

April 25, 2019

VIA EDGAR

U.S. Securities and Exchange Commission
Division of Corporation Finance,
Office of Healthcare & Insurance
100 F. Street, NE
Washington, DC 20549

**RE: Flex Pharma, Inc.
Registration Statement on Form S-4 (File No. 333-229666)
Filed February 14, 2019**

Ladies and Gentlemen:

Pursuant to Rules 460 and 461 of the General Rules and Regulations under the Securities Act of 1933, as amended, Flex Pharma, Inc. (the "Registrant") hereby requests that the effectiveness of the above-captioned Registration Statement (the "Registration Statement") be accelerated so that it will become effective as of 10:00 a.m. EDT on April 29, 2019, or as soon thereafter as practicable.

The Registrant acknowledges that:

- should the U.S. Securities and Exchange Commission (the "Commission") or the staff of the Commission (the "Staff"), acting pursuant to delegated authority, declare the Registration Statement effective, it does not foreclose the Commission from taking any action with respect to the Registration Statement;
- the action of the Commission or the Staff, acting pursuant to delegated authority, in declaring the Registration Statement effective, does not relieve the Registrant from its full responsibility for the adequacy and accuracy of the disclosure in the Registration Statement; and
- the Registrant may not assert Staff comments and the declaration of effectiveness of the Registration Statement as a defense in any proceeding initiated by the Commission or any person under the federal securities laws of the United States.

Please call Walter Van Dorn of Dentons US LLP at 212-768-6985 or Thomas Redekopp of Dentons Canada LLP at 416-863-4511 to confirm the effectiveness of the Registration Statement or with any questions.

FLEX PHARMA
31 St. James Ave 6th Floor Boston, MA 02116 VOX 617-874-1821

www.flex-pharma.com

Very truly yours,

FLEX PHARMA, INC.

/s/ William McVicar

William McVicar

President and Chief Financial Officer

cc: Jeffrey Gabor
Division of Corporation Finance,
Office of Healthcare & Insurance