UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM S-8

REGISTRATION STATEMENT UNDER THE SECURITIES ACT OF 1933

BIOGEN IDEC INC.

(Exact name of registrant as specified in its charter)

DELAWARE (State or other jurisdiction of incorporation or organization)

33-0112644 (I.R.S. Employer Identification No.)

14 Cambridge Center Cambridge, Massachusetts 02142

(Address of principal executive offices, including zip code)

BIOGEN IDEC INC. 2006 NON-EMPLOYEE DIRECTORS EQUITY PLAN

(Full title of the plan)

SUSAN H. ALEXANDER, ESQ.
Executive Vice President, General Counsel and Secretary
Biogen Idec Inc.
14 Cambridge Center
Cambridge, Massachusetts 02142
(617) 679-2000

(Name, address and telephone number, including area code, of agent for service)

CALCULATION OF REGISTRATION FEE

Title of Each Class of Securities to be Registered(1)	Amount to be Registered(1)	Proposed Maximum Offering Price Per Share(2)	Proposed Maximum Aggregate Offering Price(2)	Amount of Registration Fee
Common Stock, \$.0005				
par value per share	850,000 shares	\$47.995	\$40,795,750.00	\$1,252.43

- (1) Includes associated rights to purchase Series X junior participating preferred stock. The aggregate number of shares to be registered is subject to adjustment by reason of stock splits, stock dividends and other events pursuant to the terms of the 2006 Non-Employee Directors Equity Plan, as applicable. Accordingly, pursuant to Rule 416 under the Securities Act of 1933, (the "Securities Act"), this Registration Statement covers, in addition to the number of shares of common stock shown in the table above, an indeterminate number of shares of the Registrant's common stock which may be subject to grant or otherwise issuable by operation of the provisions of the 2006 Non-Employee Directors Equity Plan governing such adjustments. Pursuant to Rule 457(h)(2) under the Securities Act, no separate fee is required with respect to the plan interests.
- (2) Estimated solely for the purpose of calculating the registration fee pursuant to Rule 457(h) under the Securities Act. The proposed maximum offering price per share and the proposed maximum aggregate offering price are based upon the average of the high and low sales price for Registrant's common stock as reported on the NASDAQ National Market on February 16, 2007.

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PART II INFORMATION REQUIRED IN THE REGISTRATION STATEMENT

Item 3. Incorporation of Documents by Reference.

Biogen Idec Inc. ("Biogen Idec" or "Registrant"), Commission File Number 000-19311, hereby incorporates the following documents herein by reference.:

- (a) Biogen Idec's Annual Report on Form 10-K for the fiscal year ended December 31, 2006, filed on February 21, 2007;
- (b) The description of Biogen Idec's common stock contained in the Registration Statement on Form 8-B filed with the Commission on July 27, 1997, including any amendment or report updating such description of the common stock; and
- (c) The description of Biogen Idec's preferred stock purchase rights contained in its Registration Statement on Form 8-A filed with the Commission on August 1, 1997, as amended by Form 8-A/A filed with the Commission on July 27, 2001 and Form 8-A/A filed with the Commission on June 25, 2003, including any amendment or report updating such description of the preferred stock purchase rights.

All documents subsequently filed by Biogen Idec pursuant to Sections 13(a), 13(c), 14 and 15(d) of the Securities Exchange Act of 1934 ("Exchange Act"), prior to the filing of a post-effective amendment which indicates that all securities offered have been sold or which deregisters all securities then remaining unsold, shall be incorporated by reference in this Registration Statement and shall be deemed to be part hereof from the date of filing of such documents. Any statement contained herein or in a document incorporated by reference shall be deemed to be modified or superseded for purposes of this Registration Statement to the extent that a statement contained in this Registration Statement or in any other subsequently filed document which also is or is deemed to be incorporated by reference herein modifies or supersedes such statement. Any such statement so modified or superseded shall not be deemed, except as so modified or superseded, to constitute a part of this Registration Statement.

Item 4. Description of Securities.

Not applicable.

Item 5. Interests of Named Experts and Counsel.

Not applicable.

Item 6. Indemnification of Directors and Officers.

