

**CERTIFICATE OF OFFICER REGARDING
AMENDED AND RESTATED ARTICLES OF INCORPORATION
OF
ADAPTIVE BIOTECHNOLOGIES CORPORATION**

Adaptive Biotechnologies Corporation, a Washington corporation, by Chad M. Robins, its duly elected and qualified Chief Executive Officer, hereby delivers to the Secretary of State of the State of Washington for filing Amended and Restated Articles of Incorporation in duplicate, pursuant to RCW 23B.10.

1. The name of the corporation is Adaptive Biotechnologies Corporation.
2. The Articles of Incorporation, as amended, have been amended and restated in their entirety to read as set forth on Exhibit A attached hereto.
3. Such amendments and restatement were adopted by the Board of Directors on _____, 2019.
4. Such amendments and restatement were duly approved by the shareholders on _____, 2019 in accordance with the provisions of RCW 23B.10.030, 23B.10.040 and 23B.10.070 of the Washington Business Corporation Act.
5. The Amended and Restated Articles of Incorporation will be effective upon filing.

Dated as of _____, 2019.

ADAPTIVE BIOTECHNOLOGIES CORPORATION

By _____
Chad M. Robins
Chief Executive Officer

**AMENDED AND RESTATED ARTICLES OF INCORPORATION
OF
ADAPTIVE BIOTECHNOLOGIES CORPORATION**

ARTICLE 1

NAME

The name of this corporation is Adaptive Biotechnologies Corporation (the “**Company**”).

ARTICLE 2

DURATION

The Company is organized under the Washington Business Corporation Act (the “**Act**”) and shall have perpetual existence.

ARTICLE 3

PURPOSE AND POWERS

The purpose and powers of this corporation are as follows:

- (a) To engage in any lawful business.
- (b) To engage in any and all activities that, in the judgment of the Board of Directors, may at any time be incidental or conducive to the attainment of the foregoing purpose.
- (c) To exercise any and all powers that a corporation formed under the Act, or any amendment thereto or substitute therefor, is entitled at the time to exercise.

ARTICLE 4

CAPITAL STOCK

4.1 **Authorized Capital.** The Company shall have authority to issue 224,762,517 shares of stock in the aggregate. Such shares shall be divided into two classes as follows:

- (a) 131,000,000 shares of common stock, par value \$0.0001 per share (the “**Common Stock**”).

(b) 93,762,517 shares of preferred stock, par value \$0.0001 per share (the “**Preferred Stock**”). The shares of Preferred Stock may be divided into and issued in series.

4.2 **Common Stock.** Except to the extent rights, preferences, privileges or restrictions are granted to Preferred Stock or any series thereof, or as provided below, Common Stock has unlimited voting rights and is entitled to receive the net assets of the Company upon dissolution. Except to the extent rights, preferences, privileges or restrictions are granted to Preferred Stock or any series thereof, or as provided below, the relative rights, preferences, privileges and restrictions granted to or imposed upon the Common Stock and the holders thereof are as follows:

(a) **Dividend Rights.** The holders of record of outstanding shares of Common Stock shall be entitled to receive, when, as and if declared by the Board of Directors, out of any funds of the Company legally available therefor, such cash and other dividends as may be declared from time to time by the Board of Directors subject, however, to any preferential rights granted to any series of Preferred Stock to first receive such assets and funds.

(b) **Liquidation Rights.** In the event of any liquidation, dissolution or winding up of the affairs of the Company, whether voluntary or involuntary, the holders of issued and outstanding shares of Common Stock shall be entitled to receive with equal priority and on a *pari passu* basis among the holders of Common Stock and Series E-1 Preferred (as defined below) based on the number of shares of Common Stock held by them (on an as-converted to Common Stock basis), all the assets and funds of the Company available for distribution to its shareholders, whether from capital or surplus, subject, however, to any preferential rights granted to any series of Preferred Stock to first receive such assets and funds.

(c) **Voting Rights.** Each holder of Common Stock shall be entitled to one vote for each share of Common Stock held.

4.3 **Preferred Stock.** Authority is vested in the Board of Directors, subject to the limitations and procedures prescribed by law, to divide any part or all of such Preferred Stock into any number of series, to fix and determine relative rights and preferences of the shares of any series to be established, and to amend the rights and preferences of the shares of any series that has been established but is wholly unissued.

Within any limits stated in these Articles, the Board of Directors, after the issuance of shares of a series, may amend the resolution establishing the series to decrease (but not below the number of shares of such series then outstanding) the number of shares of that series, and the number of shares constituting the decrease shall thereafter constitute authorized but undesignated shares.

Unless otherwise expressly provided in the designation of the rights and preferences of a series of Preferred Stock, a distribution in redemption or cancellation of shares of Common Stock or rights to acquire Common Stock held by a former employee

or consultant of the Company or any of its affiliates may, notwithstanding RCW 23B.06.400(2)(b), be made without regard to the preferential rights of holders of shares of that series of Preferred Stock.

4.4 **Designation of Rights and Preferences of Series Preferred.** Four Million Five Hundred Fifty Thousand (4,550,000) shares of Preferred Stock are designated as Series A Preferred Stock (the “**Series A Preferred**”). Except as otherwise provided in these Articles, all shares of Series A Preferred shall be identical and shall entitle the holders thereof to the same rights and privileges. Five Million Six Hundred Forty-Five Thousand Seven Hundred Six (5,645,706) shares of Preferred Stock are designated as Series B Preferred Stock (the “**Series B Preferred**”). Except as otherwise provided in these Articles, all shares of Series B Preferred shall be identical and shall entitle the holders thereof to the same rights and privileges. Four Million Eight Hundred Four Thousand Two Hundred Twenty-Seven (4,804,227) shares of Preferred Stock are designated as Series C Preferred Stock (the “**Series C Preferred**”). Except as otherwise provided in these Articles, all shares of Series C Preferred shall be identical and shall entitle the holders thereof to the same rights and privileges. Nineteen Million Two Hundred Sixty-Nine Thousand One Hundred Seventeen (19,269,117) shares of Preferred Stock are designated as Series D Preferred Stock (the “**Series D Preferred**”). Except as otherwise provided in these Articles, all shares of Series D Preferred shall be identical and shall entitle the holders thereof to the same rights and privileges. Fifteen Million Five Hundred Twenty-Four Thousand Three Hundred Fifty (15,524,350) shares of Preferred Stock are designated as Series E Preferred Stock (the “**Series E Preferred**”). Except as otherwise provided in these Articles, all shares of Series E Preferred shall be identical and shall entitle the holders thereof to the same rights and privileges. Seventeen Million Four Hundred Seven Thousand Four Hundred Forty-One (17,407,441) shares of Preferred Stock are designated as Series E-1 Preferred Stock (the “**Series E-1 Preferred**” and, collectively with the Series A Preferred, Series B Preferred and Series C Preferred, the “**Junior Preferred**”). Except as otherwise provided in these Articles, all shares of Series E-1 Preferred shall be identical and shall entitle the holders thereof to the same rights and privileges. Twenty-One Million Seven Hundred Sixty-One Thousand Six Hundred Seventy-Six (21,761,676) shares of Preferred Stock are designated as Series F Preferred Stock (the “**Series F Preferred**”). Except as otherwise provided in these Articles, all shares of Series F Preferred shall be identical and shall entitle the holders thereof to the same rights and privileges. Four Million Eight Hundred Thousand (4,800,000) shares of Preferred Stock are designated as Series F-1 Preferred Stock (the “**Series F-1 Preferred**”, and, collectively with the Series D Preferred, the Series E Preferred and the Series F Preferred, the “**Senior Preferred**”). Except as otherwise provided in these Articles, all shares of Series F-1 Preferred shall be identical and shall entitle the holders thereof to the same rights and privileges. The Junior Preferred and the Senior Preferred are collectively referred to herein as the “**Series Preferred.**” The relative rights, preferences, privileges and restrictions granted to or imposed upon the Series Preferred and the holders thereof are as follows:

