

Via Facsimile and U.S. Mail
Mail Stop 6010

March 10, 2009

Mr. Christopher Anzalone
Chief Executive Officer, President and Director
Arrowhead Research Corporation
201 S. Lake Avenue, Suite 703
Pasadena, California 91101

**Re: Arrowhead Research Corporation
Form 10-K for the Fiscal Year Ended September 30, 2008
Filed December 15, 2008, as amended on December 17, 2008
Form 10-Q for the Quarterly Period Ended December 31, 2008
Filed February 9, 2009
File No. 000-21898**

Dear Mr. Anzalone:

We have reviewed your filings and have the following comments. We have limited our review to your financial statements and related disclosures and do not intend to expand our review to other portions of your document. In our comments, we ask you to provide us with information to better understand your disclosure. Where a comment requests you to revise disclosure, the information you provide should show us what the revised disclosure will look like and identify the annual or quarterly filing, as applicable, in which you intend to first include it. If you do not believe that revised disclosure is necessary, explain the reason in your response. After reviewing the information provided, we may raise additional comments and/or request that you amend your filing.

Please understand that the purpose of our review process is to assist you in your compliance with the applicable disclosure requirements and to enhance the overall disclosure in your filing. We look forward to working with you in these respects. We welcome any questions you may have about our comments or on any other aspect of our review. Feel free to call us at the telephone numbers listed at the end of this letter.

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Form 10-K for Fiscal Year Ended September 30, 2008

Notes to Consolidated Financial Statements

Note 1. Organization and Significant Accounting Policies, page F-8

Principles of Consolidation

1. You disclose losses allocated to minority interests in 2007 and 2008 of \$6,727,284 and \$7,445,542, respectively, while the minority interests in the equity capital of your primary subsidiaries amounted to \$152,609 at September 30, 2007 and zero at September 30, 2008. Given the magnitude of these loss allocations, please explain to us how your accounting for minority interests complies with ARB 51, particularly your basis for allocating losses in 2007 and 2008 as prescribed in paragraph 15. Include in your analysis to us a roll forward of the minority interests accounts shown on your balance sheets that reconciles to the corresponding disclosure in the Notes, particularly Note 4. Revise your disclosure to describe your accounting for minority interests, your existing obligations to fund subsidiary losses, and other key contractual terms that govern minority interests in all of your subsidiaries. In addition, revise your disclosure to describe and quantify the specific transactions underlying the “increase in Arrowhead’s proportionate share of Insert Therapeutic’s equity” recorded in fiscal 2007 for \$2,401,394 and the corresponding amount recorded for Unidym in fiscal 2008 for \$1,720,962.

Form 10-Q for Quarterly Period Ended December 31, 2008

Item 2. Management’s Discussion and Analysis of Financial Condition and Results of Operations

Contractual Obligations and Commitments, page 33

2. Please revise the table to include the Calando Unsecured Promissory Notes and associated interest.

* * * *

Please respond to these comments within 10 business days or tell us when you will provide us with a response. Your letter should key your responses to our comments. Detailed letters greatly facilitate our review. Please furnish your letter on EDGAR under the form type label CORRESP.

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 all information required under

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the Securities Exchange Act of 1934 and that they have provided all information investors require for an informed investment decision. 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 connection with responding to our comments, please provide, in your letter, a 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.

In addition, please be advised that the Division of Enforcement has access to all information you provide to the staff of the Division of Corporation Finance in our review of your filing or in response to our comment on your filing.

Please contact Frank Wyman, Staff Accountant, at (202) 551-3660 or Don Abbott, Senior Staff Accountant, at (202) 551-3608, if you have any questions regarding these comments. In this regard, do not hesitate to contact me, at (202) 551-3679.

Sincerely,

Jim B. Rosenberg
Senior Assistant Chief Accountant