

AILERON THERAPEUTICS, INC.

285 Summer Street, Suite 101

Boston, Massachusetts 02210

June 14, 2022

VIA EDGAR

Securities and Exchange Commission
Division of Corporation Finance
100 F Street, N.E.
Washington, D.C. 20549

Re: Aileron Therapeutics, Inc.
Registration Statement on Form S-3
File No. 333-265470
Request for Acceleration

Ladies and Gentlemen:

Pursuant to Rule 461 promulgated under the Securities Act of 1933, as amended, Aileron Therapeutics, Inc. (the "Registrant") hereby requests acceleration of the effective date of its Registration Statement on Form S-3 (File No. 333-265470), so that it may become effective at 4:30 p.m. Eastern time on June 16, 2022, or as soon thereafter as practicable, or at such later time as the Registrant or its counsel may orally request via telephone call to the staff.

Very truly yours,

AILERON THERAPEUTICS, INC.

By: /s/ Manuel Aivado

Name: Manuel Aivado

Title: President and Chief Executive Officer

cc: Stuart Falber, *Wilmer Cutler Pickering Hale and Dorr LLP*
Craig Hilts, *Wilmer Cutler Pickering Hale and Dorr LLP*