(a) **Dividend Rights.**

- (i) The Company shall not declare, pay or set aside any

dividends on shares of any other class or series of capital stock of the Company ranking junior to the Series Preferred (“**Junior Stock**”) (other than dividends on shares of Common Stock payable in shares of Common Stock) unless the holders of the Series Preferred then outstanding shall first receive, or simultaneously receive, a dividend on each outstanding share of Series Preferred in an amount at least equal to the greater of (A) in the case of the Series F-1 Preferred, \$0.8535 per share (as adjusted for any consolidations, combinations, stock distributions, stock dividends, stock splits, reverse splits or similar events (each, a “**Recapitalization Event**”)) per year from and after the date of the issuance of each such share of Series F-1 Preferred (to the extent not previously paid), (B) in the case of the Series F Preferred, \$0.7172 per share (as adjusted for any Recapitalization Event) per year from and after the date of the issuance of each such share of Series F Preferred (to the extent not previously paid), (C) in the case of the Series E Preferred, \$0.4831 per share (as adjusted for any Recapitalization Event) per year from and after the date of the issuance of each such share of Series E Preferred (to the extent not previously paid), (D) in the case of the Series D Preferred, \$0.4442 per share (as adjusted for any Recapitalization Event) per year from and after the date of the issuance of each such share of Series D Preferred (to the extent not previously paid), and (E) (1) in the case of a dividend on Common Stock or any other Junior Stock that is convertible into Common Stock, that dividend per share of Series Preferred as would equal the product of (x) the dividend payable on each share of such Junior Stock determined, if applicable, as if all shares of such Junior Stock had been converted into Common Stock and (y) the number of shares of Common Stock issuable upon conversion of such share of Series Preferred, in each case calculated on the record date for determination of holders entitled to receive such dividend or (2) in the case of a dividend on any Junior Stock that is not Common Stock or convertible into Common Stock, at a rate per share of Series Preferred determined by (x) dividing the amount of the dividend payable on each share of such Junior Stock by the original issuance price of such Junior Stock (as adjusted for any Recapitalization Event with respect to such shares) and (y) multiplying such fraction by an amount equal to the applicable Original Issue Price (as defined below); provided that, if the Company declares, pays or sets aside, on the same date, a dividend on shares of more than one class or series of Junior Stock, the dividend payable to the holders of Series Preferred pursuant to this subsection (i) shall be calculated based upon the dividend on the class or series of Junior Stock that would result in the highest dividend per share of Series Preferred. The “**Series A Original Issue Price**” shall mean \$1.00 per share, as adjusted for any Recapitalization Event with respect to the Series A Preferred; the “**Series B Original Issue Price**” shall mean \$1.7127 per share, as adjusted for any Recapitalization Event with respect to the Series B Preferred; the “**Series C Original Issue Price**” shall mean \$2.6374 per share, as adjusted for any Recapitalization Event with respect to the Series C Preferred; the “**Series D Original Issue Price**” shall mean \$5.5529 per share, as adjusted for any Recapitalization Event with respect to the Series D Preferred; the “**Series E Original Issue Price**” shall mean \$6.0389 per share, as adjusted for any Recapitalization Event with respect to the Series E Preferred; the “**Series E-1 Original Issue Price**” shall mean \$6.0389 per share, as adjusted for any Recapitalization Event with respect to the Series E-1 Preferred; the “**Series F Original Issue Price**” shall mean \$8.9653 per share, as adjusted for any Recapitalization Event with respect to the Series F Preferred; and the “**Series F-1**

Original Issue Price” shall mean \$10.6686 per share, as adjusted for any Recapitalization Event with respect to the Series F-1 Preferred (each, the applicable **“Original Issue Price”** for such series). Notwithstanding the above, each holder of an outstanding share of Series Preferred shall be deemed to have consented to distributions made by the Company in connection with its repurchase of shares of Common Stock issued to or held by officers, directors or employees of, or consultants to, the Company or its subsidiaries upon termination of their employment or services pursuant to agreements (whether now existing or hereafter entered into) providing for the right of repurchase between the Company and such persons upon termination of employment or services.

(ii) Dividends, if any, shall be paid by mailing a check, postage prepaid, or via wire transfer, to the address of each holder (or, in the case of joint holders, to the address of any such holder) of Series Preferred and/or Common Stock, as applicable, as shown on the books of the Company, or to such other address as such holder specifies for such purpose by written notice to the Company. The mailing of such check or wire transfer shall satisfy all obligations of the Company with respect to such dividends, unless such check is not paid upon timely presentation.

(b) **Liquidation Rights.**

(i) In the event of any liquidation, dissolution, or winding up of the Company, whether voluntary or involuntary:

(A) First, the holders of each share of Series F-1 Preferred and Series F Preferred shall be entitled to receive, on a *pari passu* basis, prior and in preference to any distribution of the assets or surplus funds of the Company to the holders of shares of Series E Preferred, Series D Preferred or any series of Junior Preferred or of Junior Stock by reason of their ownership thereof, and subject to the rights of any series of Preferred Stock that ranks on liquidation prior to the Series F-1 Preferred and Series F Preferred, an amount equal to the greater of: (1) an amount per share, as adjusted for any Recapitalization Events, equal to the sum of the applicable Original Issue Price for such share plus any declared but unpaid dividends thereon; or (2) such amount per share as would have been payable had each such share of Series F-1 Preferred or Series F Preferred been converted into Common Stock pursuant to Section 4.4(d) below immediately prior to such liquidation, dissolution, or winding up; provided, that if the assets and surplus funds available for distribution among the holders of Series F-1 Preferred and Series F Preferred shall be insufficient to permit the payment to such holders of the full aforesaid preferential amounts, then the entire assets and surplus funds then remaining legally available for distribution shall be distributed among the holders of the Series F-1 Preferred and Series F Preferred in proportion to the full preferential amount each such holder is otherwise entitled to receive.

(B) Upon the completion of the distributions required by Section 4.4(b)(i)(A) above, the holders of each share of Series E Preferred and Series D Preferred shall be entitled to receive, on a *pari passu* basis, prior and in preference to any distribution of the assets or surplus funds of the Company to the holders of shares of any series of Junior Preferred or of Junior Stock by reason of their ownership thereof, and

subject to the rights of any series of Preferred Stock (other than the Series F-1 Preferred and Series F Preferred) that ranks on liquidation prior to the Series E Preferred and Series D Preferred, an amount equal to the greater of: (1) an amount per share, as adjusted for any Recapitalization Events, equal to the sum of the applicable Original Issue Price for such share plus any declared but unpaid dividends thereon; or (2) such amount per share as would have been payable had each such share been converted into Common Stock pursuant to Section 4.4(d) below immediately prior to such liquidation, dissolution, or winding up; provided, that if the assets and surplus funds available for distribution among the holders of Series E Preferred and Series D Preferred shall be insufficient to permit the payment to such holders of the full aforesaid preferential amounts, then the entire assets and surplus funds then remaining legally available for distribution shall be distributed, on a pari passu basis, among the holders of the Series E Preferred and Series D Preferred in proportion to the full preferential amount each such holder is otherwise entitled to receive.

