

For the six months ended September 30, 2015, total revenue of \$0.6 million was \$0.5 million, or approximately 307% higher than total revenue for the six months ended September 30, 2014. \$0.4 million of this increase is comprised of product and service revenue related to exVive3D™ Human Liver Tissue research services, which were launched commercially in the third quarter of fiscal 2015. Grant revenue also increased by more than \$0.1 million due primarily to the completion of activities under the Company's NIH grant, under which activities commenced during the third quarter of fiscal 2015 and completed in the second quarter of fiscal 2016. These increases were partially offset by a decrease in collaboration revenue of less than \$0.1 million due to the timing of achieving certain milestones.

Operating Expenses

Overview

Operating expenses increased approximately \$4.8 million, or 31%, from approximately \$15.5 million for the six months ended September 30, 2014 to \$20.3 million for the six months ended September 30, 2015. Of this increase, approximately \$2.0 million is related to increased selling, general and administrative expense while the other \$2.8 million relates to increased investment in research and development. These increases are attributed to the Company's continued implementation of its business plan, including hiring additional staff to support research and development initiatives, incremental investments associated with strategic growth and commercialization project initiatives, expenses related to operating as a publicly traded corporation, and expansion of its facility.

Research and Development Expenses

Research and development expenses increased by approximately \$2.8 million, or 46%, from approximately \$6.1 million for the six months ended September 30, 2014 to approximately \$8.9 million for the six months ended September 30, 2015, as the Company increased its research staff to support its obligations under existing collaborative research agreements and to expand its product development team and activities commensurate with launching commercial research services associated with the commercial launch of the Company's first product in the third quarter of fiscal 2015. Full-time research and development staffing increased from an average of thirty-eight full-time employees for the six months ended September 30, 2014 to an average of fifty-four full-time employees for the six months ended September 30, 2015. In addition to increases in staffing expense of approximately \$1.4 million, the Company increased its spending on lab supplies and contract services by \$0.6 million and \$0.3 million, respectively, in proportion to its increased research activities. Finally, facilities charges allocated to research and development increased by approximately \$0.5 million due to the expansion of the Company's facilities and increased occupancy rates.

Selling, General and Administrative Expenses

For the six months ended September 30, 2015, selling, general and administrative expenses were approximately \$11.4 million, an increase of \$2.0 million, or 21%, over expenses in the same period of fiscal 2015 of approximately \$9.4 million. This increase was primarily driven by an increase in staffing-related expenses of approximately \$1.4 million due to an increase in average administrative headcount from fourteen full-time employees to thirty-three full-time employees to provide strategic infrastructure in developing collaborative relationships and preparation for commercialization of research-derived product introductions. The remainder of the increase was primarily driven by increased consulting costs due to additional strategic review and planning performed during the first half of fiscal 2016.

Other Income (Expense)

Other income (expense) was less than \$0.1 million for the six months ended September 30, 2015 and 2014, and consisted primarily of gains (losses) related to the revaluation of warrant derivative liabilities. The majority of the underlying warrants to which the derivative relates have been exercised or converted to equity instruments in previous years, significantly lessening the impact of subsequent changes in our stock price.

Financial Condition, Liquidity and Capital Resources

Since its inception, the Company has primarily devoted its efforts to technology and product development, raising capital and building infrastructure. The Company has not realized significant revenue from its planned principal operations.

Since inception, the Company has incurred negative cash flows from operations. As of September 30, 2015, the Company had cash and cash equivalents of approximately \$76.9 million and an accumulated deficit of \$142.0 million. The Company also had negative cash flow from operations of \$14.9 million during the six months ended September 30, 2015. At March 31, 2015, the Company had cash and cash equivalents of approximately \$50.1 million and an accumulated deficit of \$122.3 million.

At September 30, 2015, the Company had total current assets of approximately \$77.8 million and current liabilities of approximately \$5.5 million, resulting in working capital of \$72.3 million. At March 31, 2015, we had total current assets of approximately \$51.3 million and current liabilities of approximately \$4.8 million, resulting in working capital of \$46.5 million.

Net cash used by operating activities for the six months ended September 30, 2015 was approximately \$14.9 million as compared to \$9.7 million used in operating activities for the six months ended September 30, 2014. This \$5.2 million increase in cash usage can be attributed to a \$4.5 million increase in operating expenses as well as changes in working capital.

Net cash used in investing activities was approximately \$1.6 million and \$0.6 million for the six months ended September 30, 2015 and 2014, respectively. This increase can be attributed to increased capital spending as the company built out its facility space to expand its research capabilities.

Net cash provided by financing activities increased from \$16.5 million provided during the six months ended September 30, 2014 to \$43.2 million provided during the six months ended September 30, 2015 due primarily to the public offering of common stock in June 2015 that yielded net proceeds of approximately \$43.1 million.

We believe our cash and cash equivalents on hand as of September 30, 2015, together with amounts to be received from our collaborative research agreements and our commercial products and services, will be sufficient to fund our ongoing operations as currently planned for at least the next twelve months. Through September 30, 2015, we have financed our operations primarily through the sale of convertible notes, the private placement of equity securities, the sale of common stock through public offerings, and from revenue derived from grants, collaborative research agreements, product sales and research-based services.

In November 2013, the Company entered into an equity distribution agreement with an investment banking firm. Under the terms of the distribution agreement, the Company may offer and sell up to 4,000,000 shares of its common stock, from time to time, through the investment bank in “at the market” offerings, as defined by the SEC, and pursuant to the Company’s effective shelf registration statement previously filed with the SEC in July 2013 (the “2013 Shelf”). Through September 30, 2015, the Company issued 2,532,180 shares of common stock in at the market offerings under the distribution agreement with net proceeds of approximately \$19.6 million. The net proceeds from these offerings have been used for general corporate purposes, including research and development, the commercialization of our products, general administrative expenses, and working capital and capital expenditures.

In December 2014, the Company entered into an equity offering sales agreement with another investment banking firm. Under the terms of the sales agreement, the Company may offer and sell shares of its common stock having an aggregate offering price of up to \$33,000,000, from time to time, through the investment bank in “at the market” offerings, as defined by the SEC, and pursuant to the 2013 Shelf. As of September 30, 2015, the Company has sold 1,000,000 shares of common stock in at the market offerings under the sales agreement, with net proceeds of approximately \$6.2 million. The Company has used the net proceeds raised through these “at-the-market” sales for general corporate purposes, including research and development, the commercialization of the Company’s products, general administrative expenses, and working capital and capital expenditures.

The Company will limit future sales under the 2013 distribution agreement and the 2014 sales agreement to ensure that it does not exceed the maximum amount available for sale under the 2013 Shelf. Based on its use of the 2013 Shelf registration statement through September 30, 2015, the Company cannot sell more than an aggregate of \$26,777,785 in shares of common stock under the 2013 distribution agreement and the 2014 sales agreement.

On June 18, 2015, the Company entered into an Underwriting Agreement with Jefferies LLC and Piper Jaffray & Co., acting as representatives of the underwriters named in the 2015 Underwriting Agreement and as joint book-running managers, relating to the issuance and sale of 9,425,000 shares of the Company’s common stock, par value \$0.001 per share (the “2015 Offering”). The price to the public in the 2015 Offering was \$4.25 per share, and the Underwriters agreed to purchase the shares from the Company pursuant to the 2015 Underwriting Agreement at a price of \$3.995 per share. Under the terms of the 2015 Underwriting Agreement, the Company granted the Underwriters an option, exercisable for 30 days, to purchase up to an additional 1,413,750 shares. The Company issued 10,838,750 shares of common stock pursuant to the 2015 Underwriting Agreement, including shares issuable on exercise of the over-allotment option, with net proceeds of \$43.1 million, after deducting underwriting discounts and commissions and offering expenses payable by the Company. The net proceeds from this offerings will be used for general corporate purposes, including research and development, the commercialization of our products, general administrative expenses, and working capital and capital expenditures.

The Company's future capital needs will depend on the revenues it generates through its commercialization efforts and the resources it elects to spend to pursue its product development efforts and implement its business plan. As a result, the Company cannot predict with certainty when it may be required to secure additional capital to fund its future operations.

The Company intends to cover its future operating expenses through cash on hand, revenue derived from grants, product sales, collaborative research agreements and research services agreements and through the issuance of additional equity or debt securities. Depending on market conditions, we cannot be sure that additional financing will be available when needed or that, if available, financing will be obtained on terms favorable to us or to our stockholders.

Having insufficient funds may require us to delay, scale back, or eliminate some or all of our development programs or relinquish rights to our technology on less favorable terms than we would otherwise choose. Failure to obtain adequate financing could eventually adversely affect our ability to operate as a going concern. If we raise additional funds from the issuance of equity securities, substantial dilution to our existing stockholders would likely result. If we raise additional funds by incurring debt financing, the terms of the debt may involve significant cash payment obligations as well as covenants and specific financial ratios that may restrict our ability to operate our business.

As of September 30, 2015, the Company had 92,327,772 total issued and outstanding shares of common stock, and five year warrants for the opportunity to purchase an additional 831,005 shares of common stock at exercise prices between \$0.85 and \$1.00 per share and 271,370 warrants with terms between two and five years and exercise prices between \$2.28 and \$7.62 per share. If all warrants were exercised on a cash basis, the Company would realize approximately \$2.7 million additional gross proceeds.

The 2008 Equity Incentive Plan provides for the issuance of up to 896,256 shares of our outstanding common stock and the 2012 Equity Incentive Plan, as amended, provides for the issuance of up to 17,553,986 shares, or approximately 19% of our outstanding common stock, to executive officers, directors, advisory board members, employees and consultants. In aggregate, issued and outstanding common stock, shares underlying outstanding warrants, and shares reserved for the 2008 and 2012 incentive plans total 109,542,999 shares of common stock as of September 30, 2015.

Off-Balance Sheet Arrangements

We have no off-balance sheet arrangements, including unrecorded derivative instruments that have or are reasonably likely to have a current or future material effect on our financial condition, changes in financial condition, revenues or expenses, results of operations, liquidity, capital expenditures or capital resources. We have certain warrants and options outstanding but we do not expect to receive sufficient proceeds from the exercise of these instruments unless and until the underlying securities are registered, and/or all restrictions on trading, if any, are removed, and in either case the trading price of our common stock is significantly greater than the applicable exercise prices of the options and warrants.

Effect of Inflation and Changes in Prices

Management does not believe that inflation and changes in price will have a material effect on the Company's operations.

Contractual Obligations

In the normal course of business, we enter into contracts and commitments that obligate us to make payments in the future. The table below sets forth Organovo's significant contractual obligations and related scheduled payments as of September 30, 2015 (in thousands):

	<u>Total</u>	<u>Less than 1 year</u>	<u>1 to 3 years</u>	<u>3 to 5 years</u>	<u>More than 5 years</u>
Operating lease obligations (A)	6,564	1,154	2,240	2,144	1,026
Total	6,564	1,154	2,240	2,144	1,026

(A) Operating lease obligations are primarily comprised of remaining payments due under the Company's facility leases.

ITEM 3. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

The primary objective of our investment activities is to preserve our capital for the purpose of funding our operations. To achieve these objectives, our investment policy allows us to maintain a portfolio of cash, cash equivalents, and short-term investments in a variety of securities, including commercial paper and money market funds. Our primary exposure to market risk is interest income sensitivity, which is affected by changes in the general level of U.S. interest rates, particularly because the majority of our investments are comprised of cash and cash equivalents. We currently do not hedge interest rate exposure. Due to the nature of our short-term investments, we believe that we are not subject to any material market risk exposure. We have limited foreign currency risk exposure as our business operates primarily in U.S. dollars. We do not have any foreign currency or other derivative financial instruments.

ITEM 4. CONTROLS AND PROCEDURES

Disclosure Controls and Procedures

Our management, with the participation of our Chief Executive Officer and Chief Financial Officer, evaluated the effectiveness of our disclosure controls and procedures (as defined in Rule 13a-15(e) of the Exchange Act) as of the end of the period covered by this report. Based on that evaluation, our Chief Executive Officer and Chief Financial Officer concluded that our disclosure controls and procedures as of the end of the quarterly period covered by this report were effective.

