

April 22, 2016

Via Edgar

United States Securities and Exchange Commission
Division of Corporation Finance
100 F Street, N.E.
Washington, DC 20549

Re: Flex Pharma, Inc.
Registration Statement on Form S-3 (File No. 333-210289)

Ladies and Gentlemen:

The undersigned 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 to become effective at 4:00 p.m. Eastern Time on April 26, 2016 or as soon thereafter as is practicable.

The undersigned registrant hereby acknowledges that:

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

Sincerely,

Flex Pharma, Inc.

By: /s/ John McCabe
John McCabe
VP, Finance

cc: Marc A. Recht, Esq.