



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

DIVISION OF  
CORPORATION FINANCE

Mail Stop 4720

September 14, 2015

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

**Re: Voyager Therapeutics, Inc.  
Amendment No. 3 to Draft Registration Statement on Form S-1  
Submitted August 28, 2015  
CIK No. 0001640266**

Dear Dr. Paul:

We have reviewed your amended 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.

License Agreement with University of Massachusetts, page 117

1. We refer to your disclosure regarding your “exclusive, worldwide, royalty-bearing license” agreement with the University of Massachusetts and the corresponding agreement filed as Exhibit 10.4. We also note your disclosure, “[w]e have exclusively licensed three families of patents and patent applications and nonexclusively licensed three families of patents and patent applications directed to RNAi constructs as vector payloads, their design and use in the treatment of CNS disorders from the University of Massachusetts,” in the second paragraph of “Licensed Intellectual Property” on page 122. Please expand your disclosure to indicate which patents and patent applications licensed from the University of Massachusetts are exclusive and which are non-exclusive. Please

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also discuss the material terms of any agreement with the University of Massachusetts relating to the non-exclusive licensed patent families. In addition, please file the agreement as an exhibit in accordance with Item 601 of Regulation S-K.

Company-Owned Intellectual Property, page 121

2. We refer to your last patent disclosure on page 122. Please expand your disclosure to briefly identify the intellectual property and type of patent protection sought (e.g. method of use or composition of matter) to protect your intellectual property rights arising from the The Amyotrophic Lateral Sclerosis Association grant.

You may contact Keira Nakada at (202) 551-3659 or James Rosenberg at 202-551-3679 if you have questions regarding comments on the financial statements and related matters. Please contact Tara Keating Brooks at (202) 551-8336, Bryan Pitko at (202) 551-3203 or me at (202) 551-3675 with any other questions.

Sincerely,

*/s/ Bryan J. Pitko for*

Suzanne Hayes  
Assistant Director

cc: Via E-mail  
Mitchell S. Bloom, Esq.  
Goodwin Procter LLP