(C) Upon the completion of the distributions required by Sections 4.4(b)(i)(A) and (B) above, the holders of each share of Series A Preferred, Series B Preferred and Series C Preferred shall be entitled to receive, on a pari passu basis, prior and in preference to any distribution of the assets or surplus funds of the Company to the holders of shares of Series E-1 Preferred Stock or of Junior Stock by reason of their ownership thereof, and subject to the rights of any series of Preferred Stock (other than the Senior Preferred) that ranks on liquidation prior to the Series A Preferred, Series B Preferred and Series C Preferred, an amount equal to the greater of: (1) an amount per share, as adjusted for any Recapitalization Events, equal to the applicable Original Issue Price for such share; or (2) such amount per share as would have been payable had each such share been converted into Common Stock pursuant to Section 4.4(d) below immediately prior to such liquidation, dissolution or winding up; provided, that if the assets and surplus funds available for distribution among the holders of Series A Preferred, Series B Preferred and Series C Preferred shall be insufficient to permit the payment to such holders of the full aforesaid preferential amounts, then the entire assets and surplus funds then remaining legally available for distribution shall be distributed, on a pari passu basis, among the holders of the Series A Preferred, Series B Preferred and Series C Preferred in proportion to the full preferential amount each such holder is otherwise entitled to receive.

(D) Upon the completion of the distributions required by Sections 4.4(b)(i)(A), (B) and (C) above, the remaining assets of the Company available for distribution to shareholders shall be distributed with equal priority and pro rata among the holders of Junior Stock and Series E-1 Preferred Stock on an as-converted basis (not including the Senior Preferred, the Series A Preferred, the Series B Preferred or the Series C Preferred) in accordance with Section 4.2(b) hereof.

(ii) A merger, consolidation, share exchange or reorganization of the Company with or into any other corporation, corporations or other entity (excluding any merger effected exclusively for the purpose of changing the domicile of the corporation), or any other transaction or series of related transactions, in which the shareholders of the Company immediately prior to such reorganization, merger or

consolidation own less than fifty percent (50%) of the voting power of the surviving entity, or a sale, license, conveyance or other disposition of all or substantially all of the assets of the Company (collectively, a “**Corporate Event**”) shall be regarded as a liquidation within the meaning of this Section.

(iii) If any of the assets of the Company are to be distributed other than in cash under this Section 4.4(b) or for any purpose, then the value of the assets to be distributed to the holders of Preferred Stock shall be determined in good faith by the Board of Directors. Notwithstanding the above, any securities to be distributed to the shareholders shall be valued as follows:

(A) if traded on a securities exchange, the value shall be deemed to be the average of the closing prices of the securities on such exchange over the 10-trading-day period ending three business days prior to the distribution;

(B) if actively traded over-the-counter, the value shall be deemed to be the average of the closing bid prices over the 10-trading-day period ending three business days prior to the distribution; and

(C) if there is no active public market, the value shall be the fair market value thereof, as determined in good faith by the Board of Directors; provided, however, that the holders of a majority of the then outstanding shares of Senior Preferred, on an as-converted basis (a “**Senior Preferred Majority**”) shall be entitled to dispute the determination of fair market value of any assets or securities (other than securities described in clauses (A) or (B) above) to be distributed to such holder (by notice from the holder to the Board of Directors). Upon delivery of such notice, the Senior Preferred Majority and the Board of Directors shall mutually agree on a nationally recognized investment bank, who shall be engaged to provide a final and conclusive determination of said value as promptly as possible following such engagement; provided, that if the Senior Preferred Majority and the Board of Directors are unable to reach agreement on a nationally recognized investment bank, then each shall pick a nationally recognized investment bank and the two selected investment banks shall select a third nationally recognized investment bank who shall be engaged to provide a final and conclusive determination of said value as promptly as possible following such engagement (the investment bank selected, the “**Arbitrator**”). The Arbitrator’s determination will be based primarily on written submissions by the Senior Preferred Majority, on the one hand, and the Board of Directors, on the other hand. The written submissions of the Senior Preferred Majority and the Board of Directors shall be delivered to the Arbitrator within 30 days after the Arbitrator’s engagement. The Arbitrator’s determination shall be set forth in a written report delivered within 60 days following the Arbitrator’s engagement, shall include an explanation of the reasons for its determination and shall be final, binding and conclusive on the parties, absent manifest error. The fees and expenses of the Arbitrator shall be borne by the Company.

(c) **Voting Rights.** Each holder of Series Preferred shall be entitled to vote on all matters submitted to (or required to be submitted to) a vote by shareholders and shall be entitled to that number of votes equal to the total number of shares of

Common Stock into which such holder's shares of Series Preferred are convertible, at the record date for the determination of shareholders entitled to vote or consent on such matter, or, if no such record date is established, at the date on which notice of the meeting of shareholders at which the vote is to be taken is mailed, or the date any written consent of shareholders is first solicited if the action is to be taken by written consent; provided, however, that (w) holders of Series F Preferred, (x) holders of Series E Preferred, (y) holders of Series D Preferred that also hold the Series E Preferred and (z) holders of Series F-1 Preferred that also hold Series E Preferred or Series F Preferred shall not have any right to vote their shares of Series F Preferred, Series E Preferred or, if applicable, Series D Preferred or Series F-1 Preferred (whether at a meeting of corporation shareholders or via written consent) for the election or removal of directors unless and until the earlier to occur of, with respect to a particular holder of Series F Preferred, Series E Preferred or, if applicable, Series D Preferred or Series F-1 Preferred, (i) the filing of all notices and reports as may be required by such holder under the Hart-Scott-Rodino Antitrust Improvements Act of 1976, as amended (15 U.S.C. 18a, the "**HSR Act**") and the expiration or termination of the applicable waiting period under the HSR Act or (ii) the delivery to the corporation of a certification by such holder stating that no filing under the HSR Act is required in order for such holder to have the right to vote its shares of Series F Preferred, Series E Preferred or, if applicable, Series D Preferred or Series F-1 Preferred in the election or removal of directors; provided, further, that following the earlier to occur of (i) or (ii) with respect to a particular holder, such holder shall thereafter automatically and without further action be entitled to vote its shares of Series F Preferred, Series E Preferred or, if applicable, Series D Preferred or Series F-1 Preferred (whether at a meeting of corporation shareholders or via written consent) for the election or removal of directors. Fractional votes will not be permitted, but will be rounded up or down to the nearest whole number with one-half being rounded up based on the aggregate number of shares of Series Preferred held. Except as otherwise expressly provided herein or by the Act, the holders of shares of Series Preferred and Common Stock shall vote together as a single class on all matters.

(d) **Conversion.**

(i) **Right to Convert.** Each share of Series Preferred shall be convertible, at the option of the holder, at any time and from time to time after the date of issuance of such share, at the office of the Company or any transfer agent for the Series Preferred, into one fully paid and nonassessable share of Common Stock (the "**Conversion Ratio**"); provided, that the Conversion Ratio of the shares of Senior Preferred will be subject to adjustment as described in Section 4.4(d)(iv) below, and the Conversion Ratio of all shares of Series Preferred will be subject to adjustment as described in Section 4.4(e) below.