Internal Control over Financial Reporting

There was no change in our internal control over financial reporting (as defined in Rule 13a-15(f) of the Exchange Act) that occurred during the fiscal quarter to which this report relates that has materially affected, or is reasonably likely to materially affect, our internal control over financial reporting.

Inherent Limitations on Effectiveness of Controls

Our management, including our Chief Executive Officer and our Chief Financial Officer, do not expect that our disclosure controls or our internal control over financial reporting will prevent or detect all error and all fraud. A control system, no matter how well designed and operated, can provide only reasonable, not absolute, assurance that the control system's objectives will be met. The design of a control system must reflect the fact that there are resource constraints, and the benefits of controls must be considered relative to their costs. Further, because of the inherent limitations in all control systems, no evaluation of controls can provide absolute assurance that misstatements due to error or fraud will not occur or that all control issues and instances of fraud, if any, have been detected. These inherent limitations include the realities that judgments in decision-making can be faulty and that breakdowns can occur because of simple error or mistake. Controls can also be circumvented by the individual acts of some persons, by collusion of two or more people, or by management override of the controls. The design of any system of controls is based in part on certain assumptions about the likelihood of future events, and there can be no assurance that any design will succeed in achieving its stated goals under all potential future conditions. Projections of any evaluation of controls effectiveness to future periods are subject to risks. Over time, controls may become inadequate because of changes in conditions or deterioration in the degree of compliance with policies or procedures.

PART II—OTHER INFORMATION

ITEM 1. LEGAL PROCEEDINGS

See Note 4 of the Notes to the Unaudited Condensed Consolidated Financial Statements within this Form 10-Q for a discussion of our legal proceedings and contingencies.

ITEM 1A. RISK FACTORS

In evaluating us and our common stock, we urge you to carefully consider the risks and other information in this Quarterly Report on Form 10-Q as well as the risk factors disclosed in our Annual Report on Form 10-K for the year ended March 31, 2015, filed with the Securities and Exchange Commission on June 9, 2015. There have been no material changes from the risk factors as previously disclosed in our Annual Report on Form 10-K. Any of the risks discussed in this Quarterly Report on Form 10-Q and in our Annual Report on Form 10-K, as well as additional risks and uncertainties not currently known to us or that we currently deem immaterial, could materially and adversely affect our results of operations or financial condition.

ITEM 2. UNREGISTERED SALES OF EQUITY SECURITIES AND USE OF PROCEEDS

None.

ITEM 3. DEFAULTS UPON SENIOR SECURITIES

None.

ITEM 4. MINE SAFETY DISCLOSURE

Not applicable.

ITEM 5. OTHER INFORMATION

Severance and Change in Control Plan

On November 4, 2015 (the “Effective Date”), we entered into a Severance and Change in Control Plan Participation Agreement (the “Participation Agreement”) with our executive officers and certain key employees pursuant to the Organovo Holdings, Inc. Severance and Change in Control Plan (the “Severance Plan”) approved by the Compensation Committee of our Board of Directors. The Severance Plan establishes the amount of severance payments and benefits payable to a participant in the event of a (i) termination of the participant’s employment by the Company for reasons other than Cause, death or Disability (each as defined in the Severance Plan) or by the participant for Good Reason (as defined in the Severance Plan) and (ii) termination of the participant’s employment by the Company for reasons other than Cause, death or Disability or by the participant for Good Reason six months before or within 12 months after a Change in Control (as defined in the Severance Plan).

The Severance Plan establishes four tiers of employee participants. The Tier 1 Employees are the Company’s Chief Executive Officer and its Chief Financial Officer. The Tier 2 Employees are all non-Tier 1 members of the Company’s executive team. The Tier 3 Employees are all senior vice presidents of the Company who are not Tier 1 or Tier 2 Employees and such other executives designated by the Compensation Committee from time to time. The Tier 4 Employees are all vice presidents of the Company who are not Tier 1 or Tier 2 Employees and such other executives designated by the Compensation Committee from time to time. Currently, Keith Murphy, Chief Executive Officer and President, and Barry Michaels, Chief Financial Officer, qualify as Tier 1 Employees, and Sharon Presnell, Ph.D., Chief Technology Officer and Executive Vice President of Research & Development, Eric David, MD, JD, Chief Strategy Officer and Executive Vice President of Pre-Clinical Development, and Jennifer Kinsbruner Bush, JD, General Counsel, Corporate Secretary and Compliance Officer, qualify as Tier 2 Employees.

Upon termination of a participant’s employment by the Company for reasons other than Cause, death or Disability or by the participant for Good Reason: (i) each Tier 1 Employee is eligible for a cash severance payment equal to 2.0 times the participant’s base salary, plus a pro-rated target bonus for the fiscal year in which the termination occurs, health benefit continuation for 18 months and outplacement assistance for 18 months; (ii) each Tier 2 Employee is eligible for a cash severance payment equal to 1.0 times the participant’s base salary, plus a pro-rated target bonus for the fiscal year in which the termination occurs, health benefit continuation for 12 months and outplacement assistance for 12 months; (iii) each Tier 3 Employee is eligible for a cash severance payment equal to 0.75 times the participant’s base salary, plus a pro-rated target bonus for the fiscal year in which the termination occurs, health benefit continuation for nine months and outplacement assistance for nine months; and (iv) each Tier 4 Employee is eligible for a cash severance payment equal to 0.5 times the participant’s base salary, plus a pro-rated target bonus for the fiscal year in which the

termination occurs, health benefit continuation for six months and outplacement assistance for six months. The Company will pay the severance payments and the pro-rated target bonuses in a lump sum subject to and contingent upon the participant's execution of a release agreement in favor of the Company and the participant's compliance with the restrictive covenants set forth in Section 7(b) of the Severance Plan.

Upon termination of a participant's employment by the Company for reasons other than Cause, death or Disability or by the participant for Good Reason six months before or within 12 months after a Change in Control: (i) each Tier 1 Employee is eligible for a cash severance payment equal to 2.0 times the participant's base salary, plus a pro-rated target bonus for the fiscal year in which the termination occurs, health benefit continuation for 18 months and outplacement assistance for 18 months; (ii) each Tier 2 Employee is eligible for a cash severance payment equal to 1.0 times the participant's base salary, plus a pro-rated target bonus for the fiscal year in which the termination occurs, health benefit continuation for 12 months and outplacement assistance for 12 months; (iii) each Tier 3 Employee is eligible for a cash severance payment equal to 1.0 times the participant's base salary, plus a pro-rated target bonus for the fiscal year in which the termination occurs, health benefit continuation for nine months and outplacement assistance for nine months; and (iv) each Tier 4 Employee is eligible for a cash severance payment equal to 0.75 times the participant's base salary, paid in a lump sum, plus a pro-rated target bonus for the fiscal year in which the termination occurs, health benefit continuation for six months and outplacement assistance for six months. In addition, each Tier 1-4 Employee will receive full accelerated vesting of such participant's outstanding equity awards and a one-year time period to exercise any stock options or stock appreciation rights included in such equity awards that are not cashed out upon the Change in Control. The Company will pay the severance payments and the pro-rated target bonuses in a lump sum subject to and contingent upon the participant's execution of a release agreement in favor of the Company and the participant's compliance with the restrictive covenants set forth in Section 7(b) of the Severance Plan.

Further, pursuant to the terms of the Participation Agreements, any existing employment or severance agreement between the Company and the participant is immediately terminated and replaced with the provisions of the Severance Plan, subject to limited exceptions required to comply with the requirements of Internal Revenue Code Section 409A. Each Participation Agreement also provides that any outstanding equity award agreements held by a participant are amended to provide that the terms "Cause", "Change of Control", "Disability" and "Good Reason" as defined in the Severance Plan shall govern the outstanding equity award agreements.

The foregoing description of the Severance Plan and the Participation Agreements is qualified in its entirety by reference to the complete text of the Severance Plan, which is filed herewith as Exhibit 10.2, and the form of Participation Agreement, which is filed herewith as Exhibit 10.3, and both of which are incorporated herein by reference.

ITEM 6. EXHIBITS

The following exhibit index shows those exhibits filed with this report and those incorporated herein by reference:

Exhibit No.	Description
2.1	Agreement and Plan of Merger and Reorganization, dated as of February 8, 2012, by and among Organovo Holdings, Inc. a Delaware corporation, Organovo Acquisition Corp., a Delaware corporation and Organovo, Inc., a Delaware corporation (incorporated by reference from Exhibit 2.1 to the Company's Current Report on Form 8-K, as filed with the SEC on February 13, 2012)
2.2	Certificate of Merger as filed with the Delaware Secretary of State effective February 8, 2012 (incorporated by reference from Exhibit 2.2 to the Company's Current Report on Form 8-K, as filed with the SEC on February 13, 2012)
2.3	Articles of Merger as filed with the Nevada Secretary of State effective December 28, 2011 (incorporated by reference from Exhibit 2.1 to the Company's Current Report on Form 8-K, as filed with the Securities and Exchange Commission (the "SEC") on February 3, 2012 (the "February 2012 Form 8-K")
2.4	Agreement and Plan of Merger, dated as of December 28, 2011, by and between Real Estate Restoration and Rental, Inc. and Organovo Holdings, Inc. (incorporated by reference from Exhibit 2.2 to the Company's Current Report on Form 8-K, as filed with the SEC on January 4, 2012)
2.5	Certificate of Merger as filed with the Delaware Secretary of State effective January 30, 2012 (incorporated by reference from Exhibit 2.3 to the February 2012 Form 8-K)
2.6	Agreement and Plan of Merger, dated as of January 30, 2012, by and between Organovo Holdings, Inc. (Nevada) and Organovo Holdings, Inc. (Delaware) (incorporated by reference from Exhibit 2.2 to the February 2012 Form 8-K)
2.7	Articles of Merger as filed with the Nevada Secretary of State effective January 30, 2012 (incorporated by reference from Exhibit 2.4 to the February 2012 Form 8-K)
3.1	Certificate of Incorporation of Organovo Holdings, Inc. (Delaware) (incorporated by reference from Exhibit 3.1 to the February 2012 Form 8-K)
3.2	Bylaws of Organovo Holdings, Inc. (Delaware) (incorporated by reference from Exhibit 3.2 to the February 2012 Form 8-K)
4.1	Form of Bridge Warrant of Organovo, Inc. (incorporated by reference from Exhibit 4.1 to the Company's Current Report on Form 8-K, as filed with the SEC on February 13, 2012)
4.2	Form of Warrant of Organovo, Inc. issued to former holders of Organovo, Inc. promissory notes (incorporated by reference from Exhibit 4.3 to the Company's Current Report on Form 8-K, as filed with the SEC on February 13, 2012)
4.3	Form of Warrant of Organovo Holdings, Inc. (\$1.00 exercise price) issued to Placement Agent (incorporated by reference from Exhibit 4.2(i) to the Company's Current Report on Form 8-K, as filed with the SEC on March 19, 2012)
4.4	Form of Warrant of Organovo Holdings, Inc. (\$1.00 exercise price) issued to Placement Agent in exchange for Organovo, Inc. warrant issued to Selling Agent (incorporated by reference from Exhibit 4.2(iii) to the Company's Current Report on Form 8-K, as filed with the SEC on March 19, 2012)
10.1	Amended and Restated 2012 Equity Incentive Plan, dated August 20, 2015 (incorporated by reference from Exhibit 10.1 to the Company's Current Report on Form 8-K, as filed with the SEC on August 4, 2015)#
10.2	Organovo Holdings, Inc. Severance and Change in Control Plan.*#
10.3	Form of Organovo Holdings, Inc. Severance and Change in Control Plan Participation Agreement.*#
31.1	Certification of Chief Executive Officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.*
31.2	Certification of Chief Financial Officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.*
32.1	Certifications pursuant to 18 U.S.C. Section 1350.*
101	Interactive Data File*

* Filed herewith.

Designates management contracts and compensation plans.

SIGNATURES

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

ORGANOVO HOLDINGS, INC.

