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): **January 27, 2020**

ACCELERON PHARMA INC.

(Exact name of Registrant as specified in its charter)

Delaware	**001-36065**	**27-0072226**
(State or other jurisdiction of incorporation)	(Commission File Number)	(I.R.S. Employer Identification Number)
128 Sidney Street **Cambridge, MA** (Address of principal executive offices)		**02139** (Zip Code)

Registrant's telephone number, including area code: **(617) 649-9200**

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:

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 Exchange Act:

Title of each class	Ticker Symbol(s)	Name of each exchange on which registered
Common Stock, $0.001 per share	XLRN	The Nasdaq Global 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 January 27, 2020, Acceleron Pharma Inc. ("Acceleron") announced that the PULSAR Phase 2 trial of sotatercept met its primary and key secondary endpoints in patients with pulmonary arterial hypertension (PAH). In patients on stable background PAH-specific therapies, sotatercept demonstrated a statistically significant reduction in pulmonary vascular resistance (PVR), the trial's primary endpoint, at week 24 versus placebo. The trial also achieved a statistically significant improvement in the key secondary endpoint of 6MWD, as well as other secondary endpoints, including NT-proBNP, and WHO functional class.

In this Phase 2 double-blind, placebo-controlled study, 106 patients were randomized to receive placebo, 0.3 mg/kg of sotatercept, or 0.7 mg/kg of sotatercept subcutaneously every 21 days in combination with stable background PAH-specific therapies over a 24-week treatment period.

Sotatercept was generally well tolerated in the trial. Adverse events observed in the study were generally consistent with previously published data on sotatercept in other diseases.

97 out of the 106 patients who enrolled in the PULSAR trial are currently participating in the 18-month extension period of the trial. To date, no patients have discontinued participation in the extension trial.

Acceleron plans to present a detailed review of the topline results from the PULSAR Phase 2 trial of sotatercept at a medical conference later this year.

Sotatercept is an investigational therapy that is not approved for any use in any country.

Cautionary Note on Forward-Looking Statements

This Current Report on Form 8-K contains forward-looking statements about Acceleron's strategy, future plans and prospects, including statements regarding the development and commercialization of sotatercept in PAH and of Acceleron's other compounds, the timeline for clinical development and regulatory approval of sotatercept in PAH and Acceleron's other compounds, the expected timing for reporting of data from ongoing clinical trials, and the potential of Acceleron's compounds as therapeutic drugs. The words "anticipate," "believe," "could," "estimate," "expect," "goal," "intend," "may," "plan," "possible," "potential," "project," "should," "target," "will," "would," and similar expressions are intended to identify forward-looking statements, although not all forward-looking statements contain these identifying words.

Actual results could differ materially from those included in the forward-looking statements due to various factors, risks and uncertainties, including, but not limited to, that preclinical testing of Acceleron's compounds and data from clinical trials may not be predictive of the results or success of ongoing or later clinical trials, that the results of any clinical trials may not be predictive of the results or success of other clinical trials, that regulatory approval of Acceleron's compounds in one indication or country may not be predictive of approval in another indication or country, that the development of Acceleron's compounds will take longer and/or cost more than planned, that Acceleron will be unable to successfully complete the clinical development of Acceleron's compounds, that Acceleron may be delayed in initiating, enrolling or completing any clinical trials, that Acceleron's compounds will not receive regulatory approval or become commercially successful products. These and other risks and uncertainties are identified under the heading "Risk Factors" included in Acceleron's most recent Annual Report on Form 10-K, and other filings that Acceleron has made and may make with the SEC in the future.

The forward-looking statements contained in this Current Report on Form 8-K are based on management's current views, plans, estimates, assumptions, and projections with respect to future events, and Acceleron does not undertake and specifically disclaims any obligation to update any forward-looking statements.

SIGNATURES

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

ACCELERON PHARMA INC.

By: /s/ Adam M. Veness, Esq.

Adam M. Veness, Esq.
Vice President, General Counsel and Secretary

Date: January 27, 2020