

UNITED STATES SECURITIES AND EXCHANGE COMMISSION WASHINGTON, D.C. 20549

DIVISION OF CORPORATION FINANCE

February 16, 2018

Taylor Crouch Chief Executive Officer Organovo Holdings, Inc. 6275 Nancy Ridge Drive, Suite 110 San Diego, CA 92121

> Re: Organovo Holdings, Inc. Registration Statement on Form S-3 Filed February 8, 2018 File No. 333-222929

Dear Mr. Crouch:

This is to advise you that we have not reviewed and will not review your registration statement.

Please refer to Rules 460 and 461 regarding requests for acceleration. We remind you that the company and its management are responsible for the accuracy and adequacy of their disclosures, notwithstanding any review, comments, action or absence of action by the staff.

Please contact Ada D. Sarmento at 202-551-3798 with any questions.

Division of Corporation Finance Office of Healthcare & Insurance

cc: Jeffrey C. Thacker, Esq.