

# Delaware

The First State

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I, JEFFREY W. BULLOCK, SECRETARY OF STATE OF THE STATE OF DELAWARE, DO HEREBY CERTIFY THE ATTACHED ARE TRUE AND CORRECT COPIES OF ALL DOCUMENTS FILED FROM AND INCLUDING THE RESTATED CERTIFICATE OR A MERGER WITH A RESTATED CERTIFICATE ATTACHED OF "BIOGEN INC." AS RECEIVED AND FILED IN THIS OFFICE.

THE FOLLOWING DOCUMENTS HAVE BEEN CERTIFIED:

RESTATED CERTIFICATE, FILED THE FIRST DAY OF DECEMBER, A.D. 1999, AT 5 O`CLOCK P.M.

CERTIFICATE OF AMENDMENT, FILED THE TWENTY-FOURTH DAY OF MAY, A.D. 2001, AT 4:30 O`CLOCK P.M.

CERTIFICATE OF DESIGNATION, FILED THE TWENTY-SIXTH DAY OF JULY, A.D. 2001, AT 10 O`CLOCK A.M.

CERTIFICATE OF AMENDMENT, CHANGING ITS NAME FROM "IDEC PHARMACEUTICALS CORPORATION" TO "BIOGEN IDEC INC.", FILED THE TWELFTH DAY OF NOVEMBER, A.D. 2003, AT 1:41 O`CLOCK P.M.

CERTIFICATE OF CHANGE OF REGISTERED AGENT, FILED THE FOURTEENTH DAY OF SEPTEMBER, A.D. 2007, AT 12:42 O`CLOCK P.M.

A handwritten signature of Jeffrey W. Bullock in black ink, written over a horizontal line.

Jeffrey W. Bullock, Secretary of State

2726078 8100X  
SR# 20212384500

You may verify this certificate online at [corp.delaware.gov/authver.shtml](http://corp.delaware.gov/authver.shtml)

Authentication: 203394012  
Date: 06-08-21

# Delaware

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*CERTIFICATE OF AMENDMENT, FILED THE SECOND DAY OF JUNE, A.D.  
2011, AT 2:16 O`CLOCK P.M.*

*CERTIFICATE OF AMENDMENT, FILED THE THIRTEENTH DAY OF JUNE,  
A.D. 2012, AT 3:24 O`CLOCK P.M.*

*CERTIFICATE OF AMENDMENT, CHANGING ITS NAME FROM "BIOGEN  
IDEC INC." TO "BIOGEN INC.", FILED THE TWENTY-THIRD DAY OF  
MARCH, A.D. 2015, AT 8 O`CLOCK A.M.*

*CERTIFICATE OF CHANGE OF REGISTERED AGENT, FILED THE  
THIRTIETH DAY OF JANUARY, A.D. 2018, AT 4:24 O`CLOCK P.M.*

*CERTIFICATE OF AMENDMENT, FILED THE EIGHTH DAY OF JUNE, A.D.  
2021, AT 8:04 O`CLOCK A.M.*



  
Jeffrey W. Bullock, Secretary of State

2726078 8100X  
SR# 20212384500

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Authentication: 203394012  
Date: 06-08-21

**AMENDED AND RESTATED CERTIFICATE OF INCORPORATION**  
**OF**  
**IDEC PHARMACEUTICALS CORPORATION**

**Pursuant to the General Corporation Law  
of the State of Delaware**

IDEC Pharmaceuticals Corporation (the "Corporation"), a corporation organized and existing under the General Corporation Law of the State of Delaware, does hereby certify:

FIRST: The original Certificate of Incorporation of IDEC Pharmaceuticals Corporation was filed with the Secretary of State of Delaware on April 1, 1997.

SECOND: The Amended and Restated Certificate of Incorporation, as herein amended, and the Rights, Preferences and Restrictions of the Series X Junior Participating Preferred Stock of the Corporation are hereby restated and integrated into the single instrument which is hereinafter set forth, and which is entitled Amended and Restated Certificate of Incorporation of IDEC Pharmaceuticals Corporation, without any further amendments other than the amendments herein certified and without any discrepancy between the provisions of the Amended and Restated Certificate of Incorporation, as herein amended, and the Rights, Preferences and Restrictions of the Series X Junior Participating Preferred Stock and the provisions of the said single instrument hereinafter set forth.

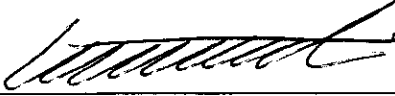
THIRD: The amendment and the restatement of the Amended and Restated Certificate of Incorporation set forth herein has been duly adopted in accordance with the provisions of Sections 245, 242 and 211 of the General Corporation Law of the State of Delaware by the directors and stockholders of the Corporation.

FOURTH: Effective upon the filing of this Amended and Restated Certificate of Incorporation, each issued and outstanding share of Common Stock of the Corporation shall be split into two shares of Common Stock.

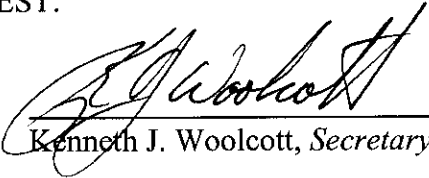
FIFTH: The text of the Corporation's Amended and Restated Certificate of Incorporation so adopted reads in full as set forth in Exhibit A attached hereto and is hereby incorporated herein by this reference.

IN WITNESS WHEREOF, IDEC Pharmaceuticals Corporation has caused this Amended and Restated Certificate of Incorporation to be signed by the President and the Secretary this 15<sup>th</sup> day of December, 1999.

IDEC PHARMACEUTICALS CORPORATION

By:   
William H. Rastetter, Ph.D.  
*President and Chief Executive Officer*

ATTEST:

By:   
Kenneth J. Woolcott, *Secretary*

## **EXHIBIT A**

### **AMENDED AND RESTATED CERTIFICATE OF INCORPORATION**

#### **OF**

#### **IDEC PHARMACEUTICALS CORPORATION**

##### *ARTICLE I*

The name of this corporation is IDEC Pharmaceuticals Corporation.

##### *ARTICLE II*

The address of the registered office of the corporation in the State of Delaware is 1209 Orange Street, in the City of Wilmington, County of New Castle. The name of its registered agent at such address is The Corporation Trust Company.

##### *ARTICLE III*

The nature of the business or purposes to be conducted or promoted is to engage in any lawful act or activity for which corporations may be organized under the Delaware General Corporation Law.

##### *ARTICLE IV*

(A) Classes of Stock. This corporation is authorized to issue two classes of stock to be designated, respectively, "Common Stock" and "Preferred Stock." The total number of shares which the corporation is authorized to issue is Two Hundred Eight Million (208,000,000) shares. Two Hundred Million (200,000,000) shares shall be Common Stock, par value \$0.0005 per share, and Eight Million (8,000,000) shares shall be Preferred Stock, par value \$0.001 per share.

(B) Rights, Preferences and Restrictions of Preferred Stock. The Preferred Stock authorized by this Certificate of Incorporation may be issued from time to time in series. The rights, preferences, privileges, and restrictions granted to and imposed on the Series A Preferred Stock, which series shall consist of One Million Seven Hundred Fifty Thousand (1,750,000) shares, which may be issued in seven subseries designated as (i) "Series A-1 Preferred Stock," consisting of One Hundred Thousand (100,000) authorized shares; (ii) "Series A-2 Preferred Stock," consisting of One Hundred Fifty Thousand (150,000) authorized shares; (iii) "Series A-3 Preferred Stock," consisting of Seven Hundred Thousand (700,000) authorized shares; (iv) "Series A-4 Preferred Stock," consisting of Two Hundred Fifty Thousand (250,000) authorized shares; (v) "Series A-5 Preferred Stock," consisting of Three Hundred Fifty Thousand (350,000) authorized shares; (vi) "Series A-6 Preferred Stock," consisting of One Hundred Thousand (100,000) authorized shares; and (vii) "Series A-7 Preferred Stock," consisting of One Hundred Thousand (100,000) authorized shares; and on the Series X Junior Participating Preferred Stock, consisting of Fifty-Eight Thousand (58,000) authorized shares, are as set forth

below in this Article IV(B). The Board of Directors is hereby authorized to fix or alter the rights, preferences, privileges and restrictions granted to or imposed upon additional series of Preferred Stock, and the number of shares constituting any such additional series and the designation thereof, or of any of them. Subject to compliance with applicable protective voting rights which have been or may be granted to the Preferred Stock or series thereof in the Corporation's Certificate of Incorporation, as amended and restated from time to time, and requirements and restrictions of applicable law ("Protective Provisions"), the rights, privileges, preferences and restrictions of any such additional series may be subordinated to, pari passu with (including, without limitation, inclusion in provisions with respect to liquidation and acquisition preferences, redemption and/or approval of matters by vote or written consent), or senior to any of those of any present or future class or series of Preferred or Common Stock. Subject to compliance with applicable Protective Provisions, the Board of Directors is also authorized to increase the number of shares of any series (other than the Series A Preferred Stock), or decrease the number of shares of any series prior or subsequent to the issue of that series, but not below the number of shares of such series then outstanding. In case the number of shares of any series shall be so decreased, the shares constituting such decrease shall resume the status which they had prior to the adoption of the resolution originally fixing the number of shares of such series. The Series A Preferred Stock and the subseries thereof shall have the relative rights, preferences and restrictions set forth in Annex A hereto, which is incorporated by reference herein and made a part hereof. The Series X Junior Participating Preferred Stock shall have the relative rights, preferences and restrictions set forth in Annex B hereto, which is incorporated by reference herein and made a part hereof.

