June 13, 2022

VIA EDGAR

United States Securities and Exchange Commission Division of Corporation Finance 100 F Street, N.E. Washington, DC 20549

Re: Delaying Amendment for Aileron Therapeutics, Inc. Registration Statement on Form S-3 (File No. 333-265470)

Ladies and Gentlemen:

Reference is made to the Registration Statement on Form S-3 (File No. 333-265470) filed with the Securities and Exchange Commission (the "Commission") by Aileron Therapeutics, Inc. on June 8, 2022 (the "Registration Statement"). Pursuant to Rule 473(c) of the Securities Act of 1933, as amended (the "Act"), the following delaying amendment, prescribed by Rule 473(a) of the Act, is hereby incorporated into the facing page of the Registration Statement:

"The registrant hereby amends this registration statement on such date or dates as may be necessary to delay its effective date until the registrant shall file a further amendment which specifically states that this registration statement shall thereafter become effective in accordance with section 8(a) of the Securities Act of 1933, as amended, or until the registration statement shall become effective on such date as the Commission, acting pursuant to said section 8(a), may determine."

No fees are required in connection with this filing. If you have any questions or comments in connection with this delaying amendment, please call Stuart Falber, Wilmer Cutler Pickering Hale and Dorr LLP, at 617-526-6000, or Craig Hilts, Wilmer Cutler Pickering Hale and Dorr LLP, at 617-526-6000, outside counsel to the Company.

Sincerely,

Aileron Therapeutics, Inc.

/s/ Manuel Aivado

Manuel Aivado, M.D., Ph.D.
President and Chief Executive Officer

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