

October 28, 2020

Via EDGAR

The Securities and Exchange Commission Washington, DC 20549 Division of Corporate Finance Office of Life Sciences

Re: File No.: 001-16467, Preliminary Proxy Statement filed on Schedule 14A on October 20, 2020

Attn: Ms. Margaret Schwartz and Ms. Christine Westbrook

Dear Ms. Schwartz:

We are submitting this letter in response to the comment of the staff (the "Staff") of the Securities and Exchange Commission set forth in your letter dated October 27, 2020 regarding the preliminary proxy statement on Schedule 14A filed on October 20, 2020 (the "Proxy Statement") of RespireRx Pharmaceuticals Inc. (the "Company"). The Proxy Statement contains two proposals: (1) Approval of Amendment of Restated Certificate of Incorporation to Effect Reverse Stock Split ("Proposal 1") and (2) Approval of Amendment of Restated Certificate of Incorporation to Increase Authorized Shares of Common Stock ("Proposal 2").

For your convenience, the Staff's comment is recited below, followed by the Company's response.

<u>Comment</u>: We note that the reverse stock split will not result in the reduction of your authorized common shares. Additionally, we note that on page 3 you state that one purpose of Proposal 2 is to "provide for an adequate number of shares of Common Stock available for future capital raise transactions, including pursuant to Regulation A under the Securities Act of 1933, as amended." Please disclose whether you have any current plans, agreements, arrangements, or understandings, written or oral, to issue the additional authorized shares that may become available if Proposal 1 or Proposal 2 is approved. Please also revise your disclosure to discuss the potential dilutive effect of Proposals 1 and 2.

Response: We appreciate your comment and intend to revise our disclosure as follows:

In the sections of the Proxy Statement captioned "Proposal 1 – Approval of Amendment of Restated Certificate of Incorporation to Effect Reverse Stock Split—Reasons for the Proposed Amendment" and "Proposal 2 – Approval of Amendment of Restated Certificate of Incorporation to Increase Authorized Shares of Common Stock—Reasons for the Proposed Amendment," we intend to add the following supplemental disclosure as a new paragraph in each section:

"If Proposal [1][2] is approved and implemented, the Company plans to pursue a capital raise transaction pursuant to Regulation A under the Securities Act, the structure, size and timing of which are highly uncertain. The Company is not party to any definitive or binding agreement to undertake any such transaction. The Company has, however, entered into a non-binding letter of intent with respect to a potential Regulation A investment and has received two additional indications of interest with respect to potential investments in the Company pursuant to Regulation A. Other than as set forth herein, there are no other current plans, agreements, arrangements or understandings to issue additional authorized shares that may become available if either Proposal 1 or Proposal 2 is approved."

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



In the section of the Proxy Statement captioned "Effects of the Proposed Amendment," we intend to add the following supplemental disclosure:

"As discussed above, if Proposal 1 and Proposal 2 are approved and implemented, the Company plans to pursue a capital raise transaction pursuant to Regulation A under the Securities Act, the structure, size and timing of which are highly uncertain. The Company is not party to any definitive or binding agreement to undertake any such transaction. The Company has, however, entered into a non-binding letter of intent with respect to a potential Regulation A investment and has received two additional indications of interest with respect to potential investments in the Company pursuant to Regulation A. Other than as set forth herein, there are no other current plans, agreements, arrangements or understandings to issue additional authorized shares that may become available if either Proposal 1 or Proposal 2 is approved."

The Company intends to add a new section captioned "Dilution" under "Effects of the Proposed Amendment" as follows:

"Dilution

If the Reverse Stock Split is effected, the ratio of each stockholder's holdings compared to the total outstanding shares of Common Stock will not change, except for immaterial changes resulting from the cash payment in lieu of fractional shares. Similarly, the proposed increase in authorized share capital will not change the ratio of any stockholder's holdings compared to the total outstanding shares of Common Stock. Each of Proposal 1 and Proposal 2 will, however, if approved and effected by the Company, increase the number of authorized but unissued shares of Common Stock that are available for future issuance. Any future issuance of Common Stock, or securities convertible or exercisable into Common Stock, will be dilutive to the Company's then-current stockholders."

If you have any further questions, please do not hesitate to contact me at 856-278-8199 or tjones@respirerx.com or Jeff Margolis at 917-834-7206 or jmargolis@respirerx.com.

Sincerely,

/s/ Timothy Jones Timothy Jones President and Chief Executive Officer

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