(C) Common Stock.

1. Dividend Rights. Subject to the prior rights of holders of all classes of stock at the time outstanding having prior rights as to dividends, the holders of the Common Stock shall be entitled to receive, when and as declared by the Board of Directors, out of any assets of the Corporation legally available therefor, such dividends as may be declared from time to time by the Board of Directors.

2. Liquidation Rights. Upon the liquidation, dissolution or winding up of the Corporation, the assets of the Corporation shall be distributed to the holders of the Common Stock as provided in Annex A and Annex B hereto.

3. Redemption. The Common Stock is not redeemable.

4. Voting Rights. The holder of each share of Common Stock shall have the right to one vote, and shall be entitled to notice of any stockholders' meeting in accordance with the Bylaws of the Corporation, and shall be entitled to vote upon such matters and in such manner as may be provided by law.

*ARTICLE V*

The Board of Directors may from time to time make, amend, supplement or repeal the bylaws of the corporation by the requisite affirmative vote of directors as set forth in the bylaws of the corporation; provided, however, that the stockholders may change or repeal any bylaw adopted by the Board of Directors by the requisite affirmative vote of stockholders as

set forth in the bylaws of the corporation; and, provided further, that no amendment or supplement to the bylaws of the corporation adopted by the Board of Directors shall vary or conflict with any amendment or supplement thus adopted by the stockholders.

#### *ARTICLE VI*

The number of directors of the corporation shall be fixed from time to time by, or in the manner provided in, the bylaws or amendment thereof duly adopted by the board of directors or by the stockholders of the corporation.

#### *ARTICLE VII*

Elections of directors need not be by written ballot unless the bylaws of the corporation shall so provide. The directors shall be classified into three classes, as nearly equal in number as possible as determined by the board of directors, with (i) the term of office of the first class to expire at the 1998 Annual Meeting of Stockholders, (ii) the term of office of the second class to expire at the 1999 Annual Meeting of Stockholders and (iii) the term of office of the third class to expire at the 2000 Annual Meeting of Stockholders. At each Annual Meeting of Stockholders, directors elected to succeed those directors whose terms expire shall be elected for a term of office to expire at the third succeeding Annual Meeting of Stockholders after their election. Additional directorships resulting from an increase in the number of directors shall be apportioned among the classes as equally as possible as determined by the board of directors.

#### *ARTICLE VIII*

The Corporation is to have perpetual existence.

#### *ARTICLE IX*

Meetings of stockholders may be held within or without the State of Delaware, as the bylaws of the corporation may provide. The books of the corporation may be kept (subject to any provision contained in the statutes) outside the State of Delaware at such place or places as may be designated from time to time by the board of directors or in the bylaws of the corporation.

#### *ARTICLE X*

A director of the Corporation shall not be personally liable to the Corporation or its stockholders for monetary damages for any breach of fiduciary duty as a director, except for liability (i) for any breach of the director's duty of loyalty to the Corporation or its stockholders, (ii) for acts or omissions not in good faith or which involve intentional misconduct or a knowing violation of law, (iii) under Section 174 of the Delaware General Corporation Law, or (iv) for any transaction from which the director derived an improper personal benefit. If the Delaware General Corporation Law is amended after approval of this Article to authorize corporate action further eliminating or limiting the personal liability of directors, then the liability of a director

shall be eliminated or limited to the fullest extent permitted by the Delaware General Corporation Law, as so amended. Any repeal or modification of the foregoing provisions of this Article X shall not adversely affect any right or protection of a director of the Corporation with respect to any acts or omissions of such director occurring prior to such repeal or modification.

#### *ARTICLE XI*

To the fullest extent permitted by applicable law, the Corporation is also authorized to provide indemnification of (and advancement of expenses to) such agents (and any other persons to which Delaware law permits the Corporation 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 Delaware General Corporation Law, subject only to limits created by applicable Delaware law (statutory or non-statutory), with respect to actions for breach of duty to the Corporation, its stockholders, and others. Any repeal or modification of any of the foregoing provisions of this Article XI shall not adversely affect any right or protection of a director, officer, agent or other person existing at the time of, or increase the liability of any director of the Corporation with respect to any acts or omissions of such director, officer or agent occurring prior to such repeal or modification.

#### *ARTICLE XII*

The corporation reserves the right to amend, alter, change or repeal any provision contained in this Certificate of Incorporation, in the manner now or hereafter prescribed by statute, and all rights conferred upon stockholders herein are granted subject to this reservation.



**RIGHTS, PREFERENCES AND RESTRICTIONS OF THE  
SERIES A-1, A-2, A-3, A-4, A-5, A-6 AND A-7 PREFERRED STOCK**

The rights, preferences, restrictions and other matters relating to the Series A Preferred Stock are as follows:

1. Certain Definitions.

*"Affiliate"* means an entity that, directly or indirectly, through one or more intermediaries, is controlled by IDEC or Genentech. As used herein, the term "control" will mean the direct or indirect ownership of fifty percent (50%) or more of the stock having the right to vote for directors thereof or the ability to otherwise control the management of the corporation or other business entity.

*"Approval Process Event"* means a determination by the Joint Development Committee that the formulation of C2B8 and the process for C2B8 recovery are commercially viable as more fully described in Appendix I to the Development Plan.

*"C2B8"* means that certain monoclonal antibody to B cells more particularly described on Exhibit B to the Collaboration Agreement.

*"Co-Promotion Territory"* means the United States and Canada.

*"Collaboration Agreement"* shall mean the Collaboration Agreement dated the Effective Date between the Corporation and Genentech.

*"Controlled,"* unless specified otherwise herein, means possession of the ability to grant a license or sublicense as provided for herein without violating the terms of any agreement or other arrangement with any entity other than the Corporation or Genentech.

*"Development Plan"* means the comprehensive plan for the development of C2B8, designed to generate the preclinical, process development/manufacturing scale-up, clinical and regulatory information required to obtain Regulatory Approval in the Co-Promotion Territory, and may be modified from time to time by the JDC. Development shall refer to all activities related to preclinical testing, toxicology, formulation, process development, manufacturing scale-up, quality assurance/quality control, clinical studies and regulatory affairs for a Licensed Product in connection with obtaining Regulatory Approvals of such Products.

*"Effective Date"* means March 16, 1995.

*"First Anniversary Date"* means the date which is twelve (12) calendar months following March 16, 1995.

*"FDA Approval Date"* means the date on which the United States Food and Drug Administration grants Regulatory Approval of C2B8 for manufacture and sale in the United States.

*"FDA Approval Event"* means the FDA Approval Date occurs on or before the Fifty-Four Month Anniversary Date.

*"Fifty-Four Month Anniversary Date"* means that date which is fifty-four (54) calendar months following March 16, 1995.

*"Genentech"* means Genentech, Inc., a Delaware corporation, and its Affiliates.

*"IDEC"* means IDEC Pharmaceuticals Corporation, a Delaware corporation, and its Affiliates.

*"Joint Development Committee"* or *"JDC"* means that committee established pursuant to Section 3.2 of the Collaboration Agreement.

*"Licensed Product(s)"* means any compound or composition of matter whose mechanism of action is initiated by interaction with the CD20 or CD19 B-cell determinant (including C2B8, but excluding Y2B8 (as defined in Section 2.2. of the Collaboration Agreement) and In2B8 (as defined in Section 2.2. of the Collaboration Agreement) unless the option set forth in Section 2.3 of the Collaboration Agreement is exercised) (a) developed by IDEC or (b) the intellectual property rights to which are owned or Controlled, in whole or in part, by IDEC, in either (a) or (b) as of the Effective Date or during the term of the Collaboration Agreement.

*"Major European Country"* means the United Kingdom, Italy, Germany, France or Spain.

