

**AMENDED AND RESTATED  
CERTIFICATE OF INCORPORATION  
OF  
ANACOR PHARMACEUTICALS, INC.**  
a Delaware corporation

Anacor Pharmaceuticals, Inc., a corporation organized and existing under the General Corporation Law of the State of Delaware, does hereby certify:

FIRST: The name of this corporation is Anacor Pharmaceuticals, Inc. The original Certificate of Incorporation was filed with the Secretary of the State of Delaware on December 14, 2000, under the name "AnaMax, Inc."

SECOND: This Amended and Restated Certificate of Incorporation of Anacor Pharmaceuticals, Inc., has been duly adopted in accordance with the provisions of Sections 228, 242 and 245 of the General Corporation Law of the State of Delaware by the directors and stockholders of the Corporation, and prompt written notice was duly given pursuant to Section 228 of the General Corporation Law of the State of Delaware to those stockholders who did not approve this Amended and Restated Certificate of Incorporation, as so amended, by written consent.

THIRD: The Amended and Restated Certificate of Incorporation as heretofore adopted is hereby amended and restated now to read in full as follows:

**ARTICLE I.**

The name of this corporation is Anacor Pharmaceuticals, Inc. (the "Corporation").

**ARTICLE II.**

The address of this Corporation's registered office in the State of Delaware is 2711 Centerville Road, Suite 400, City of Dover, County of Kent, and the name of the registered agent of this Corporation in the State of Delaware at such address is CorpAmerica, Inc.

**ARTICLE III.**

The purpose of this Corporation is to engage in any lawful act or activity for which corporations may be organized under the General Corporation Law of Delaware.

#### ARTICLE IV.

A. This Corporation is authorized to issue two classes of stock to be designated, respectively, Common Stock ("Common Stock") and Preferred Stock ("Preferred Stock"). The total number of shares which this Corporation shall have authority to issue is 131,172,227 shares. 75,500,000 shares shall be Common Stock with a par value of \$0.001 per share and 55,672,227 shares shall be Preferred Stock with a par value of \$0.001 per share.

B. The Preferred Stock may be issued from time to time in one or more series. The series of Preferred Stock shall be designated as and comprise the following:

1. 4,228,329 shares of Series A-1 Preferred Stock (the "Series A-1 Preferred");
  2. 1,198,046 shares of Series A-2 Preferred Stock (the "Series A-2 Preferred");
  3. 3,339,341 shares of Series B Preferred Stock (the "Series B Preferred");
  4. 28,089,885 shares of Series C Preferred Stock (the "Series C Preferred");
  5. 3,716,626 shares of Series D Preferred Stock (the "Series D Preferred");
- and
6. 15,100,000 shares of Series E Preferred Stock (the "Series E Preferred").

The Series A-1 Preferred and the Series A-2 Preferred are sometimes referred to herein collectively as the "Series A Preferred." The holders of Series A-2 Preferred shall not have voting rights or privileges, either as an individual class or together with any other class of capital stock, except as otherwise expressly set forth herein.

C. The number of authorized shares of Common Stock may be increased or decreased (but not below the number of shares of Common Stock then outstanding) by the affirmative vote of the holders of a majority of the stock of the Corporation entitled to vote (voting together as a single class on an as-if-converted basis).

#### ARTICLE V.

A. The powers, rights, preferences, privileges and restrictions relating to the Common Stock and Preferred Stock are as follows:

1. Definitions. For purposes of this Article V, the following definitions shall apply:

(a) "Convertible Securities" shall mean any bonds, debentures, notes or other evidences of indebtedness, and any warrants, shares or any other securities (other than shares of Preferred Stock) convertible into, exercisable for, or exchangeable for Common Stock.

(b) "Options" shall mean rights, options or warrants to subscribe for, purchase or otherwise acquire Common Stock or Convertible Securities.

(c) "Original Issue Date" shall mean for each series of Preferred Stock the first date upon which shares of such series of Preferred Stock are first issued.

(d) "Original Purchase Price" shall mean \$0.7095 for each share of Series A Preferred, \$1.19784 for each share of Series B Preferred, \$0.89 for each share of Series C Preferred, \$1.73 for each share of Series D Preferred and \$3.3872 for each share of Series E Preferred, subject to equitable and proportional adjustment in the event of stock splits, reverse splits, recapitalization and the like.

## 2. Dividends.

(a) Treatment of Preferred Stock. The holders of the Preferred Stock shall be entitled to receive annual dividends at a rate of eight percent (8%) of each such series' Original Purchase Price, out of any assets at the time legally available therefor, when, as and if declared by the Board of Directors of the Corporation (the "Preferred Dividends" and the "Board of Directors"). The Board of Directors is under no obligation to declare dividends, no rights shall accrue to the holders of Preferred Stock if dividends are not declared, and any dividends declared shall not be cumulative. Subject to Section 2(b), to the extent that the Corporation declares or pays dividends on the Common Stock, the Corporation shall declare and pay a participating dividend on each share of Preferred Stock on an as-if-converted basis; and no dividend shall be paid on the Common Stock at a rate greater than the rate at which dividends are paid on the Preferred Stock. The number of shares of Common Stock into which shares of Preferred Stock are convertible shall be determined as of the date on which the dividend is declared.

(b) Priority of Dividends. The Corporation shall make no Distribution (as defined below in Section 2(c)) to the holders of shares of Common Stock except in accordance with Section 2(a) above, and no Distributions shall be paid on any Common Stock during any fiscal year of the Corporation until the Preferred Dividends have been declared and paid in full to the holders of Preferred Stock during that fiscal year.

