



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

DIVISION OF
CORPORATION FINANCE

Mail Stop 4546

November 14, 2016

Via E-mail

Christopher Anzalone
Chief Executive Officer
Arrowhead Pharmaceuticals, Inc.
225 South Lake Avenue, Suite 1050
Pasadena, California 91101

**Re: Arrowhead Pharmaceuticals, Inc.
Registration Statement on Form S-3
Filed October 28, 2016
File No. 333-214315**

Dear Mr. Anzalone:

We have limited our review of your registration statement to the issue we have addressed in our comment.

Please respond to this letter by amending your registration statement and providing the requested information. If you do not believe our comment applies 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 our comment, we may have additional comments.

Exhibit Index

1. We note your indication that you may file Exhibit 25.1 as an exhibit to a report filed under the Exchange Act to be incorporated by reference to this registration statement or to a post-effective amendment to the registration statement. Please note that you must separately file the Form T-1 under the electronic form type "305B2" and not in a post-effective amendment or in a Form 8-K. Please refer to Question 206.01 of the Trust Indenture Act of 1939 Compliance and Disclosure Interpretations, available at <http://www.sec.gov/divisions/corpfin/guidance/tiainterp.htm>. Please revise your exhibit index accordingly.

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.

You may contact Johnny Gharib at (202) 551-3170 or Erin Jaskot at (202) 551-3442 with any questions.

Sincerely,

/s/ Erin K. Jaskot, *for*

Suzanne Hayes
Assistant Director
Office of Healthcare and Insurance