

RESPIRERX PHARMACEUTICALS INC.
126 Valley Road, Suite C
Glen Rock, New Jersey 07452
(201) 444-4947

VIA EDGAR

October 26, 2020

U.S. Securities and Exchange Commission
Division of Corporation Finance
100 F Street, N.E.
Washington, D.C. 20549

Re: RespireRx Pharmaceuticals Inc.
Registration Statement on Form S-1
File No. 333-249469

Dear Ladies and Gentlemen:

Pursuant to Rule 461 under the Securities Act of 1933, as amended (the "Act"), RespireRx Pharmaceuticals Inc. (the "Company") hereby requests acceleration of the effective date and time of the above-referenced registration statement (the "Registration Statement") to October 28, 2020, at 5:00 p.m. Eastern Time or as soon thereafter as is practicable. In making this acceleration request, the Company acknowledges that it is aware of its responsibilities under the Act.

Once the Registration Statement is effective, please inform our counsel, Faegre Drinker Biddle & Reath LLP, by calling Elizabeth A. Diffley at (215) 988-2607.

Sincerely,

RESPIRERX PHARMACEUTICALS INC.

By: /s/ Jeff E. Margolis

Jeff E. Margolis

SVP, CFO, Secretary and Treasurer

cc: Elizabeth A. Diffley
Faegre Drinker Biddle & Reath LLP