(c) Distribution. As used in this section, "Distribution" means the transfer of cash or property without consideration, whether by way of dividend or otherwise (except a dividend in shares of the Corporation) or the purchase of shares of the Corporation (other than in connection with the repurchase of shares of Common Stock issued to or held by employees, consultants, officers or directors pursuant to agreements providing for the right of such repurchase) for cash or property.

(d) Consent to Certain Repurchases. As authorized by Section 402.5(c) of the General Corporation Law of California, Sections 502 and 503 of the General Corporation Law of California shall not apply with respect to Distributions made by the Corporation in connection with the repurchase of shares of Common Stock issued to or held by employees, consultants, officers or directors at a price not greater than the amount paid by such person for such shares upon termination of their employment or services pursuant to agreements

providing for the right of said repurchase, which agreements were authorized by the approval of the Corporation's Board of Directors.

3. Liquidation Preference.

(a) Series C, Series D and Series E Preferred Stock Liquidation Preference. In the event of any liquidation, dissolution or winding up of the Corporation ("Liquidation"), either voluntary or involuntary, the holders of Series C Preferred, Series D Preferred and Series E Preferred then held by them shall be entitled to receive, for each such share of Preferred Stock, out of the assets of the Corporation, \$0.89 in the case of Series C Preferred, \$1.73 in the case of Series D Preferred and \$3.3872 in the case of Series E Preferred, in each case as adjusted for stock splits, stock dividends recapitalizations and the like, plus, in each case, an amount equal to all declared and unpaid dividends thereon (the "Series C, Series D and Series E Liquidation Preference"), if any, to the date that payment is made, before any payment shall be made or any assets distributed to the holders of Series A Preferred, Series B Preferred and Common Stock. If upon the Liquidation, the assets to be distributed among the holders of Series C Preferred, Series D Preferred and Series E Preferred are insufficient to permit the payment to such holders of the full Series C, Series D and Series E Liquidation Preference for their shares, then the entire assets of the Corporation legally available for distribution shall be distributed with equal priority and *pro rata* among the holders of the Series C Preferred, Series D Preferred and Series E Preferred in proportion to the aggregate Series C, Series D and Series E Liquidation Preference each such holder is otherwise entitled to receive.

(b) Series A and Series B Preferred Stock Liquidation Preference. In the event of any Liquidation, either voluntary or involuntary, and following the payment of the Series C, Series D and Series E Liquidation Preference, the holders of Series A Preferred and Series B Preferred then held by them shall be entitled to receive, for each such share of Preferred Stock, out of the assets of the Corporation, \$0.7095 in the case of the Series A Preferred and \$1.19784 in the case of the Series B Preferred, in each case as adjusted for stock splits, stock dividends recapitalizations and the like, plus, in each case, an amount equal to all declared and unpaid dividends thereon (the "Series A and Series B Liquidation Preference"), if any, to the date that payment is made, before any payment shall be made or any assets distributed to the holders of Common Stock. If upon the Liquidation, the assets to be distributed among the holders of the Series A Preferred and the Series B Preferred are insufficient to permit the payment to such holders of the full Series A and Series B Liquidation Preference for their shares, then the entire assets of the Corporation legally available for distribution to such holders shall be distributed with equal priority and *pro rata* among the holders of the Series A Preferred and Series B Preferred in proportion to the aggregate Series A and Series B Liquidation Preference each such holder is otherwise entitled to receive.

(c) Preferred Stock Participation. Following payment to the holders of Preferred Stock of the full Liquidation Preferences set forth above, the remaining assets of the Corporation, if any, shall be distributed to the holders of the Preferred Stock and the holders of the Common Stock *pro rata* (on an as-if-converted basis) until such time as the holders of Preferred Stock have received an amount per share of Preferred Stock then held by them equal to three times the Original Purchase Price plus an amount equal to all declared and unpaid

dividends thereon with respect to each share in the aggregate pursuant to subsection 3(a) or 3(b), as the case may be, and this subsection 3(c).

(d) Remaining Assets. Following payment to the holders of Preferred Stock of the full preferential amounts specified above, no further payments shall be made to the holders of Preferred Stock, and any remaining assets of the Corporation shall be distributed with equal priority and *pro rata* among the holders of Common Stock. In the event that a holder of Preferred Stock would receive a greater amount pursuant to Section 3(d) with respect to such holder's shares of any series of Preferred Stock upon conversion thereof than such holder is entitled to receive for such shares of any series of Preferred Stock, such holder shall automatically receive such greater amount in lieu of the payment described in Section 3(a) or 3(b) and 3(c), as applicable, irrespective of whether such holder converts such shares of Preferred Stock.

(e) Reorganization. For purposes of this Section 3, unless expressly waived by the holders of at least 70% of the Preferred Stock, voting together as a single class, a Liquidation shall be deemed to be occasioned by, or to include, (i) the acquisition of the Corporation by another entity by means of any transaction or series of related transactions (including, without limitation, any reorganization, merger or consolidation); or (ii) a sale, exclusive license or other disposition of all or substantially all of the assets of the Corporation; *provided, however*, that, in case of (i), the applicable transaction shall not be deemed a Liquidation unless the Corporation's stockholders of record as constituted immediately prior to such acquisition or sale hold less than fifty (50%) of the voting power of the surviving or acquiring entity immediately after such acquisition or sale (by virtue of securities issued as consideration for such transaction) in the same relative proportions (a "Liquidation Event").

