



DIVISION OF  
CORPORATION FINANCE

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

June 9, 2020

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

**Re: Axcella Health Inc.**  
**Registration Statement on Form S-3**  
**Filed June 5, 2020**  
**File No. 333-238983**

Dear Mr. Hinshaw:

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 Alan Campbell at 202-551-4224 with any questions.

Sincerely,

Division of Corporation Finance  
Office of Life Sciences

cc: Laurie Burlingame