UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM 8-K

CURRENT REPORT

Pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934

Date of Report (Date of earliest event reported): April 21, 2015

ORGANOVO HOLDINGS, INC.

(Exact name of registrant as specified in its charter)

Commission File Number: 001-35996

Delaware (State or other jurisdiction of incorporation) **27-1488943** (I.R.S. Employer Identification No.)

6275 Nancy Ridge Dr., San Diego, California 92121 (Address of principal executive offices, including zip code)

(858) 224-1000

(Registrant's telephone number, including area code)

(Former Name or Former Address, if Changed Since Last Report)

Check the appropriate box below if the Form 8-K filing is intended to simultaneously satisfy the filing obligation of the registrant under any of the following provisions (see General Instruction A.2. below):

o Written communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425)

o Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12)

o Pre-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b))

o Pre-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240.13e-4(c))

Item 2.02 Results of Operations and Financial Condition.

On April 21, 2015, Organovo Holdings, Inc. (the "Company") announced preliminary unaudited financial information for the fourth fiscal quarter and the fiscal year ended March 31, 2015. The press release is furnished herewith as Exhibit 99.1 and is incorporated herein by reference.

The information furnished in this Form 8-K and the attached press release, is furnished pursuant to Item 2.02 and shall not be deemed "filed" for purposes of Section 18 of the Exchange Act or otherwise subject to the liabilities of that section, nor shall it be deemed incorporated by reference into any other filing under the Securities Act of 1933 or the Securities Exchange Act of 1934, except as expressly set forth by specific reference in such a filing.

Item 9.01 Financial Statements and Exhibits.

(d)	Exhibits
99.1	Press Release, dated April 21, 2015.

SIGNATURES

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

ORGANOVO HOLDINGS, INC.

Date: April 21, 2015

<u>/s/ Keith Murphy</u> Keith Murphy Chief Executive Officer

Exhibit	
No.	Description

99.1 Press Release, dated April 21, 2015.

ORGANOVO HOLDINGS, INC. PRE-ANNOUNCES PRELIMINARY FISCAL 2015 FOURTH QUARTER AND YEAR END FINANCIAL INFORMATION

San Diego, Calif., April 21, 2015—Organovo Holdings, Inc. (NYSE MKT: ONVO) today announced preliminary financial information (unaudited) for the fourth quarter and fiscal year ended March 31, 2015.

Based on preliminary financial information for the fiscal quarter and year-ended March 31, 2015, Organovo estimates:

- · Total net revenues of approximately \$268 thousand for the quarter, and approximately \$571 thousand for the fiscal year
- •Total net cash utilization during fiscal 2015 fourth quarter and fiscal year ended March 31, 2015 of approximately \$6.3 million and \$21.1 million, respectively; and
- •The Company closed the year with cash and cash equivalents of approximately \$50.1 million

"We are pleased to report preliminary fourth quarter and annual results which primarily reflect the initial uptake of our pre-launch product and services," said Chief Financial Officer Barry Michaels. "Fiscal 2015 was an exceptional year of accomplishment for Organovo, as we locked down our liver toxicity product and initiated commercial launch of our product and service in November. We expect to gain greater adoption from the global pharmaceutical community and look forward to partnering with them in the discovery and development of their products. Moreover, we are excited about our development progress with a kidney tissue product as well as the opportunity to expand our footprint to include applications within the cosmetics industry. We enter fiscal 2016 with confidence and momentum and look forward to continued expansion of our platform technology across multiple industries utilizing various fully cellular tissues. "

We define net cash utilization as the change in the amount of cash and cash equivalents at the beginning of the reporting period as compared to the end of the reporting period, excluding financing activities (which would include proceeds from the sale of common stock and the exercise of warrants and stock options). Net cash utilization is an operational measure that should be considered in addition to our results prepared in accordance with U.S. generally accepted accounting principles ("GAAP"). This operational measure should not be considered as a substitute for, or superior to, GAAP results. We believe net cash utilization is a relevant and useful operational measure for the Company and our investors because it provides information regarding our cash burn rate.

Organovo will initiate quarterly earnings calls upon filing the fiscal 2015 10-K annual report with the SEC in early to mid-June, 2015. Earnings call details will be published approximately one week before the event.

About Organovo Holdings, Inc.

Organovo designs and creates functional, three-dimensional human tissues for use in medical research, cosmetic, and therapeutic applications. The Company develops 3D human tissue models through internal development and in collaboration with pharmaceutical, cosmetic, and academic partners. Organovo's 3D human tissues have the potential to accelerate the discovery process, enabling drug treatments and active agents to be developed faster and at lower cost. The company recently launched its initial product of the planned exVive3DTM portfolio offering, a 3D Human Liver Tissue for use in Toxicology and other preclinical drug testing. Additional products are in development, with anticipated release for an exVive3DTM Human Kidney Tissue in the latter half of calendar year 2016. The Company also actively conducts early research on specific tissues for therapeutic use in direct surgical applications. In addition to numerous scientific publications, the Company's technology has been featured in The Wall Street Journal, Time Magazine, The Economist, and numerous other media outlets. Organovo is changing the shape of medical research and practice. Learn more at <u>www.organovo.com</u>.

Sign up for email updates and connect with us on Twitter (@Organovo).

Safe Harbor Statement

Any statements contained in this press release that do not describe historical facts may constitute forward-looking statements as that term is defined in the Private Securities Litigation Reform Act of 1995 and includes, without limitation, the preliminary financial information for the fiscal quarter and year ended March 31, 2015, the adoption rate for our liver tissue product, the development of our kidney tissue product and our opportunities in the cosmetics industry. The financial information disclosed above is preliminary and remains subject to final management review and audit by the Company's independent registered public accounting firm. As a result, the Company's actual results could differ materially and adversely from those set forth above. The Company will not update this preliminary financial information until it reports its financial results for the fiscal year ended March 31, 2015 in its annual report on Form 10-K. Any forward-looking statements contained herein are based on current expectations, but are subject to a number of risks and uncertainties. The factors that could cause actual future results to differ materially from current expectations include, but are not limited to, risks and uncertainties relating to the Company's ability to develop, market and sell products based on its technology; the expected benefits and efficacy of the Company's products and technology; the market acceptance of the Company's products; the Company's business, research, product development, regulatory approval, marketing and distribution plans and strategies; and the Company discovers errors in the preliminary financial information in connection with the audit of those numbers. These and other factors are identified and described in more detail in our filings with the SEC, including our Quarterly Report on Form 10-Q filed with the SEC on February 6, 2015. You should not place undue reliance on these forward-looking statements, which speak only as of the date that they were made. These cautionary statements should be considered with any written or oral forward-looking statements that we may issue in the future. Except as required by applicable law, including the securities laws of the United States, we do not intend to update any of the forward-looking statements to conform these statements to reflect actual results, later events or circumstances or to reflect the occurrence of unanticipated events.

SOURCE Organovo Holdings, Inc.

Barry Michaels, Chief Financial Officer, 858-224-1000, ext. 3, IR@organovo.com, or Gerry Amato, Amato and Partners, LLC, Investor Relations, gerald@amatoandpartners.com; Media Contact, Mike Renard, EVP, Commercial Operations, 858-224-1006, mrenard@organovo.com