



DIVISION OF
CORPORATION FINANCE

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

July 8, 2020

Sanjiv K. Patel, M.D.
President and Chief Executive Officer
Relay Therapeutics, Inc.
399 Binney Street, 2nd Floor
Cambridge, MA 02139

Re: Relay Therapeutics, Inc.
Registration Statement on Form S-1
Filed June 24, 2020
File No. 333-239412

Dear Dr. Patel:

We have reviewed your 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 amending your registration statement and providing the requested information. 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 any amendment to your registration statement and the information you provide in response to these comments, we may have additional comments. Unless we note otherwise, our references to prior comments are to comments in our June 18, 2020 letter.

Registration Statement on Form S-1 filed June 24, 2020

Business

Our solution, RLY-1971, page 105

1. We note your response to comment 15 and do not agree with your conclusion that these comparisons are appropriate without additional disclosure that provides appropriate context for investors, e.g., as a non-exhaustive list, discussion that highlights the early stage nature of your RLY-4008 program, differing dosages and patient populations and, as referenced in your response, that you will need to generate the bulk of the clinical data necessary to support marketing approval.

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Our clinical development plan, page 112

2. We note your response to comment 14 and your disclosure on page 3 that you are evaluating the safety and tolerability of RLY-1971 in a Phase 1 dose escalation study. Please expand your disclosure to state the current size of the clinical trial population.

Collaboration and License Agreement with D. E. Shaw Research, LLC, page 133

3. We note your response to comment 16. Please revise the summary to clearly state that RLY-1941 is currently co-owned with D. E. Shaw Research and explain your development and commercialization rights.

We remind you that the company and its management are responsible for the accuracy and adequacy of their disclosures, notwithstanding any review, comments, action or absence of action by the staff.

Refer to Rules 460 and 461 regarding requests for acceleration. Please allow adequate time for us to review any amendment prior to the requested effective date of the registration statement.

You may contact Rolf Sundwall at 202-551-3105 or Terence O'Brien at 202-551-3355 if you have questions regarding comments on the financial statements and related matters. Please contact Jeffrey Gabor at 202-551-2544 or Christine Westbrook at 202-551-5019 with any other questions.

Sincerely,

Division of Corporation Finance
Office of Life Sciences

cc: Gabriela Morales-Rivera, Esq.