The Certificate of Incorporation provides that a director of Biogen Idec shall not be personally liable to Biogen Idec or its stockholders for monetary damages for any breach of fiduciary duty as a director, except for liability for (i) any breach of the director's duty of loyalty to Biogen Idec or its stockholders; (ii) acts or omissions

not in good faith or which involve intentional misconduct or a knowing violation of law; (iii) unlawful payments of dividends or unlawful stock repurchases or redemptions as provided in Section 174 of the Delaware General Corporate Law ("DGCL"); or (iv) any transaction from which the director derived an improper personal benefit. This provision has no effect on any non-monetary remedies that may be available to Biogen Idec or its stockholders, nor does it relieve Biogen Idec or its officers or directors from compliance with federal or state securities laws.

The Certificate of Incorporation provides that to the fullest extent permitted by applicable law, Biogen Idec is authorized to provide indemnification of, and advancement of expenses to, such agents and any other persons to which Delaware law permits Biogen Idec to provide indemnification though bylaw provisions, agreements with such agents or other persons, vote of stockholders or disinterested directors or otherwise, in excess of the indemnification and advancement otherwise permitted by Section 145 of the DGCL, subject only to limits created by applicable Delaware law, with respect to actions for breach of duty to Biogen Idec, its stockholders, and others.

Biogen Idec's Bylaws provide that Biogen Idec shall indemnify, to the fullest extent authorized by the DGCL, each person who was or is made a party or is threatened to be made a party to or is involved in any action, suit or proceeding, whether civil, criminal, administrative or investigative, by reason of the fact that he or she or a person of whom he or she is the legal representative (in the event of death or disability of such person) is or was a director or officer of Biogen Idec (or any predecessor) or is or was serving at the request of Biogen Idec (or any predecessor) as a director, officer, employee or agent of another corporation or of a partnership, joint venture, trust, or employee benefit plan sponsored or maintained by Biogen Idec. Biogen Idec's Bylaws also provide that expenses incurred by a director or officer of Biogen Idec in defending a civil or criminal action, suit or proceeding by reason of the fact that he or she is or was a director or officer of Biogen Idec (or was serving at Biogen Idec's request as a director or officer of another corporation) shall be paid by Biogen Idec in advance of the final disposition of such action, suit or proceeding.

Section 145 of the DGCL provides that a corporation has the power to indemnify a director, officer, employee or agent of the corporation and certain other persons serving at the request of the corporation in related capacities against amounts paid and expenses incurred in connection with an action or proceeding to which he is or is threatened to be made a party by reason of such position, if such person shall have acted in good faith and in a manner he reasonably believed to be in or not opposed to the best interests of the corporation, and, in any criminal proceeding, if such person had no reasonable cause to believe his conduct was unlawful; provided that, in the case of actions brought by or in the right of the corporation, no indemnification shall be made with respect to any matter as to which such person shall have been adjudged to be liable to the corporation unless and only to the extent that the adjudicating court determines that such indemnification is proper under the circumstances. Section 145 of the DGCL also provides that a corporation shall indemnify a director or officer of the corporation to the extent he or she has been successful on the merits or otherwise in defense of any such action, suit or proceeding, for expenses reasonably incurred in connection with such action, suit or proceeding.

Biogen Idec has secured insurance on behalf of directors, officers and employees of Biogen Idec and its subsidiaries for liability arising out of certain claims which may be made against them, whether or not Biogen Idec would have the power to indemnify them against such liability under the DGCL.

In addition to indemnification provided for in its Bylaws, Biogen Idec has entered into agreements with certain of its directors and officers to indemnify them for, among other things, certain expenses (including attorneys' fees), judgments, fines and settlement amounts reasonably incurred by them in any action or proceeding, including any action by or in the right of Biogen Idec, to which they are a party by reason of the fact that they were or are a

director, officer, employee or agent of Biogen Idec or of any other company or enterprise to which the person provides such services at Biogen Idec's request.

Item 7. Exemption From Registration Claimed.

Not applicable.

Item 8. Exhibits.

