



DIVISION OF
CORPORATION FINANCE

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

November 22, 2017

Chen Schor
President and Chief Executive Officer
resTORbio, Inc.
501 Boylston Street, Suite 6102
Boston, MA 02116

Re: resTORbio, Inc.
Draft Registration Statement on Form S-1
Filed October 27, 2017
File No. 377-01761

Dear Mr. Schor:

We have reviewed your draft registration statement and have the following comments. In some of our comments, we may ask you to provide us with information so we may better understand your disclosure.

Please respond to this letter by providing the requested information and either submitting an amended draft registration statement or publicly filing your registration statement on EDGAR. If you do not believe our comments apply to your facts and circumstances or do not believe an amendment is appropriate, please tell us why in your response.

After reviewing the information you provide in response to these comments and your amended draft registration statement or filed registration statement, we may have additional comments.

Draft Registration Statement on Form S-1

Summary, page 1

1. We note your statements that you were co-founded by PureTech Health LLC, which appears to be affiliated with PureTech Health plc, a public company listed on the London Stock Exchange. PureTech Health plc's publicly available investor documents refer to you as a subsidiary, and its website includes RTB101 in its pipeline of products. If correct, please revise your disclosure throughout the prospectus to clarify your current subsidiary relationship with PureTech Health plc, any services PureTech provides to you, and disclose the expected percentage ownership PureTech Health will have in you

following the offering and discuss all potential conflicts of interest.

2. Please limit the summary discussion of your results to whether the product candidate met the primary endpoints and a description of the primary endpoints. The discussion of p-values is more appropriate for the Business discussion, where you should also discuss how the values relate to the FDA's evidentiary standards of efficacy.
3. Please remove the last row in your product pipeline table here and in the Business section since you have not yet identified a product candidate and indication and it is therefore premature to include it in the pipeline table.

Implications of Being an Emerging Growth Company, page 5

4. Please supplementally provide us with copies of all written communications, as defined in Rule 405 under the Securities Act, that you, or anyone authorized to do so on your behalf, present to potential investors in reliance on Section 5(d) of the Securities Act, whether or not they retain copies of the communications.

Use of Proceeds, page 76

5. Please revise your disclosure to clarify whether you expect to be able to complete each of the identified uses with the proceeds from the offering and your other available assets. If you do not, please clarify your expectations with respect to progress towards completion of the stated uses.

Management's Discussion and Analysis of Financial Condition and Results of Operations

Critical Accounting Policies and Estimates

Determination of Estimated Offering Price, page 93

6. Once you have an estimated offering price or range, please explain to us how you determined the fair value of the common stock underlying your equity issuances and the reasons for any differences between the recent valuations of your common stock leading up to the IPO and the estimated offering price. This information will help facilitate our review of your accounting for equity issuances including stock compensation and beneficial conversion features.

Our TORC1 Program, page 107

7. Please revise your narrative explanation of the figure on page 107 to clarify what the figure is designed to depict. Currently, it appears to state that RTB101 monotherapy can inhibit phosphorylation of S6K and 4EBP1, and that RTB101 in combination with everolimus may completely inhibit Ulk1. However, the figure appears to indicate that 42BP1 and Ulk1 activity increase as a result of the treatments.

8. Please expand your narrative disclosure regarding the figures at the top of page 111 to further explain how they demonstrate that your product candidate may enhance innate immunity and provide the p-values.

Intellectual Property, page 116

9. Please clarify the statement in the carryover paragraph on page 117 that intellectual property rights not controlled by Novartis as of the effective date are not included in the license to identify the referenced intellectual property rights, explain whether such rights relate to your product candidates and if yes, whether you expect not having a license to such rights to have a material effect on your business.

Management, page 137

10. We note that John McCabe is your Vice President, Finance and that he is indicated in the registration statement to be your principal financial and accounting officer. However, we also note that on your website, you indicate that Landen Williams is your interim chief financial officer. Please revise or explain.

Transactions with Related Persons, page 156

11. Please disclose the approximate value of the transaction in which you issued shares to PureTech Health in exchange for the founding business services.
12. Please revise the discussion of your Investors' Rights Agreement to identify the 5% stockholders, entities affiliated with your directors and these directors.

Principal Stockholders, page 158

13. Please revise footnote 3 to identify the person(s) who have voting and investment power.

Statements of Redeemable Convertible Preferred Stock and Stockholders' (Deficit) Equity, page F-5

14. Tell us how you determined the reported amount of \$9,764,000 for the redeemable convertible preferred stock at September 30, 2017. Also explain why additional paid in capital was increased by \$1,379,000 for the issuance of the redeemable preferred stock. Finally, tell us why accumulated deficit was reduced by \$1,379,000 to arrive at a pro forma balance of \$9,346,000 at September 30, 2017.

Chen Schor
resTORbio, Inc.
November 22, 2017
Page 4

You may contact Rolf Sundwall at 202-551-3105 or Lisa Vanjoske at 202-551-3614 if you have questions regarding comments on the financial statements and related matters. Please contact Dorrie Yale at 202-551-8776 or Suzanne Hayes at 202-551-3675 with any other questions.

Division of Corporation Finance
Office of Healthcare & Insurance

cc: Danielle M. Lauzon