(f) Non-Cash Consideration. If any property distributed to stockholders in connection with any Liquidation is other than cash, then the value of such assets shall be their fair market value as determined in good faith by the Board of Directors, except that any securities to be distributed to stockholders in such Liquidation shall be valued as follows:

(i) The method of valuation of securities not subject to investment letter or other similar restrictions on free marketability shall be as follows:

a. if the securities are then traded on a national securities exchange or a national quotation system, then the value shall be deemed to be the average of the closing prices of the securities on such exchange or system over the 30-day period ending three (3) days prior to the distribution (not including the day of distribution);

b. if actively traded over-the-counter, then the value shall be deemed to be the average of the closing bid prices over the 30-day period ending three (3) days prior to the distribution (not including the day of distribution); and

c. if there is no active public market, then the value shall be the fair market value thereof, as determined in good faith by the Board of Directors of the Corporation.

(ii) The method of valuation of securities subject to investment letter or other restrictions on free marketability shall be to make an appropriate discount from the market value determined as above in subparagraphs (i)(a), (i)(b) or (i)(c) of this subsection 3(f) to reflect the approximate fair market value thereof, as determined in good faith by the Board of Directors.

(g) Right to Contest Valuation. The Corporation shall promptly give the stockholders written notice of the fair market value as determined by the Board of Directors pursuant to Section 3(g) hereof, and the holders of a majority of the Corporation's then outstanding Preferred Stock voting as a separate class shall have the right to contest such determination by giving written notice thereof to the Corporation within fifteen (15) days of the receipt of the Corporation's notice, and in such event the fair market value shall be determined by an independent appraiser that is acceptable to a majority of disinterested directors and holders of a majority of the then outstanding Preferred Stock. In the event that the holders of a majority of the Preferred Stock contest the fair market valuation of the Board of Directors, the cost of the appraisal shall be borne as follows:

(i) if the fair market value determined by the independent appraiser is less than or equal to ninety percent (90%) of the fair market value as determined by the Board of Directors, then the cost of appraisal shall be borne entirely by the holders of the Preferred Stock *pro rata* based on the number of shares held immediately prior to the close of business on the date the vote to contest the determination of the Board of Directors was concluded;

(ii) if the fair market value determined by the independent appraiser is equal to or greater than one hundred ten percent (110%) of the fair market value as determined by the Board of Directors, then the cost of appraisal shall be borne entirely by the Corporation; and

(iii) if the fair market value determined by the independent appraiser is between ninety percent (90%) and one hundred ten percent (110%) of the fair market value as determined by the Board of Directors, then the cost of appraisal shall be borne fifty percent (50%) by the Corporation and fifty percent (50%) by the holders of the Preferred Stock, with each such holder paying a *pro rata* portion based on the number of shares held immediately prior to the close of business on the date the vote to contest the determination of the Board of Directors was concluded.

4. Conversion. The Preferred Stock shall have conversion rights as follows (the "Conversion Rights"):

(a) Right to Convert. Each share of 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 the Corporation or any transfer agent for the Preferred Stock. Each share of Series A Preferred, Series B Preferred, Series C Preferred, Series D Preferred and Series E Preferred shall be convertible into that number of fully-paid and nonassessable shares of Common Stock that is equal to the Original Purchase Price of such series of Preferred Stock divided by the Conversion Price (as hereinafter defined) of such series of Preferred Stock. The

"Conversion Price" shall mean, in the case of Series A Preferred, \$0.7095 per share, in the case of Series B Preferred, \$0.91 per share, in the case of Series C Preferred, \$0.89 per share, in the case of Series D Preferred, \$1.73 per share, and in the case of Series E Preferred, \$3.3872 per share, in each case subject to adjustment as provided herein. The number of shares of Common Stock into which each share of Preferred Stock may be converted is hereinafter referred to as the "Conversion Rate."

(b) Automatic Conversion. Each share of Preferred Stock shall automatically be converted into shares of Common Stock at the then effective Conversion Rate for such share immediately before the closing of an underwritten public offering of Common Stock pursuant to the Securities Act of 1933, as amended (the "Securities Act"), on Form S-1 (as defined in the Securities Act), which results in aggregate gross cash proceeds to the Corporation of at least \$35,000,000 (net of underwriting discounts and commissions) at a price per share of at least \$3.3872, subject to equitable and proportional adjustment in the event of stock splits, reverse splits, recapitalization and the like (a "Qualified Public Offering"). In addition, each share of Series A Preferred, Series B Preferred, Series C Preferred, Series D Preferred and Series E Preferred shall automatically be converted into shares of Common Stock at the then effective Conversion Rate for such share immediately upon the affirmative vote of the holders of at least 70% of the then outstanding shares of Preferred Stock, voting together as a single class. Each share of Series A-2 Preferred shall automatically be converted into shares of Common Stock at the then effective Conversion Rate for such share immediately upon the conversion of the Series A-1 Preferred into shares of Common Stock pursuant to this Section 4(b).

(c) Mechanics of Conversion.

