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

**FORM S-8
REGISTRATION STATEMENT**
UNDER THE SECURITIES ACT OF 1933

BELLICUM PHARMACEUTICALS, INC.
(Exact name of registrant as specified in its charter)

Delaware
(State or other jurisdiction of
incorporation or organization)

20-1450200
(I.R.S. Employer
Identification No.)

2130 W. Holcombe Blvd., Ste. 800
Houston, Texas
(Address of Principal Executive Offices)

77030
(Zip Code)

2006 Stock Option Plan
2011 Stock Option Plan
2014 Equity Incentive Plan
2014 Employee Stock Purchase Plan
(Full titles of the plans)

Thomas J. Farrell
President and Chief Executive Officer
Bellicum Pharmaceuticals, Inc.
2130 W. Holcombe Blvd., Ste. 800
Houston, Texas 77030
(832) 384-1100

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

Copies to:

Julie M. Robinson, Esq.
Karen E. Deschaine, Esq.
Cooley LLP
4401 Eastgate Mall
San Diego, California 92121
Tel: (858) 550-6000

Alan A. Musso, C.P.A., C.M.A.
Chief Financial Officer and Treasurer
Bellicum Pharmaceuticals, Inc.
2130 W. Holcombe Blvd., Ste. 800
Houston, Texas 77030
(832) 384-1100

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

Large Accelerated filer Accelerated filer
 Non-accelerated filer (Do not check if a smaller reporting company) Smaller reporting company

CALCULATION OF REGISTRATION FEE

Title of securities to be registered	Amount to be registered (1)	Proposed maximum offering price per share	Proposed maximum aggregate offering price	Amount of registration fee
2006 Stock Option Plan Common Stock, \$0.01 par value per share	167,056 shares (2)	\$0.50 (3)	\$83,528 (3)	\$10
2011 Stock Option Plan Common Stock, \$0.01 par value per share	2,449,090 shares (4)	\$4.62 (5)	\$11,314,796 (5)	\$1,315
2014 Equity Incentive Plan Common Stock, \$0.01 par value per share	5,582,970 shares (6)	\$19.00 (7)	\$106,076,430 (7)	\$12,327
2014 Employee Stock Purchase Plan Common Stock, \$0.01 par value per share	550,000 shares (8)	\$19.00 (7)	\$10,450,000 (7)	\$1,215

- (1) Pursuant to Rule 416(a) under the Securities Act of 1933, as amended (the “Securities Act”), this Registration Statement shall also cover any additional shares of the Registrant’s Common Stock (“Common Stock”) that become issuable under the Bellicum Pharmaceuticals, Inc. 2006 Stock Option Plan, as amended (the “2006 Plan”), the Bellicum Pharmaceuticals, Inc. 2011 Stock Option Plan, as amended (the “2011 Plan”), the Bellicum Pharmaceuticals, Inc. 2014 Equity Incentive Plan (the “2014 Plan”) or the Bellicum Pharmaceuticals, Inc. 2014 Employee Stock Purchase Plan (the “2014 ESPP”) by reason of any stock dividend, stock split, recapitalization or other similar transaction.
- (2) Represents shares of Common Stock reserved for issuance upon the exercise of outstanding stock options granted under the 2006 Plan. The 2006 Plan has been terminated; no additional stock awards will be granted under the 2006 Plan and shares are no longer available for the grant of stock awards under the 2006 Plan. Upon the date of the underwriting agreement between the Registrant and the underwriters managing the initial public offering of the Common Stock, pursuant to which the Common Stock is priced for the initial public offering (the “Effective Date”), any shares underlying then-outstanding stock awards granted under the 2006 Plan that on or after the Effective Date expire or terminate for any reason prior to exercise or settlement, are forfeited or otherwise return to the Registrant or are reacquired or withheld to satisfy a tax withholding obligation in connection with a stock award or to satisfy the purchase price or exercise price of a stock award, the shares of Common Stock not acquired pursuant to the stock option (such shares, the “2006 Returning Shares”) will become available for the grant of stock awards under the 2014 Plan.
- (3) Estimated solely for the purpose of calculating the amount of the registration fee pursuant to Rule 457(h) of the Securities Act. The proposed maximum aggregate offering price per share and proposed maximum aggregate offering price for the 167,056 shares of Common Stock reserved for issuance upon the exercise of outstanding stock options granted under the 2006 Plan are calculated using a weighted average exercise price of \$0.50 per share based on exercise prices for such outstanding stock options ranging from \$0.34 to \$0.51 per share.
- (4) Represents shares of Common Stock reserved for issuance upon the exercise of outstanding stock options granted under the 2011 Plan. Upon the Effective Date, no additional stock awards will be granted under the 2011 Plan, and the shares remaining available for the grant of future stock awards under the 2011 Plan (the “2011 Plan Pool”), plus any shares underlying then-outstanding stock awards granted under the 2011 Plan that on or after the Effective Date expire or terminate for any reason prior to exercise or settlement, are forfeited or otherwise return to the Registrant or are reacquired or withheld to satisfy a tax withholding obligation in connection with a stock award or to satisfy the purchase price or exercise price of a stock award, the shares of Common Stock not acquired pursuant to the stock option (such shares, the “2011 Returning Shares”) will become available for the grant of stock awards under the 2014 Plan.
- (5) Estimated solely for the purpose of calculating the amount of the registration fee pursuant to Rule 457(h) of the Securities Act. The proposed maximum aggregate offering price per share and proposed maximum aggregate offering price for the 2,449,090 shares of Common Stock reserved for issuance upon the exercise of outstanding stock options granted under the 2011 Plan are calculated using a weighted average exercise price of \$4.62 per share based on exercise prices for such outstanding stock options ranging from \$2.55 to \$7.47 per share.
- (6) Represents 141,176 shares of Common Stock reserved for issuance upon the exercise of outstanding stock options granted under the 2014 Plan, a restricted stock award covering 117,647 shares of Common Stock issued under the 2014 Plan, 2,341,177 shares of Common Stock, plus the 2011 Plan Pool, the 2006 Returning Shares and the 2011 Returning Shares.
- (7) This estimate is made pursuant to Rule 457(h) and Rule 457(c) of the Securities Act solely for purposes of calculating the registration fee, and is based on the price per share in the initial public offering of the Common Stock as set forth in the Registrant’s prospectus filed with the Securities and Exchange Commission (the “Commission”) on December 18, 2014 pursuant to Rule 424(b) under the Securities Act.
- (8) Represents 550,000 shares of Common Stock reserved for future grant under the 2014 ESPP.