Date: November 9, 2015

By: /s/ Keith Murphy
Name: Keith Murphy
Title: Chairman, Chief Executive Officer and President
(Principal Executive Officer)

Date: November 9, 2015

By: /s/ Barry D. Michaels
Name: Barry D. Michaels
Title: Chief Financial Officer
(Principal Financial and Accounting Officer)

ORGANOVO HOLDINGS, INC.
SEVERANCE AND CHANGE IN CONTROL PLAN
(Effective as of November 4, 2015)

1. Purpose of the Plan

The Board believes it is in the best interests of Organovo to encourage and motivate key employees to devote their full attention to the performance of their assigned duties without the distraction or concerns regarding their involuntary termination of employment. Organovo believes that it is in the best interests of its key employees and the shareholders of Organovo to provide financial assistance through severance payments and other benefits to eligible key employees who are involuntarily terminated. Organovo formerly entered into individual employment contracts with certain employees providing for change of control and severance benefits for the above purposes. This Plan is intended to consolidate and replace (with the consent of the respective Participants where required) such individual employment contracts in order to provide uniform administration of change of control and severance benefits. With respect to each Participant, the Plan supersedes all plans, agreements, or other arrangements for severance benefits or for enhanced severance payments whether or not before, on or after a change in control. This Plan is intended to be a “welfare plan” under ERISA providing benefits to a select group of management or highly compensated employees as described in DOL Regulation section 2520.104-24.

2. Definitions

“Accrued Benefits” means (i) the Participant’s Base Salary through the date of termination of employment, (ii) any accrued but unused paid time off and floating holiday pay, and (iii) unreimbursed business expenses. Organovo will pay the Accrued Benefits to the Participant in a cash lump sum within ten (10) days after the Participant’s termination of employment with Organovo.

“Affiliate” means any other entity, whether now or hereafter existing, which controls, is controlled by, or is under common control with, Organovo (including, but not limited to, joint ventures, limited liability companies, and partnerships).

“Base Salary” means the annual rate of base salary in effect as of the date of termination of employment, determined without regard to any reduction thereof that constitutes Good Reason.

“Board” means the Board of Directors of Organovo Holdings, Inc.

“Cash Severance” means the amount specified in Section 6(a), Section 6(b) or Section 6(c), as applicable.

“Cause” means:

(i) the willful and continued failure of the Participant to perform substantially the Participant’s duties with Organovo (other than any such failure resulting from incapacity due to physical or mental illness), as determined by the Board with respect to any Tier 1 or Tier 2 Employee, and as determined by Organovo’s Chief Executive Officer with respect to Employees in Tiers 3-4 no earlier than thirty (30) days after a written demand for substantial performance is delivered to the Participant, which specifically identifies the manner in which Organovo believes that the Participant has willfully and continuously failed to perform substantially the Participant’s duties with Organovo (provided, however, that with respect to any Tier 1 or Tier 2 Employee, the failure to achieve individual or Company-based performance goals, budgets or targets shall not be deemed to be a failure of the Participant to perform his or her duties for purposes of this definition of Cause);

(ii) the willful engaging by the Participant in illegal conduct or gross misconduct which is materially and demonstrably injurious to Organovo or Participant’s ability to perform his or her duties with Organovo;

(iii) conviction (including a plea of guilty or *nolo contendere*) of a felony;

(iv) a material violation of a material written policy of Organovo or any Affiliate, violation of which would be grounds for immediate dismissal under applicable Company policy;

(v) failure to comply in any material respect with the Foreign Corrupt Practices Act, the Securities Act of 1933, as amended, the Securities Exchange Act of 1934, as amended, the Sarbanes-Oxley Act of 2002, the Dodd-Frank Wall Street Reform and Consumer Protection Act of 2010, or the Truth in Negotiations Act, or any rules or regulations thereunder;

(vi) a material breach of the restrictive covenants in Section 7(b) subject to the cure provisions provided in Section 7(b) of the Plan.

“Change in Control” means the effective date of the occurrence of any of the following events:

(i) any “person” (as such term is used in Sections 13(d) and 14(d) of the Exchange Act) becomes the “beneficial owner” (as such term is defined in Rule 13d-3 under the Exchange Act), directly or indirectly, of securities of Organovo representing more than thirty percent (30%) of the total Fair Market Value or total combined voting power of Organovo’s then-outstanding securities entitled to vote generally in the election of Directors; provided, however, that a Change in Control shall not be deemed to have occurred if such degree of beneficial ownership results from any of the following: (A) an acquisition by any person who on the Effective Date is the beneficial owner of more than thirty percent (30%) of such voting power, (B) any acquisition directly from Organovo, including, without limitation, pursuant to or in connection with a public offering of securities, (C) any acquisition by Organovo, (D) any acquisition by a trustee or other fiduciary under an employee benefit plan of a Participating Company or (E) any acquisition by an entity owned directly or indirectly by the shareholders of Organovo in substantially the same proportions as their ownership of the voting securities of Organovo; or

(ii) an Ownership Change Event (as defined below) or series of related Ownership Change Events (collectively, a “*Transaction*”) in which the shareholders of Organovo immediately before the Transaction do not retain immediately after the Transaction direct or indirect beneficial ownership of more than fifty percent (50%) of the total combined voting power of the outstanding securities entitled to vote generally in the election of Directors or, in the case of an Ownership Change Event described in clause (iii) of that definition, the entity to which the assets of Organovo were transferred (the “*Transferee*”), as the case may be; or

(iii) a majority of members of the Incumbent Directors (as defined below) is replaced during any twelve (12)-month period;

provided, however, that a Change in Control shall be deemed not to include an event described in subsection (i) until the earlier of (a) the person has two or more representatives on the Board of Directors or (b) the person becomes the “beneficial owner” (as such term is defined in Rule 13d-3 under the Exchange Act), directly or indirectly, of securities of Organovo representing more than fifty percent (50%) of the total Fair Market Value or total combined voting power of Organovo’s then-outstanding securities entitled to vote generally in the election of Directors.

For purposes of subsections (i) and (ii), indirect beneficial ownership shall include, without limitation, an interest resulting from ownership of the voting securities of one or more corporations or other business entities which own Organovo or the Transferee, as the case may be, either directly or through one or more subsidiary corporations or other business entities.

In addition for purposes of subsections (i) and (ii), the Committee shall determine whether multiple acquisitions of the voting securities of Organovo and/or multiple Ownership Change Events are related and to be treated in the aggregate as a single Change in Control, and its determination shall be final, binding and conclusive.

For purposes of this definition of Change in Control, “Incumbent Director” means a director who either (i) is a member of the Board as of the Effective Date or (ii) is elected, or nominated for election, to the Board with the affirmative votes of at least a majority of the Incumbent Directors at the time of such election or nomination (but excluding a director who was elected or nominated in connection with an actual or threatened proxy contest relating to the election of directors of Organovo or at the request of a person who is the “beneficial owner” (as such term is defined in Rule 13d-3 under the Exchange Act), directly or indirectly, of securities of Organovo representing more than five percent (5%) of the total Fair Market Value or total combined voting power of Organovo’s then-outstanding securities entitled to vote generally in the election of Directors); and “Ownership Change Event” means the occurrence of any of the following with respect to Organovo: (i) the direct or indirect sale or exchange in a single or series of related transactions by the shareholders of Organovo of securities of Organovo representing more than fifty percent (50%) of the total combined voting power of Organovo’s then outstanding securities entitled to vote generally in the election of Directors; (ii) a merger or consolidation in which Organovo is a party; or (iii) the sale, exchange, or transfer of all or substantially all of the assets of Organovo (other than a sale, exchange or transfer to one or more subsidiaries of Organovo).

“Code” means the Internal Revenue Code of 1986, as amended, and the regulations and Treasury guidance promulgated under it.

“Committee” means the Compensation Committee of the Board. Except with respect to Tier 1 and Tier 2 Employees, the Committee may delegate some or all of its authority under the Plan to any person, persons or subcommittee, in which event, the term “Committee” includes such person, persons or subcommittee to the extent of such delegation.

“Company” means Organovo Holdings, Inc. and any of its Affiliates.

“Competitive Activity” means any design, development, sale, promotion, production, marketing, licensing, distribution or provision of any service, technology, product or product feature that is, directly or indirectly, or is intended to be, competitive with one or more services, technologies, products or product features provided by Organovo.

“Competitor of Organovo” means any Person that is engaged or preparing to engage in any Competitive Activity.

“Disability” means incapacity due to physical or mental illness which has rendered the Participant unable effectively to carry out his/her duties and obligations to Organovo or unable to participate effectively and actively in the management of Organovo for a period of ninety (90) consecutive days or for shorter periods aggregating to one-hundred twenty (120) days (whether or not consecutive) during any consecutive twelve (12) months.

“Effective Date” has the meaning specified in Section 3.

“ERISA” means the Employee Retirement Income Security Act of 1974, as amended, and the regulations and guidance promulgated under it.

“Exchange Act” means the Securities Exchange Act of 1934, as amended, and the rules and guidance promulgated under it.

“Good Reason” means, without the Participant’s consent:

(i) In the case of a Tier 1, 2, 3, or 4 Employee, a material diminution in the Participant’s Base Salary or Target Bonus Potential. This does not apply to a material diminution in the case of a Tier 1 or Tier 2 Employee resulting from a determination by both the CEO and the Compensation Committee that Organovo’s financial condition is such that a reduction in compensation is appropriate and the reduction is applied uniformly to all Company officers;

(ii) a material diminution in the Participant’s authority, duties, or responsibilities, which shall include (A) with respect to any Participant who is a member of the Board, any failure of the Board to appoint or the stockholders of Organovo to elect such Participant as a member of the Board, or any removal of Participant from the Board for reasons other than Cause, (B) with respect to any Participant who is a Tier 1 or Tier 2 Employee, removal from Organovo’s Executive Team;

(iii) with respect to any Participant who is a Tier 1, 2, 3, or 4 Employee, a material diminution in the authority, duties, or responsibilities of the supervisor to whom the Participant is required to report;

(iv) any requirement that the Participant relocate, by more than fifty (50) miles, the principal location from which the Participant performs services for Organovo immediately prior to the termination of employment or the occurrence of the Change in Control.

It shall be a condition precedent to the Participant’s right to terminate Participant’s employment for Good Reason (whether before or after a Change in Control) that (i) the Participant shall have first given Organovo written notice stating with reasonable specificity the breach on which such termination is premised within ninety (90) days after the Participant becomes aware or should have become aware of such breach, and (ii) if such breach is susceptible of cure or remedy, such breach has not been cured or remedied within thirty (30) days after receipt of such notice.

“Health Benefit Continuation” means payment by Organovo of the premium for COBRA coverage, if elected by the Participant and his/her eligible dependents, upon loss of coverage under Organovo’s group health plan for active employees of Organovo due to termination of employment, until the earlier of (i) the end of the Health Benefit Payment Period, (ii) the date that the Participant becomes eligible for coverage under another group health plan, or (iii) the end of the eighteen (18)-month maximum COBRA coverage period.

“Health Benefit Payment Period” means eighteen (18) months for a Tier 1 Employee, twelve (12) months for a Tier 2 Employee, (9) months for a Tier 3 Employee and six (6) months for a Tier 4 Employee.

“Organovo” means Organovo Holdings, Inc., and its Affiliates.

“Outplacement Assistance” means payment by Organovo of the cost of providing outplacement services for the following periods:

Tier 1 – 18 months

Tier 2 – 12 months

Tier 3 – 9 months

Tier 4 – 6 months

“Participant” means a person who has become a participant pursuant to Section 5 of the Plan.

“Participation Agreement” means a written agreement with Organovo in such form as the Committee may specify which obligates the Participant to comply with all of the terms and conditions of participation in the Plan.

“Plan” means this Organovo Holdings, Inc. Severance and Change in Control Plan.

“Restricted Period” means twenty-four (24) months for a Tier 1 Employee, twelve (12) months for a Tier 2 Employee, (9) months for a Tier 3 Employee, and six (6) months for a Tier 4 Employee.

“Severance Benefits” means the benefits specified in Section 6 of this Plan.

