



DIVISION OF  
CORPORATION FINANCE

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

October 8, 2020

Richard J. Wanstall  
Chief Financial Officer  
Aileron Therapeutics, Inc.  
490 Arsenal Way, Suite 210  
Watertown, Massachusetts 02472

**Re: Aileron Therapeutics, Inc.**  
**Registration Statement on Form S-1**  
**Filed October 5, 2020**  
**File No. 333-249319**

Dear Mr. Wanstall:

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 Abby Adams at (202) 551-6902 with any questions.

Sincerely,

Division of Corporation Finance  
Office of Life Sciences

cc: Stuart M. Falber, Esq.