



DIVISION OF  
CORPORATION FINANCE

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

July 15, 2013

Via E-mail

Glenn P. Sblendorio  
President and Chief Financial Officer  
The Medicines Company  
8 Sylvan Way  
Parsippany, NJ 07054

**Re: The Medicines Company  
Form 10-K for the Fiscal Year Ended December 31, 2012  
Filed March 1, 2013  
Form 10-Q for the Quarterly Period Ended March 31, 2013  
Filed May 10, 2013  
File No. 000-31191**

Dear Mr. Sblendorio:

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 documents. In our comments, we ask that you provide us information so we may better understand your disclosures.

Please respond to this letter within 10 business days by providing us the requested information or by advising us when you will provide the requested response. If you do not believe 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 filings.

Form 10-K for the Fiscal Year Ended December 31, 2012

Management's Discussion and Analysis of Financial Condition and Results of Operations  
Results of Operations  
Years Ended December 31, 2012 and 2011, page 67

1. You disclose the amount of the net revenue increase that was due to net volume increases and price increases. Please provide us proposed disclosure to be included in future filings that indicates the cause of the increase in price and increase in volume, and the expected effect of each cause, if any, on future results of operations.

Notes to the Consolidated Financial Statements

2. Significant Accounting Policies

Stock-Based Compensation, page F-17

2. You disclose “Expected volatilities are based on historic volatility of the Company’s common stock as well as implied volatilities of peer companies in the life science industry...” Please tell us the authoritative literature on which you are relying to use implied volatilities of peer companies instead of implied volatility on your market traded options. In your response, please quantify the difference between your historical volatility and the implied volatility of peer companies and tell us how you determine the volatility assumption to use.

Form 10-Q for the Quarterly Period Ended March 31, 2013

Notes to Unaudited Consolidated Financial Statements

3. Please provide us proposed disclosure to be included in future filings to describe your collaboration agreements with AstraZeneca and Alnylam Pharmaceuticals and disclose all amounts recorded to date under the agreements. Please refer to ASC 808-10-50. In addition, please clarify your policy for recording co-promotion income under the agreement with AstraZeneca.

13. Acquisitions, page 18

4. Please provide us proposed disclosure to be included in future filings to include a qualitative description of the factors that make up the goodwill recognized as required by ASC 805-30-50 and clarify whether the transactions were accounted for using the acquisition method of accounting. Also, please include the amount of the transaction costs and clarify how you accounted for these costs. In addition with respect to the Recothrom transaction, please explain to us why it is appropriate for the option in the amount of \$57.1 million to be measured at cost as opposed to fair value. Please reference the authoritative accounting literature that you relied upon in response.

We urge all persons who are responsible for the accuracy and adequacy of the disclosure in the filings to be certain that the filings 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 filings;
- staff comments or changes to disclosure in response to staff comments do not foreclose the Commission from taking any action with respect to the filings; and

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- 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.

You may contact Vanessa Robertson, Staff Accountant, at (202) 551-3649 or Lisa Vanjoske, Assistant Chief Accountant, at (202) 551-3614 if you have any 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