

Via Facsimile and U.S. Mail
Mail Stop 4720

August 26, 2009

Mr. Barry D. Quart
President and Chief Executive Officer
Ardea Biosciences, Inc.
4939 Directors Place
San Diego, CA 92121

Re: Ardea Biosciences, Inc.
Form 10-K for the Year Ended December 31, 2008
Filed March 13, 2009
File No. 001-33734
DEF14A
Filed April 16, 2009
File No. 001-33734

Dear Mr. Quart:

We have reviewed your filings and have the following comment.

In our comment, we ask you to provide us with information to better understand your disclosure. Where it 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 comment or on any other aspect of our review. Feel free to call us at the telephone numbers listed at the end of this letter.

DEF14A

Compensation Discussion and Analysis, page 21

Elements of Executive Compensation, page 22

Annual Performance-Based Bonus, pages 23-24

1. In the discussion of your annual performance-based bonus program, you disclose that the annual incentive award for each of Mr. Beck, Ms. Manhard and Mr. Kruger were based 75% on achieving the pre-established corporate goal and 25% on achievement of pre-established individual goals. We further note that you disclose that, for each of the above individuals, the award actually earned reflects the achievement of individual goals and varies according to individual performance. Please provide us with proposed sample disclosure for inclusion in your next proxy statement which identifies the 2009 individual performance goals for each of the above named executive officers and confirm that you will revise your disclosure in your next proxy statement to also discuss, for each named executive officer, the extent to which individual and corporate goals were achieved and how the achievement was used to determine the individual bonuses.

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Please respond to these comments within 10 business days or tell us when you will provide us with a response. Please furnish a cover letter that keys your response to our comment and provide any requested information. Detailed letters greatly facilitate our review. Please file 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 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.

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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 Nandini Acharya, Staff Attorney at (202) 551-3495 or me at (202) 551-3715 with any questions.

Sincerely,

Jeffrey P. Riedler
Assistant Director