
**UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549**

**POST-EFFECTIVE AMENDMENT NO. 1 TO 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. 2008 OMNIBUS EQUITY PLAN
BIOGEN IDEC INC. 2005 OMNIBUS 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)

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, or a smaller reporting company. See the definitions of "large accelerated filer," "accelerated filer" and "smaller reporting company" in Rule 12b-2 of the Exchange Act. (Check one):

Large accelerated filer

Accelerated filer

Non-accelerated filer

Smaller reporting company

(Do not check if a smaller reporting company)

EXPLANATORY NOTE

This post-effective amendment is being filed because the following shares that were previously reserved for issuance pursuant to the Biogen Idec Inc. 2005 Omnibus Equity Plan (the “2005 Plan”) may now be issued pursuant to the Biogen Idec Inc. 2008 Omnibus Equity Plan (the “2008 Plan”): (1) shares that remained available for grant under the 2005 Plan as of the effective date of the 2008 Plan (including shares available under such plan by reason of a predecessor plan) and (2) shares that were subject to awards under the 2005 Plan as of the effective date of the 2008 Plan but which remain unvested upon the cancellation, surrender, exchange or termination of such awards for any reason whatsoever.

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PART II
INFORMATION REQUIRED IN THE REGISTRATION STATEMENT

Item 8. Exhibits.

The exhibits listed on the Exhibit Index immediately preceding such exhibits are filed as part of this Registration Statement.

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 Post-Effective Amendment to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of Cambridge, Commonwealth of Massachusetts, on July 22, 2008.

BIOGEN IDEC INC.

By: /s/ James C. Mullen
James C. Mullen
Chief Executive Officer and President

Pursuant to the requirements of the Securities Act of 1933, this Post-Effective Amendment has been signed by the following persons in the capacities indicated on July 22, 2008.

Further, we, the undersigned officers and directors of the Registrant hereby severally constitute and appoint James C. Mullen, Paul J. Clancy 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 the Registration Statement on Form S-8 of the Registrant to which this Post-Effective Amendment relates, including post-effective amendments to the Registration Statement, 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 Registrant to comply with the provisions of the Securities Act of 1933 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.

| <u>Name</u> | <u>Capacity</u> |
|---|---|
| <u>/s/ James C. Mullen</u> JAMES C. MULLEN | Director, Chief Executive Officer and President (Principal Executive Officer) |
| <u>/s/ Paul J. Clancy</u> PAUL J. CLANCY | Executive Vice President and Chief Financial Officer (Principal Financial Officer) |
| <u>/s/ Michael F. MacLean</u> MICHAEL F. MACLEAN | Senior Vice President, Finance and Chief Accounting Officer (Principal Accounting Officer) |
| <u>/s/ Bruce R. Ross</u> BRUCE R. ROSS | Director and Chairman of the Board of Directors |
| <u>LAWRENCE C. BEST</u> | Director |

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| <u>Name</u> | <u>Capacity</u> |
|---|-----------------|
| <u>/s/ Marijn E. Dekkers</u> MARIJN E. DEKKERS | Director |
| <u>/s/ Alan B. Glassberg</u> ALAN B. GLASSBERG | Director |
| <u>/s/ Nancy L. Leaming</u> NANCY L. LEAMING | Director |
| <u>/s/ Robert W. Pangia</u> ROBERT W. PANGIA | Director |
| <u>/s/ Stelios Papadopoulos</u> STELIOS PAPADOPOULOS | Director |
| <u>/s/ Cecil B. Pickett</u> CECIL B. PICKETT | Director |
| <u>/s/ Lynn Schenk</u> LYNN SCHENK | Director |
| <u>/s/ Phillip A. Sharp</u> PHILLIP A. SHARP | Director |
| <u>/s/ William D. Young</u> WILLIAM D. YOUNG | Director |

EXHIBIT INDEX

| <u>Exhibit</u> | <u>Description</u> |
|----------------|--|
| 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). |
| <hr/> | |
| + | Filed herewith. |

July 22, 2008

Biogen Idec Inc.
14 Cambridge Center
Cambridge, Massachusetts 02142

Ladies and Gentlemen:

This opinion is furnished to you in connection with Post-Effective Amendment No. 1 to the registration statement on Form S-8 (the "Registration Statement"), Registration Number 333-128339, filed with the Securities and Exchange Commission (the "Commission") under the Securities Act of 1933, as amended, for the registration of shares of common stock of Biogen Idec Inc., a Delaware corporation (the "Company") that are issuable under the 2005 Omnibus Equity Plan (the "2005 Plan"). The Company has adopted the 2008 Omnibus Equity Plan (the "Plan") under which shares that were available for issuance under the 2005 Plan, or subject to awards that are forfeited or cancelled in whole or in part, in each case on or after the effective date of the Plan (the "Shares"), may be issued pursuant to awards (the "Awards") under the Plan.

We have acted as counsel for the Company in connection with 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. This opinion is limited to the General Corporation Law of the State of Delaware, including those applicable provisions of the Delaware Constitution and the reported cases interpreting those laws.

Based upon the foregoing, we are of the opinion that the Shares to be issued pursuant to the Plan have been duly authorized and, when issued in accordance with the Plan, 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 (No. 333-128339) of our report dated February 14, 2008 relating to the financial statements 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, 2007.

/s/ PricewaterhouseCoopers LLP

Boston, Massachusetts

July 22, 2008