UNITED STATES SECURITIES AND EXCHANGE COMMISSION

WASHINGTON, D.C. 20549

FORM 8-A

FOR REGISTRATION OF CERTAIN CLASSES OF SECURITIES PURSUANT TO SECTION 12(b) OR (g) OF THE SECURITIES EXCHANGE ACT OF 1934

Organovo Holdings, Inc.

(Exact name of registrant as specified in its charter)

Delaware (State of incorporation or organization)

6275 Nancy Ridge Drive, Suite 110 San Diego, CA (Address of principal executive offices) 27-1488943 (I.R.S. Employer Identification No.)

> 92121 (Zip Code)

Securities to be registered pursuant to Section 12(b) of the Act:

Title of each class to be so registered Common Stock, par value \$0.001 per share Name of each exchange on which each class is to be registered NASDAQ Global Market of The NASDAQ Stock Market LLC

If this form relates to the registration of a class of securities pursuant to Section 12(b) of the Exchange Act and is effective pursuant to General Instruction A. (c), check the following box.

If this form relates to the registration of a class of securities pursuant to Section 12(g) of the Exchange Act and is effective pursuant to General Instruction A. (d), check the following box.

Securities Act registration statement file number to which this form relates: Not Applicable

Securities to be registered pursuant to Section 12(g) of the Act: None

EXPLANATORY NOTE

Organovo Holdings, Inc. (the "Registrant") is filing this Form 8-A in connection with the transfer of the listing of its common stock, \$0.001 par value per share (the "Common Stock"), from the NYSE MKT to the NASDAQ Global Market of The NASDAQ Stock Market LLC.

Item 1. Description of Registrant's Securities to be Registered.

The description of the Common Stock of the Registrant set forth under the caption "Description of Capital Stock" in the Registrant's Registration Statement on Form S-3 (File No. 333-202382) as originally filed with the Securities and Exchange Commission on February 27, 2015, including any subsequent amendments thereto (the "**Form S-3**"), and in the prospectus to be filed by the Registrant pursuant to Rule 424(b) of the Securities Act of 1933, which prospectus will constitute a part of the Form S-3, is hereby incorporated by reference in response to this item.

Item 2. Exhibits.

		Incorporated by Reference			
Exhibit Number	Exhibit Description	Form	<u>File No.</u>	<u>Exhibit</u>	Filing Date
3.1	Certificate of Incorporation of Organovo Holdings, Inc.	8-K	333-169928	3.1	2/3/2012
3.2	Bylaws of Organovo Holdings, Inc.	8-K	333-169928	3.2	2/3/2012
4.1	Form of Bridge Warrant of Organovo, Inc.	8-K	333-169928	4.1	2/13/2012
4.2	Form of Warrant of Organovo Holdings, Inc. (\$1.00 exercise price) issued to Placement Agent	8-K	000-54621	4.2(i)	3/19/2012
4.3	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	8-K	000-54621	4.2(iii)	3/19/2012

SIGNATURE

Pursuant to the requirements of Section 12 of the Securities Exchange Act of 1934, the Registrant has duly caused this registration statement to be signed on its behalf by the undersigned, thereunto duly authorized.

Dated: July 26, 2016

ORGANOVO HOLDINGS, INC.

By: /s/ Keith Murphy

Keith Murphy Chief Executive Officer and President

EXHIBIT INDEX

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