(i) No fractional shares of Common Stock shall be issued upon conversion of the Preferred Stock. In lieu of any fractional shares to which the holder would otherwise be entitled, the Corporation shall pay cash equal to such fraction multiplied by the then fair market value of such fractional shares as determined in good faith by the Board of Directors (as evidenced by certified resolutions) of the Corporation. For such purpose, all shares of Preferred Stock held by each holder shall be aggregated, and any resulting fractional share of Common Stock shall be paid in cash. Before any holder of Preferred Stock shall be entitled to convert the same into full shares of Common Stock, and to receive certificates therefor, he shall surrender the certificate or certificates therefor, duly endorsed, at the office of the Corporation or of any transfer agent for the Preferred Stock, and shall give written notice to the Corporation at such office that he elects to convert the same; *provided, however*, that in the event of an automatic conversion pursuant to paragraph 4(b) above, such shares of Preferred Stock shall be converted automatically without any further action by the holders of such shares and whether or not the certificates representing such shares are surrendered to the Corporation or its transfer agent; *provided further, however*, that the Corporation shall not be obligated to issue certificates evidencing the shares of Common Stock issuable upon such automatic conversion unless either the certificates evidencing such shares of Preferred Stock are delivered to the Corporation or its transfer agent as provided above, or the holder notifies the Corporation or its transfer agent that such certificates have been lost, stolen or destroyed and executes an agreement satisfactory to the Corporation to indemnify the Corporation from any loss incurred by it in connection with such certificates.

(ii) The Corporation shall, as soon as practicable after such delivery, or after such agreement and indemnification, issue and deliver at such office to such holder of Preferred Stock, a certificate or certificates for the number of shares of Common Stock to which he shall be entitled as aforesaid and a check payable to the holder in the amount of any cash amounts payable as the result of a conversion into fractional shares of Common Stock, plus any declared and unpaid dividends on the converted Preferred Stock. 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 Preferred Stock to be converted, or such later date or event as may be indicated in such notice, 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 on such date; *provided, however*, that if the conversion is in connection with an underwritten offering of securities registered pursuant to the Securities Act, the conversion may, at the option of any holder tendering Preferred Stock for conversion, be conditioned upon the closing of the sale of securities pursuant to such offering, in which event the person(s) entitled to receive the Common Stock issuable upon such conversion of the Preferred Stock shall not be deemed to have converted such Preferred Stock until immediately prior to the closing of such underwritten offering.

(d) Adjustments to Conversion Price for Diluting Issues.

(i) Special Definition. For purposes of this Section 4(d), "Additional Shares of Common" shall mean all shares of Common Stock issued (or, pursuant to Section 4(d)(iii), deemed to be issued) by the Corporation on or after the Original Issue Date of the Series E Preferred, other than the following specified securities:

- a. shares of Common Stock issued or issuable upon conversion of shares of Preferred Stock;
- b. shares of Common Stock reserved for issuance pursuant to the Corporation's 2001 Equity Incentive Plan, as amended, and additional shares of Common Stock issued or issuable to any employee, officer or director of, or consultant to, the Corporation pursuant to any other plan or arrangement approved by the Board of Directors of the Corporation;
- c. shares of Common Stock or other securities issued or issuable to any bank, equipment or real estate lessor or other similar institution pursuant to any transaction or arrangement, the primary purpose of which is other than to obtain equity financing for the Corporation through the issuance of equity securities, approved by the Board of Directors of the Corporation;
- d. shares of Common Stock or other securities issued or issuable as consideration for the acquisition of any business entity by the Corporation by merger, purchase of all or substantially all of the assets or capital stock of such entity, or other reorganization, each as approved by the Board of Directors of the Corporation, whereby the Corporation owns not less than a majority of the voting power of such entity (or the surviving or successor entity);



e. shares of Common Stock issued pursuant to a Qualified Public Offering; and

f. shares of Common Stock issued or issuable as a dividend or distribution on Preferred Stock or pursuant to any event for which adjustment is made pursuant to Section 4(e) or (f) hereof.

(ii) No Adjustment of Conversion Price. No adjustment in the Conversion Price of any series of Preferred Stock shall be made in respect of the issuance of Additional Shares of Common unless the consideration per share for an Additional Share of Common issued or deemed to be issued by the Corporation is less than the Conversion Price in effect on the date of, and immediately prior to, such issue, for such series of Preferred Stock. No adjustment in the Conversion Price otherwise required by this Section 4 shall affect any shares of Common Stock issued upon conversion of Preferred Stock prior to such adjustment.

(iii) Deemed Issue of Additional Shares of Common. In the event the Corporation at any time or from time to time on or after the Original Issue Date of the Series E Preferred shall issue any Options or Convertible Securities or shall fix a record date for the determination of holders of any class of securities entitled to receive any such Options or Convertible Securities, then the maximum number of shares (as set forth in the instrument relating thereto without regard to any provisions contained therein for a subsequent adjustment of such number) of Common Stock issuable upon the exercise of such Options or, in the case of Convertible Securities and Options therefor, the conversion or exchange of such Convertible Securities or exercise of such Options, shall be deemed to be Additional Shares of Common, issued as of the time of such issue or, in case such a record date shall have been fixed, as of the close of business on such record date, provided that Additional Shares of Common shall not be deemed to have been issued unless the consideration per share (determined pursuant to Section 4(d)(v) hereof) of such Additional Shares of Common would be less than the Conversion Price for any series of Preferred Stock in effect on the date of and immediately prior to such issue or record date, as the case may be, and provided further that in any such case in which Additional Shares of Common are deemed to be issued:

a. no further adjustment in the Conversion Price for any series of Preferred Stock shall be made upon the subsequent issue of Convertible Securities or shares of Common Stock upon the exercise of such Options or conversion or exchange of such Convertible Securities;