(ii) **Automatic Conversion.** Each share of Series Preferred shall automatically be converted into one fully paid and nonassessable share of Common Stock upon the earlier of (A) the consummation of the Company's sale of its Common Stock in a bona fide, firm commitment underwriting pursuant to a registration statement on Form S-1 under the Securities Act of 1933, as amended, with gross proceeds to the Company of at least \$25 million (a "**QPO**"), or (B) (w) in the case of the Series D

Preferred and Series E Preferred, the affirmative vote or written consent of the holders of shares amounting to a majority of the shares of the Series D Preferred and Series E Preferred issued and outstanding, voting together as a single voting group on an as-converted basis, (x) in the case of the Series F-1 Preferred and the Series F Preferred, the affirmative vote or written consent of the holders of shares amounting to a majority of the shares of Series F-1 Preferred and Series F Preferred issued and outstanding, voting together as a single voting group on an as-converted basis, provided, however, that during the Series F-1 Protected Period (as defined below), the shares of Series F-1 Preferred shall not be automatically converted pursuant to this Section 4.4(d)(ii)(B)(x) without the affirmative vote or written consent of the holders of shares amounting to a majority of the shares of Series F-1 Preferred issued and outstanding, (y) in the case of the Series A Preferred, Series B Preferred and Series C Preferred, the affirmative vote or written consent of the holders of shares amounting to a majority of the shares of the Series A Preferred, Series B Preferred and Series C Preferred issued and outstanding, voting together as a single voting group on an as-converted basis or (z) in the case of the Series E-1 Preferred, the affirmative vote or written consent of the holders of shares of Series E-1 Preferred amounting to a majority of the shares of Series E-1 Preferred issued and outstanding on an as-converted basis; provided, that the Conversion Ratio of the shares of Senior Preferred will be subject to adjustment as described in Section 4.4(d)(iv) below, and the Conversion Ratio of all shares of Series Preferred will be subject to adjustment as described in Section 4.4(e) below. Any conversion pursuant to this Section 4.4(d)(ii) shall be effected without any action by the holder of such Series Preferred and whether or not certificates representing such shares are surrendered to the Company or any transfer agent for the Series Preferred.

For purposes of Section 4.4(d)(ii)(B)(x), the “**Series F-1 Protected Period**” shall mean the period beginning upon the execution of a term sheet, letter of intent or other agreement contemplating the consummation of a Specified Corporate Event (as defined below), or the amendment of a term sheet, letter of intent or other agreement regarding a proposed Corporate Event such that the Corporate Event would be a Specified Corporate Event, and ending upon the consummation of such Specified Corporate Event, the cessation of negotiations between the Company and the counterparty thereto with respect to definitive documentation regarding such Specified Corporate Event prior to the execution of such definitive documentation, or, if such definitive documentation is executed, the termination of such definitive documentation prior to the consummation of the Specified Corporate Event contemplated thereby.

For purposes of Section 4.4(d)(ii)(B)(x), a “**Specified Corporate Event**” shall mean a Corporate Event in which the initial consideration to be paid to the Company’s shareholders (excluding any consideration payable only upon the satisfaction of post-closing contingencies or placed into escrow or retained as holdback to be available for satisfaction of indemnification or similar obligations in connection with such Corporate Event) would, after giving effect to the automatic conversion of the Series F Preferred and the Series F-1 Preferred pursuant to Section 4.4(d)(ii)(B), result, pursuant to Section 4.4(b), in the holders of shares of Series F Preferred and Series F-1 Preferred receiving, with respect to each share of Series F Preferred and Series F-1 Preferred thus converted, an amount greater than the Series F Original Issue Price but less than the

Series F-1 Original Issue Price.

(iii) **Mechanics of Conversion.** Before any holder of Series Preferred 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 principal corporate office of the Company or of any transfer agent for the Series Preferred and shall give written notice by mail, postage prepaid, to the Company at its principal corporate office, of the election to convert the same and shall state 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 4.4(d)(ii), the outstanding shares of Series Preferred 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 Company or its transfer agent; and provided, further, that the Company 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 Preferred are either delivered to the Company or its transfer agent as provided above, or the holder notifies the Company or its transfer agent that such certificates have been lost, stolen, or destroyed and executes an agreement satisfactory to the Company to indemnify the Company from any loss incurred by it in connection with such certificates. The Company shall, as soon as practicable after such delivery, or, in the case of a lost certificate, after delivery of such agreement and indemnification, issue and deliver at such office to such holder of Series Preferred 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. 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 Preferred to be converted, 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. If the conversion is in connection with an underwritten offer of securities registered pursuant to the Securities Act of 1933, as amended, the conversion may, at the option of any holder tendering Series Preferred for conversion, be conditioned upon the closing with the underwriter 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 Series Preferred shall not be deemed to have converted such stock until immediately prior to the closing of such sale of securities. In the event some but not all of the shares of Series Preferred represented by a certificate or certificates surrendered by a holder are converted, the Company shall execute and deliver to or on the order of the holder, at the expense of the Company, a new certificate representing the shares of Series Preferred that were not converted.

(iv) **Adjustments to Conversion Ratio of Senior Preferred.** The number of shares of Common Stock into which each share of Senior Preferred is convertible pursuant to Sections 4.4(d)(i) and (ii) shall be determined by dividing the applicable Original Issue Price for such share by the applicable Conversion Price (as defined below) for such share in effect at the time of conversion. The “**Series D Conversion Price**” shall initially be equal to \$5.5529. The “**Series E Conversion Price**” shall initially be equal to \$6.0389. The “**Series F Conversion Price**” shall initially be

equal to \$8.9653. The “**Series F-1 Conversion Price**” shall initially be equal to \$10.6686. Such initial Conversion Prices, and the Conversion Ratios at which shares of such series may be converted into shares of Common Stock, shall be subject to adjustment as provided below. No adjustment in the Conversion Prices of the Series D Preferred or the Series E Preferred shall be made as the result of the issuance or deemed issuance (pursuant to Section 4.4(d)(iv)(B) below) of Additional Shares of Common Stock (as defined below) if the Company receives written notice from the holders of shares amounting to a majority of the shares of the Series D Preferred and Series E Preferred issued and outstanding, voting together as a single voting group on an as-converted basis, agreeing that no such adjustment shall be made as the result of the issuance or deemed issuance of such Additional Shares of Common Stock. No adjustment in the Conversion Prices of the Series F-1 Preferred shall be made as the result of the issuance or deemed issuance (pursuant to Section 4.4(d)(iv)(B) below) of Additional Shares of Common Stock (as defined below) if the Company receives written notice from the holders of shares of Series F-1 Preferred amounting to a majority of the shares of Series F-1 Preferred issued and outstanding on an as-converted basis, agreeing that no such adjustment shall be made as the result of the issuance or deemed issuance of such Additional Shares of Common Stock. No adjustment in the Conversion Prices of the Series F Preferred shall be made as the result of the issuance or deemed issuance (pursuant to Section 4.4(d)(iv)(B) below) of Additional Shares of Common Stock (as defined below) if the Company receives written notice from the holders of shares of Series F Preferred amounting to a majority of the shares of Series F Preferred issued and outstanding on an as-converted basis, agreeing that no such adjustment shall be made as the result of the issuance or deemed issuance of such Additional Shares of Common Stock.

(A) **Special Definitions.** For purposes of this Section 4.4(d)(iv), the following definitions shall apply:

(1) “**Option**” shall mean rights, options or warrants to subscribe for, purchase or otherwise acquire Common Stock or Convertible Securities.

(2) “**Series F-1 Original Issue Date**” shall mean the date on which the first share of Series F-1 Preferred was issued.

(3) “**Convertible Securities**” shall mean any evidences of indebtedness, shares or other securities directly or indirectly convertible into or exchangeable for Common Stock, but excluding Options.