*"ML/MS Agreement"* means the Preferred and Common Stock Purchase Agreement dated March 16, 1995 by and between ML/MS Associates, L.P. and IDEC, whereby IDEC reacquired the rights to certain technologies for the treatment of B-cell lymphomas funded and developed by ML/MS Partners pursuant to a Development Agreement and related agreements, dated as of February 17, 1988 and October 27, 1988.

*"ML/MS Partners"* shall mean ML Technology Ventures, L.P. and Morgan Stanley Ventures, L.P., and any assignee or successor to ML/MS Partners.

*"National Exchange"* shall mean the Nasdaq National Market or any other national exchange on which the Common Stock of the Corporation is listed.

*"Option Agreement"* means the Option Agreement to be dated as of the Effective Date between Genentech and the Corporation.

*"Patent Milestone Event"* means the notice of grant in the European Patent Office or issuance in a Major European Country of the first valid and enforceable letters patent covering C2B8.

*"Preferred Stock Purchase Agreement"* means the Preferred Stock Purchase Agreement dated the Effective Date between the Corporation and Genentech.

*"Regulatory Approval"* means any approvals (including pricing and reimbursement approvals), licenses, registrations or authorizations of any federal, state or local regulatory agency, department, bureau or other governmental entity, necessary for the manufacture and sale of a Licensed Product in a regulatory jurisdiction.

*"Registration Rights Agreement"* means the 1995 Registration Rights Agreement dated as of the Effective Date between Genentech, ML/MS Associates, L.P. and the Corporation.

*"Third Anniversary Date"* means that date which is thirty-six months following March 16, 1995.

2. Dividend Provisions.

a. Series A-1, A-2, A-3, A-4, A-5 and A-6 Preferred Stock Dividend Provisions. No dividend or other distribution shall be paid, or declared and set apart for payment (other than dividends of Common Stock on the Common Stock of the Corporation and dividends payable on the Series A-7 Preferred Stock pursuant to Section 2(b) below), on the shares of any class or series of capital stock of the Corporation unless and until a dividend of equal or greater amount (calculated as if the shares of Series A-1, A-2, A-3, A-4, A-5 and A-6 Preferred Stock had been converted Common Stock on the date the dividend is declared) is first declared and paid with respect to any series of Series A Preferred Stock.

b. Series A-7 Preferred Stock Dividend Provisions. Cumulative dividends shall accrue from the date of issuance of the Series A-7 Preferred Stock at a fluctuating rate per annum equal to the sum of two percent (2%) plus the "Prime Rate" as announced by the Bank of America, San Francisco Branch, from time to time. Accrued dividends shall be payable quarterly in arrears on the first day of each quarter, commencing with the first day of the first quarter following the earlier of the FDA Approval Date or the Fifty-Four Month Anniversary Date. On the earlier of the FDA Approval Date or the Fifty-Four Month Anniversary Date, all dividends accrued through such date shall be paid. Any accumulation of dividends on the Series A-7 Preferred Stock shall not bear interest. No dividend or other distribution shall be paid, or declared and set apart for payment (other than dividends of Common Stock on the Common Stock of the Corporation), on the shares of any class or series of capital stock of the Corporation unless and until such dividends have been paid. The Corporation shall take any and all corporate action necessary to declare and pay such dividends described in this Section 2(b).

3. Liquidation Preference. The holders of Series A Preferred Stock share a liquidation preference as follows:

a. Series A-1, A-2, A-3, A-4, A-5, A-6 and A-7 Preferred Stock Liquidation Preference. In the event of any liquidation, dissolution or winding up of this Corporation, either voluntary or involuntary, subject to the rights of series of Series A Preferred Stock that may from time to time come into existence, the holders of Series A-1, Series A-2, Series A-3, Series A-4, Series A-5, Series A-6 and Series A-7 Preferred Stock, shall be entitled to receive, prior and in preference to any distribution of any of the assets of this Corporation to

the holders of Common Stock and any other series of Series A Preferred Stock by reason of their ownership thereof, an amount per share equal to the Original Issue Price (defined below) for such subseries plus an amount equal to (i) the declared but unpaid dividends and distributions on such share in the case of the Series A-1, Series A-2, Series A-3, Series A-4, Series A-5 and Series A-6 Preferred Stock and (ii) the accrued but unpaid dividends and distributions on such share in the case of the Series A-7 Preferred Stock. If upon the occurrence of such event, the assets and funds thus distributed among the holders of the Series A-1, Series A-2, Series A-3, Series A-4, Series A-5, Series A-6 and Series A-7 Preferred Stock shall be insufficient to permit the payment to such holders of the full aforesaid preferential amounts, then, subject to the rights of series of Series A Preferred Stock that may from time to time come into existence, the entire assets and funds of the Corporation legally available for distribution shall be distributed ratably among the holders of the Series A-1, Series A-2, Series A-3, Series A-4, Series A-5, Series A-6 and Series A-7 Preferred Stock on an as-converted to Common Stock basis in proportion to the amount of such stock owned by each such holder. The "Original Issue Price" for each subseries shall mean the price at which the initial share of such subseries is issued.

b. Upon the completion of the distribution required by subparagraph (a) of this Section 3 and any other distribution that may be required with respect to series of Series A Preferred Stock that may from time to time come into existence, if assets remain in this Corporation, the holders of the Common Stock of this Corporation, shall receive all of the remaining assets of this Corporation.

c. If (i) a single shareholder or group of affiliated shareholders, other than a holder of the Series A Preferred Stock, or a Controlled Affiliate thereof, who would be required to file a Schedule 13D under the Securities Exchange Act of 1934, as amended, acquires or obtains the right to acquire voting stock of the Corporation so that its total holdings of such stock equal or exceed fifty percent (50%) of the then outstanding voting stock of the Corporation, or (ii) any third party (i.e., a party other than a holder or a Controlled Affiliate) acquires or obtains the right to acquire all or substantially all of the assets of the Corporation, then such event shall be considered a liquidation under this Section 3. For purposes hereunder, "Controlled Affiliate" shall mean a party that, directly or indirectly, through one or more intermediaries, is controlled by such holder.

4. Series A Preferred Stock Conversion. The holders of the Series A-1, Series A-2, Series A-3, Series A-4, Series A-5, Series A-6 and Series A-7 Preferred Stock shall have conversion rights as follows (the "Conversion Rights"):

a. Series A-1, Series A-2, Series A-3, Series A-4 and Series A-5, Preferred Stock Conversion. Each share of Series A-1, Series A-2, Series A-3, Series A-4 and Series A-5 Preferred Stock shall be convertible, at the option of the holder thereof, at any time after the date of issuance of such share at the office of this Corporation or any transfer agent for such stock, into ten (10) fully paid and nonassessable shares of Common Stock (the "Conversion Rate" for the Series A-1 Preferred Stock, Series A-2 Preferred Stock, Series A-3 Preferred Stock, Series A-4 Preferred Stock and the Series A-5 Preferred Stock).

b. [Intentionally omitted.]

c. Series A-6 Preferred Stock Conversion.

(1) “Series A-6 Conversion Number” means the number calculated according to the following formulas: (i) If the FDA Approval Date occurs prior to the Fifty-Four Month Anniversary Date, then the Series A-6 Conversion Number shall equal the average closing price for the Common Stock during the period beginning on the FDA Approval Date and ending on the date which is twenty (20) trading days following the FDA Approval Date, as reported on the National Exchange; or (ii) if the Fifty-Four Month Anniversary Date occurs prior to the FDA Approval Date, then the Series A-6 Conversion Number shall equal the average closing price for the Common Stock during the period beginning on the date which is twenty (20) trading days prior to the Fifty-Four Month Anniversary Date and ending on the Fifty-Four Month Anniversary Date, as reported on the National Exchange.

(2) The Series A-6 Preferred Stock shall not be convertible until the earlier of (i) twenty (20) trading days following the FDA Approval Date or (ii) the Fifty-Four Month Anniversary Date. Thereafter, each share of Series A-6 Preferred Stock shall be convertible, at the option of the holder thereof, into the number of shares of fully paid and nonassessable shares of Common Stock as equals seventy-five (75) divided by the Series A-6 Conversion Number (the “Conversion Rate” for the Series A-6 Preferred Stock).

d. Series A-7 Preferred Stock Conversion.

(1) “Series A-7 Conversion Number” means the average closing price for the Common Stock during the period beginning on the twentieth (20th) trading day preceding the date on which the holder gives notice of such holder’s intention to convert (the “Notice Date”) and ending on the Notice Date, as reported on the National Exchange.