b. if such Options or Convertible Securities by their terms provide, with the passage of time or otherwise, for any increase or decrease in the consideration payable to the Corporation, or decrease or increase in the number of shares of Common Stock issuable, upon the exercise, conversion or exchange thereof, the Conversion Price for any series of Preferred Stock computed upon the original issue thereof (or upon the occurrence of a record date with respect thereto), and any subsequent adjustments based thereon, shall, upon any such increase or decrease becoming effective, be recomputed to reflect such increase or decrease insofar as it affects such Options or the rights of conversion or exchange under such Convertible Securities;

c. no readjustment pursuant to clause (b) above shall have the effect of increasing the Conversion Price for any series of Preferred Stock to an amount which exceeds the lower of (i) the Conversion Price for such series of Preferred Stock on the original adjustment date, or (ii) the Conversion Price for such series of Preferred Stock that would have resulted from any issuance of Additional Shares of Common between the original adjustment date and such readjustment date;

d. upon the expiration of any such Options or any rights of conversion or exchange under such Convertible Securities which shall not have been exercised, the Conversion Price for any series of Preferred Stock computed upon the original issue thereof (or upon the occurrence of a record date with respect thereto) and any subsequent adjustments based thereon shall, upon such expiration, be recomputed as if:

(i) in the case of Convertible Securities or Options for Common Stock, the only Additional Shares of Common issued were the shares of Common Stock, if any, actually issued upon the exercise of such Options or the conversion or exchange of such Convertible Securities and the consideration received therefor was the consideration actually received by the Corporation for the issue of such exercised Options plus the consideration actually received by the Corporation upon such exercise or for the issue of all such Convertible Securities which were actually converted or exchanged, plus the additional consideration, if any, actually received by the Corporation upon such conversion or exchange, and

(ii) in the case of Options for Convertible Securities, only the Convertible Securities, if any, actually issued upon the exercise thereof were issued at the time of issue of such Options, and the consideration received by the Corporation for the Additional Shares of Common deemed to have been then issued was the consideration actually received by the Corporation for the issue of such exercised Options, plus the consideration deemed to have been received by the Corporation (determined pursuant to Section 4(d)(v)) upon the issue of the Convertible Securities with respect to which such Options were actually exercised; and

e. if such record date shall have been fixed and such Options or Convertible Securities are not issued on the date fixed therefor, the adjustment previously made in the Conversion Price for any series of Preferred Stock which became effective on such record date shall be canceled as of the close of business on such record date, and thereafter the Conversion Prices for such series of Preferred Stock shall be adjusted pursuant to this Section 4(d)(iii) as of the actual date of their issuance.

(iv) Adjustment of Conversion Price Upon Issuance of Additional Shares of Common. In the event the Corporation, at any time after the Original Issue Date of the Series E Preferred shall issue Additional Shares of Common (including Additional Shares of Common deemed to be issued pursuant to Section 4(d)(iii)) without consideration or for a consideration per share less than the Conversion Price for any series of Preferred Stock in effect on the date of and immediately prior to such issuance, then and in such event, the Conversion Price for each such series of Preferred Stock shall be reduced, concurrently with such issuance, to a price determined by multiplying such Conversion Price by a fraction, the

numerator of which shall be the number of shares of Common Stock outstanding immediately prior to such issuance, and all shares of Common Stock issuable upon conversion of Preferred Stock and exercise of all Options and Convertible Securities outstanding immediately prior to such issuance plus the number of shares of Common Stock which the aggregate consideration received by the Corporation for the total number of Additional Shares of Common so issued would purchase at such Conversion Price, and the denominator of which shall be the number of shares of Common Stock outstanding immediately prior to such issuance and all shares of Common Stock issuable upon conversion of Preferred Stock and exercise of all Options and Convertible Securities outstanding immediately prior to such issuance plus the number of such Additional Shares of Common so issued.

(v) Determination of Consideration. For purposes of this subsection 4(d), the consideration received by the Corporation for the issuance of any Additional Shares of Common shall be computed as follows:

a. Cash and Property. Such consideration shall:

(i) insofar as it consists of cash, be computed at the aggregate amount of cash received by the Corporation excluding amounts paid or payable for accrued interest or accrued dividends and excluding any discounts, commissions or placement fees payable by the Corporation to any underwriter or placement agent in connection with the issuance of any Additional Shares of Common;

(ii) insofar as it consists of property other than cash, be computed at the fair value thereof at the time of such issuance, as determined in good faith by the Board of Directors; and

(iii) in the event Additional Shares of Common are issued together with other shares or securities or other assets of the Corporation for consideration which covers both, be the proportion of such consideration so received, computed as provided in clauses (i) and (ii) above, as reasonably determined in good faith by the Board of Directors.

b. Options and Convertible Securities. The consideration per share received by the Corporation for Additional Shares of Common deemed to have been issued pursuant to Section 4(d)(iii), relating to Options and Convertible Securities, shall be determined by dividing

(i) the total amount, if any, received or receivable by the Corporation as consideration for the issuance of such Options or Convertible Securities (determined in the manner described in subsection (a) above), plus the minimum aggregate amount of additional consideration (as set forth in the instruments relating thereto, without regard to any provision contained therein for a subsequent adjustment of such consideration) payable to the Corporation upon the exercise of such Options or the conversion or exchange of such Convertible Securities, or in the case of Options for Convertible Securities, the exercise of such Options for Convertible Securities and the conversion or exchange of such Convertible Securities by

(ii) the maximum number of shares of Common Stock (as set forth in the instruments relating thereto, without regard to any provision contained therein for a subsequent adjustment of such number) issuable upon the exercise of such Options or the conversion or exchange of such Convertible Securities.