(4) “**Additional Shares of Common Stock**” shall mean all shares of Common Stock issued (or, pursuant to Subsection 4.4(d)(iv)(B) below, deemed to be issued) by the Company after the Series F-1 Original Issue Date, other than the following shares of Common Stock and shares of Common Stock deemed issued pursuant to the following Options and Convertible Securities (collectively, “**Exempted Securities**”):

(a) Shares of Common Stock issued or issuable upon conversion of shares of Series Preferred outstanding on the Series F-1 Original Issue Date (including shares issued or issuable pursuant to the anti-dilution provisions thereof);

(b) shares of Common Stock, Options or Convertible Securities issued or issuable as a dividend or distribution on the Senior Preferred, as applicable;

(c) shares of Common Stock, Options or Convertible Securities issued or issuable by reason of a dividend, stock split, split-up or other distribution on shares of Common Stock that is covered by Sections 4.4(e), (f) or (g);

(d) shares of Common Stock or Options issued or issuable to employees or directors of, or contractors, consultants or advisors to, the Company or any of its subsidiaries pursuant to incentive agreements, stock purchase or stock option plans, stock bonuses or awards, or any other incentive plan, or similar arrangement approved by the Board of Directors;

(e) shares of Common Stock or Convertible Securities actually issued upon the exercise or conversion of Options or Convertible Securities outstanding as of the Series F-1 Original Issue Date, in each case provided such issuance is made pursuant to the terms of such Option or Convertible Security (including any anti-dilution provisions thereof);

(f) shares of Common Stock, Options or Convertible Securities issued or issuable to banks, equipment lessors or other financial institutions, or to real property lessors, pursuant to a debt financing, equipment leasing or real property leasing transaction approved by the Board of Directors;

(g) shares of Common Stock, Options or Convertible Securities issued or issuable to suppliers, third party service providers, customers, technology licensors or collaborators, or other strategic partners, in each instance, which are unaffiliated with the Company or any shareholder, officer or director of the Company and that are investing in connection with the provision of goods or services or other commercial or strategic relationships approved by the Board of Directors;

(h) shares of Common Stock, Options or Convertible Securities issued or issuable pursuant to the acquisition by the Company of another business or entity that is unaffiliated with the Company or any shareholder, officer or director of the Company, whether by merger, purchase of all or substantially all of the assets of such business or entity, or any other reorganization or joint venture arrangement in which the Company acquires, in a single transaction or series of related transactions, all or substantially all of the assets of such business or entity or fifty percent

(50%) or more of the equity ownership or interest therein, provided that such issuances are approved by the Board of Directors; or

(i) shares of Common Stock issued or issuable in connection with a QPO.

(B) Deemed Issuance of Additional Shares of Common Stock.

(1) If the Company at any time or from time to time after the Series F-1 Original Issue Date shall issue any Options or Convertible Securities (excluding Options or Convertible Securities which are themselves Exempted 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 of Common Stock (as set forth in the instrument relating thereto, assuming the satisfaction of any conditions to exercisability, convertibility or exchangeability but without regard to any provision contained therein for a subsequent adjustment of such number) 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, shall be deemed to be Additional Shares of Common Stock 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.

(2) If the terms of any Option or Convertible Security, the issuance of which resulted in an adjustment to the Conversion Price of any series of Senior Preferred pursuant to the terms of Section 4.4(d)(iv)(C), are revised as a result of an amendment to such terms or any other adjustment pursuant to the provisions of such Option or Convertible Security (but excluding automatic adjustments to such terms pursuant to anti-dilution or similar provisions of such Option or Convertible Security) to provide for either (x) any increase or decrease in the number of shares of Common Stock issuable upon the exercise, conversion and/or exchange of any such Option or Convertible Security or (y) any increase or decrease in the consideration payable to the Company upon such exercise, conversion and/or exchange, then, effective upon such increase or decrease becoming effective, the Conversion Price of the applicable series computed upon the original issue of such Option or Convertible Security (or upon the occurrence of a record date with respect thereto) shall be readjusted to the Conversion Price of such series as would have been obtained had such revised terms been in effect upon the original date of issuance of such Option or Convertible Security. Notwithstanding the foregoing, no readjustment pursuant to this Section 4.4(d)(iv)(B)(2) shall have the effect of increasing the Conversion Price of any such series to an amount which exceeds the lower of (i) the applicable Conversion Price of such series in effect immediately prior to the original adjustment made as a result of the issuance of such Option or Convertible Security, or (ii) the applicable Conversion Price of such series that would have resulted from any issuances of Additional Shares of Common Stock (other than deemed issuances of Additional Shares of Common Stock as a result of the issuance of such Option or Convertible Security) between the original adjustment date and such readjustment date.

(3) If the terms of any Option or Convertible Security (excluding Options or Convertible Securities which are themselves Exempted Securities), the issuance of which did not result in an adjustment to the Conversion Price of any series of Senior Preferred pursuant to the terms of Section 4.4(d)(iv)(C) (either because the consideration per share, determined pursuant to Section 4.4(d)(iv)(D), of the Additional Shares of Common Stock subject thereto was equal to or greater than the Conversion Price of the applicable series of Senior Preferred then in effect, or because such Option or Convertible Security was issued before the Series F-1 Original Issue Date), are revised after the Series F-1 Original Issue Date as a result of an amendment to such terms or any other adjustment pursuant to the provisions of such Option or Convertible Security (but excluding automatic adjustments to such terms pursuant to anti-dilution or similar provisions of such Option or Convertible Security) to provide for either (x) any increase in the number of shares of Common Stock issuable upon the exercise, conversion or exchange of any such Option or Convertible Security or (y) any decrease in the consideration payable to the Company upon such exercise, conversion or exchange, then such Option or Convertible Security, as so amended or adjusted, and the Additional Shares of Common Stock subject thereto (determined in the manner provided in Section 4.4(d)(iv)(D)(2)) shall be deemed to have been issued effective upon such increase or decrease becoming effective.

(4) Upon the expiration or termination of any unexercised Option or unconverted or unexchanged Convertible Security (or portion thereof) which resulted (either upon its original issuance or upon a revision of its terms) in an adjustment to the Conversion Price of any series of Senior Preferred pursuant to the terms of Section 4.4(d)(iv)(C), the Conversion Price of the applicable series shall be readjusted to the Conversion Price of such series as would have obtained had such Option or Convertible Security (or portion thereof) never been issued.

(5) If the number of shares of Common Stock issuable upon the exercise, conversion and/or exchange of any Option or Convertible Security, or the consideration payable to the Company upon such exercise, conversion and/or exchange, is calculable at the time such Option or Convertible Security is issued or amended but is subject to adjustment based upon subsequent events, any adjustment to the Conversion Price of any series of the Senior Preferred provided for in this Section 4.4(d)(iv)(B) shall be effected at the time of such issuance or amendment based on such number of shares or amount of consideration without regard to any provisions for subsequent adjustments (and any subsequent adjustments shall be treated as provided in Sections 4.4(d)(iv)(B)(2) and (3)). If the number of shares of Common Stock issuable upon the exercise, conversion and/or exchange of any Option or Convertible Security, or the consideration payable to the Company upon such exercise, conversion and/or exchange, cannot be calculated at all at the time such Option or Convertible Security is issued or amended, any adjustment to the Conversion Price of any series of the Senior Preferred that would result under the terms of this Section 4.4(d)(iv)(B) at the time of such issuance or amendment shall instead be effected at the time such number of shares and/or amount of consideration is first calculable (even if subject to subsequent adjustments), assuming for purposes of calculating such adjustment to the Conversion

Price of such series of Senior Preferred, that such issuance or amendment took place at the time such calculation can first be made.

