

**UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549**

FORM 8-K

**CURRENT REPORT
Pursuant to Section 13 or 15(d)
of the Securities Exchange Act of 1934**

Date of Report (Date of earliest event reported): March 2, 2021

Aileron Therapeutics, Inc.

(Exact Name of Company as Specified in Charter)

Delaware
(State or Other Jurisdiction
of Incorporation)

001-38130
(Commission
File Number)

13-4196017
(IRS Employer
Identification No.)

290 Pleasant Street
Watertown, MA
(Address of Principal Executive Offices)

02472
(Zip Code)

Registrant's telephone number, including area code: (617) 995-0900

Not applicable
(Former Name or Former Address, if Changed Since Last Report)

Check the appropriate box below if the Form 8-K filing is intended to simultaneously satisfy the filing obligation of the registrant under any of the following provisions (see General Instruction A.2. below):

- Written communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425)
- Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12)
- Pre-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b))
- Pre-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240.13e-4(c))

Securities registered pursuant to Section 12(b) of the Act:

Title of each class	Trading Symbol	Name of each exchange on which registered
Common Stock, \$0.001 par value per share	ALRN	Nasdaq Capital Market

Indicate by check mark whether the registrant is an emerging growth company as defined in Rule 405 of the Securities Act of 1933 (§230.405 of this chapter) or Rule 12b-2 of the Securities Exchange Act of 1934 (§240.12b-2 of this chapter).

Emerging growth company

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act.

Item 8.01 Other Events.

On March 2, 2021, Aileron Therapeutics, Inc. (the “Company”) announced that it has expanded the enrollment target for its upcoming Phase 1b clinical trial of ALRN-6924 in patients with non-small cell lung cancer (“NSCLC”) undergoing chemotherapy from 40 to 60 patients. In the randomized, double-blind, placebo-controlled Phase 1b trial, the Company plans to enroll 60 patients with advanced p53-mutated NSCLC undergoing treatment with first-line carboplatin plus pemetrexed (with or without immune checkpoint inhibitors). In the planned Phase 1b NSCLC trial, patients will be randomized 1:1 to receive either carboplatin/pemetrexed plus 0.3 mg/kg ALRN-6924 or carboplatin/pemetrexed plus placebo for at least four 21-day treatment cycles. Evaluations will include the proportion of treatment cycles free of severe hematological and other toxicities, transfusions, and the use of growth factors, as well as the impact on quality of life.

The Company anticipates beginning to enroll patients in the Phase 1b clinical trial in the second quarter of 2021. The Company anticipates reporting initial data from the trial late in the fourth quarter of 2021 and full results in mid-2022.

Forward-Looking Statements conform

Statements in this report about the Company’s future expectations, plans and prospects, as well as any other statements regarding matters that are not historical facts, may constitute forward-looking statements within the meaning of The Private Securities Litigation Reform Act of 1995. These statements include, but are not limited to, statements about the Company’s strategy and clinical development plans. The words “anticipate,” “believe,” “continue,” “could,” “estimate,” “expect,” “intend,” “may,” “plan,” “potential,” “predict,” “project,” “should,” “target,” “would” and similar expressions are intended to identify forward-looking statements, although not all forward-looking statements contain these identifying words. Actual results may differ materially from those indicated by such forward-looking statements as a result of various important factors, including whether the Company’s cash resources will be sufficient to fund its continuing operations for the periods anticipated; whether initial results of clinical trials will be indicative of final results of those trials or results obtained in future clinical trials; whether ALRN-6924 will advance through the clinical trial process on a timely basis, or at all; whether the results of such trials will be accepted by and warrant submission for approval from the United States Food and Drug Administration or equivalent foreign regulatory agencies; whether ALRN-6924 will receive approval from regulatory agencies on a timely basis or at all; whether, if ALRN-6924 obtains approval, it will be successfully distributed and marketed; what impact the coronavirus pandemic may have on the timing of our clinical development, clinical supply and our operations; and other factors discussed in the “Risk Factors” section of the Company’s quarterly report on Form 10-Q for the period ended September 30, 2020, filed on November 12, 2020, and risks described in other filings that the Company may make with the Securities and Exchange Commission. Any forward-looking statements contained in this report speak only as of the date hereof, and the Company specifically disclaims any obligation to update any forward-looking statement, whether because of new information, future events or otherwise.

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, as amended, the registrant has duly caused this report to be signed on its behalf by the undersigned hereunto duly authorized.

Date: March 2, 2021

Aileron Therapeutics, Inc.

By: /s/ Richard J. Wanstall

Richard J. Wanstall

Chief Financial Officer and Treasurer