



DIVISION OF
CORPORATION FINANCE

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

November 20, 2012

Via E-mail

Mr. Michael Kishbauch
President and Chief Executive Officer
Achillion Pharmaceuticals, Inc.
300 George Street
New Haven, CT 06511

**Re: Achillion Pharmaceuticals, Inc.
Form 10-K for the Fiscal Year Ended December 31, 2011
Filed March 8, 2012
File No. 001-33095**

Dear Mr. Kishbauch:

We have limited our review to only 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 so we may better understand your disclosure.

Please respond to this letter within 10 business days by providing the requested information or by advising us when you will provide the requested response. If you do not believe that a comment applies to your facts and circumstances, please tell us why in your response. Please furnish us a letter on EDGAR under the form type label CORRESP that keys your responses to our comments.

After reviewing the information provided, we may raise additional comments and/or request that you amend your filing.

Notes to Financial Statements

2. Summary of Significant Accounting Policies
Stock-Based Compensation – Employee Stock-Based Awards, page F-9

1. In light of the length of time for which you have granted employee stock-based awards and have been public, please tell us why you continue to believe that you do not have sufficient history to estimate the expected term of your options. Also, you disclose that expected volatility is based on the weighted average of historical and peer group volatility. It appears that you have sufficient experience to use just historical volatility of the Company. Please explain to us why your assumption is based on this weighted average volatility.

5. Collaboration Arrangements
GCA Therapeutics, Ltd., page F-14

2. Please provide us proposed revised disclosure to be included in future filings that provide a description of each milestone, the related contingent consideration and the event that will trigger the milestone. In addition, please provide in your proposed disclosure the factors you considered to determine whether each milestone is substantive. Please refer to ASC 605-28-50-2.

We urge all persons who are responsible for the accuracy and adequacy of the disclosure in the filing to be certain that the filing include 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.

Please contact Kei Nakada, Staff Accountant, at (202) 551-3659 or Don Abbott, Senior Staff Accountant, at (202) 551-3608, if you have questions regarding the comments. In this regard, do not hesitate to contact me at (202) 551-3679.

Sincerely,

/s/ Jim B. Rosenberg

Jim B. Rosenberg
Senior Assistant Chief Accountant