(2) Each share of Series A-7 Preferred Stock shall be convertible, at the option of the holder thereof, at any time after the Fifty-Four Month Anniversary Date at the office of this Corporation or any transfer agent for such stock, into such number of shares of fully paid and nonassessable shares of Common Stock as equals (A) one hundred (100) divided by (B) the Series A-7 Conversion Number (the “Conversion Rate” for the Series A-7 Preferred Stock).

e. Automatic Conversion. (i) Each share of Series A-1, Series A-2, Series A-3, Series A-4 and Series A-5 Preferred Stock; (ii) each share of Series A-6 Preferred Stock that has become convertible at the option of the holder pursuant to Section 4(c); and (iii) each share of Series A-7 Preferred Stock that has become convertible at the option of the holder pursuant to Section 4(d), shall, in each case, automatically be converted into shares of Common Stock at its then effective Conversion Rate immediately upon the transfer of ownership by the initial holder to a third party which is not an Affiliate of such holder. For purposes hereunder, “Affiliate” shall mean a party that, directly or indirectly, through one or more intermediaries, controls or is controlled by such holder.

f. Mechanics of Conversion of Series A Preferred Stock. Before any holder of Series A Preferred Stock shall be entitled to convert the same into shares of Common

Stock, such holder shall surrender the certificate or certificates therefor, duly endorsed, at the office of this Corporation or of any transfer agent for the Series A Preferred Stock, and shall give written notice to this Corporation at its principal corporate office, of the election to convert the same and shall state therein the name or names in which the certificate or certificates for shares of Common Stock are to be issued; provided, however, that in the event of an automatic conversion pursuant to Section 4(e), the outstanding shares of Series A Preferred Stock shall be converted automatically without any further action by the holder of such shares and whether or not the certificates representing such shares are surrendered to the Corporation or its transfer agent, and provided further that the Corporation shall not be obligated to issue certificates evidencing the shares of Common Stock issuable upon such automatic conversion unless the certificates evidencing such shares of Series A Preferred Stock are delivered to the Corporation or its transfer agent as provided herein. This Corporation shall, as soon as practicable thereafter, issue and deliver at such office to such holder of Preferred Stock, or to the nominee or nominees of such holder, a certificate or certificates for the number of shares of Common Stock to which such holder shall be entitled as aforesaid and shall promptly pay in cash or, to the extent sufficient funds are not then legally available therefor, in Common Stock (at the Common Stock's fair market value determined by the Board of Directors as of the date of such conversion), any declared and unpaid dividends on the shares of Series A-1, Series A-2, Series A-3, Series A-4, Series A-5 and Series A-6 Preferred Stock being converted and any accrued but unpaid dividends on the shares of Series A-7 Preferred Stock being converted. Such conversion shall be deemed to have been made immediately prior to the close of business on the date of such surrender of the shares of Series A Preferred Stock to be converted, or in the case of automatic conversion pursuant to Section 4(e), on the date of transfer to the new non-Affiliate holder; and the person or persons entitled to receive the shares of Common Stock issuable upon such conversion shall be treated for all purposes as the record holder or holders of such shares of Common Stock as of such date.

g. Conversion Rate Adjustments of Series A Preferred Stock for Splits and Combinations. The Conversion Rate of the Series A-1, Series A-2, Series A-3, Series A-4, Series A-5, Series A-6 and Series A-7 Preferred Stock shall be subject to adjustment from time to time as follows:

(1) In the event the Corporation should at any time or from time to time after the date upon which any shares of Series A Preferred Stock were first issued (the "Purchase Date"), fix a record date for the effectuation of a split or subdivision of the outstanding shares of Common Stock or the determination of holders of Common Stock entitled to receive a dividend or other distribution payable in additional shares of Common Stock or other securities or rights convertible into, or entitling the holder thereof to receive directly or indirectly, additional shares of Common Stock (hereinafter referred to as "Common Stock Equivalents") without payment of any consideration by such holder for the additional shares of Common Stock or the Common Stock Equivalents (including the additional shares of Common Stock issuable upon conversion or exercise thereof), then, as of such record date (or the date of such dividend distribution, split or subdivision if no record date is fixed), the Conversion Rate of the Series A Preferred Stock shall be appropriately increased so that the number of shares of Common Stock issuable on conversion of each share of such series shall be increased in proportion to such increase of the aggregate of shares of Common Stock outstanding and those issuable with respect to such Common Stock Equivalents.

(2) If the number of shares of Common Stock outstanding at any time after the Purchase Date is decreased by a combination of the outstanding shares of Common Stock, then, following the record date of such combination, the Conversion Rate for the applicable series of Series A Preferred Stock shall be appropriately decreased so that the number of shares of Common Stock issuable on conversion of each share of such series shall be decreased in proportion to such decrease in outstanding shares. Any adjustment under Section 4(g)(1) or (2) shall become effective at the close of business on the date the split, subdivision, stock dividend, other distribution or combination becomes effective.

h. Distributions. In the event this Corporation shall declare a distribution payable in securities of other persons, evidences of indebtedness issued by this Corporation or other persons, assets (excluding cash dividends), then, in each such case for the purpose of this subsection 4(h), the holders of the Series A Preferred Stock shall be entitled to a proportionate share of any such distribution as though they were the holders of the number of shares of Common Stock of the Corporation into which their shares of Series A Preferred Stock are convertible as of the record date fixed for the determination of the holders of Common Stock of the Corporation entitled to receive such distribution.

i. Recapitalizations. If at any time or from time to time there shall be a recapitalization of the Common Stock (other than a subdivision or combination provided for elsewhere in this Section 4 or a change in control provided for in Section 3(c)) provision shall be made so that the holders of the Series A-1, Series A-2, Series A-3, Series A-4, Series A-5, Series A-6 and Series A-7 Preferred Stock shall thereafter be entitled to receive upon conversion of the Series A Preferred Stock the number of shares of stock or other securities or property of the Corporation or otherwise, to which a holder of Common Stock deliverable upon conversion would have been entitled on such recapitalization, all subject to further adjustment as provided herein or with respect to such other securities or property by the terms thereof. In any such case, appropriate adjustment shall be made in the application of the provisions of this Section 4 with respect to the rights of the holders of the Series A Preferred Stock after the recapitalization to the end that the provisions of this Section 4 (including adjustment of the applicable Conversion Rate then in effect and the number of shares purchasable upon conversion of the Series A Preferred Stock) shall be applicable after that event as nearly equivalent as may be practicable.

j. No Impairment. This Corporation will not, by amendment of its Certificate of Incorporation or through any reorganization, recapitalization, transfer of assets, consolidation, merger, dissolution, issue or sale of securities or any other voluntary action, avoid or seek to avoid the observance or performance of any of the terms to be observed or performed hereunder by this Corporation, but will at all times in good faith assist in the carrying out of all the provisions of this Section 4 and in the taking of all such action as may be necessary or appropriate in order to protect the Conversion Rights of the holders of the Series A Preferred Stock against impairment.

k. No Fractional Shares and Certificate as to Adjustments.

(1) No fractional shares shall be issued upon the conversion of any share or shares of the Series A Preferred Stock, and the number of shares of Series A Preferred Stock or Common Stock to be issued shall be rounded to the nearest whole share.

Whether or not fractional shares are issuable upon such conversion shall be determined on the basis of the total number of shares of Series A Preferred Stock the holder is at the time converting into Series A Preferred Stock or Common Stock and the number of shares of Series A Preferred Stock or Common Stock issuable upon such aggregate conversion.

(2) Upon the occurrence of each adjustment or readjustment of the Conversion Rate of Series A Preferred Stock pursuant to this Section 4, this Corporation, at its expense, shall promptly compute such adjustment or readjustment in accordance with the terms hereof and prepare and furnish to each holder of Series A Preferred Stock a certificate setting forth such adjustment or readjustment and showing in detail the facts upon which such adjustment or readjustment is based. This Corporation shall, upon the written request at any time of any holder of Series A Preferred Stock, furnish or cause to be furnished to such holder a like certificate setting forth (a) such adjustment and readjustment, (b) the Conversion Rate for such Series A Preferred Stock at the time in effect, and (c) the number of shares of Common Stock and the amount, if any, of other property which at the time would be received upon the conversion of a share of Series A Preferred Stock.

l. Notices of Record Date. In the event of any taking by this Corporation of a record of the holders of any class of securities for the purpose of determining the holders thereof who are entitled to receive any dividend (other than a cash dividend) or other distribution, any right to subscribe for, purchase or otherwise acquire any shares of stock of any class or any other securities or property, or to receive any other right, this Corporation shall mail to each holder of Series A Preferred Stock, at least 20 days prior to the date specified therein, a notice specifying the date on which any such record is to be taken for the purpose of such dividend, distribution or right, and the amount and character of such dividend, distribution or right.

m. Reservation of Stock Issuable Upon Conversion. This Corporation shall at all times reserve and keep available out of its authorized but unissued shares of Common Stock, solely for the purpose of effecting the conversion of the shares of the Series A-1, Series A-2, Series A-3, Series A-4, Series A-5, Series A-6 and Series A-7 Preferred Stock, respectively, such number of its shares of Common Stock as shall from time to time be sufficient to effect the conversion of all outstanding shares of the Series A-1, Series A-2, Series A-3, Series A-4, Series A-5, Series A-6 and Series A-7 Preferred Stock, respectively, and if at any time the number of authorized but unissued shares of Common Stock shall not be sufficient to effect the conversion of all then outstanding shares of the Series A-1, Series A-2, Series A-3, Series A-4, Series A-5, Series A-6 and Series A-7 Preferred Stock, respectively, in addition to such other remedies as shall be available to the holder of such Preferred Stock, this Corporation will take such corporate action as may, in the opinion of its counsel, be necessary to increase its authorized but unissued shares of Common Stock to such number of shares as shall be sufficient for such purposes, including, without limitation, engaging in best efforts to obtain the requisite shareholder approval of any necessary amendment to its Certificate of Incorporation.

n. Notices. Any notice required to be given to the holders of shares of Series A Preferred Stock shall be deemed given if deposited in the United States mail, postage prepaid, and addressed to each holder of record at his address appearing on the books of this Corporation.