“Target Bonus” means the Participant’s short-term incentive bonus target in effect on the Participant’s date of termination of employment, provided, however, that following a Change in Control, the Target Bonus shall be the greater of (1) the Participant’s short-term incentive bonus target in effect on the Participant’s date of termination of employment, and (2) the Participant’s short-term incentive bonus target in effect on the date of the Change in Control.

“Tier 1 Employees” means Organovo’s Chief Executive Officer, Chief Financial Officer, and such other executives as the Committee shall specify from time to time.

“Tier 2 Employees” means all non-Tier 1 members of Organovo’s Executive Team, and such other executives as the Committee shall specify from time to time.

“Tier 3 Employees” means all Senior Vice Presidents who are not members of Organovo’s Executive Team, and such other executives as the Committee shall specify from time to time.

“Tier 4 Employees” means all Vice Presidents who are not members of Organovo’s Executive Team, and such other executives as the Committee shall specify from time to time.

3. Effective Date

The Plan shall be effective only with respect to a termination of employment covered by the Plan that occurs on or after November 4, 2015 (the “Effective Date”).

4. Administration

- (a) The Committee shall act as the plan administrator and the “named fiduciary” of the Plan for purposes of ERISA. Before a Change in Control, the Committee has sole and absolute discretion and authority to administer the Plan, including the sole and absolute discretion and authority to:
- (i) adopt such rules as it deems advisable in connection with the administration of the Plan, and to construe, interpret, apply and enforce the Plan and any such rules and to remedy ambiguities, errors or omissions in the Plan;
 - (ii) determine questions of eligibility and entitlement to benefits and any other terms of the Plan applicable to the Participants; the Committee’s determinations are conclusive and binding on all parties affected by its determinations;
 - (iii) act under the Plan on a case-by-case basis; the Committee’s decisions under the Plan need not be uniform with respect to similarly situated Participants; and
 - (iv) delegate its authority under the Plan to any director, officer, employee, or group of directors, officers and/or employees of Organovo.
- (b) If any person with administrative authority becomes eligible or makes a claim for Plan benefits, that person will have no authority with respect to any matter specifically affecting his/her individual interest under the Plan, and the Committee will designate another person to exercise such authority.
-

- (c) Notwithstanding anything in the Plan to the contrary, after a Change in Control, neither the Committee nor the Board nor any other person or entity shall have any discretionary authority in the administration of the Plan, and any court or tribunal that adjudicates any dispute, controversy or claim in connection with any Severance Benefits under this Plan will apply a *de novo* standard of review to any determinations made by the Committee or Board following such Change in Control. Such *de novo* standard shall apply notwithstanding the grant of full discretion hereunder to the Committee, Board, or any person or entity or characterization of any decision by the Committee, Board, or by such person or entity as final, binding or conclusive on any party.

5. Eligibility to Participate in Plan

(a) In order to participate in the Plan, an employee must; (i) be scheduled to work at least 20 hours a week in the conduct of the business of Organovo, (ii) have been on the Employer’s U.S. payroll for at least six months prior to the Termination Date and (iii) have entered into a written Participation Agreement with Organovo. Notwithstanding the preceding sentence, the term “Employee” shall not include any of the following individuals:

(i) Any person classified by Organovo as a casual employee, intern, on-call employee, seasonal employee, temporary employee, zero-hour employee or contingent employee;

(ii) Any person whose terms and conditions of employment are governed by a collective bargaining agreement, unless such collective bargaining agreement provides for participation by employees in the bargaining unit in the Plan or a program described in the appendices to the Plan;

(iii) Any person who is subject to a written agreement that provides that such individual shall not be eligible to participate in the Plan;

(iv) Any person seconded from a jurisdiction outside the United States; and

(v) Any member of a group, division or other classification designated by the Employer as ineligible to participate in the Plan.

(b) An individual’s eligibility shall be determined by the Committee in its sole discretion. All such determinations shall be conclusive and binding on all persons.

Severance Benefits

(a) *Before a Change in Control.* If a Participant’s employment with Organovo is terminated after the Effective Date and before a Change in Control either by Organovo for reasons other than Cause, death, or Disability, or by the Participant for Good Reason, then the Participant will be entitled to receive his or her Accrued Benefits and, subject to the Participant’s satisfaction of the requirements of Section 7(a) (regarding waiver and release of claims) and Section 7(b) (regarding restrictive covenants), Organovo shall provide the Participant with the following Severance Benefits:

(i) payment of the Cash Severance specified in this Section 6(a)(i), which amount shall be paid in a lump sum within the first regular payroll period following the expiration of any period during which a Participant may revoke the waiver and release of claims executed pursuant to Section 7(a), so long as that waiver and release becomes effective no later than sixty (60) days after the Participant’s termination of employment.

Tier	Fixed Benefit	Variable Benefit	Maximum
Tier 1	2.0 times the Base Salary	N/A	N/A
Tier 2	1.0 times the Base Salary	N/A	N/A
Tier 3	75 times the Base Salary	N/A	N/A
Tier 4	5 times the Base Salary	N/A	N/A

(ii) a pro-rated Target Bonus for Organovo's fiscal year in which the termination occurs, pro-rated based on the number of full and partial calendar months during such year prior to the date of termination of employment, which amount shall be paid at the time at which bonuses are paid to actively employed employees for such fiscal year;

(iv) Health Benefit Continuation; and

(v) Outplacement Assistance.

(b) *Termination Less Than Six Months Before a Change in Control.* If the employment of a Participant in Tiers 1-4, is terminated after the Effective Date either by Organovo for reasons other than Cause, death, or Disability, or by the Participant for Good Reason, the Participant begins to receive severance in accordance with Section 6(a), and a Change in Control occurs within six (6) months after the effective date of such termination of employment, then (i) no further payments shall be made pursuant to Sections 6(a)(i) and 6(a)(ii), and the Participant shall receive a single lump sum cash payment upon such Change in Control (or such later date as the release becomes effective as provided in Section 6(a)) equal to the amount (if any) by which (A) the sum of the Cash Severance determined in accordance with Section 6(c)(i) plus the prorated Target Bonus determined in accordance with Section 6(c)(ii), exceeds (B) the amount of any Cash Severance already paid to the Participant under Section 6(a)(i) and the amount of any pro-rated bonus already paid to the Participant under Section 6(a)(ii) for Organovo's fiscal year in which the termination occurs based on actual performance, and (ii) all outstanding equity awards granted by Organovo to such Participant shall become fully vested upon such Change in Control, and to the extent such equity award is a stock option or stock appreciation right which is not cashed out upon the Change in Control, shall be exercisable for a period of one year following the effective date of such termination or until the option expiration date, if earlier. If a Change in Control occurs more than six (6) months after the effective date of a Participant's termination of employment, all payments specified by Section 6(a) will continue to be paid as scheduled.

(c) *After a Change in Control.* If a Participant's employment with Organovo is terminated within 12 months after a Change in Control either by Organovo (or its successor) for reasons other than Cause, death, or Disability, or by the Participant for Good Reason, then the Participant will be entitled to receive his or her Accrued Benefits and, subject to the Participant's satisfaction of the requirements of Section 7(a) (regarding waiver and release of claims) and Section 7(b) (regarding restrictive covenants), Organovo shall provide the Participant with the following Severance Benefits in lieu of those provided under Section 6(a):

(i) payment of the Cash Severance specified in this Section 6(c)(i), which amount shall be paid in a lump sum cash amount no later than ten (10) business days following the expiration of any period during which a Participant may revoke the waiver and release of claims executed pursuant to Section 7(a), so long as that waiver and release becomes effective no later than sixty (60) days after the Participant's termination of employment (or the Change in Control Date, for a Participant whose termination of employment is deemed to occur on the Change in Control Date). Notwithstanding the foregoing, if the period during which a Participant has discretion to execute or revoke the waiver and release of claims straddles two taxable years of the Participant, then Organovo shall make the payment in the second of such taxable years, regardless of which taxable year the Participant actually delivers the executed waiver and release to Organovo:

Tier	Fixed Benefit	Variable Benefit	Maximum
Tier 1	2.0 times the Base Salary	N/A	N/A
Tier 2	1.0 times the Base Salary	N/A	N/A
Tier 3	1.0 times the Base Salary	N/A	N/A
Tier 4	.75 times the Base Salary	N/A	N/A

(ii) a pro-rated Target Bonus for Organovo's fiscal year in which the termination occurs, pro-rated based on the number of full and partial calendar months during such year prior to the date of termination of employment, which amount shall be paid at the time and subject to the same conditions as the Cash Severance;

(iii) with respect to equity awards outstanding on the effective date of termination of employment: all outstanding equity awards granted by Organovo to the terminated Employees in Tiers 1-4, as applicable, shall become fully vested, and to the extent such equity award is a stock option or stock appreciation right which is not cashed out upon the Change in Control, shall be exercisable for a period of one year following the effective date of such termination or until the option expiration date, if earlier;

(iv) Health Benefit Continuation.

(v) Outplacement Assistance.

(d) *Form of Severance under Existing Agreement.* Participants who are covered by an existing employment or severance agreement with Organovo on the Effective Date agree that their existing rights under that agreement are terminated and replaced with the provisions of this Plan; provided, however, that for the duration of the original remaining term of the employment or severance agreement only, the timing and form of severance (i.e., lump sum or installments) in the employment or severance agreement shall supersede the timing and form of payment provisions in this Section 6 and control the timing and form of payment of the Cash Severance. The Participation Agreement shall provide that, unless otherwise agreed to in writing by the Participant and Organovo, that any defined terms in any outstanding equity awards held by the Participant as of the Effective Date shall be superseded and replaced in their entirety by the defined terms in Section 2 of this Plan (including, but not limited to, "Cause", "Change of Control", "Disability" and "Good Reason").

(e) *Release of Claims and Restrictive Covenants.* Notwithstanding anything in this Plan to the contrary, the Severance Benefits are subject to and contingent on the Participant's satisfaction of the requirements of Section 7(a) (regarding waiver and release of claims) and Section 7(b) (regarding restrictive covenants).

(f) *Code Section 280G Cutback.* If the Severance Benefits provided by this Plan or other benefits otherwise payable to the Participant (a) constitute "parachute payments" within the meaning of Code section 280G, and (b) but for this Section 6(g), would be subject to the excise tax imposed by Code section 4999 ("Excise Tax"), then such Severance Benefits or other benefits shall be payable either in full or in such lesser amount which would result in no portion of such Severance Benefits or other benefits being subject to the Excise Tax, whichever of the foregoing amounts, taking into account the applicable federal, state and local income and employment taxes and the Excise Tax, results in the receipt by the Participant, on an after-tax basis, of the greatest amount of such Severance Benefits and other benefits under this Plan or otherwise, notwithstanding that all or some portion of such Severance Benefits or other benefits may be taxable under Code section 4999. Any reduction in the Severance Benefits and other benefits required by this Section 6(g) shall be made in the following order: (i) reduction of cash payments; (ii) reduction of accelerated vesting of equity awards other than stock options; (iii) reduction of accelerated vesting of stock options; and (iv) reduction of other benefits paid or provided to the Participant. The calculations in this Section 6(g) will be performed by the professional firm engaged by

Organovo for general tax purposes as of the day prior to the date of the Change in Control. If the tax firm so engaged by Organovo is serving as accountant or auditor for the acquiring company, Organovo shall appoint a nationally recognized tax firm to make the determinations required by this Section 6(g). Organovo shall bear all expenses with respect to the determinations by such firm required to be made by this Section 6(g). Organovo and the Participant shall furnish such tax firm such information and documents as the tax firm may reasonably request in order to make its required determination. The tax firm will provide its calculations, together with detailed supporting documentation, to Organovo and the Participant as soon as practicable following its engagement. Any good faith determinations of the tax firm made hereunder shall be final, binding and conclusive upon Organovo and the Participant. As a result of the uncertainty in the application of Code section 409A, 280G or 4999 at the time of the initial determination by the professional tax firm described in this Section 6(g), it is possible that the Internal Revenue Service (the "IRS") or other agency will claim that an Excise Tax greater than that amount, if any, determined by such professional firm for the purposes of Section 6(g) is due (the "Additional Excise Tax"). The Participant shall notify Organovo in writing of any claim by the IRS or other agency that, if successful, would require payment of Additional Excise Tax. The Participant and Organovo shall each reasonably cooperate with the other in connection with any administrative or judicial proceedings concerning the existence or amount of liability for Excise Tax with respect to payments made or due to the Participant. Organovo shall pay all reasonable fees, expenses and penalties of the Participant relating to a claim by the IRS or other agency. In the event it is finally determined that a further reduction would have been required under this Section 6(g) to place the Participant in a better after-tax position, the Participant shall repay Organovo such amount within thirty (30) days thereof in order to effect such result.