PART I

INFORMATION REQUIRED IN THE SECTION 10(a) PROSPECTUS

ITEM 1. PLAN INFORMATION.

Not required to be filed with this Registration Statement.

ITEM 2. REGISTRANT INFORMATION AND EMPLOYEE PLAN ANNUAL INFORMATION.

Not required to be filed with this Registration Statement.

PART II
INFORMATION REQUIRED IN THE REGISTRATION STATEMENT

ITEM 3. INCORPORATION OF DOCUMENTS BY REFERENCE.

The Registrant hereby incorporates by reference into this Registration Statement the following documents previously filed by the Registrant with the Commission:

(a) The Registrant's prospectus filed on December 18, 2014 pursuant to Rule 424(b) under the Securities Act, relating to the registration statement on Form S-1 originally filed on November 18, 2014, as amended (File No. 333- 200328), which contains audited financial statements for the Registrant's latest fiscal year for which such statements have been filed.

(b) The description of the Registrant's Common Stock contained in the Registrant's registration statement on Form 8-A filed on December 10, 2014 (File No. 001-36783) under the Securities Exchange Act of 1934, as amended (the "Exchange Act"), including any amendment or report filed for the purpose of updating such description.

All documents, reports and definitive proxy or information statements filed pursuant to Section 13(a), 13(c), 14 or 15(d) of the Exchange Act after the date of this Registration Statement and prior to the filing of a post-effective amendment which indicates that all securities offered hereby have been sold or which deregisters all securities then remaining unsold, shall be deemed to be incorporated by reference into this Registration Statement and to be a part hereof from the date of filing of such documents; provided, however, that documents, reports and definitive proxy or information statements, or portions thereof, which are furnished and not filed in accordance with the rules of the Commission shall not be deemed incorporated by reference into this Registration Statement. Any statement contained in a document incorporated or deemed to be incorporated herein by reference shall be deemed to be modified or superseded for purposes of this Registration Statement to the extent that a statement herein or in any other subsequently filed document which also is or is deemed to be incorporated by reference herein modifies or supersedes that statement. Any such statement so modified or superseded shall not constitute a part of this Registration Statement, except as so modified or superseded.

ITEM 4. DESCRIPTION OF SECURITIES.

Not applicable.

ITEM 5. INTERESTS OF NAMED EXPERTS AND COUNSEL.

Not applicable.

ITEM 6. INDEMNIFICATION OF DIRECTORS AND OFFICERS.