Exhibit	Description
4.1	Amended and Restated Certificate of Incorporation, dated December 1, 1999 (previously filed as Appendix A to Biogen Idec's Definitive Proxy Statement filed November 4, 1999 (Commission File No. 000-19311 Film No. 99740703) and incorporated herein by reference).
4.2	Certificate of Amendment, dated May 21, 2001 (previously filed as Exhibit 3.2 to Biogen Idec's Quarterly Report on Form 10-Q for the period ended June 30, 2001 (Commission File No. 000-19311 Film No. 1707153) and incorporated herein by reference).
4.3	Certificate of Amendment, dated November 12, 2003 (previously filed as Exhibit 3.4 to Biogen Idec's Annual Report on Form 10-K for the period ended December 31, 2003 (Commission File No. 000-19311 Film No. 04659799) and incorporated herein by reference).
4.4	Amended and Restated Bylaws (previously filed as Exhibit 3.1 to Biogen Idec's Registration Statement on Form 8-B filed on October 3, 2005 (Commission File No. 000-19311 Film No. 051117560) and incorporated herein by reference).
5	Opinion of Ropes & Gray LLP.
23.1	Consent of PricewaterhouseCoopers LLP, an independent registered public accounting firm.
23.2	Consent of Ropes & Gray LLP (included in its opinion in Exhibit 5).
24	Powers of Attorney (contained in Part II hereof under Signatures and Power of Attorney).

Item 9. Undertakings.

- (a) The undersigned Registrant hereby undertakes:
 - (1) To file, during any period in which offers or sales are being made, a post-effective amendment to this Registration Statement:
 - (i) To include any prospectus required by Section 10(a)(3) of the Securities Act;
 - (ii) To reflect in the prospectus any facts or events arising after the effective date of the Registration Statement (or the most recent post-effective amendment thereof) which, individually or in the aggregate, represent a fundamental change

- in the information set forth in the Registration Statement. Notwithstanding the foregoing, any increase or decrease in volume of securities offered (if the total dollar value of securities offered would not exceed that which was registered) and any deviation from the low or high end of the estimated maximum offering range may be reflected in the form of a prospectus filed with the Commission pursuant to Rule 424(b) under the Securities Act if, in the aggregate, the changes in volume and price represent no more than a 20 percent change in the maximum aggregate offering price set forth in the "Calculation of Registration Fee" table in the effective registration statement;
- (iii) To include any material information with respect to the plan of distribution not previously disclosed in the Registration Statement or any material change to such information in the Registration Statement;
- *provided*, *however*, that paragraphs (a)(1)(i) and (a)(1)(ii) above shall not apply if the information required to be included in a post-effective amendment by those paragraphs is contained in periodic reports filed with or furnished to the Commission by the Registrant pursuant to Section 13 or 15(d) of the Exchange Act that are incorporated by reference in the Registration Statement.
- (2) That, for the purpose of determining any liability under the Securities Act, each such post-effective amendment shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial *bona fide* offering thereof.
- (3) To remove from registration by means of a post-effective amendment any of the securities being registered which remain unsold at the termination of the offering.
- (b) The undersigned Registrant hereby undertakes that, for purposes of determining any liability under the Securities Act, each filing of the Registrant's annual report pursuant to Section 13(a) or 15(d) of the Exchange Act (and, where applicable, each filing of an employee benefit plan's annual report pursuant to Section 15(d) of the Exchange Act) that is incorporated by reference in the Registration Statement shall be deemed to be a new Registration Statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial *bona fide* offering thereof.
- (c) Insofar as indemnification for liabilities arising under the Securities Act may be permitted to directors, officers and controlling persons of the Registrant pursuant to the foregoing provisions, or otherwise, the Registrant has been advised that in the opinion of the Commission such indemnification is against public policy as expressed in the Securities Act and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the Registrant of expenses incurred or paid by a director, officer or controlling person of the Registrant in the successful defense of any action, suit or proceeding) is asserted by such director, officer or controlling person in connection with the securities being registered, the Registrant will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by it is against public policy as expressed in the Securities Act and will be governed by the final adjudication of such issue.

SIGNATURES AND POWER OF ATTORNEY

Pursuant to the requirements of the Securities Act of 1933, the Registrant certifies that it has reasonable grounds to believe that it meets all of the requirements for filing on Form S-8 and has duly caused this Registration Statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of Cambridge, the Commonwealth of Massachusetts, on February 21, 2007.

BIOGEN IDEC INC.

