

April 17, 2024

Keith Murphy
Executive Chairman
Organovo Holdings, Inc.
11555 Sorrento Valley Road, Suite 100
San Diego, CA 92121

Inc.

Statement on Form S-1
2024

Re: Organovo Holdings,
Registration
Filed April 12,
File No. 333-278668

Dear Keith Murphy:

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.

Stacey Gama at 202-551-3188 with any questions.

Please contact Doris

Sincerely,

Division of Corporation Finance

Office of Life Sciences

cc:

Samantha Eldredge, Esq.