

Arrowhead Research Corporation
225 South Lake Avenue, Suite 1050 | Pasadena, CA 91101

April 30, 2015

VIA EDGAR

Securities and Exchange Commission
Division of Corporation Finance
100 F Street, N.E.
Washington, DC 20549
Attn: Jeffrey Riedler

Re: Arrowhead Research Corporation
Registration Statement on Form S-3 (File No. 333-202737)

Ladies and Gentlemen:

Pursuant to Rule 461 under the Securities Act of 1933, as amended, Arrowhead Research Corporation (the “**Company**”) hereby requests that the effective date of the above-captioned registration statement (the “**Registration Statement**”) be accelerated so that it becomes effective at 4:00 p.m., Eastern Time, on May 4, 2015, or as soon thereafter as practicable.

The Company hereby acknowledges that:

- should the Securities and Exchange Commission (the “**Commission**”) or 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 filing;
- the action of the Commission or the staff, acting pursuant to delegated authority, in declaring the Registration Statement effective, does not relieve the Company from its full responsibility for the adequacy and accuracy of the disclosure in the Registration Statement; and
- the Company may not assert staff comments and the declaration of the 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 Ryan Murr of Gibson Dunn & Crutcher, LLP at (415) 393-8373 as soon as the Registration Statement has been declared effective.

Very truly yours,

ARROWHEAD RESEARCH CORPORATION

By: /s/ Kenneth Myszkowski
Name: Kenneth Myszkowski
Title: Chief Financial Officer