February 1, 2024

Manuel Alves-Aivado Chief Executive Officer Aileron Therapeutics Inc. 738 Main Street #398 Waltham, MA 02451

Therapeutics Inc.

Statement on Form S-3

2024

Re: Aileron

Registration

Filed January 29,

File No. 333-276746

Dear Manuel 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.

Please contact Lauren

Hamill at 303-844-1008 with any questions.

Sincerely,

Division of Corporation Finance

Office of Life Sciences

cc: Craig Hilts