7. Terms and Conditions of Participation

(a) *Waiver and Release of Claims.* As a condition to receiving Severance Benefits under the Plan, each Participant shall be required to sign and deliver to Organovo, and may not revoke or violate the terms of, a general release of all claims against Organovo, and the directors, officers, and employees of each of them, in the form attached as Exhibit A or such other form reasonably satisfactory to the Committee. In no case will payments be made or begin before the end of any revocation period required by applicable law or regulation in connection with any release or waiver that the Participant is asked to sign.

(b) *Restrictive Covenants.* By executing the Participation Agreement, the Participant agrees to abide by the following restrictive covenants as consideration for the Severance Benefits provided under Section 6, and acknowledges that the provisions and covenants contained in this Section 7(b) are ancillary and material to the terms of the Plan and that the limitations contained herein are reasonable in geographic and temporal scope and do not impose a greater restriction or restraint than is necessary to protect the goodwill and other legitimate business interests of Organovo. The Participant also acknowledges and agrees that the provisions of this Section 7(b) do not adversely affect the Participant's ability to earn a living in any capacity that does not violate the covenants contained herein. Organovo acknowledges and agrees that before Participant shall be determined to have breached any provision or covenant contained in this Section 7(b), the Participant shall have been given notice of any such alleged breach (including the grounds for Organovo's determination in reasonable detail) and been given forty-five (45) days after receipt of such notice of such breach to (1) cure or remedy any such breach that is reasonably susceptible of cure or remedy or (2) provide Organovo with support that Participant did not breach this Section 7(b). During this forty-five (45) day notice period, a Tier 1 Employee will be afforded the opportunity to make a presentation to the Board regarding the matters referred to in Organovo's notice.

(i) *Confidential Information.* The Participant shall hold in a fiduciary capacity for the benefit of Organovo and all of its subsidiaries, partnerships, joint ventures, limited liability companies, and other affiliates (collectively, the "Company Group"), all secret or confidential information, knowledge or data relating to Organovo and its businesses (including, without limitation, any proprietary and not publicly available information concerning any processes, methods, trade secrets, intellectual property, research secret data, costs, names of users or purchasers of their respective products or services, business methods, operating or manufacturing procedures, or programs or methods of promotion and sale) that the Participant has obtained or obtains during the Participant's employment by Organovo and that is not public knowledge (other than as a result of the Participant's violation of this Section 7(b)(i)) ("Confidential Information"). The Participant shall not communicate, divulge or disseminate Confidential Information at any time during or after the Participant's employment and/or service as a consultant with Organovo, except with prior written consent of a corporate officer of Company, or as otherwise required by law or legal process. All records, files, memoranda, reports, customer lists, drawings, plans, documents and the like that the Participant uses, prepares or comes into contact with during the course of the Participant's employment shall remain the sole property of Organovo and/or Organovo, as applicable, and shall be turned over to the applicable Company Group company upon termination of the Participant's employment.

(ii) *Non-Recruitment of Company Group Employees, Etc.* During the Participant's employment with Organovo and for the Restricted Period, the Participant shall not (1) solicit or participate in the solicitation of any person who was employed by Organovo at any time during the six-month period prior to the Participant's termination of employment to leave the employ of Organovo; or (2) on behalf of the Participant or any other person, hire, employ, or engage any such person, provided that these restrictions shall only apply so long as the person remains employed by the Organovo and for six months after they cease to be employed by Organovo. The Participant further agrees that, during the Participant's employment with Organovo and for the Restricted Period, if an employee of

Organovo contacts the Participant about prospective employment, the Participant will inform that employee that the Participant cannot discuss the matter further without informing Organovo.

(iii) *Non-Solicitation of Business.* The Participant acknowledges and agrees that the identities of Organovo's customers and any information regarding Organovo's customers is confidential and constitutes trade secrets. In recognition of the confidential and trade secret nature of information regarding Organovo's customers, the Participant agrees that during the Restricted Period, the Participant shall not (either directly or indirectly or as an officer, agent, employee, partner or director of any other company, partnership or entity) solicit on behalf of any Competitor of Organovo the business of (1) any customer of Organovo during the time of the Participant's employment or as of the date of Participant's termination of employment, or (2) any potential customer of Organovo which the Participant knew to be an identified, prospective purchaser of services or products of Organovo as of the date of Participant's termination of employment.

(iv) *Employment by Competitor.* During the Restricted Period, the Participant shall not invest in (other than in a publicly traded company with a maximum investment of no more than one percent (1%) of outstanding shares), counsel, advise, or be otherwise engaged or employed by, any Competitor of Organovo.

(v) *No Disparagement.*

(1) The Participant and Organovo shall at all times refrain from taking actions or making statements, written or oral, that denigrate, disparage or defame the goodwill or reputation of the Participant or Organovo, as the case may be, or any of its trustees, officers, security holders, partners, agents or former or current employees and directors. The Participant further agrees not to make any negative statement to third parties relating to the Participant's employment or any aspect of the businesses of Organovo and not to make any statements to third parties about the circumstances of the termination of the Participant's employment, or about Organovo or its trustees, directors, officers, security holders, partners, agents or former or current employees and directors, except as may be required by a court or government body.

(2) The Participant further agrees that, following termination of employment for any reason, the Participant shall assist and cooperate with Organovo with regard to any matter or project in which the Participant was involved during the Participant's employment with Organovo, including but not limited to any litigation that may be pending or arise after such termination of employment (other than any litigation in which Organovo asserts a claim against Participant or alleges that Participant breached one of the restrictive covenants in this Section 7(b)). Organovo shall not unreasonably request such cooperation of the Participant and shall cooperate with the Participant in scheduling any assistance by the Participant taking into account the Participant's business and personal affairs and shall compensate the Participant for any lost wages and/or expenses associated with such cooperation and assistance.

(vi) *Inventions.* All plans, discoveries and improvements, whether patentable or unpatentable, made or devised by the Participant, whether alone or jointly with others, from the date of the Participant's initial employment by Organovo and continuing until the end of any period during which the Participant is employed by Organovo, relating or pertaining in any way to the Participant's employment with or the business of Organovo (each, an "Invention"), shall be promptly disclosed in writing to the Secretary of the Board and are hereby transferred to and shall redound to the benefit of Organovo and shall become and remain its sole and exclusive property. The Participant agrees to execute any assignment to Organovo or its nominee, of the Participant's entire right, title and interest in and to any Invention and to execute any other instruments and documents requisite or desirable in applying for and obtaining patents, trademarks or copyrights, at Organovo's expense, with respect thereto in the United States and in all foreign countries, that may be required by Organovo. The Participant further agrees to cooperate, while employed and thereafter, to the extent and in the manner required by Organovo, in the prosecution or defense of any patent or copyright claims or any litigation, or other proceeding involving any trade secrets, processes, discoveries or improvements covered by this covenant, but all necessary expenses thereof shall be paid by Organovo. The Participant agrees to disclose promptly in writing to Organovo all innovations (including Inventions) conceived, reduced to practice, created, derived, developed, or made by the Participant during the term of employment and for three months thereafter, whether or not the Participant believes such innovations are subject to this Section 7(b)(vi), to permit a determination by Organovo as to whether or not the innovations should be the property of Organovo. Any such information will be received in confidence by Organovo.

(vii) *Acknowledgement and Enforcement.* The Participant acknowledges and agrees that: (1) the purpose of the foregoing covenants is to protect the goodwill, trade secrets and other Confidential Information of Organovo; (2) because of the nature of the business in which Organovo is engaged and because of the nature of the Confidential Information to which the Participant has access, Organovo would suffer irreparable harm and it would be impractical and excessively difficult to determine the actual damages of Organovo in the event the Participant breached any of the covenants of this Section 7(b); and (3) remedies at law (such as monetary damages) for any breach of the Participant's obligations under this Section 7(b) would be inadequate. The Participant therefore agrees and consents that (X) if the Participant commits any breach of a covenant under this Section 7(b) during the applicable period of restriction specified therein, all unpaid Severance Benefits will be immediately forfeited, and (Y) if the Participant commits any

breach of a covenant under this Section 7(b) or threatens to commit any such breach at any time, Organovo shall have the right (in addition to, and not in lieu of, any other right or that may be available to it) to temporary and permanent injunctive relief from a court of competent jurisdiction, without posting any bond or other security and without the necessity of proof of actual damage.

(viii) *Similar Covenants in Other Agreements Unaffected.* The Participant may be or become subject to covenants contained in other agreements (including but not limited to stock option and restricted stock unit agreements) which are similar to those contained in this Section 7(b). Further, a breach of the covenants contained in this Section 7(b) may have implications under the terms of such other agreements, including but not limited to a forfeiture of equity awards and long-term cash compensation. The Participant acknowledges the foregoing and understands that the covenants contained in this Section 7(b) are in addition to, and not in substitution of, the similar covenants contained in any such other agreements.

(c) *At-Will Employment.* Each Participant is employed by Organovo on an “at will” basis and nothing in this Plan shall give any Participant any right to continue in the employ of Organovo. A Participant shall have no rights under the Plan if the Participant’s employment is terminated by Organovo, or any successor, with Cause or by the Participant without Good Reason, or due to the Participant’s death or Disability.

(d) *Nonduplication; No Impact on Benefits.*

Payments to a Participant under the Plan shall be in lieu of any severance or similar payments that otherwise might be payable under any Company plan, program, policy or agreement with Organovo that provides Severance Benefits upon termination of employment.

Benefits payable under the Plan, whether paid in a lump sum or in periodic payments, will not increase or decrease the benefits otherwise available to a Participant under any company-sponsored retirement plan, welfare plan or any other employee benefit plan or program, unless otherwise expressly provided for in any particular plan or program.

Any Severance Benefits specified under the Plan shall be reduced by the amount of any payment required by Organovo to the Participant (A) because of insufficient advance notice of employment loss as may be required by law; or (B) under applicable law because of the termination of employment.

8. Claims

(a) *Initial Claim.* Any claims concerning eligibility, participation, benefits or other aspects of the Plan must be submitted in writing and directed to the Committee, within thirty (30) days after the communication of the determination that is the basis of the claim. Within thirty (30) days after receiving a claim, the Committee will (i) either accept or deny the claim completely or partially and (ii) notify the Participant of acceptance or denial of the claim. If a claim is partially or wholly denied, the Committee will provide a written denial to the Participant no later than ninety (90) days after receipt of the initial claim request. The written denial shall include specific reasons for the denial, specific references to the Plan provisions upon which the denial was based, a description of any additional material or information necessary for the Participant to perfect the claim, an explanation of why such material is necessary, and instructions on the Plan’s claim review procedure.

(b) *Appeals.* The Participant may submit a written request for review of a denied claim within thirty (30) days after receipt of such denial. Such written request must contain an explanation as to why the Participant is seeking a review, and must be submitted to the Company’s Head of Human Resources. For purposes of the review, the Participant has the right to (i) submit written comments, documents, records and other information relating to the claim for benefits; (ii) request, free of charge, reasonable access to, and copies of, all documents, records, and other information relevant to the claim for benefits; and (iii) a review that takes into account all comments, documents, records, and other information the Participant submitted relating to the claim, regardless of whether the information was submitted or considered in the initial decision. A decision on such review will be rendered in writing by the Board within thirty (30) days of the Company’s receipt of a request for review. A written notice affirming the denial of a claim will set forth the specific reasons for the decision and make specific reference to Plan provisions upon which the decision or appeal is based. In preparation for filing such a request for review, the Participant or the Participant’s authorized representative may review pertinent Plan documents, and as part of the written request for review, may submit issues and comments concerning the claim. No claim may be brought before or submitted to a court of law or other governmental entity unless and until the claims process under this Section 7 has been exhausted.