(C) **Adjustment of Conversion Price of the Senior Preferred Upon Issuance of Additional Shares of Common Stock.** In the event the Company shall at any time after the Series F-1 Original Issue Date issue Additional Shares of Common Stock (including Additional Shares of Common Stock deemed to be issued pursuant to Section 4.4(d)(iv)(B), without consideration or for a consideration per share less than the Conversion Price of any series of Senior Preferred in effect immediately prior to such issue, then the Conversion Price of such series of Senior Preferred shall be reduced, concurrently with such issue, to a price (calculated to the nearest one-hundredth of a cent) determined in accordance with the following formula:

$$CP_2 = CP_1 * (A + B) \div (A + C).$$

For purposes of this Section 4.4(d)(iv)(C) and the foregoing formula, the following definitions shall apply:

(1) “**CP₂**” shall mean the Conversion Price of such series of Senior Preferred in effect immediately after such issue of Additional Shares of Common Stock

(2) “**CP₁**” shall mean the Conversion Price of such series of Senior Preferred in effect immediately prior to such issue of Additional Shares of Common Stock;

(3) “**A**” shall mean the number of shares of Common Stock outstanding immediately prior to such issue of Additional Shares of Common Stock (treating for this purpose as outstanding all shares of Common Stock issuable upon exercise of Options outstanding immediately prior to such issue or upon conversion or exchange of Convertible Securities (including but not limited to all Series Preferred) outstanding (assuming exercise of any outstanding Options therefor) immediately prior to such issue);

(4) “**B**” shall mean the number of shares of Common Stock that would have been issued if such Additional Shares of Common Stock had been issued at a price per share equal to CP_1 (determined by dividing the aggregate consideration received by the Company in respect of such issue by CP_1); and

(5) “**C**” shall mean the number of such Additional Shares of Common Stock issued in such transaction.

In the event the Company shall issue on more than one date Additional Shares of Common Stock that are a part of one transaction or a series of related transactions and that would result in an adjustment to the Conversion Price of any series of Senior Preferred pursuant to the terms of this Section 4.4(d)(iv)(C), then, upon the final such issuance, the Conversion Price of such series of Senior Preferred shall be readjusted to give effect to all such issuances as if they occurred on the date of the first such issuance

(and without giving effect to any additional adjustments as a result of any such subsequent issuances within such period).

(D) **Determination of Consideration.** For purposes of this Section 4.4(d)(iv), the consideration received by the Company for the issue of any Additional Shares of Common Stock shall be computed as follows:

(1) **Cash and Property.** Such consideration shall:

(a) insofar as it consists of cash, be computed at the aggregate amount of cash received by the Company, after deducting therefrom any discounts, commissions or placement fees, excluding amounts paid or payable for accrued interest;

(b) insofar as it consists of property other than cash, be computed at the fair market value thereof at the time of such issue, as determined in good faith by the Board of Directors (in a manner consistent with 4.4(b)(iii) to the extent the consideration comprises securities); and

(c) in the event Additional Shares of Common Stock are issued together with other shares or securities or other assets of the Company for consideration which covers both, be the proportion of such consideration so received, computed as provided in clauses (a) and (b) above.

(2) **Options and Convertible Securities.** The consideration per share received by the Company for Additional Shares of Common Stock deemed to have been issued pursuant to Section 4.4(d)(iv)(B), relating to Options and Convertible Securities, shall be determined by dividing:

(a) The total amount, if any, received or receivable by the Company as consideration for the issue of such Options or Convertible Securities, 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 Company 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

(b) the total 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, 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.

(e) **Adjustment for Stock Splits and Combinations.** If the Company shall at any time or from time to time after the Series F-1 Original Issue Date effect a subdivision of the outstanding Common Stock, the Conversion Ratio in effect immediately before that subdivision shall be proportionately decreased so that the number of shares of Common Stock issuable on conversion of each share of Series Preferred shall be increased in proportion to such increase in the aggregate number of shares of Common Stock outstanding. If the Company shall at any time or from time to time after the Series F-1 Original Issue Date combine the outstanding shares of Common Stock, the Conversion Ratio in effect immediately before the combination shall be proportionately increased so that the number of shares of Common Stock issuable on conversion of each share of such Series Preferred shall be decreased in proportion to such decrease in the aggregate number of shares of Common Stock outstanding. Any adjustment under this Section 4.4(e) shall become effective at the close of business on the date the subdivision or combination becomes effective.

(f) **Other Distributions.** In the event the Company shall declare a distribution payable in securities of other persons, evidences of indebtedness issued by the Company or other persons, assets (excluding cash dividends) or options or rights not referred to in Section 4.4(d)(iv), then, in each such case for the purpose of this Section 4.4(f), the holders of the Series Preferred 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 Company into which their shares of Series Preferred are convertible as of the record date fixed for the determination of the holders of Common Stock of the Company entitled to receive such distribution.

(g) **Recapitalizations.** If the Common Stock issuable upon the conversion of Series Preferred shall be changed into the same or a different number of shares of any class or classes of stock of the Company, whether by capital reorganization, reclassification or otherwise (other than a subdivision or combination of shares or stock dividend provided for in Section 4.4(e) or a merger, consolidation, share exchange or reorganization provided for in Section 4.4(b)(ii)), then and in each such event each share of Series Preferred shall be convertible into the kind and amount of shares of stock and other securities and property receivable upon such reorganization, reclassification or other change by the number of shares of Common Stock into which such share of Series Preferred might have been converted immediately prior to such reorganization, reclassification or change.

(h) **Certificate as to Adjustments.** Upon the occurrence of each adjustment or readjustment of the Conversion Ratio of any shares of Series Preferred pursuant to this Section 4.4, the Company at its expense shall, as promptly as reasonably practicable, compute such adjustment or readjustment in accordance with the terms hereof and furnish to each holder of Series Preferred whose shares are so affected a certificate setting forth such adjustment or readjustment (including the kind and amount of securities, cash or other property into which such shares of Series Preferred are then convertible) and showing in detail the facts upon which such adjustment or readjustment is based. The Company shall, as promptly as reasonably practicable after the written request at any time of any holder of shares of Series Preferred, furnish or cause to be

furnished to such holder a certificate setting forth (i) the Conversion Ratio then in effect, and (ii) the number of shares of Common Stock and the amount, if any, of other securities, cash or property which then would be received upon the conversion of such shares of Series Preferred.

(i) **No Fractional Shares.** No fractional shares of Common Stock or scrip representing fractional shares shall be issued upon the conversion of shares of Series Preferred, but the Company shall pay to the holder of such shares a cash adjustment in respect of such fractional shares in an amount equal to the same fraction of the market price per share of the Common Stock (as determined in a reasonable manner prescribed by the Board of Directors) at the close of business on the applicable conversion date. The determination as to whether or not any fractional shares are issuable shall be based upon the total number of shares of Series Preferred being converted at any one time by any holder, not upon each share of Series Preferred being converted.

(j) **Notices of Record Date.** In the event of any taking by the Company 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 other securities or property, or to receive any other right, or in connection with any Corporate Event, the Company shall mail to each holder of Series Preferred, at least ten (10) 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, right or Corporate Event, and the amount and character of such dividend, distribution or right.

(k) **Reservation of Stock Issuable Upon Conversion.** The Company shall at all times reserve and keep available out of its authorized but unissued shares of Common Stock such number of its shares of Common Stock as shall be sufficient to effect the conversion of all outstanding shares of the Series Preferred; 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 Preferred, in addition to such other remedies as shall be available to the holder of such Series Preferred, the Company 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.

(l) **Notices.** Any notice required by the provisions of this Section 4.4 to be given to the holders of shares of Series Preferred shall be deemed effectively given: (i) if delivered by hand, upon delivery; (ii) if by facsimile machine during normal business hours, upon transmission with confirmation of receipt by the receiving party's facsimile terminal and if not sent during normal business hours, then on the next business day; (iii) if sent by documented overnight delivery service, on the date following the date on which such notice or other written communication is delivered to such overnight delivery service for mailing; (iv) if mailed via first-class regular mail, forty-eight (48) hours after mailing to the address on record for such holder; or (v) if provided by

electronic transmission to the electronic address designated by the receiving party in a consent to receive notices by electronic transmission, on the next business day.