5. Voting Rights. The holders of shares of Series A Preferred Stock shall not have any voting rights, except as required under the General Corporation Law of Delaware.

6. Status of Unissued, Converted or Redeemed Stock. In the event any shares shall be converted pursuant to Section 4 hereof, the shares so converted shall be cancelled and shall not be issuable by the Corporation. The Certificate of Incorporation of this Corporation shall be appropriately amended to effect the corresponding reduction in the Corporation's authorized capital stock. In the event the Corporation issues less than the number of authorized shares of any subseries of Series A Preferred Stock, the Certificate of Incorporation of this Corporation shall be appropriately amended to effect a corresponding reduction in such subseries of Preferred Stock.

7. Cancellation of Series A-3 Preferred Stock. If the Approval Process Event has not occurred on or before the First Anniversary Date and if the Patent Milestone Event occurs prior to the Third Anniversary Date, then this Corporation may, at its option, cancel that number of shares of Series A-3 Preferred Stock (or if an insufficient number of shares of Series A-3 Preferred Stock are outstanding, then an equivalent number of outstanding shares of other subseries of Series A Preferred Stock or Common Stock) equal to \$2,500,000 divided by the Series A-3 Cancellation Price, where the "Series A-3 Cancellation Price" equals the higher of the (i) price paid per share for the Series A-3 Preferred Stock on the date of issuance, or (ii) fair market value of the Series A-3 Preferred Stock calculated as (A) the average closing price for the Corporation's Common Stock during the period beginning twenty-three (23) trading days prior to the date of cancellation and ending three (3) trading days prior to the date of cancellation, as reported on the National Exchange, multiplied by (B) the Conversion Rate for the Series A-3 Preferred Stock.

8. Cancellation of Series A-7 Preferred Stock. If the FDA Approval Date occurs on or before the Fifty-Four Month Anniversary Date, the Corporation shall cancel all of the then outstanding shares of Series A-7 Preferred Stock by crediting therefor an amount equal to the liquidation preference of such shares (including accrued but unpaid dividends) against the milestone payments due the Corporation pursuant to the Collaboration Agreement, such amount to be credited first to the milestone payment payable upon Regulatory Approval in the United States (as described in Section 7.4 of the Collaboration Agreement) and second, to the extent the aforesaid liquidation preference remains unpaid, to the milestone payment then payable on the date of regulatory approval in the first Major European Country (as described in Section 7.4 of the Collaboration Agreement) (collectively, the "Milestone Payments"). If at any time there is a Default Event (defined below), the Corporation shall immediately cancel all of the outstanding shares of Series A-7 Preferred Stock by paying the holders in cash an amount equal to the liquidation preference of such shares (including accrued but unpaid dividends) (an "Acceleration Event"). If the Corporation is unable to cancel such shares of Series A-7 Preferred Stock within seven (7) calendar days from the occurrence of the Default Event, then notwithstanding any provision herein to the contrary, the holder of such shares may, at its sole election, convert such shares into shares of Common Stock of the Corporation equal to the liquidation preference of such shares (including accrued but unpaid dividends) divided by the Original Issue Price for such subseries multiplied by the Conversion Rate for the Series A-7 Preferred Stock. If there is an Acceleration Event and the holder receives cash or converts to

Common Stock in exchange for cancellation of the outstanding shares of Series A-7 Preferred Stock as described in the preceding sentence, the holder shall be obligated to pay, in cash, to the Corporation, any and all Milestone Payments as such payments become due under the Collaboration Agreement.

A "Default Event" shall mean the occurrence of any of the following events:

(i) Distributions. Failure to make a required payment or distribution hereunder;

(ii) Material Adverse Event. At the end of any fiscal quarter, the total cash, cash equivalents and marketable debt investments of the Corporation shall be valued at less than the sum of the principal of and unpaid accrued interest on (i) all indebtedness of the Corporation to banks, insurance companies or financial institutions regularly engaged in the business of lending money, which is for money borrowed by the Corporation; (ii) all purchase money security interests in an amount not to exceed \$5,000,000 (as defined in the California Uniform Commercial Code); and (iii) the liquidation preference of the outstanding Series A-7 Preferred Stock. In such event, the Corporation shall provide holder with written notice thereof within twenty-four (24) hours of determining that such event has occurred.

(iii) Bankruptcy Commenced by the Corporation. If the Corporation:

(a) shall commence any proceeding in bankruptcy or seek reorganization, arrangement, readjustment of its debts, dissolution, liquidation, winding-up, composition or any other relief under the United States Bankruptcy Act, as amended, or under any other insolvency, liquidation, dissolution, arrangement, composition, readjustment of debt or any other similar act or law, of any jurisdiction, domestic or foreign, now or hereafter existing;

(b) shall admit its inability to pay its debts as they mature in any petition or pleading in connection with any such proceeding;

(c) shall apply for, or, in writing, consent to or acquiesce in, an appointment of a receiver, conservator, trustee or similar officer for it or for all or substantially all of its assets;

(d) shall make a general assignment for the benefit of creditors; or

(e) shall admit in writing its inability to pay its debts as they mature;

(iv) Bankruptcy Commenced Against the Corporation. If any proceedings are commenced or any other action is taken against the Corporation in bankruptcy or seeking reorganization, arrangement, readjustment of its debts, dissolution, liquidation, winding-up, composition or any other relief under the United States Bankruptcy Act, as amended, or under any other insolvency, reorganization, liquidation, dissolution, arrangement,

composition, readjustment of debt or any other similar act or law, of any jurisdiction, domestic or foreign, now or hereafter existing; or a receiver, conservator, trustee or similar officer for the Corporation or for all or substantially all of its assets is appointed; and in each such case, such event continues for ninety (90) days undismissed, unbounded and undischarged; and

(v) Material Breach. (A) Any breach of any material representation, warranty, covenant or obligation of the Corporation under (i) the Collaboration Agreement, which breach is not cured within sixty (60) days of written notice thereof from Genentech (or if such breach is not susceptible of cure within such period, the Corporation is not making diligent good faith efforts to cure such breach); (ii) the Preferred Stock Purchase Agreement, the Option Agreement or the Registration Rights Agreement, which breach is not cured within thirty (30) days after receipt of written notice of such breach from Genentech to the Corporation; or (iii) the ML/MS Agreement, to the extent such breach materially adversely affects the Corporation's ability to perform its obligations under the Collaboration Agreement; or (B) if, at any time, any of the Collaboration Agreement, the Series A Preferred Stock Agreement, the Option Agreement or the Registration Rights Agreement ceases to be in full force and effect.

**RIGHTS, PREFERENCES AND RESTRICTIONS OF THE  
SERIES X JUNIOR PARTICIPATING PREFERRED STOCK**

The rights, preferences, restrictions and other matters relating to the Series X Junior Participating Preferred Stock shall be as follows:

Section 1. Designation and Amount. The shares of such series shall be designated as "Series X Junior Participating Preferred Stock" (the "Series X Preferred Stock") and the number of shares constituting the Series X Preferred Stock shall be Fifty Eight Thousand (58,000). Such number of shares may be increased or decreased by resolution of the Board of Directors; provided, that no decrease shall reduce the number of shares of Series X Preferred Stock to a number less than the number of shares then outstanding plus the number of shares reserved for issuance upon the exercise of outstanding options, rights or warrants or upon the conversion of any outstanding securities issued by the Corporation which are convertible into Series X Preferred Stock.

Section 2. Dividends and Distributions.

