

Via Facsimile and U.S. Mail  
Mail Stop 4720

October 9, 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 the correspondence you submitted on September 10, 2009 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. We note that your proposed disclosure identifies the 2009 individual performance goals for each of Mr. Beck, Mr. Krueger and Ms. Manhard. To the extent that any of these goals are quantifiable, please provide revised disclosure setting forth the numerical or percentage target level of achievement. For instance, with respect to Mr. Beck, we note that one of his performance goals is to achieve operating expense and cash management target levels.

\* \* \* \*

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 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