



DIVISION OF
CORPORATION FINANCE

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

April 9, 2020

William Hinshaw
Chief Executive Officer
Axcella Health Inc.
840 Memorial Drive
Cambridge, MA 02139

Re: Axcella Health Inc.
Draft Registration Statement on Form S-1
Filed April 3, 2020
CIK No. 0001633070

Dear Mr. Hinshaw:

This is to advise you that we do not intend to review your registration statement.

We request that you publicly file your registration statement no later than 48 hours prior to the requested effective date and time. 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 Paul Fischer at 202-551-3415 with any questions.

Sincerely,

Division of Corporation Finance
Office of Life Sciences

cc: Laurie Burlingame, Esq.