(A) Subject to the rights of the holders of any shares of any series of Preferred Stock (or any similar stock) ranking prior and superior to the Series X Preferred Stock with respect to dividends, the holders of shares of Series X Preferred Stock, in preference to the holders of the Common Stock of the Corporation (the "Common Stock"), and of any other junior stock, shall be entitled to receive, when, as and if declared by the Board of Directors out of funds legally available for the purpose, quarterly dividends payable in cash on the first day of March, June, September and December in each year (each such date being referred to herein as a "Quarterly Dividend Payment Date"), commencing on the first Quarterly Dividend Payment Date after the first issuance of a share or fraction of a share of Series X Preferred Stock, in an amount per share (rounded to the nearest cent) equal to, subject to the provision for adjustment hereinafter set forth, 1000 times the aggregate per share amount of all cash dividends, and 1000 times the aggregate per share amount (payable in kind) of all non-cash dividends or other distributions, other than a dividend payable in shares of Common Stock or a subdivision of the outstanding shares of Common Stock (by reclassification or otherwise), declared on the Common Stock since the immediately preceding Quarterly Dividend Payment Date or, with respect to the first Quarterly Dividend Payment Date, since the first issuance of any share or fraction of a share of Series X Preferred Stock. In the event the Corporation shall at any time declare or pay any dividend on the Common Stock payable in shares of Common Stock, or effect a subdivision or combination or consolidation of the outstanding shares of Common Stock (by reclassification or otherwise than by payment of a dividend in shares of Common Stock) into a greater or lesser number of shares of Common Stock, then in each such case the amount to which holders of shares of Series X Preferred Stock were entitled immediately prior to such event under the preceding sentence shall be adjusted by multiplying such amount by a fraction, the numerator of which is the number of shares

of Common Stock outstanding immediately after such event and the denominator of which is the number of shares of Common Stock that were outstanding immediately prior to such event.

(B) The Corporation shall declare a dividend or distribution on the Series X Preferred Stock as provided in paragraph (A) of this Section immediately after it declares a dividend or distribution on the Common Stock (other than a dividend payable in shares of Common Stock).

(C) Dividends shall begin to accrue and be cumulative on outstanding shares of Series X Preferred Stock from the Quarterly Dividend Payment Date next preceding the date of issue of such shares, unless the date of issue of such shares is prior to the record date for the first Quarterly Dividend Payment Date, in which case dividends on such shares shall begin to accrue from the date of issue of such shares, or unless the date of issue is a Quarterly Dividend Payment Date or is a date after the record date for the determination of holders of shares of Series X Preferred Stock entitled to receive a quarterly dividend and before such Quarterly Dividend Payment Date, in either of which events such dividends shall begin to accrue and be cumulative from such Quarterly Dividend Payment Date. Accrued but unpaid dividends shall not bear interest. Dividends paid on the shares of Series X Preferred Stock in an amount less than the total amount of such dividends at the time accrued and payable on such shares shall be allocated pro rata on a share-by-share basis among all such shares at the time outstanding. The Board of Directors may fix a record date for the determination of holders of shares of Series X Preferred Stock entitled to receive payment of a dividend or distribution declared thereon, which record date shall be not more than 60 days prior to the date fixed for the payment thereof.

Section 3. Voting Rights. The holders of shares of Series X Preferred Stock shall have the following voting rights:

(A) Subject to the provision for adjustment hereinafter set forth, each share of Series X Preferred Stock shall entitle the holder thereof to 1000 votes on all matters submitted to a vote of the stockholders of the Corporation. In the event the Corporation shall at any time declare or pay any dividend on the Common Stock payable in shares of Common Stock, or effect a subdivision or combination or consolidation of the outstanding shares of Common Stock (by reclassification or otherwise than by payment of a dividend in shares of Common Stock) into a greater or lesser number of shares of Common Stock, then in each such case the number of votes per share to which holders of shares of Series X Preferred Stock were entitled immediately prior to such event shall be adjusted by multiplying such number by a fraction, the numerator of which is the number of shares of Common Stock outstanding immediately after such event and the denominator of which is the number of shares of Common Stock that were outstanding immediately prior to such event.

(B) Except as otherwise provided herein, in any other Certificate of Designation creating a series of Preferred Stock or any similar stock, or by law, the holders of shares of Series X Preferred Stock and the holders of shares of Common Stock

and any other capital stock of the Corporation having general voting rights shall vote together as one class on all matters submitted to a vote of stockholders of the Corporation.

(C) Except as set forth herein, or as otherwise provided by law, holders of Series X Preferred Stock shall have no special voting rights and their consent shall not be required (except to the extent they are entitled to vote with holders of Common Stock as set forth herein) for taking any corporate action.

#### Section 4. Certain Restrictions.

(A) Whenever quarterly dividends or other dividends or distributions payable on the Series X Preferred Stock as provided in Section 2 are in arrears, thereafter and until all accrued and unpaid dividends and distributions, whether or not declared, on shares of Series X Preferred Stock outstanding shall have been paid in full, the Corporation shall not:

(i) declare or pay dividends, or make any other distributions, on any shares of stock ranking junior (either as to dividends or upon liquidation, dissolution or winding up) to the Series X Preferred Stock;

(ii) declare or pay dividends, or make any other distributions, on any shares of stock ranking on a parity (either as to dividends or upon liquidation, dissolution or winding up) with the Series X Preferred Stock, except dividends paid ratably on the Series X Preferred Stock and all such parity stock on which dividends are payable or in arrears in proportion to the total amounts to which the holders of all such shares are then entitled;

(iii) redeem or purchase or otherwise acquire for consideration shares of any stock ranking junior (either as to dividends or upon liquidation, dissolution or winding up) to the Series X Preferred Stock, provided that the Corporation may at any time redeem, purchase or otherwise acquire shares of any such junior stock in exchange for shares of any stock of the Corporation ranking junior (either as to dividends or upon dissolution, liquidation or winding up) to the Series X Preferred Stock; or

(iv) redeem or purchase or otherwise acquire for consideration any shares of Series X Preferred Stock, or any shares of stock ranking on a parity with the Series X Preferred Stock, except in accordance with a purchase offer made in writing or by publication (as determined by the Board of Directors) to all holders of such shares upon such terms as the Board of Directors, after consideration of the respective annual dividend rates and other relative rights and preferences of the respective series and classes, shall determine in good faith will result in fair and equitable treatment among the respective series or classes.

(B) The Corporation shall not permit any subsidiary of the Corporation to purchase or otherwise acquire for consideration any shares of stock of the Corporation

unless the Corporation could, under paragraph (A) of this Section 4, purchase or otherwise acquire such shares at such time and in such manner.

Section 5. Reacquired Shares. Any shares of Series X Preferred Stock purchased or otherwise acquired by the Corporation in any manner whatsoever shall be retired and cancelled promptly after the acquisition thereof. All such shares shall upon their cancellation become authorized but unissued shares of Preferred Stock and may be reissued as part of a new series of Preferred Stock subject to the conditions and restrictions on issuance set forth herein, in the Certificate of Incorporation, or in any other Certificate of Designation creating a series of Preferred Stock or any similar stock or as otherwise required by law.

Section 6. Liquidation, Dissolution or Winding Up. Upon any liquidation, dissolution or winding up of the Corporation, no distribution shall be made (1) to the holders of shares of stock ranking junior (either as to dividends or upon liquidation, dissolution or winding up) to the Series X Preferred Stock unless, prior thereto, the holders of shares of Series X Preferred Stock shall have received \$1,000 per share, plus an amount equal to accrued and unpaid dividends and distributions thereon, whether or not declared, to the date of such payment, provided that the holders of shares of Series X Preferred Stock shall be entitled to receive an aggregate amount per share, subject to the provision for adjustment hereinafter set forth, equal to 1000 times the aggregate amount to be distributed per share to holders of shares of Common Stock, or (2) to the holders of shares of stock ranking on a parity (either as to dividends or upon liquidation, dissolution or winding up) with the Series X Preferred Stock, except distributions made ratably on the Series X Preferred Stock and all such parity stock in proportion to the total amounts to which the holders of all such shares are entitled upon such liquidation, dissolution or winding up. In the event the Corporation shall at any time declare or pay any dividend on the Common Stock payable in shares of Common Stock, or effect a subdivision or combination or consolidation of the outstanding shares of Common Stock (by reclassification or otherwise than by payment of a dividend in shares of Common Stock) into a greater or lesser number of shares of Common Stock, then in each such case the aggregate amount to which holders of shares of Series X Preferred Stock were entitled immediately prior to such event under the proviso in clause (1) of the preceding sentence shall be adjusted by multiplying such amount by a fraction the numerator of which is the number of shares of Common Stock outstanding immediately after such event and the denominator of which is the number of shares of Common Stock that were outstanding immediately prior to such event.

