

CATABASIS PHARMACEUTICALS, INC.  
ONE KENDALL SQUARE  
BUILDING 1400E, SUITE B14202  
CAMBRIDGE, MA 02139

June 19, 2018

**Via EDGAR**

Securities and Exchange Commission  
Division of Corporation Finance  
100 F Street, N.E.  
Washington, D.C. 20549

Re: Catabasis Pharmaceuticals, Inc.  
Registration Statement on Form S-1  
File No. 333-225410  
Request for Acceleration

Ladies and Gentlemen:

Pursuant to Rule 461 promulgated under the Securities Act of 1933, as amended, Catabasis Pharmaceuticals, Inc. hereby requests acceleration of the effective date of its Registration Statement on Form S-1 (File No. 333-225410), so that it may become effective at 5:00 p.m. Eastern time on June 19, 2018, or as soon thereafter as practicable.

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Very truly yours,

**Catabasis Pharmaceuticals, Inc.**

By: /s/ Deirdre A. Cunnane  
Name: Deirdre A. Cunnane  
Title: Chief Legal Officer

*[Signature Page to Request for Acceleration]*

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