

**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 1, 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) 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))

Item 1.01 Entry into a Material Definitive Agreement.

On April 1, 2015, Organovo Holdings, Inc. (“Organovo” or the “Company”) entered into a Research Collaboration Agreement (the “Agreement”) with L’Oreal USA Products, Inc. (“L’Oreal”) pursuant to which the parties agreed to collaborate on the development of skin tissue models utilizing the Company’s proprietary NovoGen Bioprinting Platform™ and skin cell technology developed by L’Oreal. Under the Agreement, L’Oreal will have the exclusive right to use the skin tissue models for the development, manufacturing, testing, evaluation and sale of non-prescription cosmetic, beauty, dermatology and skin care products and nutraceutical supplements. The Company retained the right to use the skin tissue models for toxicity and efficacy testing of prescription drugs and for developing and testing surgically transplanted and therapeutic tissues.

The Agreement provides for three separate phases, including a development phase, a validation phase and a commercial supply phase. The continuation of each phase is subject to the skin tissue models meeting certain specified performance criteria and L’Oreal exercising its option to move forward with the respective phases. The Agreement contains customary early termination provisions.

The development and validation phases each require L’Oreal to make an upfront payment and payments for certain deliverables. The Agreement contemplates that the parties will negotiate an exclusive commercial supply agreement, which will include customary licensing and royalty terms. The parties have not disclosed the commercial terms of the Agreement.

The foregoing description of the Agreement is qualified in its entirety by reference to the full Agreement, which will be filed as an exhibit to the Company’s Annual Report on Form 10-K for the fiscal year ended March 31, 2015. The Company intends to submit a FOIA Confidential Treatment Request to the Securities and Exchange Commission pursuant to Rule 24b-2 under the Securities Exchange Act of 1934, as amended, requesting that it be permitted to redact trade secrets and the confidential commercial portions of the Agreement.

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 7, 2015

/s/ Keith Murphy  
Keith Murphy  
Chief Executive Officer