

February 4, 2021

Manuel C. Alves Aivado, M.D., Ph.D.
President and Chief Executive Officer
Aileron Therapeutics, Inc.
290 Pleasant Street, Unit 112
Watertown, Massachusetts 02472

Therapeutics, Inc.
Statement on Form S-3
2021

Re: Aileron
Registration
Filed January 29,
File No. 333-252587

Dear Dr. Alves 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.

Virginio at 202-551-4530 with any questions.

Please contact Deanna

Sincerely,

Division of Corporation Finance

Office of Life Sciences

cc:

Stuart M. Falber, Esq.