The Registrant is incorporated under the laws of the State of Delaware. Section 145 of the Delaware General Corporation Law provides that a Delaware corporation may indemnify any persons who were, are, or are threatened to be made, parties to any threatened, pending or completed action, suit or proceeding, whether civil, criminal, administrative or investigative (other than an action by or in the right of such corporation), by reason of the fact that such person is or was an officer, director, employee or agent of such corporation, or is or was serving at the request of such corporation as an officer, director, employee or agent of another corporation or enterprise. The indemnity may include expenses (including attorneys' fees), judgments, fines and amounts paid in settlement actually and reasonably incurred by such person in connection with such action, suit or proceeding, provided that such person acted in good faith and in a manner he or she reasonably believed to be in or not opposed to the corporation's best interests and, with respect to any criminal action or proceeding, had no reasonable cause to believe that his or her conduct was illegal. A Delaware corporation may indemnify any persons who were, are, or are threatened to be made, a party to any threatened, pending or completed action or suit by or in the right of the corporation by reason of the fact that such person is or was a director, officer, employee or agent of such corporation, or is or was serving at the request of such corporation as a director, officer, employee or agent of another corporation or enterprise. The indemnity may include expenses (including attorneys' fees) actually and reasonably incurred by such person in connection with the defense or settlement of such action or suit provided such person acted in good faith and in a manner he or she reasonably believed to be in or not opposed to the corporation's best interests except that no indemnification is permitted without judicial approval if the officer or director is adjudged to be liable to the corporation. Where an officer or director is successful on the merits or otherwise in the defense of any action referred to above, the corporation must indemnify him or her against the expenses (including attorneys' fees) actually and reasonably incurred.

The Registrant's amended and restated certificate of incorporation and amended and restated bylaws, each of which will become effective upon the closing of the Registrant's initial public offering, provide for the indemnification of its directors and officers to the fullest extent permitted under the Delaware General Corporation Law.

Section 102(b)(7) of the Delaware General Corporation Law permits a corporation to provide in its certificate of incorporation that a director of the corporation shall not be personally liable to the corporation or its stockholders for monetary damages for breach of fiduciary duties as a director, except for liability for any:

- transaction from which the director derives an improper personal benefit;
- act or omission not in good faith or that involves intentional misconduct or a knowing violation of law;
- unlawful payment of dividends or redemption of shares; or
- breach of a director's duty of loyalty to the corporation or its stockholders.

The Registrant's amended and restated certificate of incorporation includes such a provision. Expenses incurred by any officer or director in defending any such action, suit or proceeding in advance of its final disposition shall be paid by the Registrant upon delivery to it of an undertaking, by or on behalf of such director or officer, to repay all amounts so advanced if it shall ultimately be determined that such director or officer is not entitled to be indemnified by the Registrant.

Section 174 of the Delaware General Corporation Law provides, among other things, that a director who willfully or negligently approves of an unlawful payment of dividends or an unlawful stock purchase or redemption may be held liable for such actions. A director who was either absent when the unlawful actions were approved, or dissented at the time, may avoid liability by causing his or her dissent to such actions to be entered in the books containing minutes of the meetings of the board of directors at the time such action occurred or immediately after such absent director receives notice of the unlawful acts.

As permitted by the Delaware General Corporation Law, the Registrant has entered into indemnity agreements with each of its directors and executive officers, that require the Registrant to indemnify such persons against any and all costs and expenses (including attorneys', witness or other professional fees) actually and reasonably incurred by such person in connection with any action, suit or proceeding (including derivative actions), whether actual or threatened, to which any such person may be made a party by reason of the fact that such person is or was a director or officer or is or was acting or serving as an officer, director, employee or agent of the Registrant or any of its affiliated enterprises, provided that such person acted in good faith and in a manner such person reasonably believed to be in or not opposed to the Registrant's best interests and, with respect to any criminal proceeding, had no reasonable cause to believe his or her conduct was unlawful. The indemnification agreements also set forth certain procedures that will apply in the event of a claim for indemnification thereunder.

At present, there is no pending litigation or proceeding involving any of the Registrant's directors or executive officers as to which indemnification is required or permitted, and the Registrant is not aware of any threatened litigation or proceeding that may result in a claim for indemnification.

The Registrant has an insurance policy in place that covers its officers and directors with respect to certain liabilities, including liabilities arising under the Securities Act or otherwise.

ITEM 7. EXEMPTION FROM REGISTRATION CLAIMED.

