



DIVISION OF
CORPORATION FINANCE

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

March 23, 2015

Via E-mail

Christopher Anzalone
Chief Executive Officer
Arrowhead Research Corporation
225 S. Lake Avenue, Suite 1050
Pasadena, California 91101

**Re: Arrowhead Research Corporation
Form 10-K for the Fiscal Year Ended September 30, 2014
Filed November 25, 2014
File No. 000-21898**

Dear Mr. Anzalone:

We have reviewed your filing and have the following comments. In some of our comments, we may ask you to provide us with information so we may better understand your disclosure.

Please respond to these comments within ten business days by providing the requested information or advise us as soon as possible when you will respond. If you do not believe our comments apply to your facts and circumstances, please tell us why in your response.

After reviewing your response and any amendment you may file in response to these comments, we may have additional comments.

Business

Partner-based Pipeline, pages 11-12

1. We note that you previously filed your license agreement with Cerulean Pharmaceuticals, Inc. However, the agreement is not included as an exhibit to your current annual report. Please include the agreement as an exhibit or, in the alternative, please provide us with your legal analysis supporting your conclusion that it no longer need be filed pursuant to Item 601(b)(10) of Regulation S-K.
2. Please revise your disclosure to describe all of the material terms of your research collaboration and license agreement with Shire AG including its duration, termination provisions, material obligations that must be met to keep the agreement in place, and royalty payments. Please also file the agreement as an exhibit pursuant to Item 601(b)(10) of Regulation S-K.

University of Texas MD Anderson Cancer Center License, page 20

3. We note that you previously filed your license agreement with the Board of Regents of the University of Texas System. However, the agreement is not included as an exhibit to your current annual report. Please include the agreement as an exhibit or, in the alternative, please provide us with your legal analysis supporting your conclusion that it no longer need be filed pursuant to Item 601(b)(10) of Regulation S-K.

We urge all persons who are responsible for the accuracy and adequacy of the disclosure in the filing to be certain that the filing includes the information the Securities Exchange Act of 1934 and all applicable Exchange Act rules require. Since the company and its management are in possession of all facts relating to a company's disclosure, they are responsible for the accuracy and adequacy of the disclosures they have made.

In responding to our comments, please provide a written statement from the company acknowledging that:

- the company is responsible for the adequacy and accuracy of the disclosure in the filing;
- staff comments or changes to disclosure in response to staff comments do not foreclose the Commission from taking any action with respect to the filing; and
- the company may not assert staff comments as a defense in any proceeding initiated by the Commission or any person under the federal securities laws of the United States.

You may contact Mary Mast at (202) 551-3613 or James Rosenberg at (202) 551-3679 if you have questions regarding comments on the financial statements and related matters. Please contact Alla Berenshteyn at (202) 551-4325 or me at (202) 551-3715 with any other questions.

Sincerely,

/s/ Daniel Greenspan for

Jeffrey P. Riedler
Assistant Director

cc: Via E-mail
Ryan Murr, Esq.
Gibson, Dunn & Crutcher LLP