(c) Adjustments for Stock Dividends, Subdivisions or Combinations of Common. In the event that the Corporation at any time after the Original Issue Date of the Series E Preferred shall declare or pay without consideration any dividends on the Common Stock payable in Common Stock or in any right to acquire Common Stock, or in the event the outstanding shares of Common Stock shall be subdivided (by stock split or otherwise than by payment of a dividend in Common Stock and without a corresponding adjustment to the Preferred Stock), into a greater number of shares of Common Stock, the Conversion Price for each series of Preferred Stock in effect immediately prior to such subdivision shall, concurrently with the effectiveness of such subdivision, be proportionately decreased. In the event the outstanding shares of Common Stock shall be combined (by reclassification or otherwise) into a lesser number of shares of Common Stock and without a corresponding adjustment to the Preferred Stock, the Conversion Price for each series of Preferred Stock in effect immediately prior to such combination shall, concurrently with the effectiveness of such combination, be proportionately increased.

(f) Adjustments for Reclassification, Exchange and Substitution. If the Common Stock issuable upon conversion of any series of Preferred Stock shall be changed into the same or a different number of shares of any other class or classes of stock, whether by capital reorganization, reclassification or otherwise (other than a subdivision or combination of shares provided for above or a transaction subject to Section 3(e)), then, concurrently with the effectiveness of such reorganization or reclassification, each series of Preferred Stock shall be convertible into, in lieu of the number of shares of Common Stock which the holders would otherwise have been entitled to receive, a number of shares of such other class or classes of stock which a holder of the number of shares of Common Stock deliverable upon conversion of such series of Preferred Stock immediately before that change would have been entitled to receive in such reorganization or reclassification.

(g) Certificate of Adjustments. Upon the occurrence of each adjustment or readjustment of the Conversion Price of any series of Preferred Stock pursuant to this Section 4, the Corporation at its expense shall promptly compute such adjustment or readjustment in accordance with the terms hereof and furnish to each holder of such series of Preferred Stock a certificate setting forth such adjustment or readjustment and showing in detail the facts upon which such adjustment or readjustment is based. The Corporation shall, upon the written request at any time of any holder of Preferred Stock, furnish or cause to be furnished to such holder a like certificate setting forth (i) such adjustments and readjustments, (ii) the Conversion Prices at the time in effect, and (iii) 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 Preferred Stock.

(h) Notices of Record Date. In the event that the Corporation shall propose at any time (i) to declare any dividend or distribution upon its Common Stock, whether in cash, property, stock or other securities, whether or not a regular cash dividend and whether or

not out of earnings or earned surplus; (ii) to offer for subscription *pro rata* to the holders of any class or series of its stock any additional shares of stock of any class or series or other rights; (iii) to effect any reclassification or recapitalization of its Common Stock outstanding involving a change in the Common Stock; or (iv) to merge with or into any other corporation, or sell, lease or convey all or substantially all its property or business, or to liquidate, dissolve or wind up (including any Liquidation Event); then, in connection with each such event, the Corporation shall send to the holders of the Preferred Stock at least twenty (20) days' prior written notice of the date on which a record shall be taken for such dividend, distribution or subscription rights (and specifying the date on which the holders of Common Stock shall be entitled thereto) or for determining rights to vote in respect of the matters referred to in clauses (iii) and (iv) above. Each such written notice shall be given by first class mail, postage prepaid, or reputable overnight courier, or personally delivered, addressed to the holders of Preferred Stock at the address for each such holder as shown on the books of the Corporation (with the date such notice is deemed given to be three (3) days after such deposit in the U.S. mail, the business day after deposit with a nationally-recognized overnight courier and upon delivery in the case of personal delivery). Notwithstanding the other provisions of this Certificate of Incorporation, all notice periods or notice requirements in this Section 4(h) may be shortened or waived, either before or after the action for which notice is required, upon the written consent of the holders of at least 70% of the then outstanding shares of Preferred Stock (on an as-converted basis).

(i) Reservation of Stock Issuable Upon Conversion. The 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 Preferred Stock, such number of its shares of Common Stock as shall from time to time be sufficient to effect the conversion of all then outstanding shares of the Preferred Stock; 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 Preferred Stock, the 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 purpose.

5. Voting. Except as otherwise expressly provided herein or as required by applicable law, the holders of Preferred Stock and the holders of Common Stock shall vote together and not as separate classes, *provided* that notwithstanding any other provision of this Amended and Restated Certificate of Incorporation, the holders of Series A-2 Preferred shall not be entitled to vote on any matter with regard to which the holders of Preferred Stock bear the right to vote, except as expressly provided herein or as required by applicable law. Accordingly, except and to the extent expressly stated in this Certificate of Incorporation, any reference to Preferred Stock voting rights shall not include a vote of the Series A-2 Preferred.

(a) Preferred Stock. Each holder of shares of Preferred Stock, when entitled to vote, shall be entitled to the number of votes equal to the number of shares of Common Stock into which such shares of Preferred Stock held by such holder of Preferred Stock could then be converted. The holders of shares of Preferred Stock shall be entitled to vote on all matters on which the holders of Common Stock shall be entitled to vote except as otherwise provided expressly herein or as required by law. The holders of Preferred Stock, including the Series A-2 Preferred, shall be entitled to notice of any stockholders' meeting in accordance with the bylaws of the Corporation. Fractional votes shall not, however, be permitted and any

fractional voting rights resulting from the above formula (after aggregating all shares into which shares of Preferred Stock held by each holder could be converted), shall be rounded up to the next highest whole number.

