



DIVISION OF
CORPORATION FINANCE

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

March 16, 2012

Via E-mail

Christopher Anzalone
Chief Executive Officer
Arrowhead Research Corporation
225 South Lake Avenue, Suite 300
Pasadena, CA 91101

**Re: Arrowhead Research Corporation
Form 10-K
Filed December 20, 2011
File No. 000-21898**

Dear Mr. Anzalone:

We have reviewed your filing and have the following comments. Please respond to this letter within ten business days by amending your filing or by advising us when you will provide the requested response. If you do not believe our comments apply 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 filing and the information you provide in response to these comments, we may have additional comments.

Form 10-K, filed December 20, 2011

Cycloset Technology & CRLX101 (Formerly IT-101), page 6

1. We note that you have included as an exhibit your license agreement with Cerulean Pharma, Inc. Please revise your disclosure to describe the material terms of this agreement including, but not limited to, duration, termination provisions, obligations or rights to defend, other material obligations that must be met to keep the agreement in place, aggregate potential milestone payments, and a range of royalty payments not to exceed ten percent, e.g. "single digits," "teens," "twenties," etc.

Intellectual Property, page 7

2. Please expand the discussion concerning your material patents or groups of patents to identify the jurisdiction(s) where you have obtained patent protection, identify the products, product candidates, or technology that are dependent on the patent(s) or groups of patents, and disclose when the patents expire.

Our Approach to the Treatment of Obesity, page 8

3. We note that you have included as an exhibit your patent and technology license agreement with the Board of Regents of the University of Texas System. Please revise your disclosure to describe the material terms of this agreement including, but not limited to, duration, termination provisions, obligations or rights to defend, other material obligations that must be met to keep the agreement in place, aggregate potential milestone payments, and a range of royalty payments not to exceed ten percent, e.g. “single digits,” “teens,” “twenties,” etc. If the duration of the agreement is conditioned on the expiration of a patent, please provide the name of the patent and its expiration date.
4. Please revise your disclosure to describe Ablaris Therapeutics Inc.’s material patent or groups of patents, identify the jurisdiction(s) where Ablaris obtained patent protection, identify the products, product candidates, or technology that are dependent on the patent(s) or groups of patents, and disclose when the patents expire.

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.

Christopher Anzalone
Arrowhead Research Corporation
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Please contact Johnny Gharib at (202) 551-3170, John Krug at (202) 551-3862 or me at (202) 551-3715 with any questions.

Sincerely,

/s/ Daniel Greenspan for

Jeffrey Riedler
Assistant Director

cc: Ryan Murr
Ropes and Gray LLP
Three Embarcadero Center
San Francisco, CA 94111