By: /s/ James C. Mullen

James C. Mullen

President and Chief Executive Officer

Pursuant to the requirements of the Securities Act of 1933, as amended, this Registration Statement has been signed by the following persons in the capacities indicated on February 21, 2007.

Further, we, the undersigned officers and directors of Biogen Idec Inc. (the "Corporation") hereby severally constitute and appoint James C. Mullen, Peter N. Kellogg, and Susan H. Alexander and each of them singly, our true and lawful attorneys with full power to them, and each of them singly, to sign for us and in our names in the capacities as indicated, any and all amendments or supplements to this Registration Statement on Form S-8 of the Corporation, and generally to do all such things in connection therewith in our name and on our behalf in our capacities as indicated to enable the Corporation to comply with the provisions of the Securities Act of 1933, as amended, and all requirements of the Securities and Exchange Commission, hereby ratifying and confirming our signatures as they may be signed by our said attorneys or any of them, to any and all amendments.

Signature	Title
/s/ James C. Mullen	President, Chief Executive Officer and Director
JAMES C. MULLEN	(Principal Executive Officer)
/s/ Peter N. Kellogg	Executive Vice President, Finance and Chief Financial
Peter N. Kellogg	Officer
	(Principal Financial Officer)
/s/ Michael F. MacLean	Senior Vice President, Chief Accounting Officer and
MICHAEL F. MACLEAN	Controller
	(Principal Accounting Officer)
/s/ Bruce R. Ross	Director, Chairman of the Board of Directors
Bruce R. Ross	
/s/ Alan Belzer	Director
Alan Belzer	

Signature	<u>Title</u>
/s/ Lawrence C. Best	Director
LAWRENCE C. BEST	-
/s/ Alan B. Glassberg	Director
ALAN B. GLASSBERG, M.D.	-
/s/ Mary L. Good	Director
MARY L. GOOD, PH.D	•
/s/ Thomas F. Keller	Director
THOMAS F. KELLER, Ph.D.	•
/s/ Robert W. Pangia	Director
ROBERT W. PANGIA	•
/s/ Cecil B. Pickett	Director
CECIL B. PICKETT, PH.D.	
/s/ Lynn Schenk	Director
Lynn Schenk	
/s/ Phillip A. Sharp	Director
PHILLIP A. SHARP, PH.D.	
/s/ William D. Young	Director
WILLIAM D. YOUNG	

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February 21, 2007

Biogen Idec Inc. 14 Cambridge Center Cambridge, Massachusetts 02142

Ladies and Gentlemen:

This opinion is furnished to you in connection with a registration statement on Form S-8 (the "Registration Statement"), filed with the Securities and Exchange Commission under the Securities Act of 1933, as amended, for the registration of 850,000 shares of Common Stock, \$.0005 par value (the "Shares"), of Biogen Idec Inc., a Delaware corporation (the "Company"). The Shares are issuable under the Company's 2006 Non-Employee Directors Equity Plan (the "Plan").

We are familiar with the actions taken by the Company in connection with the adoption of the Plan. For purposes of this opinion, we have examined or relied upon such documents, records, certificates and other instruments as we have deemed necessary. The opinions expressed below are limited to the Delaware General Corporation Law, including applicable provisions of the Delaware Constitution, and the reported cases interpreting those laws.

Based on the foregoing, we are of the opinion that the Shares have been duly authorized and, when the Shares have been issued and sold and the Company has received the consideration therefor in accordance with the terms of the Plan, the Shares will be validly issued, fully paid and nonassessable.

We hereby consent to the filing of this opinion as an exhibit to the Registration Statement. Our consent shall not be deemed an admission that we are experts whose consent is required under Section 7 of the Securities Act of 1933.

Very truly yours,

/s/ Ropes & Gray LLP Ropes & Gray LLP

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We hereby consent to the incorporation by reference in this Registration Statement on Form S-8 of our report dated February 21, 2007 relating to the financial statements, management's assessment of the effectiveness of internal control over financial reporting and the effectiveness of internal control over financial reporting, which appears in Biogen Idec Inc.'s Annual Report on Form 10-K for the year ended December 31, 2006.

/s/ PricewaterhouseCoopers LLP

Boston, Massachusetts February 21, 2007