

February 1, 2024

VIA EDGAR SUBMISSION

Securities and Exchange Commission
Division of Corporation Finance
100 F Street, NE
Washington, DC 20549
Attention: Lauren Hamill

Re: Aileron Therapeutics, Inc.
Registration Statement on Form S-3
File No. 333-276746
Request for Acceleration

Ladies and Gentlemen:

Pursuant to Rule 461 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. 333-276746), so that it may become effective at 4:30 p.m., Eastern time, on February 5, 2024, 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,

By: /s/ Manuel C. Alves Aivado, M.D., Ph.D.
Manuel C. Alves-Aivado, M.D., Ph.D.
Chief Executive Officer

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