

FLEX PHARMA, INC.
31 St. James Avenue, 6th Floor
Boston, MA 02116

May 16, 2019

Via EDGAR

U.S. Securities and Exchange Commission
Division of Corporation Finance
100 F Street, N.E.
Mail Stop 4720
Washington, D.C. 20549
Attn: Jeff Gabor

Re: **Flex Pharma, Inc.**
Registration Statement on Form S-3
File No. 333-231010

Acceleration Request

Requested Date: Friday, May 17, 2019

Requested Time: 4:00 P.M. Eastern time

Ladies and Gentlemen:

In accordance with Rule 461 under the Securities Act of 1933, as amended, the undersigned registrant (the “**Registrant**”) hereby requests that the Securities and Exchange Commission (the “**Commission**”) take appropriate action to cause the above-referenced Registration Statement on Form S-3 (File No. 333-231010) (the “**Registration Statement**”) to become effective on Friday, May 17, 2019, at 4:00 p.m. Eastern time, or as soon thereafter as is practicable.

Very truly yours,

Flex Pharma, Inc.

/s/ John McCabe

By: John McCabe

Title: Chief Financial Officer