

April 21, 2010

Mr. Jeffrey P. Riedler
Assistant Director
Division of Corporation Finance, Mail Stop 4720
U.S. Securities and Exchange Commission
Washington, D.C. 20549

**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. Riedler:

This letter sets forth the responses of Biogen Idec Inc., a Delaware corporation (the “Company”), to the comments of the staff of the Securities and Exchange Commission (the “Staff”) set forth in the Staff’s letter of March 29, 2010 (the “Comment Letter”) regarding the above-referenced annual report on Form 10-K (the “Form 10K”). For the convenience of the Staff, we have restated in this letter each of the comments in the Comment Letter and numbered each of the responses to correspond with the numbers of the comments in the Comment Letter. Capitalized terms used and not defined regarding the Form 10K have the meanings given in the Form 10K. All references to page numbers and captions correspond to the page numbers and captions in the Form 10K.

Comment 1.

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.**

Comment 1. Response:

We anticipate filing our definitive proxy statement for our 2010 annual meeting of stockholders, which includes the information required by Part III of Form 10-K, on or about April 28, 2010 and not later than 120 days after the end of our fiscal year ended December 31, 2009. We understand that the Staff may have further comments after reviewing that information.

Mr. Jeffrey P. Riedler
U.S. Securities and Exchange Commission
April 21, 2010
Page 2

Comment 2.

Item 1. Business, page 1

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.).

Comment 2. Response:

We propose to clarify that the royalties to be paid under our collaboration agreement with the Roche Group are between 10% and 12%, as follows:

Under the collaboration agreement, our current pretax co-promotion profit-sharing formula, which resets annually, provides for a 30% share of co-promotion profits on the first \$50.0 million of co-promotion operating profit with our share increasing to 40% if co-promotion operating profits exceed \$50.0 million. In 2009, 2008, and 2007, the 40% threshold was met during the first quarter. Our collaboration agreement also provides that we will be paid royalties between 10% and 12% on sales of RITUXAN outside the U.S. and Canada, with the royalty period lasting 11 years from the first commercial sale of RITUXAN on a country-by-country basis. The royalty period for sales of RITUXAN has expired in the majority of European countries. For substantially all of the remaining royalty-bearing sales of RITUXAN in the rest of world the royalty period will expire through 2012.

This proposed revision, and the additional proposed disclosure in Exhibit A to our March 19, 2010 response letter, would appear in our “Collaborations” footnote to our consolidated financial statements in our 2010 Annual Report on Form 10-K, to which the reader of the “Business” section is directed for additional information about our collaborations.

As you requested, we hereby acknowledge 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.

If you need any additional information or if you have additional comments, please do not hesitate to call me at (617) 679-2803 or send additional correspondence by facsimile at (866) 406-0526.

Very truly yours,

/s/ Paul J. Clancy

Paul J. Clancy
Chief Financial Officer