Christopher Anzalone Chief Executive Officer Arrowhead Research Corporation 201 South Lake Avenue, Suite 703 Pasadena, CA 91101

Re: Arrowhead Research Corporation

Schedule 14A

Filed August 18, 2009 File No. 000-21898

Dear Mr. Anzalone:

We have completed our review of your preliminary proxy statement on Schedule 14A and have no further comments at this time.

Sincerely,

Jeffrey P. Riedler Assistant Director

cc: Ryan Murr

Rachael Simonoff Wexler Goodwin Procter LLP Three Embarcadero Center, 24th Floor San Francisco, CA 94111

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