
**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): January 14, 2014

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) 550-9994
(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):

- Written communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425)
 - Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12)
 - Pre-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b))
 - Pre-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240.13e-4(c))
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Item 7.01 Regulation FD Disclosure

On January 14, 2014, Organovo Holdings, Inc. (the “Company”) issued a press release announcing that it is collaborating with the National Center for Advancing Translational Sciences (NCATS) and the National Eye Institute (NEI) to develop better and more clinically predictive tissue models using the Company’s Novogen MMX Bioprinter®. A copy of the press release is attached hereto as Exhibit 99.1 and incorporated herein by reference.

The information furnished on this Form 8-K, including the press release attached as 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 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 January 14, 2014.

SIGNATURES

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

Date: January 16, 2014

ORGANOVO HOLDINGS, INC.

/s/ Keith Murphy

Keith Murphy
Chief Executive Officer

Exhibit Index

**Exhibit
No.**

Description

99.1 Press Release, dated January 14, 2014.

Organovo Announces Collaboration with National Institutes of Health

01/14/2014

SAN DIEGO, CA and BETHESDA, Md., Jan. 14, 2014 /PRNewswire/ — Organovo announced today that they are joining together with two institutes from the National Institutes of Health (NIH) to help scientists develop more reliable tools for bringing safer, more effective treatments to patients on a faster timeline. Organovo is collaborating with the National Center for Advancing Translational Sciences (NCATS) and the National Eye Institute (NEI) to develop better and more clinically predictive tissue models using Organovo's Novogen MMX Bioprinter®. Organovo will collaborate with NCATS and NEI in using the NovoGen Bioprinting platform to create three-dimensional, architecturally correct, functional living tissues.

"Researchers who develop new therapies for patients are too often hampered by animal models and traditional cell culture models that are poor predictors of drug efficacy and toxicity in human beings," says Keith Murphy, Organovo's Chief Executive Officer. "Our 3D printer creates living human tissues that more closely reproduce in vivo human tissues. In collaboration with NIH, which has worked to highlight and address the critical need for better models that can lead to better drugs, we hope to create tissue models that give researchers a much more accurate view of how drugs will behave in human beings before those drugs ever enter clinical trials."

"Developing collaborations like this are central to NCATS' mission," said NCATS Director Christopher P. Austin, M.D. "We look forward to working with Organovo and our colleagues at NEI to develop a printable eye tissue. We also plan to develop additional tissue models that complement and leverage our current Tissue Chip and compound screening programs."

"This technology could provide us with a renewable and easy-to-manipulate source of functional eye tissue," said NEI Director Paul A. Sieving, M.D., Ph.D. "Printable eye tissue could be used to identify disease pathways and to screen for and discover new therapeutic drugs."

For more information about NCATS and NEI, visit www.ncats.nih.gov and www.nei.nih.gov.

About Organovo Holdings, Inc.

Organovo designs and creates functional, three-dimensional human tissues for medical research and therapeutic applications. The Company is collaborating with pharmaceutical and academic partners to develop human biological disease models in three dimensions. These 3D human tissues have the potential to accelerate the drug discovery process, enabling treatments to be developed faster and at lower cost. In addition to numerous scientific publications, the Company's technology has been featured in The Wall Street Journal, Time Magazine, The Economist, and numerous others. Organovo is changing the shape of medical research and practice. Learn more at www.organovo.com.

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. 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 for the Company's products, and the risks related to the Company's business, research, product development, regulatory approval, marketing and distribution plans and strategies. These and other factors are identified and described in more detail in our filings with the SEC, including our report on Form 10-Q filed November 8, 2013, the prospectus supplement filed with the SEC on August 2, 2013 and the transition report on Form 10-KT filed with the SEC on May 24, 2013 and our other filings with the Securities and Exchange Commission. 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.

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