

June 14, 2022

Manuel C. Alves Aivado, M.D., Ph.D.  
President and Chief Executive Officer  
Aileron Therapeutics, Inc.  
285 Summer Street, Unit 101  
Boston, MA 02210

Therapeutics, Inc.  
Statement on Form S-3

Re: Aileron

Registration

Filed June 8, 2022  
File No. 333-265470

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 Joshua Gorsky at 202-551-7836 with any questions.

Sincerely,

Division of Corporation Finance

Office of Life Sciences

cc:

Craig Hilts, Esq.