(m) **Covenants.**

(i) In addition to any other rights provided by law and notwithstanding anything herein to the contrary (including Section 4.12), so long as at least four million (4,000,000) shares of Senior Preferred shall be outstanding (as adjusted for any Recapitalization Event), the Company shall not, without first obtaining the written consent, authorization or waiver of the Senior Preferred Majority, which consent, authorization or waiver may be obtained without the necessity of formal shareholder action or of notice to the holders of any shares of capital stock not expressly empowered with such right to consent, authorize or waive:

(A) any amendment or change to the Articles of Incorporation or Bylaws that would adversely affect the holders of Senior Preferred;

(B) any merger, consolidation, share exchange or reorganization of the Company with or into one or more other entities, or any other similar transaction or series of transactions, following which the shareholders of the Company immediately prior to such event will hold stock representing less than a majority of the voting power of the outstanding stock or voting interests of the surviving or successor entity, unless in any such case the transaction or series of transactions would result in the receipt by holders of Senior Preferred of consideration or proceeds having a value at least equal to the amount specified in Section 4.4(b)(i)(A)(1) or Section 4.4(b)(i)(B)(1), as applicable, per share of Senior Preferred;

(C) any sale, license or other disposition of all or substantially all the Company's assets, unless any such sale, license or other disposition would be followed by a distribution to holders of Senior Preferred having a value at least equal to the amount specified in Section 4.4(b)(i)(A)(1) or Section 4.4(b)(i)(B)(1), as applicable, per share of Senior Preferred;

(D) any liquidation or dissolution of the Company, other than in connection with a sale, license or other disposition of all or substantially all of its assets (which shall be subject to clause (D) above);

(E) any change in or expansion of the Company's principal business to include any lines of business outside of the biotechnology industry;

(F) any declaration or payment of a dividend or distribution on any Junior Stock;

(G) any purchase or redemption of any other class or series of capital stock (other than repurchases at not more than cost upon termination of service of an individual or entity pursuant to a restricted stock purchase agreement or equity incentive plan);

(H) any incurrence, amendment or refinancing of any indebtedness (including guarantees thereof) in the aggregate at any time in excess of \$20,000,000;

(I) any material amendment to the Company's employee option plan(s) or entry into a new option plan which in the aggregate provides for the issuance of Common Stock or Options therefor exceeding the number of shares of Common Stock reserved for issuance under the Company's existing employee option plan(s) as of the Series F-1 Original Issue Date;

(J) any increase in the cash compensation (salary plus bonus entitlement) of Dr. Harlan Robins or Mr. Chad Robins to a level greater than three times the amounts in effect on April 3, 2014; and

(K) any related-party transaction with any officer, director or 5%-or-greater shareholder of the Company, involving the payment or receipt of more than \$50,000 of value by the Company;

(ii) In addition to any other rights provided by law, so long as shares of Series D Preferred, shall be outstanding, the Company shall not, either directly or indirectly and whether by amendment, merger, consolidation or otherwise, without first obtaining the written consent, authorization or waiver of the holders of not less than a majority of the outstanding shares of Series D Preferred, alter or change the rights, preferences or privileges of the shares of Series D Preferred so as to adversely affect the holders of shares of Series D Preferred, including but not limited to any increase in the number of authorized shares of Series D Preferred.

(iii) In addition to any other rights provided by law, so long as shares of Series E Preferred, shall be outstanding, the Company shall not, either directly or indirectly and whether by amendment, merger, consolidation or otherwise, without first obtaining the written consent, authorization or waiver of the holders of not less than a majority of the outstanding shares of Series E Preferred, alter or change the rights, preferences or privileges of the shares of Series E Preferred so as to adversely affect the holders of shares of Series E Preferred, including but not limited to any increase in the number of authorized shares of Series E Preferred.

(iv) In addition to any other rights provided by law, so long as shares of Series F Preferred, shall be outstanding, the Company shall not, either directly or indirectly and whether by amendment, merger, consolidation or otherwise, without first obtaining the written consent, authorization or waiver of the holders of not less than a majority of the outstanding shares of Series F Preferred, alter or change the rights, preferences or privileges of the shares of Series F Preferred so as to adversely affect the holders of shares of Series F Preferred, including but not limited to any increase in the number of authorized shares of Series F Preferred.

(v) In addition to any other rights provided by law, so long as at least three million (3,000,000) shares of Junior Preferred (all such series being

aggregated for this purpose) shall be outstanding (as adjusted for any Recapitalization Event), the Company shall not, either directly or indirectly and whether by amendment, merger, consolidation or otherwise, without first obtaining the written consent, authorization or waiver of the holders of not less than a majority of the outstanding shares of Junior Preferred, voting together as a single voting group on an as-converted basis, which consent, authorization or waiver may be obtained without the necessity of formal shareholder action or of notice to the holders of any shares of capital stock other than the Junior Preferred:

(A) alter or change the rights, preferences or privileges of the shares of any series of Junior Preferred so as to materially and adversely affect the holders of shares of such series; provided, that if such material and adverse change affects any series of Junior Preferred in a manner different from any other series of Junior Preferred, then the consent of holders of not less than a majority of the outstanding shares of such series of Junior Preferred will be required; or

(B) increase the number of authorized shares of any series of Junior Preferred.

(vi) In addition to any other rights provided by law, the Company shall not, either directly or indirectly and whether by amendment, merger, consolidation or otherwise, without first obtaining the written consent, authorization or waiver of the holders of not less than a majority of the outstanding shares of Series E-1 Preferred (a) amend, waive or terminate any provision of Section 4.4(m)(v) or this Section 4.4(m)(vi), (b) increase or decrease the number of authorized shares of Series E-1 Preferred or (c) issue or obligate itself to issues shares of Series E-1 Preferred other than pursuant to exercise of options outstanding as of the date hereof.

(vii) In addition to any other rights provided by law, so long as shares of Series F-1 Preferred, shall be outstanding, the Company shall not, either directly or indirectly and whether by amendment, merger, consolidation or otherwise, without first obtaining the written consent, authorization or waiver of the holders of not less than a majority of the outstanding shares of Series F-1 Preferred alter or change the rights, preferences or privileges of the shares of Series F-1 Preferred so as to adversely affect the holders of shares of Series F-1 Preferred, including but not limited to any increase in the number of authorized shares of Series F-1 Preferred.

4.5 Issuance of Certificates. The Board of Directors shall have the authority to issue shares of the capital stock of this Company and the certificates therefor subject to such transfer restrictions and other limitations as it may deem necessary to promote compliance with applicable federal and state securities laws, and to regulate the transfer thereof in such manner as may be calculated to promote such compliance or to further reasonable purpose.

4.6 No Cumulative Voting. Shareholders of this Company shall not have the right to cumulate votes for the election of directors.

4.7 **No Preemptive Rights.** No shareholder of this Company shall have, solely by reason of being a shareholder, any preemptive or preferential right or subscription right to any stock of this Company or to any obligations convertible into stock of this Company, or to any warrant or option for the purchase thereof.

4.8 **Quorum for Meeting of Shareholders.** A quorum shall exist at any meeting of shareholders if a majority of the votes entitled to be cast is represented in person or by proxy. In the case of any meeting of shareholders that is adjourned more than once because of the failure of a quorum to attend, those who attend the third convening of such meeting, although less than a quorum, shall nevertheless constitute a quorum for the purpose of electing directors, provided that the percentage of shares represented at the third convening of such meeting shall not be less than one-third of the votes entitled to be cast.

