



DIVISION OF
CORPORATION FINANCE

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

December 16, 2016

Steven M. Paul, M.D.
President and Chief Executive Officer
Voyager Therapeutics, Inc.
75 Sidney Street
Cambridge, MA 02139

**Re: Voyager Therapeutics, Inc.
Registration Statement on Form S-3
Filed December 1, 2016
File No. 333-214861**

Dear Dr. Paul, M.D.:

We have limited our review of your registration statement to those issues we have addressed in our 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.

Registration Statement on Form S-3 filed December 1, 2016

Plan of Distribution, page 10

1. Your plan of distribution and coverage page for the sales agreement prospectus indicate that sales of your common stock, if any, will be made at market prices by any method that is deemed to be an "at the market offering" as defined in Rule 415 under the Securities Act, including sales made directly on The NASDAQ Global Select Market or any other trading market for your common stock, or sales to or through a market maker other than on an exchange. Your disclosure also states that Cowen and Company may sell your common stock by any other method permitted by law, including negotiated transactions. Please tell us whether sales made to or through a market maker or sales made in negotiated transactions satisfy the "at the market offering" definition under Rule 415. If any sales method does not constitute a sales method that is deemed to be an "at the

Steven M. Paul, M.D.
Voyager Therapeutics, Inc.
December 16, 2016
Page 2

market offering” as defined in Rule 415 or if any material information with respect to a particular offering has been omitted, please confirm that you will file an additional prospectus supplement at the time of such sales or tell us why such additional filing would not be necessary.

Exhibits

2. Please file your indentures (Exhibits 4.2 and 4.3) prior to effectiveness of the registration statement.

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.

Please contact Joseph McCann at (202) 551-6262 or Suzanne Hayes, Assistant Director, at (202) 551-3675 with any questions.

Division of Corporation Finance
Office of Healthcare & Insurance