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): February 27, 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 7.01 Regulation FD Disclosure

On March 5, 2015, Keith Murphy, the President and Chief Executive Officer of Organovo Holdings, Inc. (the "Company"), will be participating in a live webcast presentation to investors via http://RetailInvestorConferences.com. During the webcast, Mr. Murphy intends to provide a business update, including an update on the commercial launch of the Company's exVive3D Liver, Bioprinted Human Tissue and a discussion of the commercialization milestones for the Company's 3D bioprinted kidney tissue. The presentation will take place at 12:15 p.m. Eastern Standard Time, and investors may access the presentation at http://retailinvestorconferences.com > click on red "register / watch event now" button.

The presentation will be a live, interactive online event where investors are invited to ask questions in real-time - both in the presentation hall as well as the Company's "virtual trade booth." If attendees are not able to join the event live on the day of the conference, an on-demand archive will be available at http://retailinvestorconferences.com for 90 days. A press release regarding the live webcast presentation is attached hereto as Exhibit 99.1.

The information furnished on this Form 8-K, including Exhibit 99.1, 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 the information 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 (Retail Investor Conference), dated February 27, 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: March 2, 2015

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

Exhibit No. 99.1

Press Release (Retail Investor Conference), dated February 27, 2015.

Description

Organovo Holdings, Inc. to Provide Corporate Update and Investor Presentation in a Live, Interactive Webcast on March 5th

Company invites individual and institutional investors as well as advisors to attend real-time, virtual RetailInvestorConferences.com

SAN DIEGO, February 27, 2015 -- Organovo Holdings, Inc. (NYSE MKT: ONVO) ("Organovo"), a three-dimensional biology company focused on delivering breakthrough 3D bioprinting technology, announced today that Keith Murphy, President and Chief Executive Officer, will present live at RetailInvestorConferences.com on March 5th.

"We invite you to join us for this Company update," said Mr. Murphy. "We plan to provide updates on our commercial launch of the exVive3D Liver, Bioprinted Human Tissue, commercialization milestones for 3D bioprinted kidney tissue, and additional exciting opportunities for the Company's future growth."

For investors who are not yet familiar with the Company and desire background information, including an understanding of the 3D bioprinting technology used by Organovo to create functional living human tissues, investors can watch an informational background presentation on the Company's website: http://www.organovo.com/investors/investor-overview

To view the live update and current information presentation, use these instructions at the time indicated:

DATE: Thursday, March 5, 2015

TIME: 9:15 am PST / 12:15 PM EST

LINK: http://retailinvestorconferences.com > red "register/ watch event now" button

It is recommended that investors pre-register to save time and receive event updates.

This will be a live, interactive online event where investors are invited to ask the company questions in real-time, both in the presentation hall as well as the association's "virtual trade booth." If attendees are not able to join the event live on the day of the conference, an on-demand archive will be available for 90 days.

Recent Company Highlights Include:

- Named one of **The World's Top 10 Most Innovative Companies of 2015 in Health Care by Fast Company,** a top-tier outlet focused on business and innovation.
- · Formed collaboration with Yale School of Medicine to develop 3-D organ tissues for surgical transplantation research
- Commercially released the exVive3DTM Liver, Bioprinted Human Tissues for preclinical drug toxicology testing
- The exVive3D Liver selected as one of the **Top 10 Innovations of 2014 by The Scientist** magazine, a well-respected news outlet for life science researchers
- Won the Diagnostics & Research Tools category for the 2014 Most Innovative New Product Awards, sponsored by CONNECT
- Recognized as a **2015 Technology Pioneer by the World Economic Forum** for the ability to harness creativity to design and create transformative solutions
- · Appointed Kirk Malloy, Ph.D., Senior Vice President and General Manager of Life Sciences at Illumina, to the Company's Board of Directors

- **Key opinion leader** reported Organovo's **exVive3DTM Liver** was able to establish the toxicity of toxic drug known to induce liver injury in humans that did not show toxicity in animal and other pre-clinical testing, an achievement historically unmet by animal models or other liver cell model systems
- · Initiated contracting for toxicity testing using its exVive3DTM Liver, for selected clients, in advance of its scheduled commercial release
- Entered into additional agreements to utilize 3D bio-printed tissue in drug discovery settings
- Reported that its 3D bioprinted breast cancer tissues enabled researchers to make compartment-specific assessments (i.e., epithelium, stroma, vasculature) of drug response something that is not currently possible outside of in vivo models to date
- Announced an agreement with the University of Queensland directed toward development of source cell lines for 3D kidney tissue bioprinting activities
- · Appointed Gregory T. Lucier, former Chairman and CEO of Life Technologies, as a corporate advisor

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About Organovo Holdings, Inc.

Organovo designs and creates functional, three-dimensional human tissues for use in medical research and therapeutic applications. The Company develops 3D human disease models through internal development and in collaboration with pharmaceutical and academic partners. Organovo's 3D human tissues have the potential to accelerate the drug discovery process, enabling treatments to be developed faster and at lower cost. The company 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 www.organovo.com.

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

About RetailInvestorConferences.com

Since 2010, RetailInvestorConferences.com, created by BetterInvesting (NAIC), PRNewswire and MUNCmedia, has been the only monthly virtual investor conference series that provides an interactive forum for presenting companies to meet directly with retail investors using a graphically-enhanced online platform.

Designed to replicate the look and feel of location-based investor conferences, Retail Investor Conferences unites PR Newswire's leading-edge online conferencing and investor communications capabilities with BetterInvesting's extensive retail investor audience network.

MEDIA CONTACTS

Organovo Holdings, Inc. Barry Michaels Chief Financial Officer 1-858-224-1000 ex. 3 IR@organovo.com

Gerry Amato Amato & Partners, LLC admin@amatoandpartners.com

<u>RetailInvestorConferences.com</u> Bradley H. Smith Director of Marketing, IR and Compliance Services PR Newswire +1.201.947.7157 bradley.smith@prnewswire.com