



DIVISION OF  
CORPORATION FINANCE

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

August 17, 2020

Manuel C. Alves Aivado, M.D., Ph.D.  
President and Chief Executive Officer  
Aileron Therapeutics, Inc.  
490 Arsenal Way, Suite 210  
Watertown, MA 02472

**Re: Aileron Therapeutics, Inc.**  
**Registration Statement on Form S-3**  
**Filed August 11, 2020**  
**File No. 333-244367**

Dear Dr. Aivado:

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 Jeffrey Gabor at 202-551-2544 with any questions.

Sincerely,

Division of Corporation Finance  
Office of Life Sciences

cc: Stuart M. Falber, Esq.