(b) Common Stock. Each holder of shares of Common Stock shall be entitled to one vote for each share thereof held.

(c) Election of Directors. The holders of Series A-1 Preferred and Series B Preferred, voting together as a separate and single class, shall be entitled to nominate and elect two (2) directors at each meeting or pursuant to each consent of the Corporation's stockholders for the election of directors, and to remove from office such directors and to fill any vacancy caused by the resignation, death or removal of such directors, so long as at least 1,400,000 shares of Series A-1 Preferred and Series B Preferred (as adjusted for splits, reverse splits, recapitalizations and the like) remain outstanding (the "Series A and Series B Directors"). The holders of Series C Preferred and Series D Preferred, voting together as a separate and single class, shall be entitled to nominate and elect two (2) directors at each meeting or pursuant to each consent of the Corporation's stockholders for the election of directors, and to remove from office such directors and to fill any vacancy caused by the resignation, death or removal of such directors, so long as at least 3,000,000 shares of Series C Preferred and Series D Preferred (as adjusted for splits, reverse splits, recapitalizations and the like) remain outstanding (the "Series C and Series D Directors"). The holders of Series E Preferred, voting together as a separate and single class, shall be entitled to nominate and elect one (1) director at each meeting or pursuant to each consent of the Corporation's stockholders for the election of directors, and to remove from office such director and to fill any vacancy caused by the resignation, death or removal of such director, so long as at least 1,500,000 shares of Series E Preferred (as adjusted for splits, reverse splits, recapitalizations and the like) remain outstanding (the "Series E Director"). The holders of Common Stock and Preferred Stock, voting together as a single class on an as-if-converted basis, shall be entitled to elect all remaining members of the Board of Directors at each meeting or pursuant to each consent of the Corporation's stockholders for the election of directors, and to remove from office such directors and to fill any vacancy caused by the resignation, death or removal of such directors (the "Joint Directors").

(d) The number of authorized shares of Common Stock may be increased or decreased (but not below the number of shares thereof then outstanding) by the affirmative vote of the holders of shares of stock of the Corporation representing a majority of the votes represented by all outstanding shares of stock of the Corporation entitled to vote, irrespective of the provisions of Section 242(b)(2) of the Delaware General Corporation Law.

## 6. Protective Provisions.

(a) So long as 5,500,000 shares of Preferred Stock remain outstanding, in addition to any other class vote that may be required by applicable law, the Corporation shall not (whether by merger or otherwise), without first obtaining the approval (by vote or written consent, as provided by law) of the holders of at least 70% of the then outstanding shares of Preferred Stock (on an as-converted basis):

(i) amend, waive or repeal any provisions of the Certificate of Incorporation or bylaws;

(ii) consummate any Liquidation Event as described in Section 3(c) of this Article V, consummate any other merger or consolidation of the Corporation with or into any other entity, or otherwise liquidate, dissolve or wind-up the affairs of the Corporation;

(iii) increase or decrease the number of shares of Preferred Stock or Common Stock;

(iv) declare or pay or set aside for payment any Distribution (other than dividends payable in Common Stock of the Corporation);

(v) cancel, exchange, reclassify, redeem, purchase or otherwise acquire any shares of the Corporation's capital stock other than pursuant to (1) agreements with employees or consultants for purchases or repurchases at cost upon termination of service or (2) right of first refusal arrangements in favor of the Corporation, in each case as approved by the Board of Directors;

(vi) permit the issuance of securities by any subsidiary of the Corporation to any person or entity other than the Corporation or any of its affiliates;

(vii) issue debt securities that at any one time outstanding would exceed in the aggregate \$1,000,000;

(viii) increase the size of the Corporation's aggregate stock option pool to greater than 10,844,441 shares of Common Stock;

(ix) enter into any strategic alliance, business combination or other corporate partnering relationship involving the issuance by the Corporation of greater than \$2,000,000 in aggregate value of its equity securities for all such transactions in the aggregate;

(x) change the number of directors to a number other than seven (7); or

(xi) repurchase any series of Preferred Stock and reissue such shares of Preferred Stock as any other series of Preferred Stock.

In addition, the Corporation's annual operating budget for each fiscal year (and any material modification thereto) shall require the approval (by vote or written consent, as provided by law) of the holders of at least 70% of the then outstanding shares of Preferred Stock (on an as-converted basis).

(b) So long as 4,500,000 shares of Series C Preferred, Series D Preferred and Series E Preferred remain outstanding, in addition to any other class vote that may be required by applicable law, the Corporation shall not (whether by merger or otherwise), without first obtaining the approval (by vote or written consent, as provided by law) of the

holders of at least 70% of the then outstanding shares of Series C Preferred, Series D Preferred and Series E Preferred, voting together as a single class:

(i) alter or change the rights, preferences or privileges of the shares of the Series C Preferred, Series D Preferred or Series E Preferred;

(ii) create (by amendment of the Certificate of Incorporation, reclassification, certificate of designation or otherwise) or issue any new class or series of equity securities (including securities exercisable or convertible therefor) having rights, preferences or privileges senior to or on a parity with shares of Series C Preferred, Series D Preferred or Series E Preferred; and

(iii) cancel, exchange, reclassify, redeem, purchase or otherwise acquire any shares of the Corporation's capital stock other than pursuant to agreements with employees or consultants for purchases or repurchases at cost upon termination of service.