Not applicable.

ITEM 8. EXHIBITS.

<u>Exhibit Number</u>	<u>Description</u>
4.1(1)	Amended and Restated Certificate of Incorporation of the Registrant.
4.2(2)	Amended and Restated Bylaws of the Registrant.
4.3(3)	Form of Common Stock Certificate of the Registrant.
5.1	Opinion of Cooley LLP.
23.1	Consent of Ernst & Young LLP, an Independent Registered Public Accounting Firm.
23.2	Consent of Cooley LLP. Reference is made to Exhibit 5.1.
24.1	Power of Attorney. Reference is made to the signature page hereto.
99.1(4)	Bellicum Pharmaceuticals, Inc. 2006 Stock Option Plan and Form of Nonqualified Stock Option Agreement thereunder.
99.2(5)	Bellicum Pharmaceuticals, Inc. 2011 Stock Option Plan and Forms of Incentive Stock Option Agreement and Nonqualified Stock Option Agreement thereunder.
99.3(6)	Bellicum Pharmaceuticals, Inc. 2014 Equity Incentive Plan and Forms of Stock Option Grant Notice, Stock Option Agreement and Notice of Exercise, and Forms of Restricted Stock Award Notice and Restricted Stock Award Agreement thereunder.
99.4	Bellicum Pharmaceuticals, Inc. 2014 Employee Stock Purchase Plan and Form of Offering Document thereunder.

(1)	Previously filed as Exhibit 3.2 to the Registrant's Registration Statement on Form S-1 (File No. 333-200328), originally filed with the Commission on November 18, 2014, as amended, and incorporated herein by reference.
(2)	Previously filed as Exhibit 3.4 to the Registrant's Registration Statement on Form S-1 (File No. 333-200328), originally filed with the Commission on November 18, 2014, as amended, and incorporated herein by reference.
(3)	Previously filed as Exhibit 4.1 to the Registrant's Registration Statement on Form S-1 (File No. 333-200328), originally filed with the Commission on November 18, 2014, as amended, and incorporated herein by reference.
(4)	Previously filed as Exhibit 10.2 to the Registrant's Registration Statement on Form S-1 (File No. 333-200328), originally filed with the Commission on November 18, 2013, as amended, and incorporated herein by reference.
(5)	Previously filed as Exhibit 10.3 to the Registrant's Registration Statement on Form S-1 (File No. 333-200328), originally filed with the Commission on November 18, 2013, as amended, and incorporated herein by reference.
(6)	Previously filed as Exhibit 10.4 to the Registrant's Registration Statement on Form S-1 (File No. 333-200328), originally filed with the Commission on November 18, 2013, as amended, and incorporated herein by reference.

ITEM 9. UNDERTAKINGS.

(a) The undersigned Registrant hereby undertakes:

(1) To file, during any period in which offers or sales are being made, a post-effective amendment to this Registration Statement:

(i) To include any prospectus required by Section 10(a)(3) of the Securities Act;

(ii) To reflect in the prospectus any facts or events arising after the effective date of the Registration Statement (or the most recent post-effective amendment thereof) which, individually or in the aggregate, represent a fundamental change in the information set forth in the Registration Statement. Notwithstanding the foregoing, any increase or decrease in volume of securities offered (if the total dollar value of securities offered would not exceed that which was registered) and any deviation from the low or high end of the estimated maximum offering range may be reflected in the form of prospectus filed with the SEC pursuant to Rule 424(b) if, in the aggregate, the changes in volume and price represent no more than a 20% change in the maximum aggregate offering price set forth in the "Calculation of Registration Fee" table in the effective Registration Statement;

(iii) To include any material information with respect to the plan of distribution not previously disclosed in the Registration Statement or any material change to such information in the Registration Statement;

Provided, however, that paragraphs (a)(1)(i) and (a)(1)(ii) do not apply if the Registration Statement is on Form S-8, and the information required to be included in a post-effective amendment by those paragraphs is contained in reports filed with or furnished to the Commission by the Registrant pursuant to Section 13 or Section 15(d) of the Exchange Act that are incorporated by reference in the Registration Statement; and

(2) That, for the purpose of determining any liability under the Securities Act, each such post-effective amendment shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial *bona fide* offering thereof.

(3) To remove from registration by means of a post-effective amendment any of the securities being registered which remain unsold at the termination of the offering.