9. Recoupment

(a) *Right of Recoupment.* If, at any time, the Board or the Committee, as the case may be, determines that any action or omission by the Participant constituted a violation of the restrictive covenants in Section 7(b) to the material detriment of Organovo, then the Participant’s participation in the Plan shall be immediately terminated and the Participant shall repay to Organovo, upon

notice to the Participant by Organovo, up to 100% of the pre-tax amount paid to the Participant pursuant to this Plan. The Board or the Committee, as the case may be, shall determine the date of occurrence of such violation and the percentage of the pre-tax amount received pursuant to this Plan that must be repaid to Organovo.

(b) Method of Recoupment. To the extent permitted by applicable law, Organovo may enforce the recoupment of any or all amounts due under this Section 9 by withholding future payment of any Severance Benefits, seeking reimbursement of previously paid Severance Benefits, demanding direct cash payment, reducing any amount of compensation owed by Organovo to the Participant, and/or such other means determined by the Board or Committee.

(c) Nonexclusive Remedy. Organovo's right of recoupment under this Section 98 is in addition to any remedy available to Organovo with respect to any Participant, including, but not limited to, the initiation of civil or criminal proceedings and any right to repayment under the Sarbanes-Oxley Act of 2002, Dodd-Frank Wall Street Reform and Consumer Protection Act, and any other applicable law.

10. General

(a) Amendment and Termination of the Plan. The Board or the Committee may amend or terminate the Plan in any respect (including any change to the Severance Benefits) only with two years notice to Participants; provided, however, that (i) any amendment or termination will not be effective if there is a Change in Control during the two year notice period, and (ii) the Plan cannot be amended or terminated during the twenty-four (24) month period after a Change in Control. A Participant ceasing to be eligible for a benefit under the Plan before a Change in Control, as described in Section 5, is not an amendment or termination of the Plan.

(b) Funding. Benefits payable under the Plan will be paid only from the general assets of Organovo. The Plan does not create any right to, or interest in, any specific assets of Organovo.

(c) No Mitigation. The Participant shall not be obligated to seek other employment in mitigation of the amounts payable under any provision of the Plan, and the obtaining of such other employment shall not effect any reduction of Organovo's obligations to pay the Severance Benefits provided under the Plan (unless in violation of the restrictive covenants specified under Section 7(b)).

(d) Withholding. Organovo may withhold from any payments made under the Plan all federal, state, local or other taxes required pursuant to any law or governmental regulation or ruling.

(e) Right to Offset. To the extent permitted by law, Organovo may offset against any obligation to pay any portion of the severance benefit under the Plan any outstanding amount of whatever nature that the Participant then owes to Organovo in the capacity as an employee. However, no amount of "deferred compensation" (as defined under Treasury Regulation section 1.409A-1(b)(1), after giving effect to the exemptions in Treasury Regulation sections 1.409A-1(b)(3) through (b)(12)) that is payable to a Participant under the Plan may be used to offset any amount that the Participant then owes to Organovo.

(f) Successors. All rights under the Plan are personal to the Participant and without the prior written consent of the Committee shall not be assignable by the Participant. The Plan shall inure to the benefit of and be enforceable by the Participant's legal representative. The Plan shall inure to the benefit of, and be binding upon, Organovo and its successors and assigns. Any successor (whether direct or indirect, by purchase, merger, consolidation or otherwise) to all or substantially all of the business and/or assets of Organovo Holdings shall be required to assume expressly and agree to perform the obligations set forth in the Plan in the same manner and to the same extent as Organovo would be required to do so.

(g) Governing Law. The Plan and all determinations made and actions taken pursuant to the Plan shall be governed by the substantive laws, but not the choice of law rules, of the State of Delaware or by United States federal law.

(h) Severability. If any provision of the Plan is declared illegal, invalid or otherwise unenforceable by a court of competent jurisdiction, the provision shall be reformed, if possible, to the extent necessary to render it legal, valid and enforceable, or otherwise deleted, and the remainder of the terms of the Plan shall not be affected except to the extent necessary to reform or delete such illegal, invalid or unenforceable provision.

(i) *Notices.* Notices and all other communications provided for under the Plan shall be in writing and shall be deemed to have been duly given when personally delivered or when mailed by United States certified mail, return receipt requested, or by overnight courier, postage prepaid, to Organovo's corporate headquarters address, to the attention of the Committee, or to the Participant at the home address most recently communicated by the Participant to Organovo in writing.

(j) *409A Compliance.*

(i) The Plan is intended to comply with, or otherwise be exempt from, Code section 409A. The preceding provision, however, shall not be construed as a guarantee by Organovo of any particular tax effect to a Participant under the Plan. Organovo shall not be liable to a Participant for any payment made under the Plan, at the direction or with the consent of the Participant, which is determined to result in an additional tax, penalty or interest under Code section 409A, nor for reporting in good faith any payment made under the Plan as an amount includible in gross income under Code section 409A.

(ii) "Termination of employment," or words of similar import, as used in this Plan means, for purposes of any payments under this Plan that are payments of deferred compensation subject to Code section 409A, the Participant's "separation from service" as defined in Code section 409A. For purposes of Code section 409A, the right to a series of installment payments under this Plan shall be treated as a right to a series of separate payments.

(iii) With respect to any reimbursement of expenses of, or any provision of in-kind benefits to, a Participant, as specified under this Plan: (1) the expenses eligible for reimbursement or the amount of in-kind benefits provided in one taxable year shall not affect the expenses eligible for reimbursement or the amount of in-kind benefits provided in any other taxable year, except for any medical reimbursement arrangement providing for the reimbursement of expenses referred to in Code section 105(b); (2) the reimbursement of an eligible expense shall be made no later than the end of the year after the year in which such expense was incurred; and (3) the right to reimbursement or in-kind benefits shall not be subject to liquidation or exchange for another benefit.

(iv) If a payment obligation under the Plan arises on account of a Participant's termination of employment while a "specified employee" (as defined under Code section 409A and the regulations thereunder and determined in good faith by the Committee), any payment of "deferred compensation" (as defined under Treasury Regulation section 1.409A-1(b)(1), after giving effect to the exemptions in Treasury Regulation sections 1.409A-1(b)(3) through (b)(12)) shall be made within fifteen (15) days after the end of the six-month period beginning on the date of such termination of employment or, if earlier, within fifteen (15) days after appointment of the personal representative or executor of the Participant's estate following the death of the Participant.

(k) *Arbitration.* THE COMPANY AND PARTICIPANT AGREE THAT ANY AND ALL DISPUTES ARISING OUT OF THE TERMS OF THIS PLAN, THEIR INTERPRETATION, AND ANY OF THE MATTERS HEREIN, SHALL BE SUBJECT TO ARBITRATION IN SAN DIEGO COUNTY, BEFORE JUDICIAL ARBITRATION & MEDIATION SERVICES ("JAMS"), PURSUANT TO ITS EMPLOYMENT ARBITRATION RULES & PROCEDURES ("JAMS RULES"). THE ARBITRATOR MAY GRANT INJUNCTIONS AND OTHER RELIEF IN SUCH DISPUTES. THE ARBITRATOR SHALL ADMINISTER AND CONDUCT ANY ARBITRATION IN ACCORDANCE WITH CALIFORNIA LAW, INCLUDING THE CALIFORNIA CODE OF CIVIL PROCEDURE, AND THE ARBITRATOR SHALL APPLY SUBSTANTIVE AND PROCEDURAL CALIFORNIA LAW TO ANY DISPUTE OR CLAIM, WITHOUT REFERENCE TO ANY CONFLICT-OF-LAW PROVISIONS OF ANY JURISDICTION. TO THE EXTENT THAT THE JAMS RULES CONFLICT WITH CALIFORNIA LAW, CALIFORNIA LAW SHALL TAKE PRECEDENCE. THE DECISION OF THE ARBITRATOR SHALL BE FINAL, CONCLUSIVE, AND BINDING ON THE PARTIES TO THE ARBITRATION. THE PARTIES AGREE THAT THE PREVAILING PARTY IN ANY ARBITRATION SHALL BE ENTITLED TO INJUNCTIVE RELIEF IN ANY COURT OF COMPETENT JURISDICTION TO ENFORCE THE ARBITRATION AWARD. THE PARTIES TO THE ARBITRATION SHALL EACH PAY AN EQUAL SHARE OF THE COSTS AND EXPENSES OF SUCH ARBITRATION, AND EACH PARTY SHALL SEPARATELY PAY FOR ITS RESPECTIVE COUNSEL FEES AND EXPENSES; PROVIDED, HOWEVER, THAT THE ARBITRATOR SHALL AWARD ATTORNEYS' FEES AND COSTS TO THE PREVAILING PARTY, EXCEPT AS PROHIBITED BY LAW. THE PARTIES HEREBY AGREE TO WAIVE THEIR RIGHT TO HAVE ANY DISPUTE BETWEEN THEM RESOLVED IN A COURT OF LAW BY A JUDGE OR JURY. NOTWITHSTANDING THE FOREGOING, THIS SECTION WILL NOT PREVENT EITHER PARTY FROM SEEKING INJUNCTIVE RELIEF (OR ANY OTHER PROVISIONAL REMEDY) FROM ANY COURT HAVING JURISDICTION OVER THE PARTIES AND THE SUBJECT MATTER OF THEIR DISPUTE RELATING TO THIS PLAN AND THE AGREEMENTS INCORPORATED HEREIN BY REFERENCE. SHOULD ANY PART OF THE ARBITRATION AGREEMENT CONTAINED IN THIS PARAGRAPH CONFLICT WITH ANY OTHER ARBITRATION AGREEMENT BETWEEN THE PARTIES, THE PARTIES AGREE THAT THIS ARBITRATION AGREEMENT SHALL GOVERN.

Exhibit A

WAIVER AND RELEASE AGREEMENT

This Waiver and Release Agreement (“Release”) is made by and between _____ (“Participant”) and Organovo Holdings, Inc. and its Affiliates (collectively, the “Company”) in consideration of severance pay and benefits provided to the Participant pursuant to the Organovo Holdings, Inc. Severance and Change in Control Plan (the “Plan”). The Participant and the Company are collectively referred to as the “Parties” and are individually referred to as a “Party”. All capitalized terms used in this Release not otherwise defined herein shall have the meanings set forth in Section 1 of the Plan, except as otherwise specified.

RECITALS

WHEREAS, Participant was employed by the Company as a Tier ___ Employee under the Plan;

WHEREAS, Participant’s employment with the Company ended effective _____ (the “Separation Date”); and

WHEREAS, pursuant to the terms of the Plan, the Parties wish to resolve any and all disputes, claims, complaints, grievances, charges, actions, petitions, and demands that the Participant may have against the Company and any of the Releasees as defined below, including, but not limited to, any and all claims arising out of or in any way related to Participant’s employment with or separation from the Company;

NOW, THEREFORE, in consideration of the mutual promises made herein and in the Plan, the Company and Participant hereby agree as follows:

COVENANTS

1. **Severance.**

a. **Salary.** The Company agrees to pay Participant the equivalent of ___ months of base salary, or _____ dollars (\$____), in a lump sum payment within the first regular payroll period following the expiration of any period during which the Participant may revoke this Release.

b. **Target Bonus.** The Company agrees to pay Participant a prorated bonus of _____ dollars (\$____), in a lump sum payment to be made [at the time at which bonuses are paid to actively employed employees for fiscal ____ or within the first regular payroll period following the expiration of any period during which the Participant may revoke this Release].

c. **Equity Awards.** [In the event that the Participant’s termination satisfies the conditions set forth in Section 6(b) the Plan, all outstanding equity awards granted by the Company to such Participant shall become fully vested upon such Change in Control, and to the extent such equity award is a stock option or stock appreciation right which is not cashed out upon the Change in Control, shall be exercisable for a period of one year following the effective date of such termination or until the option expiration date, if earlier.] [In the event that the Participant’s termination satisfies the conditions set forth in Section 6(c) the Plan, all outstanding equity awards granted by the Company to such Participant shall become fully vested, and to the extent such equity award is a stock option or stock appreciation right which is not cashed out upon the Change in Control, shall be exercisable for a period of one year following the effective date of such termination or until the option expiration date, if earlier.]

d. **Health Benefit Continuation.** The Company shall provide COBRA coverage for Participant and his/her eligible dependents for a period of ____ (__) months, provided Participant timely elects and pays for continuation coverage pursuant to the Consolidated Omnibus Budget Reconciliation Act of 1985, as amended (“COBRA”), within the time period prescribed pursuant to COBRA.

e. **Outplacement Assistance.** The Company agrees to pay the cost of providing outplacement services for Participant for a period of _____ (__) months following the Separation Date.