Section 7. Consolidation, Merger, etc. In case the Corporation shall enter into any consolidation, merger, combination or other transaction in which the shares of Common Stock are exchanged for or changed into other stock or securities, cash and/or any other property, then in any such case each share of Series X Preferred Stock shall at the same time be similarly exchanged or changed into an amount per share, subject to the provision for adjustment hereinafter set forth, equal to 1000 times the aggregate amount of stock, securities, cash and/or any other property (payable in kind), as the case may be, into which or for which each share of Common Stock is changed or exchanged. In the event the Corporation shall at any time declare or pay any dividend on the Common Stock payable in shares of Common Stock, or effect a subdivision or combination or consolidation of the outstanding shares of Common Stock (by reclassification or otherwise than by payment of a dividend in shares of Common Stock) into a greater or lesser number of shares of Common Stock, then in each such case the amount set forth

in the preceding sentence with respect to the exchange or change of shares of Series X Preferred Stock shall be adjusted by multiplying such amount by a fraction, the numerator of which is the number of shares of Common Stock outstanding immediately after such event and the denominator of which is the number of shares of Common Stock that were outstanding immediately prior to such event.

Section 8. No Redemption. The shares of Series X Preferred Stock shall not be redeemable.

Section 9. Rank. The Series X Preferred Stock shall rank, with respect to the payment of dividends and the distribution of assets, junior to all series of any other class of the Corporation's Preferred Stock.

Section 10. Amendment. The Certificate of Incorporation of the Corporation shall not be amended in any manner which would materially alter or change the powers, preferences or special rights of the Series X Preferred Stock so as to affect them adversely without the affirmative vote of the holders of at least a majority of the outstanding shares of Series X Preferred Stock, voting together as a single class.



CERTIFICATE OF AMENDMENT OF  
AMENDED AND RESTATED CERTIFICATE OF INCORPORATION  
OF  
IDEC PHARMACEUTICALS CORPORATION

IDEC Pharmaceuticals Corporation, a corporation organized and existing under the laws of the State of Delaware, hereby certifies as follows:

FIRST: That the Board of Directors of said corporation, at a meeting duly held, adopted a resolution proposing and declaring advisable the following amendment to the Amended and Restated Certificate of Incorporation:

RESOLVED, that the Amended and Restated Certificate of Incorporation of this corporation be amended by changing Section A of Article IV thereof so that, as amended, said Section A of Article IV shall be and read as follows:

“(A) Classes of Stock. This corporation is authorized to issue two classes of stock to be designated, respectively, “**Common Stock**” and “**Preferred Stock**.” The total number of shares which the corporation is authorized to issue is Five Hundred Eight Million (508,000,000) shares. Five Hundred Million (500,000,000) shares shall be Common Stock, par value \$0.0005 per share, and Eight Million (8,000,000) shares shall be Preferred Stock, par value \$0.001 per share.”

SECOND: That thereafter, pursuant to resolution of the Board of Directors, the annual meeting of the stockholders of said corporation was duly called and held, upon notice in accordance with Section 222 of the General Corporation Law of the State of Delaware.

THIRD: That said amendment was duly adopted in accordance with the provisions of Section 242 of the General Corporation Law of the State of Delaware.

FOURTH: That the capital of said corporation shall not be reduced under or by reason of said amendment.

IN WITNESS WHEREOF, said IDEC Pharmaceuticals Corporation has caused this certificate to be signed by its President and Chief Executive Officer, William H. Rastetter, this 21<sup>st</sup> day of May, 2001.



William H. Rastetter  
President and Chief Executive Officer

CERTIFICATE  
INCREASING THE NUMBER OF AUTHORIZED SHARES OF  
SERIES X JUNIOR PARTICIPATING PREFERRED STOCK  
OF  
IDEC PHARMACEUTICALS CORPORATION

IDEC Pharmaceuticals Corporation (the "Corporation"), a corporation organized and existing under the General Corporation Law of the State of Delaware (the "DGCL"), the Certificate of Incorporation of which was originally filed in the office of the Secretary of State of Delaware on April 1, 1997, does hereby certify as follows:

FIRST: Pursuant to the authority vested in the board of directors (the "Board") of the Corporation pursuant to the Certificate of Incorporation and Section 151 of the DGCL, the Board, by resolution thereof and a subsequent filing of a certificate of designation with the Secretary on August 1, 1997, designated the Series X Junior Participating Preferred Stock of the Corporation (the "Series X"), established the rights preferences and restrictions of the Series X and authorized the issuance of fifty-eight thousand (58,000) shares of the Series X.

SECOND: The Corporation's Certificate of Incorporation, as amended, and the rights, preferences and restrictions of the Series X were restated and integrated into a single Amended and Restated Certificate of Incorporation duly filed with the Secretary on December 1, 1999 (the "Amended and Restated Certificate").

THIRD: No shares of Series X have been issued.

FOURTH: Pursuant to the authority reserved to the Board under the Amended and Restated Certificate and Section 151(g) of the DGCL, the Board at a meeting duly convened and held on July 18, 2001, adopted the following resolution:

"RESOLVED, that, pursuant to the authority vested in the Board in accordance with the provisions of the Corporation's Certificate of Incorporation, the Board does hereby increase the number of shares of the Corporation's Series X Junior Participating Preferred Stock to 1,000,000 shares."

IN WITNESS WHEREOF, the Corporation has caused this Certificate to be signed by the President and the Secretary this 26<sup>th</sup> day of July, 2001.

IDEC PHARMACEUTICALS CORPORATION

By: /s/ William H. Rastetter  
William H. Rastetter, Ph.D.  
Chairman, President and Chief Executive Officer

Attest:

By: /s/ Kenneth J. Woolcott  
Kenneth J. Woolcott, Secretary

**CERTIFICATE OF AMENDMENT  
TO THE  
CERTIFICATE OF INCORPORATION  
OF  
IDEC PHARMACEUTICALS CORPORATION**

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Pursuant to Section 242 of the General  
Corporation Law of the State of Delaware

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IDEC Pharmaceuticals Corporation, a Delaware corporation (hereinafter called the "Corporation"), does hereby certify as follows:

**FIRST:** Article I of the Corporation's Amended and Restated Certificate of Incorporation is hereby amended to read in its entirety as set forth below:

**ARTICLE I**

The name of this corporation is "Biogen Idec Inc."

**SECOND:** Article IV(A) of the Corporation's Amended and Restated Certificate of Incorporation is hereby amended to read in its entirety as set forth below:

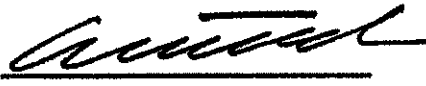
(A) Classes of Stock. The Corporation is authorized to issue two classes of stock to be designated, respectively, "Common Stock" and "Preferred Stock." The total number of shares which the Corporation is authorized to issue is One Billion Eight Million (1,008,000,000) shares. One Billion (1,000,000,000) shares shall be Common Stock, par value \$0.0005 per share, and Eight Million (8,000,000) shares shall be Preferred Stock, par value \$0.001 per share.

**THIRD:** The foregoing amendments were duly adopted in accordance with Section 242 of the General Corporation Law of the State of Delaware.

IN WITNESS WHEREOF, the Corporation has caused this Certificate to be duly executed in its corporate name this 12th day of November, 2003.

**IDEC PHARMACEUTICALS  
CORPORATION**

By: \_\_\_\_\_

  
Name: William H. Rastetter, Ph.D.  
Title: Chairman of the Board and  
Chief Executive Officer

SKARDEL, INC.  
10<sup>TH</sup> AND KING STREETS  
WILMINGTON, DELAWARE 19801

November 19, 2003

VIA FAX -- 302-739-6483

Ms. Sandi Pisarski  
Secretary of State  
Division of Corporations  
Townsend Building  
Dover, DE 19901

Re: Biogen IDEC Inc. (DE Reservation No. 3717818)

Dear Ms. Pisarski:

We reserved the above-referenced name in Delaware on October 21, 2003. I hereby request that the reservation be transferred to IDEC Pharmaceuticals Corporation, 3030 Callan Road, San Diego, CA 92121 effective immediately. Thank you for your attention to this matter.

Very truly yours,



Mary E. Keogh  
Corporate Analyst

**CERTIFICATE OF CHANGE OF LOCATION OF REGISTERED OFFICE  
AND OF REGISTERED AGENT**

**OF**

**BIAGEN IDEC INC.**

It is hereby certified that:

1. The name of the corporation (hereinafter called the "corporation") is:

**BIAGEN IDEC INC.**

2. The registered office of the corporation within the State of Delaware is hereby changed to 2711 Centerville Road, Suite 400, City of Wilmington 19808, County of New Castle.