(b) The undersigned Registrant hereby undertakes that, for purposes of determining any liability under the Securities Act, each filing of the Registrant's annual report pursuant to Section 13(a) or Section 15(d) of the Exchange Act (and, where applicable, each filing of an employee benefit plan's annual report pursuant to Section 15(d) of the Exchange Act) that is incorporated by reference in the Registration Statement shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial *bona fide* offering thereof.

(c) Insofar as indemnification for liabilities arising under the Securities Act may be permitted to directors, officers and controlling persons of the Registrant pursuant to the foregoing provisions, or otherwise, the Registrant has been advised that in the opinion of the Commission such indemnification is against public policy as expressed in the Securities Act and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the Registrant of expenses incurred or paid by a director, officer or controlling person of the Registrant in the successful defense of any action, suit or proceeding) is asserted by such director, officer or controlling person in connection with the securities being registered, the Registrant will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by it is against public policy as expressed in the Securities Act and will be governed by the final adjudication of such issue.

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, as amended, the Registrant certifies that it has reasonable grounds to believe that it meets all of the requirements for filing on Form S-8 and has duly caused this Registration Statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of Houston, State of Texas, on December 18, 2014.

BELLICUM PHARMACEUTICALS, INC.

By: /s/ Thomas J. Farrell

Thomas J. Farrell
President and Chief Executive Officer

POWER OF ATTORNEY

KNOW ALL BY THESE PRESENTS, that each person whose signature appears below constitutes and appoints Thomas J. Farrell, as his true and lawful attorney-in-fact and agent, with the full power of substitution, for him and in his name, place or stead, in any and all capacities, to sign any and all amendments to this Registration Statement (including post-effective amendments), and to file the same, with exhibits thereto and other documents in connection therewith, with the Securities and Exchange Commission, granting unto said attorney-in-fact and agent full power and authority to do and perform each and every act and thing requisite and necessary to be done in and about the premises, as fully to all intents and purposes as he might or could do in person, hereby ratifying and confirming all that said attorney-in-fact and agent, or his substitute or substitutes, may lawfully do or cause to be done by virtue hereof.

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

<u>Signature</u>	<u>Title</u>	<u>Date</u>
<u>/s/ Thomas J. Farrell</u> Thomas J. Farrell	President, Chief Executive Officer and Member of the Board of Directors <i>(Principal Executive Officer)</i>	December 18, 2014
<u>/s/ Alan A. Musso, C.P.A., C.M.A.</u> Alan A. Musso, C.P.A., C.M.A.	Chief Financial Officer and Treasurer <i>(Principal Financial and Accounting Officer)</i>	December 18, 2014
<u>/s/ Kevin M. Slawin, M.D.</u> Kevin M. Slawin, M.D.	Chief Technology Officer and Member of the Board of Directors	December 18, 2014
<u>/s/ Frank B. McGuyer</u> Frank B. McGuyer	Member of the Board of Directors	December 18, 2014
<u>/s/ James Brown</u> James Brown	Member of the Board of Directors and Chairman of the Board	December 18, 2014
<u>/s/ Reid M. Huber, Ph.D.</u> Reid M. Huber, Ph.D.	Member of the Board of Directors	December 18, 2014
<u>/s/ Jon P. Stonehouse</u> Jon P. Stonehouse	Member of the Board of Directors	December 18, 2014

EXHIBIT INDEX

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23.1	Consent of Ernst & Young LLP, an Independent Registered Public Accounting Firm.
23.2	Consent of Cooley LLP. Reference is made to Exhibit 5.1.
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(6)	Previously filed as Exhibit 10.4 to the Registrant's Registration Statement on Form S-1 (File No. 333-200328), originally filed with the Commission on November 18, 2013, as amended, and incorporated herein by reference.

Julie M. Robinson
T: +1 858 550 6092
robinsonjm@cooley.com

December 18, 2014

Bellicum Pharmaceuticals, Inc.
2130 W. Holcombe Blvd., Ste. 800
Houston, TX 77030

Ladies and Gentlemen:

