

Via Facsimile and U.S. Mail
Mail Stop 4720

March 29, 2010

James C. Mullen
Chief Executive Officer and President
Biogen Idec Inc.
14 Cambridge Center
Cambridge, Massachusetts 02142

**Re: Biogen Idec Inc.
Form 10-K for the Fiscal Year Ended December 31, 2009
Filed February 9, 2010
File No. 000-19311**

Dear Mr. Mullen:

We have reviewed your March 19, 2010 response to our March 8, 2010 comment letter and have the following additional comments. In our comments, 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 comments or on any other aspect of our review. Feel free to call us at the telephone numbers listed at the end of this letter.

Form 10-K for the fiscal year ended December 31, 2009

General

1. Please note that we intend to review the Part III information that you intend to incorporate by reference into your Form 10-K when filed. We may have further comments after reviewing that information and we will not be able to clear our review of your filing until we have the opportunity to resolve any resulting comments.

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2. We note your response to our prior comment 1. Please further revise the proposed disclosure to provide a narrow range within ten percentage points of the “low double digit royalties” to be paid under the Roche agreement (i.e., single digits, teens, twenties, etc.).

* * *

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

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.

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Please contact Laura Crotty, Staff Attorney, at (202) 551-3575 or myself at (202) 551-3715 if you have questions regarding the processing of your response as well as any questions regarding comments and related matters.

Sincerely,

Jeffrey P. Riedler
Assistant Director