2. **Other Benefits.** Other than as provided in Section 1 above, Participant’s participation in all benefits and incidents of employment, including, but not limited to, vesting in stock options, and the accrual of bonuses, vacation, and paid time off, will cease as of the Separation Date.

3. Payment of Salary and Receipt of All Benefits. Participant acknowledges and represents that, other than the consideration set forth in this Release and the Plan, the Company has paid or provided all salary, wages, bonuses, accrued vacation/paid time off, premiums, leaves, housing allowances, relocation costs, interest, severance, outplacement costs, fees, reimbursable expenses, commissions, stock, stock options, vesting, and any and all other benefits and compensation due to Participant.

4. Release of Claims. Participant agrees that the foregoing consideration represents settlement in full of all outstanding obligations owed to Participant by the Company and its current and former officers, directors, employees, agents, investors, attorneys, shareholders, administrators, affiliates, benefit plans, plan administrators, insurers, trustees, divisions, and subsidiaries, and predecessor and successor corporations and assigns (collectively, the "Releasees"). Participant, on his/her own behalf and on behalf of his/her respective heirs, family members, executors, agents, and assigns, hereby and forever releases the Releasees from, and agrees not to sue concerning, or in any manner to institute, prosecute, or pursue, any claim, complaint, charge, duty, obligation, demand, or cause of action relating to any matters of any kind, whether presently known or unknown, suspected or unsuspected, that Participant may possess against any of the Releasees arising from any omissions, acts, facts, or damages that have occurred up until and including the Effective Date of this Release, including, without limitation:

a. any and all claims relating to or arising from Participant's employment relationship with the Company and the termination of that relationship, including any and all claims relating to the Plan;

b. any and all claims relating to, or arising from, Participant's right to purchase, actual purchase or receipt of shares of stock of the Company, including, without limitation, any claims for fraud, misrepresentation, breach of fiduciary duty, breach of duty under applicable state corporate law, and securities fraud under any state or federal law, with the exception of any rights or obligations contained in any equity award agreement incorporated herein, if applicable;

c. any and all claims for wrongful discharge of employment; termination in violation of public policy; discrimination; harassment; retaliation; breach of contract, both express and implied; breach of covenant of good faith and fair dealing, both express and implied; promissory estoppel; negligent or intentional infliction of emotional distress; fraud; negligent or intentional misrepresentation; negligent or intentional interference with contract or prospective economic advantage; unfair business practices; defamation; libel; slander; negligence; personal injury; assault; battery; invasion of privacy; false imprisonment; conversion; and disability benefits;

d. any and all claims for violation of any federal, state, or municipal statute, including, but not limited to, Title VII of the Civil Rights Act of 1964; the Civil Rights Act of 1991; the Rehabilitation Act of 1973; the Americans with Disabilities Act of 1990; the Equal Pay Act; the Fair Labor Standards Act; the Fair Credit Reporting Act; the Age Discrimination in Employment Act of 1967; the Older Workers Benefit Protection Act; the Employee Retirement Income Security Act of 1974; the Worker Adjustment and Retraining Notification Act; the Family and Medical Leave Act; the Sarbanes-Oxley Act of 2002; the Immigration Control and Reform Act; the California Family Rights Act; the California Labor Code; the California Workers' Compensation Act; and the California Fair Employment and Housing Act;

e. any and all claims for violation of the federal or any state constitution;

f. any and all claims arising out of any other laws and regulations relating to employment or employment discrimination;

g. any claim for any loss, cost, damage, or expense arising out of any dispute over the nonwithholding or other tax treatment of any of the proceeds received by Participant as a result of this Release; and

h. any and all claims for attorneys' fees and costs.

Participant agrees that the release set forth in this section shall be and remain in effect in all respects as a complete general release as to the matters released. This release does not extend to any obligations incurred under this Release. This release does not release claims that cannot be released as a matter of law, including, but not limited to, Participant's right to file a charge with or participate in a charge by the Equal Employment Opportunity Commission, or any other local, state, or federal administrative body or government agency that is authorized to enforce or administer laws related to employment, against the Company (with the understanding that any such filing or participation does not give Participant the right to recover any monetary damages against the Company; Participant's release of claims herein bars Participant from recovering such monetary relief from the Company. Notwithstanding the foregoing, Participant acknowledges that any and all disputed wage claims that are released herein shall be subject to binding arbitration, except as required by applicable law. Participant represents that he/she has made no assignment or transfer of any right, claim, complaint, charge, duty, obligation, demand, cause of action, or other matter waived or released by this Section.

5. Acknowledgment of Waiver of Claims under ADEA. Participant acknowledges that he/she is waiving and releasing any rights he/she may have under the Age Discrimination in Employment Act of 1967 ("ADEA"), and that this waiver and release is knowing and voluntary. Participant agrees that this waiver and release does not apply to any rights or claims that may arise under the ADEA after the Effective Date of this Release. Participant acknowledges that the consideration given for this waiver and release is in addition to anything of value to which Participant was already entitled. Participant further acknowledges that he/she has been advised by this writing that: (a) he/she should consult with an attorney prior to executing this Release; (b) he/she has twenty-one (21) days within which to consider this Release; (c) he/she has seven (7) days following his/her execution of this Release to revoke this Release; (d) this Release shall not be effective until after the revocation period has expired; and (e) nothing in this Release prevents or precludes Participant from challenging or seeking a determination in good faith of the validity of this waiver under the ADEA, nor does it impose any condition precedent, penalties, or costs for doing so, unless specifically authorized by federal law. In the event Participant signs this Release and returns it to the Company in less than the 21-day period identified above, Participant hereby acknowledges that he/she has freely and voluntarily chosen to waive the time period allotted for considering this Release.

6. California Civil Code Section 1542. Participant acknowledges that he/she has been advised to consult with legal counsel and is familiar with the provisions of California Civil Code Section 1542, a statute that otherwise prohibits the release of unknown claims, which provides as follows:

A GENERAL RELEASE DOES NOT EXTEND TO CLAIMS WHICH THE CREDITOR DOES NOT KNOW OR SUSPECT TO EXIST IN HIS OR HER FAVOR AT THE TIME OF EXECUTING THE RELEASE, WHICH IF KNOWN BY HIM OR HER MUST HAVE MATERIALLY AFFECTED HIS OR HER SETTLEMENT WITH THE DEBTOR.

Participant, being aware of said code section, agrees to expressly waive any rights he/she may have thereunder, as well as under any other statute or common law principles of similar effect.

7. No Pending or Future Lawsuits. Participant represents that he/she has no lawsuits, claims, or actions pending in his/her name, or on behalf of any other person or entity, against the Company or any of the other Releasees. Participant also not to bring any claims on his/her own behalf or on behalf of any other person or entity against the Company or any of the other Releasees.

8. Confidentiality. Participant agrees to maintain in complete confidence the existence of this Release, the contents and terms of this Release, and the consideration for this Release (hereinafter collectively referred to as "Separation Information"). Except as required by law, Participant may disclose Separation Information only to his/her immediate family members, the arbitrator or Court in any proceedings to enforce the terms of this Release, Participant's attorney(s), and Participant's accountant and any professional tax advisor to the extent that they need to know the Separation Information in order to provide advice on tax treatment or to prepare tax returns, and must prevent disclosure of any Separation Information to all other third parties. Participant agrees that he/she will not publicize, directly or indirectly, any Separation Information.

9. Trade Secrets and Confidential Information/Company Property. Participant agrees at all times hereafter to hold in the strictest confidence, and not to use or disclose to any person or entity, any Confidential Information of the Company. Participant understands that "Confidential Information" means any Company proprietary information, technical data, trade secrets or know-how, including, but not limited to, research, product plans, products, services, customer lists and customers (including, but not limited to, customers of the Company on whom Participant has called or with whom he/she became acquainted during the term of his/her employment), markets, software, developments, inventions, processes, formulas, technology, designs, drawings, engineering, hardware configuration information, marketing, finances, or other business information disclosed to Participant by the Company either directly or indirectly, in writing, orally, or by drawings or observation of parts or equipment. Participant further understands that Confidential Information does not include any of the foregoing items that have become publicly known and made generally available through no wrongful act of Participant's or of others who were under confidentiality obligations as to the item or items involved or improvements or new versions thereof. Participant hereby grants consent to notification by the Company to any new employer about Participant's obligations under this paragraph. Participant represents that he/she has not to date misused or disclosed Confidential Information to any unauthorized party. Participant's signature below constitutes his/her certification under penalty of perjury that he/she has returned all documents and other items provided to Participant by the Company, developed or obtained by Participant in connection with his/her employment with the Company, or otherwise belonging to the Company.

10. No Cooperation. Participant agrees that he/she will not knowingly encourage, counsel, or assist any attorneys or their clients in the presentation or prosecution of any disputes, differences, grievances, claims, charges, or complaints by any third party against any of the Releasees, unless under a subpoena or other court order to do so or as related directly to the ADEA waiver in this Release. Participant agrees both to immediately notify the Company upon receipt of any such subpoena or court order, and to furnish, within three (3) business days of its receipt, a copy of such subpoena or other court order. If approached by anyone for counsel or assistance

in the presentation or prosecution of any disputes, differences, grievances, claims, charges, or complaints against any of the Releasees, Participant shall state no more than that he/she cannot provide counsel or assistance.

11. Restrictive Covenants. By executing this Release, Participant agrees to abide by each of the restrictive covenants set forth in Section 7(b) of the Plan as consideration for the Severance provided for in the Plan (as summarized in Section 1 of this Release), and acknowledges that the provisions and covenants contained in Section 7(b) of the Plan are reasonable in geographic and temporal scope and do not impose a greater restriction or restraint than is necessary to protect the goodwill and other legitimate business interests of the Company, and do not adversely affect Participant's ability to earn a living in any capacity that does not violate the covenants contained in Section 7(b) of the Plan.

12. Breach. In addition to the rights provided in the Plan, Participant acknowledges and agrees that any material breach of this Release, unless such breach constitutes a legal action by Participant challenging or seeking a determination in good faith of the validity of the waiver herein under the ADEA, or of any provision of the Confidentiality Agreement shall entitle the Company immediately to recover and/or cease providing the consideration provided to Participant under this Release and the Plan and to obtain damages, except as provided by law.

13. No Admission of Liability. Participant understands and acknowledges that this Release constitutes a compromise and settlement of any and all actual or potential disputed claims by Participant. No action taken by the Company hereto, either previously or in connection with this Release, shall be deemed or construed to be (a) an admission of the truth or falsity of any actual or potential claims or (b) an acknowledgment or admission by the Company of any fault or liability whatsoever to Participant or to any third party.

14. Costs. The Parties shall each bear their own costs, attorneys' fees, and other fees incurred in connection with the preparation of this Release.