We represent Bellicum Pharmaceuticals, Inc., a Delaware corporation (the "**Company**"), and you have requested our opinion with respect to certain matters in connection with the filing by the Company of a Registration Statement on Form S-8 (the "**Registration Statement**") with the Securities and Exchange Commission, covering the offering of up to an aggregate of 8,749,116 shares of the Company's Common Stock, \$0.01 par value (the "**Shares**"), including (i) 167,056 shares (the "**2006 Plan Shares**") reserved for issuance upon the exercise of options issued under the Company's 2006 Stock Option Plan (the "**2006 Plan**"), (ii) 2,449,090 shares (the "**2011 Plan Shares**") reserved for issuance upon the exercise of options issued under the Company's 2011 Stock Option Plan (the "**2011 Plan**"), (iii) 141,176 shares reserved for issuance upon the exercise of options issued under the Company's 2014 Equity Incentive Plan (the "**2014 Plan**"), a restricted stock award covering 117,647 shares issued under the 2014 Plan, and 5,324,147 shares initially reserved for issuance pursuant to the 2014 Plan (collectively, the "**2014 Plan Shares**"), and (iv) 550,000 shares (the "**ESPP Shares**") reserved for issuance pursuant to the Company's 2014 Employee Stock Purchase Plan (the "**ESPP**," and collectively with the 2006 Plan, the 2011 Plan, and the 2014 Plan, the "**Plans**").

In connection with this opinion, we have examined and relied upon the Registration Statement and the related prospectuses, the Company's Amended and Restated Certificate of Incorporation, and Bylaws, as amended, as currently in effect, its forms of Amended and Restated Certificate of Incorporation and Amended and Restated Bylaws to be effective upon the closing of the Company's initial public offering, the Plans and such other documents, records, certificates, memoranda and other instruments as in our judgment are necessary or appropriate to enable us to render the opinion expressed below. We have assumed the genuineness and authenticity of all documents submitted to us as originals and the conformity to originals of all documents submitted to us as copies thereof.

Our opinion is expressed only with respect to the federal laws of the United States of America and the General Corporation Law of the State of Delaware. We express no opinion as to whether the laws of any particular jurisdiction other than those identified above are applicable to the subject matter hereof.

On the basis of the foregoing, and in reliance thereon, we are of the opinion the 2006 Plan Shares, when sold and issued in accordance with the 2006 Plan, the 2011 Plan Shares, when sold and issued in accordance with the 2011 Plan, the 2014 Plan Shares, when sold and issued in accordance with the 2014 Plan, and the ESPP Shares, when sold and issued in accordance

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Bellicum Pharmaceuticals, Inc.

December 18, 2014

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with the ESPP, and in each case when sold and issued in accordance with the Registration Statement and related prospectuses, will be validly issued, fully paid, and nonassessable (except as to shares issued pursuant to certain deferred payment arrangements, which will be fully paid and nonassessable when such deferred payments are made in full).

We consent to the filing of this opinion as an exhibit to the Registration Statement.

Sincerely,

Cooley LLP

By: /s/ Julie M. Robinson

Julie M. Robinson

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Consent of Independent Registered Public Accounting Firm

We consent to the incorporation by reference in the Registration Statement on Form S-8 pertaining to the 2006 Stock Option Plan, 2011 Stock Option Plan, 2014 Equity Incentive Plan, and 2014 Employee Stock Purchase Plan of Bellicum Pharmaceuticals, Inc. of our report dated October 17, 2014 (except for Note 14, as to which the date is December 8, 2014), with respect to the financial statements of Bellicum Pharmaceuticals, Inc. included in its Registration Statement (Form S-1 No. 333-200328) for the years ended December 31, 2013 and 2012, filed with the Securities and Exchange Commission.

/s/ Ernst & Young LLP

Houston, Texas
December 15, 2014

BELLICUM PHARMACEUTICALS, INC.

2014 EMPLOYEE STOCK PURCHASE PLAN

ADOPTED BY THE BOARD OF DIRECTORS: DECEMBER 4, 2014

APPROVED BY THE STOCKHOLDERS: DECEMBER 5, 2014

1. GENERAL; PURPOSE.

(a) The Plan provides a means by which Eligible Employees of the Company and certain designated Related Corporations may be given an opportunity to purchase shares of Common Stock. The Plan permits the Company to grant a series of Purchase Rights to Eligible Employees under an Employee Stock Purchase Plan.

(b) The Company, by means of the Plan, seeks to retain the services of such Employees, to secure and retain the services of new Employees and to provide incentives for such persons to exert maximum efforts for the success of the Company and its Related Corporations.

2. ADMINISTRATION.

(a) The Board will administer the Plan unless and until the Board delegates administration of the Plan to a Committee or Committees, as provided in Section 2(c).

(b) The Board will have the power, subject to, and within the limitations of, the express provisions of the Plan:

(i) To determine how and when Purchase Rights will be granted and the provisions of each Offering (which need not be identical).

(ii) To designate from time to time which Related Corporations of the Company will be eligible to participate in the Plan.

