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): October 4, 2016

RESPIRERX PHARMACEUTICALS INC.
(Exact name of registrant as specified in its charter)

Delaware	**1-16467**	**33-0303583**
(State or other jurisdiction of incorporation)	**(Commission File Number)**	**(I.R.S Employer Identification No.)**

126 Valley Road, Suite C **Glen Rock, New Jersey** **(Address of principal executive offices)**	**07452** **(Zip Code)**

Registrant's telephone number, including area code: (201) 444-4947

(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))

Item 7.01 Regulation FD Disclosure.

On September 12, 2016, RespireRx Pharmaceuticals Inc. (the "Company") issued a press release announcing preliminary top-line analysis of safety and efficacy data from a Phase 2A clinical trial of the Company's proprietary ampakine compound, CX1739, that was recently conducted at Duke University. The Company's President and Chief Executive Officer, James S. Manuso, subsequently made a presentation on Monday, September 12, 2016 at the Rodman & Renshaw 18th Annual Global Investment Conference, in part discussing that data. A slide presentation was provided in connection with Dr. Manuso's presentation.

On October 3, 2016, the Company discovered an error in the data reported to it that the Company believes will affect the efficacy data analysis. However, at this time, the Company does not know the extent of the effect. The safety data is expected to remain unchanged. Accordingly, on October 4, 2016, the Company issued a press release retracting the efficacy data contained in the September 12, 2016 press release. The October 4, 2016 press release is attached as Exhibit 99.1 to this Current Report on Form 8-K. The Rodman & Renshaw Conference slide presentation was included on the Company's website in the ordinary course of business. In light of this new information, the Company intends to remove that presentation from its website and to provide a new slide presentation, both on its website and via a Current Report on Form 8-K, as soon as practical.

Item 9.01 Financial Statements and Exhibits

(d) Exhibits.

A list of exhibits required to be filed as part of this report is set forth in the Exhibit Index, which is presented elsewhere in this document, and is incorporated herein by reference.

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.

RESPIRERX PHARMACEUTICALS INC.

Date: October 4, 2016

By: */s/ James S. Manuso*

James S. Manuso
President and Chief Executive Officer

EXHIBIT INDEX

Exhibit Number	Exhibit Description
99.1	Press Release dated October 4, 2016*

* Furnished herewith.

RespireRx Pharmaceuticals Inc.
Retracts Efficacy Data in September 12, 2016 Press Release Announcing Preliminary Top-Line Analysis of Safety and Efficacy Data from Duke University Phase 2A Clinicial Trial of CX 1739

Data is in Process of Being Re-Analyzed
Updated Report Expected to be Issued by the End of 2016

Glen Rock, N.J., October 4, 2016/Globe Newswire – On September 12, 2016, RespireRx Pharamceuticals Inc. (OTCQB: RSPI) ("RespireRx" or the "Company") issued a press release announcing preliminary top-line analysis of safety and efficacy data from a Phase 2A clinical trial of the Company's proprietary ampakine compound, CX1739, that was recently conducted at Duke University.

On October 3, 2016, the Company discovered an error in the data reported to it that the Company believes will effect the efficacy data analysis. However, at this time, the Company does not know the extent of the effect. The safety data is expected to remain unchanged. Accordingly, the Company hereby retracts the efficacy data contained in the September 12, 2016 press release.

The Company is in the process of re-analyzing the data and expects to report the results in a final report by the end of 2016.

Additional information about the Company and the matters discussed herein can be obtained on the Company's web-site at www.RespireRx.com or in the Company's filings with the U.S. Securities and Exchange Commission at www.sec.gov .

Cautionary Note Regarding Forward-Looking Statements

This press release contains certain forward-looking statements within the meaning of Section 27A of the Securities Act of 1933 and Section 21E of the Securities Exchange Act of 1934 and the Company intends that such forward-looking statements be subject to the safe harbor created thereby. These might include statements regarding the Company's financial position, business strategy and other plans and objectives for future operations, and assumptions and predictions about research and development efforts, including, but not limited to, preclinical and clinical research design, execution, timing, costs and results, future product demand, supply, manufacturing, costs, marketing and pricing factors, which are all considered forward-looking statements.

RespireRx Pharmaceuticals Inc., 126 Valley Road, Suite C, Glen Rock, New Jersey 07452

In some cases, forward-looking statements may be identified by words including "anticipates," "believes," "intends," "estimates," "expects," "plans," and similar expressions include, but are not limited to, statements regarding (i) future research plans, expenditures and results, (ii) potential collaborative arrangements, (iii) the potential utility of the Company's proposed products, and (iv) the need for, and availability of, additional financing.

The forward-looking statements included herein are based on current expectations that involve a number of risks and uncertainties. These forward-looking statements are based on assumptions regarding the Company's business and technology, which involve judgments by management with respect to, among other things, future scientific, economic and competitive conditions, and future business decisions, all of which are difficult or impossible to predict accurately and many of which are beyond the Company's control. Although the Company believes that the assumptions underlying the forward-looking statements are reasonable, actual results may differ materially from those set forth in the forward-looking statements. In light of the significant uncertainties inherent in the forward-looking information included herein, the inclusion of such information should not be regarded as a representation by the Company or any other person that the Company's objectives or plans will be achieved.

Factors that could cause or contribute to such differences include, but are not limited to, regulatory policies or changes thereto, available cash, research and development results, competition from other similar businesses, and market and general economic factors. This press release should be read in conjunction with the condensed consolidated financial statements (unaudited) and notes thereto included in Item 1 of the Company's most recently filed Quarterly Report on Form 10-Q and the Company's Annual Report on Form 10-K for the fiscal year ended December 31, 2015, including the section entitled "Item 1A. Risk Factors." The Company does not intend to update or revise any forward-looking statements to reflect new information, future events or otherwise.

Company Contact:

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