15. ARBITRATION. THE PARTIES AGREE THAT ANY AND ALL DISPUTES ARISING OUT OF THE TERMS OF THIS RELEASE, THEIR INTERPRETATION, AND ANY OF THE MATTERS HEREIN RELEASED, SHALL BE SUBJECT TO ARBITRATION IN SAN DIEGO COUNTY, BEFORE JUDICIAL ARBITRATION & MEDIATION SERVICES ("JAMS"), PURSUANT TO ITS EMPLOYMENT ARBITRATION RULES & PROCEDURES ("JAMS RULES"). THE ARBITRATOR MAY GRANT INJUNCTIONS AND OTHER RELIEF IN SUCH DISPUTES. THE ARBITRATOR SHALL ADMINISTER AND CONDUCT ANY ARBITRATION IN ACCORDANCE WITH CALIFORNIA LAW, INCLUDING THE CALIFORNIA CODE OF CIVIL PROCEDURE, AND THE ARBITRATOR SHALL APPLY SUBSTANTIVE AND PROCEDURAL CALIFORNIA LAW TO ANY DISPUTE OR CLAIM, WITHOUT REFERENCE TO ANY CONFLICT-OF-LAW PROVISIONS OF ANY JURISDICTION. TO THE EXTENT THAT THE JAMS RULES CONFLICT WITH CALIFORNIA LAW, CALIFORNIA LAW SHALL TAKE PRECEDENCE. THE DECISION OF THE ARBITRATOR SHALL BE FINAL, CONCLUSIVE, AND BINDING ON THE PARTIES TO THE ARBITRATION. THE PARTIES AGREE THAT THE PREVAILING PARTY IN ANY ARBITRATION SHALL BE ENTITLED TO INJUNCTIVE RELIEF IN ANY COURT OF COMPETENT JURISDICTION TO ENFORCE THE ARBITRATION AWARD. THE PARTIES TO THE ARBITRATION SHALL EACH PAY AN EQUAL SHARE OF THE COSTS AND EXPENSES OF SUCH ARBITRATION, AND EACH PARTY SHALL SEPARATELY PAY FOR ITS RESPECTIVE COUNSEL FEES AND EXPENSES; PROVIDED, HOWEVER, THAT THE ARBITRATOR SHALL AWARD ATTORNEYS' FEES AND COSTS TO THE PREVAILING PARTY, EXCEPT AS PROHIBITED BY LAW. THE PARTIES HEREBY AGREE TO WAIVE THEIR RIGHT TO HAVE ANY DISPUTE BETWEEN THEM RESOLVED IN A COURT OF LAW BY A JUDGE OR JURY. NOTWITHSTANDING THE FOREGOING, THIS SECTION WILL NOT PREVENT EITHER PARTY FROM SEEKING INJUNCTIVE RELIEF (OR ANY OTHER PROVISIONAL REMEDY) FROM ANY COURT HAVING JURISDICTION OVER THE PARTIES AND THE SUBJECT MATTER OF THEIR DISPUTE RELATING TO THIS RELEASE AND THE AGREEMENTS INCORPORATED HEREIN BY REFERENCE. SHOULD ANY PART OF THE ARBITRATION AGREEMENT CONTAINED IN THIS PARAGRAPH CONFLICT WITH ANY OTHER ARBITRATION AGREEMENT BETWEEN THE PARTIES, THE PARTIES AGREE THAT THIS ARBITRATION AGREEMENT SHALL GOVERN.

16. Authority. The Company represents and warrants that the undersigned has the authority to act on behalf of the Company and to bind the Company and all who may claim through it to the terms and conditions of this Release. Participant represents and warrants that he/she has the capacity to act on his/her own behalf and on behalf of all who might claim through him/her to bind them to the terms and conditions of this Release. Each Party warrants and represents that there are no liens or claims of lien or assignments in law or equity or otherwise of or against any of the claims or causes of action released herein.

17. No Representations. Participant represents that he/she has had an opportunity to consult with an attorney, and has carefully read and understands the scope and effect of the provisions of this Release. Participant has not relied upon any representations or statements made by the Company that are not specifically set forth in this Release.

18. Severability. In the event that any provision or any portion of any provision hereof or any surviving agreement made a part hereof becomes or is declared by a court of competent jurisdiction or arbitrator to be illegal, unenforceable, or void, this Release shall continue in full force and effect without said provision or portion of provision.

19. Attorneys' Fees. Except with regard to a legal action challenging or seeking a determination in good faith of the validity of the waiver herein under the ADEA, in the event that either Party brings an action to enforce or effect its rights under this Release, the prevailing Party shall be entitled to recover its costs and expenses, including the costs of mediation, arbitration, litigation, court fees, and reasonable attorneys' fees incurred in connection with such an action.

20. Entire Agreement. This Release, together with the Plan, represents the entire agreement and understanding between the Company and Participant concerning the subject matter of this Release and Participant's employment with and separation from the Company and the events leading thereto and associated therewith, and supersedes and replaces any and all prior agreements and understandings concerning the subject matter of this Release and Participant's relationship with the Company, with the exception of the terms of any equity awards held by Participant (as modified by the Plan or this Release), if applicable.

21. No Oral Modification. This Release may only be amended in a writing signed by Participant and the Company's Chief Executive Officer.

22. Governing Law. This Release shall be governed by the laws of the State of California, without regard for choice-of-law provisions. Participant consents to personal and exclusive jurisdiction and venue in the State of California.

23. Effective Date. Participant understands that this Release shall be null and void if not executed by him/her within twenty one (21) days. Each Party has seven (7) days after that Party signs this Release to revoke it. This Release will become effective on the eighth (8th) day after Participant signed this Release, so long as it has been signed by the Parties and has not been revoked by either Party before that date (the "Effective Date").

24. Counterparts. This Release may be executed in counterparts and by facsimile, and each counterpart and facsimile shall have the same force and effect as an original and shall constitute an effective, binding agreement on the part of each of the undersigned.

25. Breach by Participant. Participant specifically agrees that the Company's payments to Participant under this Release are made in return for Participant's obligations set forth in this Release. Participant further agrees that if he or she breaches any of the obligations set forth in this Release, such a breach would cause harm to Company and its business, for which the Company may recover damages, including restitution of any and all payments made under this Release.

26. Voluntary Execution of Release. Participant understands and agrees that he/she executed this Release voluntarily, without any duress or undue influence on the part or behalf of the Company or any third party, with the full intent of releasing all of his/her claims against the Company and any of the other Releasees. Participant acknowledges that:

- (a) he/she has read this Release;
 - (b) he/she has been represented in the execution of this Release by legal counsel of his/her own choice or has elected not to retain legal counsel;
 - (c) he/she understands the terms and consequences of this Release and of the releases it contains; and
 - (d) he/she is fully aware of the legal and binding effect of this Release.
-

IN WITNESS WHEREOF, the Parties have executed this Release on the respective dates set forth below.

_____, an individual

Dated: _____, 20__

Organovo Holdings, Inc.

Dated: _____, 20__

By _____

**ORGANOVO HOLDINGS, INC.
SEVERANCE AND CHANGE IN CONTROL PLAN
PARTICIPATION AGREEMENT**

This Participation Agreement (“Participation Agreement”) is entered into effective as of November 4, 2015, by and between _____ (the “Participant”) and Organovo Holdings, Inc. (the “Company”) pursuant to the Organovo Holdings, Inc., Severance and Change of Control Plan (the “Plan”). All capitalized terms used in this Participation Agreement not otherwise defined herein shall have the meanings set forth in Section 1 of the Plan, except as otherwise specified.

Pursuant to the Plan, the Participant has been designated as a Tier [1] [2] [3] [4] Executive, eligible to receive Severance Benefits as specified in Section 6 of the Plan provided the Participant agrees to comply with all of the terms and conditions of the Plan by entering into this Participation Agreement.

Accordingly, the Participant hereby agrees that [s]he has received a copy of the Plan and has reviewed and understands all of the terms and conditions of the Plan, and hereby agrees to comply with and be bound by all of the terms and conditions of the Plan, including, but not limited to, the Restrictive Covenants set forth in Section 7(b) of the Plan; At-Will Employment status set forth in Section 7(c) of the Plan; Nonduplication; No Impact on Benefits provisions of Section 7(d) of the Plan; Benefit Claims provisions of Section 7 of the Plan; Right of Recoupment set forth in Section 9 of the Plan; Right of Offset set forth in Section 10(e) of the Plan; and Arbitration provisions set forth in Section 10(k) of the Plan.

The Participant also agrees and understands that if [s]he is covered by an existing employment or severance agreement with the Company on the Effective Date, [his][her] existing rights under that agreement are terminated and replaced with the provisions of this Plan; provided, however, that for the duration of the original remaining term of such employment or severance agreement only, the timing and form of severance (i.e., lump sum or installments) in the employment or severance agreement shall supersede the timing and form of payment provisions in Section 6 of the Plan and control the timing and form of payment of the Cash Severance to the extent required to comply with the requirements of Code section 409A.

The Participant also agrees that, by execution of this Participation Agreement, the award agreements for all outstanding equity awards held by the Participant as of the Effective Date are hereby amended to provide that the terms “Cause”, “Change of Control”, “Disability” and “Good Reason” as used in those award agreements shall have the meanings set forth in Section 2 of the Plan.

IN WITNESS WHEREOF, the Participant hereby agrees to the requirements for participation in the Plan as set forth in this Participation Agreement and the Plan, and executes this Participation Agreement this ___ day of _____, 2015.

[PARTICIPANT]

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

I, Keith Murphy, Chief Executive Officer and President of Organovo Holdings, Inc. (the "Registrant"), certify that:

1. I have reviewed this quarterly report on Form 10-Q of the Registrant;
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 circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the Registrant as of, and for, the periods presented in this report;
4. The Registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the Registrant and have:
 - a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the Registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - c) Evaluated the effectiveness of the Registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - d) Disclosed in this report any change in the Registrant's internal control over financial reporting that occurred during the Registrant's most recent fiscal quarter (the Registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the Registrant's internal control over financial reporting; and
5. The Registrant's other certifying officers and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the Registrant's auditors and the audit committee of the Registrant's board of directors (or persons performing the equivalent functions):
 - (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the Registrant's ability to record, process, summarize and report financial information; and
 - (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the Registrant's internal control over financial reporting.

Date: November 9, 2015

By: /s/ Keith Murphy
Name: Keith Murphy
Title: President and Chief Executive Officer
(Principal Executive Officer)

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

I, Barry D. Michaels, Chief Financial Officer of Organovo Holdings, Inc. (the "Registrant"), certify that:

1. I have reviewed this quarterly report on Form 10-Q of the Registrant;
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 circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the Registrant as of, and for, the periods presented in this report;
4. The Registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the Registrant and have:
 - a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the Registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - c) Evaluated the effectiveness of the Registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - d) Disclosed in this report any change in the Registrant's internal control over financial reporting that occurred during the Registrant's most recent fiscal quarter (the Registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the Registrant's internal control over financial reporting; and
5. The Registrant's other certifying officers and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the Registrant's auditors and the audit committee of the Registrant's board of directors (or persons performing the equivalent functions):
 - (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the Registrant's ability to record, process, summarize and report financial information; and
 - (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the Registrant's internal control over financial reporting.

Date: November 9, 2015

By: /s/ Barry D. Michaels
Name: Barry D. Michaels
Title: Chief Financial Officer
(Principal Financial and Accounting Officer)

**CERTIFICATION PURSUANT TO
18 U.S.C. SECTION 1350**

In connection with the Quarterly Report of Organovo Holdings, Inc. (the "Corporation") on Form 10-Q for the period ended September 30, 2015 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Keith Murphy, President and Chief Executive Officer and I, Barry D. Michaels, Chief Financial Officer, of the Corporation, certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that to our knowledge:

- (1) The Report fully complies with the requirements of section 13(a) or 15(d) of the Securities Exchange Act of 1934; and
- (2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Corporation.

Date: November 9, 2015

By: /s/ Keith Murphy
Name: Keith Murphy
Title: President and Chief Executive Officer

Date: November 9, 2015

By: /s/ Barry D. Michaels
Name: Barry D. Michaels
Title: Chief Financial Officer

A signed original of this written statement required by Section 906 has been provided to Organovo Holdings, Inc. and will be retained by Organovo Holdings, Inc. and furnished to the Securities and Exchange Commission or its staff upon request.

This certification accompanies the Form 10-Q to which it relates, is not deemed filed with the Securities and Exchange Commission and is not to be incorporated by reference into any filing of Organovo Holdings, Inc. under the Securities Act of 1933, as amended, or the Securities Exchange Act of 1934, as amended (whether made before or after the date of the Form 10-Q), irrespective of any general incorporation language contained in such filing.