(iii) To construe and interpret the Plan and Purchase Rights, and to establish, amend and revoke rules and regulations for its administration. The Board, in the exercise of this power, may correct any defect, omission or inconsistency in the Plan, in a manner and to the extent it deems necessary or expedient to make the Plan fully effective.

(iv) To settle all controversies regarding the Plan and Purchase Rights granted under the Plan.

(v) To suspend or terminate the Plan at any time as provided in Section 12.

(vi) To amend the Plan at any time as provided in Section 12.

(vii) Generally, to exercise such powers and to perform such acts as it deems necessary or expedient to promote the best interests of the Company and its Related Corporations and to carry out the intent that the Plan be treated as an Employee Stock Purchase Plan.

(viii) To adopt such procedures and sub-plans as are necessary or appropriate to permit participation in the Plan by Employees who are foreign nationals or employed outside the United States.

(c) The Board may delegate some or all of the administration of the Plan to a Committee or Committees. If administration is delegated to a Committee, the Committee will have, in connection with the administration of the Plan, the powers theretofore possessed by the Board that have been delegated to the Committee, including the power to delegate to a subcommittee any of the administrative powers the Committee is authorized to exercise (and references in this Plan to the Board will thereafter be to the Committee or subcommittee), subject, however, to such resolutions, not inconsistent with the provisions of the Plan, as may be adopted from time to time by the Board. The Board may retain the authority to concurrently administer the Plan with the Committee and may, at any time, revert in the Board some or all of the powers previously delegated. Whether or not the Board has delegated administration of the Plan to a Committee, the Board will have the final power to determine all questions of policy and expediency that may arise in the administration of the Plan.

(d) All determinations, interpretations and constructions made by the Board in good faith will not be subject to review by any person and will be final, binding and conclusive on all persons.

3. SHARES OF COMMON STOCK SUBJECT TO THE PLAN.

(a) Subject to the provisions of Section 11(a) relating to Capitalization Adjustments, the maximum number of shares of Common Stock that may be issued under the Plan will not exceed 550,000 shares of Common Stock.

(b) If any Purchase Right granted under the Plan terminates without having been exercised in full, the shares of Common Stock not purchased under such Purchase Right will again become available for issuance under the Plan.

(c) The stock purchasable under the Plan will be shares of authorized but unissued or reacquired Common Stock, including shares repurchased by the Company on the open market.

4. GRANT OF PURCHASE RIGHTS; OFFERING.

(a) The Board may from time to time grant or provide for the grant of Purchase Rights to Eligible Employees under an Offering (consisting of one or more Purchase Periods) on an Offering Date or Offering Dates selected by the Board. Each Offering will be in such form and will contain such terms and conditions as the Board will deem appropriate, and will comply with the requirement of Section 423(b)(5) of the Code that all Employees granted Purchase Rights will have the same rights and privileges. The terms and conditions of an Offering shall be incorporated by reference into the Plan and treated as part of the Plan. The provisions of separate Offerings need not be identical, but each Offering will include (through incorporation of the provisions of this Plan by reference in the document comprising the Offering or otherwise) the period during which the Offering will be effective, which period will not exceed 27 months beginning with the Offering Date, and the substance of the provisions contained in Sections 5 through 8, inclusive.

(b) If a Participant has more than one Purchase Right outstanding under the Plan, unless he or she otherwise indicates in forms delivered to the Company: (i) each form will apply to all of his or her Purchase Rights under the Plan, and (ii) a Purchase Right with a lower exercise price (or an earlier-granted Purchase Right, if different Purchase Rights have identical exercise prices) will be exercised to the fullest possible extent before a Purchase Right with a higher exercise price (or a later-granted Purchase Right if different Purchase Rights have identical exercise prices) will be exercised.

(c) The Board will have the discretion to structure an Offering so that if the Fair Market Value of a share of Common Stock on the first Trading Day of a new Purchase Period within that Offering is less than or equal to the Fair Market Value of a share of Common Stock on the Offering Date for that Offering, then (i) that Offering will terminate immediately as of that first Trading Day, and (ii) the Participants in such terminated Offering will be automatically enrolled in a new Offering beginning on the first Trading Day of such new Purchase Period.