(c) So long as 1,500,000 shares of Series E Preferred remain outstanding, in addition to any other series or class vote that may be required by applicable law, the Corporation shall not (whether by merger or otherwise), without first obtaining the approval (by vote or written consent, as provided by law) of the holders of at least 70% of the then outstanding shares of Series E Preferred, voting together as a single class, alter or change the rights, preferences or privileges of the shares of the Series E Preferred in any way that would adversely effect the rights of the holders of Series E Preferred in a manner differently than holders of any other series of Preferred Stock.

#### ARTICLE VI.

A. Amendment of Certificate. Except to the extent otherwise set forth herein, and in furtherance and not in limitation of the powers conferred by statute, the Corporation reserves the right to amend, alter, change, or repeal any provisions contained in this Certificate of Incorporation, in the manner now or hereafter prescribed by statute, and all rights conferred upon the stockholders herein are granted subject to this right.

B. Bylaws. Except to the extent otherwise set forth herein, and in furtherance and not in limitation of the powers conferred by statute, the Board of Directors of this Corporation is expressly authorized to adopt, amend or repeal the bylaws of this Corporation.

C. Election. Election of directors to the Board of Directors need not be by written ballot unless the bylaws of this Corporation shall so expressly provide.

#### ARTICLE VII.

This Corporation is to have perpetual existence.



## ARTICLE VIII.

A. **Limitation of Liability.** To the fullest extent permitted by the General Corporation Law of Delaware as the same exists or as may hereafter be amended, a director of this Corporation shall not be personally liable to this Corporation or its stockholders for monetary damages for breach of fiduciary duty as a director.

B. **Indemnification.** This Corporation may indemnify to the fullest extent permitted by law any person made or threatened to be made a party to an action or proceeding, whether criminal, civil, administrative or investigative, by reason of the fact that such person or his or her testator or intestate is or was a director or officer of this Corporation, or any predecessor of this Corporation, or serves or served at any other enterprise as a director, officer or employee at the request of this Corporation or any predecessor to this Corporation.

C. **Non-Exclusivity of Rights.** The rights to indemnification and to the advancement of expenses conferred in this Article shall not be exclusive of any other right that any person may have or hereafter acquire under any statute, provision of this Corporation's Certificate of Incorporation, bylaw, agreement, vote of stockholders or disinterested directors, or otherwise.

D. **Indemnification of Employees and Agents.** The Corporation may, to the extent authorized from time to time by the Board of Directors, grant rights to indemnification, and to the advancement of expenses to any employee or agent of the Corporation, to the fullest extent of the provisions of this Article with respect to the indemnification and advancement of expenses of directors and officers of this Corporation.

E. **Insurance.** The Corporation may maintain insurance, at its expense, to protect itself and any director, officer, employee or agent of the Corporation or another corporation, partnership, joint venture, trust or other enterprise against any expense, liability or loss, whether or not the Corporation would have the power to indemnify such person against such expense, liability or loss under the General Corporation Law of Delaware.

F. **Amendments.** Neither any amendment nor repeal of this Article VIII, nor the adoption of any provision of the Certificate of Incorporation inconsistent with this Article VIII, shall eliminate or reduce the effect of this Article VIII, in respect of any matter occurring, or any action or proceeding accruing or arising or that, but for this Article VIII, would accrue or arise, prior to such amendment, repeal, or adoption of an inconsistent provision.

#### ARTICLE IX.

Meetings of stockholders may be held within or without the State of Delaware, as the Bylaws may provide. The books of this Corporation may be kept (subject to any provision contained in the statutes) outside of 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.

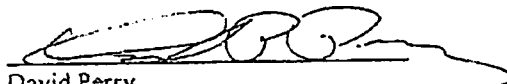
FOURTH: This Amended and Restated Certificate of Incorporation has been duly approved by the Board of Directors.

FIFTH: The stockholders of this Corporation have approved this Amended and Restated Certificate of Incorporation in accordance with Sections 242 and 245 of the General Corporation Law of the State of Delaware. The number of shares voting in favor of the foregoing amendment equaled or exceeded the vote required.

[Signature Page Follows]

We each declare under penalty of perjury under the laws of the State of Delaware that the matters set forth in this Amended and Restated Certificate of Incorporation of Anacor Pharmaceuticals, Inc. are true and correct of our own knowledge.

Executed at Palo Alto, California, on this 23<sup>rd</sup> day of December, 2008.

A handwritten signature in black ink, appearing to read 'D. Perry', written over a horizontal line.

David Perry,  
Chief Executive Officer

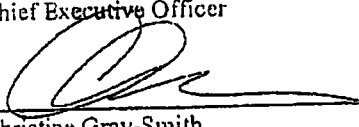
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Christine Gray-Smith,  
Secretary

We each declare under penalty of perjury under the laws of the State of Delaware that the matters set forth in this Amended and Restated Certificate of Incorporation of Anacor Pharmaceuticals, Inc. are true and correct of our own knowledge.

Executed at Palo Alto, California, on this 23<sup>rd</sup> day of December, 2008.

\_\_\_\_\_  
David Perry,  
Chief Executive Officer

  
\_\_\_\_\_  
Christine Gray-Smith,  
Secretary