



DIVISION OF
CORPORATION FINANCE

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

June 8, 2018

Jill C. Milne, Ph.D.
Chief Executive Officer
Catabasis Pharmaceuticals, Inc.
One Kendall Square
Bldg. 1400E, Suite B14202
Cambridge, MA 02139

**Re: Catabasis Pharmaceuticals, Inc.
Registration Statement on Form S-1
Filed June 4, 2018
File No. 333-225410**

Dear Dr. Milne:

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-1

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1. Please revise your prospectus prior to effectiveness to disclose the number of common units to be offered and the number of pre-funded units to be offered. For guidance, please refer to Securities Act Rules Compliance and Disclosure Interpretations Question 227.02.

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.

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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 Ada D. Sarmiento at 202-551-3798 or Mary Beth Breslin at 202-551-3625 with any questions.

Division of Corporation Finance
Office of Healthcare & Insurance

cc: Libby Ragan, Esq.