3. The registered agent of the corporation within the State of Delaware is hereby changed to Corporation Service Company, the business office of which is identical with the registered office of the corporation as hereby changed.

4. The corporation has authorized the changes hereinbefore set forth by resolution of its Board of Directors.

Signed on September 13, 2007

/s/ Robert A. Licht

Name: Robert A. Licht

Title: Vice President

STATE OF DELAWARE  
  
CERTIFICATE OF AMENDMENT  
OF CERTIFICATE OF INCORPORATION  
OF  
BIOGEN IDEC INC.

The corporation organized and existing under and by virtue of the General Corporation Law of the State of Delaware does hereby certify:

**FIRST:** That at a meeting of the Board of Directors of Biogen Idec Inc. resolutions were duly adopted setting forth a proposed amendment to Article VII of the Certificate of Incorporation of said corporation, declaring said amendment to be advisable and directing that the proposed amendment be considered at the next annual meeting of the stockholders. As amended pursuant to such resolutions, Article VII of the Certificate of Incorporation shall be and read as follows:

*ARTICLE VII*

Elections of directors need not be by written ballot unless the bylaws of the corporation shall so provide. Directors shall hold office for a term ending on the date of the next annual meeting of stockholders following their election and until their successors shall have been elected and qualified, subject to their earlier death, resignation or removal.

**SECOND:** That, pursuant to resolution of its Board of Directors, an annual meeting of the stockholders of said corporation was duly called and held upon notice in accordance with Section 222 of the General Corporation Law of the State of Delaware at which meeting the necessary number of shares as required by statute were voted in favor of the amendment.

**THIRD:** That said amendment was duly adopted in accordance with the provisions of Section 242 of the General Corporation Law of the State of Delaware.

**IN WITNESS WHEREOF,** said corporation has caused this certificate to be signed this 2<sup>nd</sup> day of June, 2011.

By: 

Authorized Officer

Title: Senior Vice President

Name: Robert A. Licht

STATE OF DELAWARE  
  
CERTIFICATE OF AMENDMENT  
OF CERTIFICATE OF INCORPORATION  
OF  
BIOGEN IDEC INC.

The corporation organized and existing under and by virtue of the General Corporation Law of the State of Delaware does hereby certify:

**FIRST:** That at a meeting of the Board of Directors of Biogen Idec Inc. resolutions were duly adopted setting forth a proposed amendment to the Certificate of Incorporation of said corporation, declaring said amendment to be advisable and directing that the proposed amendment be considered at the next annual meeting of the stockholders. As amended pursuant to such resolutions, the Certificate of Incorporation shall renumber the current Article XII as Article XIII and shall add a new Article XII to read as follows:

*ARTICLE XII*

Unless the Board of Directors or one of its committees otherwise consents to the selection of an alternate forum, the Court of Chancery of the State of Delaware shall, to the fullest extent permitted by law, be the sole and exclusive forum for (i) any derivative action brought on behalf of the corporation and (ii) any direct action brought by a stockholder against the corporation or any of its directors or officers alleging a violation of the Delaware General Corporation Law, the corporation's certificate of incorporation or bylaws or breach of fiduciary duties or other violation of Delaware decisional law relating to the internal affairs of the corporation; in each case excluding actions in which the Court of Chancery of the State of Delaware concludes that an indispensable party is not subject to the jurisdiction of the Delaware courts and can be subject to the jurisdiction of another court within the United States.

**SECOND:** That thereafter, pursuant to resolution of its Board of Directors, an annual meeting of the stockholders of said corporation was duly called and held upon notice in accordance with Section 222 of the General Corporation Law of the State of Delaware at which meeting the necessary number of shares as required by statute were voted in favor of the amendment.

**THIRD:** That said amendment was duly adopted in accordance with the provisions of Section 242 of the General Corporation Law of the State of Delaware.

**IN WITNESS WHEREOF,** said corporation has caused this certificate to be signed this 13<sup>th</sup> day of June 2012.

By: 

Authorized Officer

Title: Senior Vice President

Name: Robert A. Licht

**CERTIFICATE OF AMENDMENT  
TO THE  
CERTIFICATE OF INCORPORATION  
OF  
BIOGEN IDEC INC.**

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Pursuant to Section 242 of the General  
Corporation Law of the State of Delaware

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Biogen Idec Inc. (hereinafter referred to as the "Corporation"), a corporation duly organized and existing under the Delaware General Corporation Law (the "DGCL"), does hereby certify as follows:

**FIRST:** That at a meeting of the Board of Directors of the Corporation on December 10, 2014, a resolution was duly adopted approving a proposed amendment of the Amended and Restated Certificate of Incorporation (the "Certificate of Incorporation") of the Corporation and declaring said amendment to be advisable. The amendment is as follows:

**RESOLVED**, that the Amended and Restated Certificate of Incorporation of the Corporation be amended by changing Article I thereof, so that, as amended, said Article shall be and read as follows:

"ARTICLE I: The name of this corporation is "Biogen Inc."

**SECOND:** The foregoing amendment was duly adopted in accordance with Section 242 of the DGCL.

**THIRD:** The effective date of the amendment shall be March 23, 2015.

IN WITNESS WHEREOF, the Corporation has caused this Certificate of Amendment to be duly executed in its name this 23<sup>rd</sup> day of March, 2015.

BIOGEN IDEC INC.

By:  Authorized Officer

Name: Susan H. Alexander

Title: Secretary



STATE OF DELAWARE  
CERTIFICATE OF CHANGE OF REGISTERED AGENT  
AND/OR REGISTERED OFFICE

The corporation organized and existing under the General Corporation Law of the State of Delaware, hereby certifies as follows:

1. The name of the corporation is Biogen Inc.
2. The Registered Office of the corporation in the State of Delaware is changed to 3411 Silverside Road Tatnall Building #104  
(street), in the City of Wilmington,  
County of New Castle Zip Code 19810. The name of the  
Registered Agent at such address upon whom process against this Corporation may be  
served is United Agent Group Inc.
3. The foregoing change to the registered office/agent was adopted by a resolution of  
the Board of Directors of the corporation.

By: 

Authorized Officer

Name:

**Savannah Montalban, Special Secretary**

Print or Type

State of Delaware  
Secretary of State  
Division of Corporations  
Delivered 08:04 AM 06/08/2021  
FILED 08:04 AM 06/08/2021  
SR 20212380075 - File Number 2726078

**CERTIFICATE OF AMENDMENT  
TO THE  
CERTIFICATE OF INCORPORATION  
OF  
BIOGEN INC.**

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Pursuant to Section 242 of the General  
Corporation Law of the State of Delaware

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Biogen Inc. (hereinafter referred to as the "Corporation"), a corporation duly organized and existing under the Delaware General Corporation Law (the "DGCL"), does hereby certify as follows:

**FIRST:** That at a meeting of the Board of Directors of the Corporation on April 7, 2021, resolutions were duly adopted setting forth a proposed amendment to Article XII of the Certificate of Incorporation of said corporation, declaring said amendment to be advisable and directing that the proposed amendment be considered at the next annual meeting of the stockholders. As amended pursuant to such resolutions, Article XII of the Certificate of Incorporation shall be as follows:

*ARTICLE XII*

(a) Exclusive Forum. Unless the Board of Directors or one of its committees otherwise consents to the selection of an alternate forum, the Court of Chancery of the State of Delaware shall, to the fullest extent permitted by law, be the sole and exclusive forum for (i) any derivative action brought on behalf of the Corporation and (ii) any direct action brought by a stockholder against the Corporation or any of its directors or officers alleging a violation of the Delaware General Corporation Law, the corporation's certificate of incorporation or bylaws or breach of fiduciary duties or other violation of Delaware decisional law relating to the internal affairs of the corporation; in each case excluding actions in which the Court of Chancery of the State of Delaware concludes that an indispensable party is not subject to the jurisdiction of the Delaware courts and can be subject to the jurisdiction of another court within the United States.

(b) Federal Forum. Unless the Corporation consents in writing to the selection of an alternative forum, the federal district courts of the United States shall be the exclusive forum for the resolution of any complaint asserting a cause of action arising under the Securities Act of 1933, as amended. Any person or entity purchasing or otherwise acquiring any interest in any security of the Corporation shall be deemed to have notice of and consented to this provision.

**SECOND:** The foregoing amendment was duly adopted in accordance with Section 242 of the DGCL.

**THIRD:** The effective date of the amendment shall be June 8, 2021.

IN WITNESS WHEREOF, the Corporation has caused this Certificate of Amendment to be duly executed in its name this 8<sup>th</sup> day of June, 2021.

BIOMERIEUX INC.

Executed by:

By: Susan Alexander  
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Name: Susan Alexander

Title: Corporate Secretary