



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

DIVISION OF
CORPORATION FINANCE

July 30, 2010

Jeffrey H. Cooper
Senior Vice President, Chief Financial Officer
BioMarin Pharmaceutical Inc.
105 Digital Drive
Novato, CA 94949

**Re: BioMarin Pharmaceutical Inc.
Form 10-K for the Fiscal Year Ended December 31, 2009
Filed February 26, 2010
Form 8-K Filed March 24, 2010
Proxy Statement on Schedule 14A
Filed March 26, 2010
File Number: 000-26727**

Dear Mr. Cooper:

We have reviewed your filings and have the following comments. In our comments, we ask you to provide us with information so we may better understand your disclosure.

Please respond to this letter within ten business days by providing the requested information, or by advising us when you will provide the requested response. Where a comment 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 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, 2009

Item 1. Business, page 1

1. We note your discussion of various license and collaboration agreements throughout this section of the filing. Please revise your disclosure to include a summary of the duration and termination provisions of each material agreement.

Commercial Products, page 3

2. We note the discussion of your exclusive license agreement with Asubio Pharma Co., Ltd. on page 4 of the filing. Please revise your disclosure to quantify the total potential milestone payments due under the agreement and to provide a more narrow range of royalties paid within ten percentage points.

Patents and Proprietary Rights, page 9

3. Please revise your disclosure on page 9 to include the expiration year of each of your material patents.

Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations

4. You disclose, on page 4, that the granted orphan drug status and the related seven years of market exclusivity in the U.S. for Aldurazyme expires in 2010. In addition, you disclose that sales of Aldurazyme make up over 22% of your total net sales for the year ended December 31, 2009. Please revise your disclosure to discuss the expected impact that the expiration of the exclusive right in the U.S. will have on your future results of operations and liquidity.

Consolidated Financial Statements

Notes to Consolidated Financial Statements

Note 11. Convertible Debt, page F-30

5. You disclose that the conversion price is subject to adjustment in certain circumstances. Please disclose the circumstances that would result in an adjustment to the conversion price and tell us how you determined that the conversion feature was not an embedded derivative under ASC 815-15-25 which would require fair value accounting under ASC 470-20-25.

Note 14. Income Taxes, page F-35

6. Please revise your disclosure to clarify what is included in the permanent items line item of the tax reconciliation on page F-36 and explain the major changes in this line item for the periods presented.

Form 8-K filed March 24, 2010

7. In your response to several of the statements and assertions made by Mr. Klein in his Resignation Letter and the Company's position on the circumstances surrounding Mr. Klein's resignation you disclose a disagreement regarding how to conduct an ongoing

investigation regarding a serious matter. Please tell us the nature of the matter being investigated by the Audit Committee and status of this investigation.

Definitive Proxy Statement on Schedule 14A

Compensation Discussion and Analysis

Cash Bonus, page 34

8. We note the following statement beginning on page 34 of your definitive proxy statement: “We have not disclosed the specific corporate goals as they are based on various strategic elements, each of which is confidential and the Compensation Committee has determined that disclosure of the goals can result in competitive harm to us.” Please provide us with an analysis supporting your determination that disclosure of the specific corporate goals would result in competitive harm to the company. To avoid the disclosure of the sensitive information in the analysis when our comment letters are released publicly, you may submit a confidential treatment request pursuant to Rule 83. Otherwise, please provide draft disclosure to be included in your next annual filing which discloses the specific corporate goals and the threshold, target and maximum levels of performance which must be achieved to reach the payout levels described in the first full paragraph on page 36. To the extent the goals are quantifiable, your discussion should also be quantified.

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 filings; 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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You may contact Dana Hartz, Staff Accountant, at (202) 551-3648 or Don Abbott, Senior Staff Accountant, at (202) 551-3608 if you have any questions regarding the processing of your response as well as any questions regarding comments on the financial statements and related matters. You may contact Laura Crotty, Staff Attorney, at (202) 551-3563 with questions on any of the other comments. In this regard, do not hesitate to contact me, at (202) 551-3679.

Sincerely,

Jim B. Rosenberg
Senior Assistant Chief Accountant