4.9 **Execution of Consent by Less than Unanimous Consent of Shareholders.** To the extent permitted by, and in accordance with the procedures set forth in, the Act, the taking of action by shareholders without a meeting by less than unanimous written consent of all shareholders entitled to vote on the action shall be permitted. Shareholder action taken pursuant to this Section 4.9 shall be effective when executed consents sufficient to approve the proposed corporate action have been delivered to the Company, either at an address designated by the Company for delivery of such shareholder consents or at the Company's registered office, or to such electronic address, location, or system as the Company may have designated for delivery of such shareholder consents.

4.10 **Contracts with Interested Shareholders.** Subject to the limitations set forth in RCW 23B.19.040, to the extent applicable:

(a) The Company may enter into contracts and otherwise transact business as vendor, purchaser, lender, borrower, or otherwise with its shareholders and with corporations, associations, firms, and entities in which they are or may be or become interested as directors, officers, shareholders, members, or otherwise.

(b) Any such contract or transaction shall not be affected or invalidated or give rise to liability by reason of the shareholder's having an interest in the contract or transaction.

4.11 **Ratification by Shareholder Vote.** Subject to the requirements of RCW 23B.08.730 and 23B.19.040, to the extent applicable, any contract, transaction, or act of the Company or of any director or officer of the Company that shall be authorized, approved, or ratified by the affirmative vote of a majority of shares represented at a meeting at which a quorum is present shall, insofar as permitted by law, be as valid and as binding as though ratified by every shareholder of the Company.

4.12 **Action by Majority Vote; Reduced Voting Requirements.** The provisions of this Section 4.12 are specifically intended to reduce the voting requirements otherwise prescribed under RCW 23B.10.030, 23B.11.030, 23B.12.020 and 23B.14.020,

in accordance with RCW 23B.07.270. In the case of any matter submitted to a vote of the shareholders of this Company for which the Act requires (unless these Articles provide otherwise) the approval of two-thirds of the votes of each voting group entitled to be cast thereon, the approval of a majority, rather than two-thirds, of the votes of each voting group entitled to be cast on such matter shall be sufficient for such matter to be approved. Without limiting the generality of the foregoing, such matters are intended to include, to the extent not inconsistent with the Act, amendments to these Articles, mergers and share exchanges, sales of assets other than in the ordinary course of business, and dissolution. In addition, except as otherwise provided in these Articles, as amended from time to time, the application of separate voting group rights under RCW 23B.10.040(1)(a), (e) or (f), or 23B.11.035 (or any related section concerning voting group rights as to mergers or share exchanges), is hereby explicitly denied.

ARTICLE 5

DIRECTORS

5.1 **Number of Directors.** Except as may be provided in these Articles as amended from time to time, the number of directors of the Company shall be fixed as provided in the Bylaws and may be changed from time to time by amending the Bylaws.

5.2 **Authority of Board of Directors to Amend Bylaws.** Subject to the limitation(s) of RCW 23B.10.200, Board of Directors is expressly authorized to make, amend, or repeal the Bylaws of the Company.

5.3 **Contracts with Interested Directors.** Subject to the limitations set forth in RCW 23B.08.700 through 23B.08.730, to the extent applicable:

(a) The Company may enter into contracts and otherwise transact business as vendor, purchaser, lender, borrower, or otherwise with its directors and with corporations, associations, firms, and entities in which they are or may be or become interested as directors, officers, shareholders, members, or otherwise.

(b) Any such contract or transaction shall not be affected or invalidated or give rise to liability by reason of the director's having an interest in the contract or transaction.

5.4 **Indemnification of Directors, Officers, Employees and Agents.** The capitalized terms in this Section 5.4 shall have the meanings set forth in RCW 23B.08.500.

(a) The Company shall indemnify and hold harmless each individual who is or was serving as a Director or officer of the Company or who, while serving as a Director or officer of the Company, is or was serving at the request of the Company as a director, officer, partner, trustee, employee, or agent of another foreign or domestic corporation, partnership, joint venture, trust, employee benefit plan, or other enterprise, against any and all Liability incurred with respect to any Proceeding to which the individual is or is threatened to be made a Party because of such service, and shall make

advances of reasonable Expenses with respect to such Proceeding, to the fullest extent permitted by law, without regard to the limitations in RCW 23B.08.510 through 23B.08.550 and RCW 23B.08.560(2); provided that no such indemnity shall indemnify any Director or officer from or on account of (i) acts or omissions of the Director or officer finally adjudged to be intentional misconduct or a knowing violation of law; (ii) conduct of the Director or officer finally adjudged to be in violation of RCW 23B.08.310; or (iii) any transaction with respect to which it was finally adjudged that such Director or officer personally received a benefit in money, property, or services to which the Director or officer was not legally entitled.

(b) The Company may purchase and maintain insurance on behalf of an individual who is or was a director, officer, employee, or agent of the Company or, who, while a director, officer, employee, or agent of the Company, is or was serving at the request of the Company as a director, officer, partner, trustee, employee, or agent of another foreign or domestic corporation, partnership, joint venture, trust, employee benefit plan, or other enterprise against Liability asserted against or incurred by the individual in that capacity or arising from the individual's status as a director, officer, employee, or agent, whether or not the Company would have power to indemnify the individual against such Liability under RCW 23B.08.510 or 23B.08.520.

(c) If, after the effective date of this Section 5.4, the Act is amended to authorize further indemnification of Directors or officers, then Directors and officers of the Company shall be indemnified to the fullest extent permitted by the Act.

(d) To the extent permitted by law, the rights to indemnification and advance of reasonable Expenses conferred in this Section 5.4 shall not be exclusive of any other right which any individual may have or hereafter acquire under any statute, provision of the Bylaws, agreement, vote of shareholders or disinterested directors, or otherwise. The right to indemnification conferred in this Section 5.4 shall be a contract right upon which each Director or officer shall be presumed to have relied in determining to serve or to continue to serve as such. Any amendment to or repeal of this Section 5.4 shall not adversely affect any right or protection of a Director or officer of the Company for or with respect to any acts or omissions of such Director or officer occurring prior to such amendment or repeal.

(e) If any provision of this Section 5.4 or any application thereof shall be invalid, unenforceable, or contrary to applicable law, the remainder of this Section 5.4, and the application of such provisions to individuals or circumstances other than those as to which it is held invalid, unenforceable, or contrary to applicable law, shall not be affected thereby.

5.5 Limitation of Directors' Liability. To the fullest extent permitted by the Act, as it exists on the date hereof or may hereafter be amended, a director of this Company shall not be personally liable to the Company or its shareholders for monetary damages for conduct as a director. Any amendment to or repeal of this Section 5.5 shall not adversely affect a director of this Company with respect to any conduct of such director occurring prior to such amendment or repeal.

ARTICLE 6

OTHER MATTERS

6.1 **Amendments to Articles of Incorporation.** Except as otherwise provided in these Articles, as amended from time to time, the Company reserves the right to amend, alter, change, or repeal any provisions contained in these Articles in any manner now or hereafter prescribed or permitted by statute. All rights of shareholders of the Company are subject to this reservation. A shareholder of the Company does not have a vested property right resulting from any provision of these Articles.

6.2 **Correction of Clerical Errors.** The Company shall have authority to correct clerical errors in any documents filed with the Secretary of State of Washington, including these Articles or any amendments hereto, without the necessity of special shareholder approval of such corrections.

Executed this __ day of _____, 2019.

By: _____
Chad M. Robins,
Chief Executive Officer