5. ELIGIBILITY.

(a) Purchase Rights may be granted only to Employees of the Company or, as the Board may designate in accordance with Section 2(b), to Employees of a Related Corporation. Except as provided in Section 5(b), an Employee will not be eligible to be granted Purchase Rights unless, on the Offering Date, the Employee has been in the employ of the Company or the Related Corporation, as the case may be, for such continuous period preceding such Offering Date as the Board may require, but in no event will the required period of continuous employment be equal to or greater than two years. In addition, the Board may provide that no Employee will be eligible to be granted Purchase Rights under the Plan unless, on the Offering Date, such Employee's customary employment with the Company or the Related Corporation is more than 20 hours per week and more than five months per calendar year or such other criteria as the Board may determine consistent with Section 423 of the Code.

(b) The Board may provide that each person who, during the course of an Offering, first becomes an Eligible Employee will, on a date or dates specified in the Offering which coincides with the day on which such person becomes an Eligible Employee or which occurs thereafter, receive a Purchase Right under that Offering, which Purchase Right will thereafter be deemed to be a part of that Offering. Such Purchase Right will have the same characteristics as any Purchase Rights originally granted under that Offering, as described herein, except that:

(i) the date on which such Purchase Right is granted will be the "Offering Date" of such Purchase Right for all purposes, including determination of the exercise price of such Purchase Right;

(ii) the period of the Offering with respect to such Purchase Right will begin on its Offering Date and end coincident with the end of such Offering; and

(iii) the Board may provide that if such person first becomes an Eligible Employee within a specified period of time before the end of the Offering, he or she will not receive any Purchase Right under that Offering.

(c) No Employee will be eligible for the grant of any Purchase Rights if, immediately after any such Purchase Rights are granted, such Employee owns stock possessing five percent or more of the total combined voting power or value of all classes of stock of the Company or of any Related Corporation. For purposes of this Section 5(c), the rules of Section 424(d) of the Code will apply in determining the stock ownership of any Employee, and stock which such Employee may purchase under all outstanding Purchase Rights and options will be treated as stock owned by such Employee.

(d) As specified by Section 423(b)(8) of the Code, an Eligible Employee may be granted Purchase Rights only if such Purchase Rights, together with any other rights granted under all Employee Stock Purchase Plans of the Company and any Related Corporations, do not permit such Eligible Employee's rights to purchase stock of the Company or any Related Corporation to accrue at a rate which exceeds \$25,000 of Fair Market Value of such stock (determined at the time such rights are granted, and which, with respect to the Plan, will be determined as of their respective Offering Dates) for each calendar year in which such rights are outstanding at any time.

(e) Officers of the Company and any designated Related Corporation, if they are otherwise Eligible Employees, will be eligible to participate in Offerings under the Plan. Notwithstanding the foregoing, the Board may provide in an Offering that Employees who are highly compensated Employees within the meaning of Section 423(b)(4)(D) of the Code will not be eligible to participate.

6. PURCHASE RIGHTS; PURCHASE PRICE.

(a) On each Offering Date, each Eligible Employee, pursuant to an Offering made under the Plan, will be granted a Purchase Right to purchase up to that number of shares of Common Stock purchasable either with a percentage or with a maximum dollar amount, as designated by the Board, but in either case not exceeding 15% of such Employee's earnings (as defined by the Board in each Offering) during the period that begins on the Offering Date (or such later date as the Board determines for a particular Offering) and ends on the date stated in the Offering, which date will be no later than the end of the Offering.

(b) The Board will establish one or more Purchase Dates during an Offering on which Purchase Rights granted for that Offering will be exercised and shares of Common Stock will be purchased in accordance with such Offering.

(c) In connection with each Offering made under the Plan, the Board may specify (i) a maximum number of shares of Common Stock that may be purchased by any Participant on any Purchase Date during such Offering, (ii) a maximum aggregate number of shares of Common Stock that may be purchased by all Participants pursuant to such Offering and/or (iii) a maximum aggregate number of shares of Common Stock that may be purchased by all Participants on any Purchase Date under the Offering. If the aggregate purchase of shares of Common Stock issuable upon exercise of Purchase Rights granted under the Offering would exceed any such maximum aggregate number, then, in the absence of any Board action otherwise, a pro rata (based on each Participant's accumulated Contributions) allocation of the shares of Common Stock available will be made in as nearly a uniform manner as will be practicable and equitable.

- (d) The purchase price of shares of Common Stock acquired pursuant to Purchase Rights will be not less than the lesser of:
- (i) an amount equal to 85% of the Fair Market Value of the shares of Common Stock on the Offering Date; or
 - (ii) an amount equal to 85% of the Fair Market Value of the shares of Common Stock on the applicable Purchase Date.

7. PARTICIPATION; WITHDRAWAL; TERMINATION.

(a) An Eligible Employee may elect to authorize payroll deductions as the means of making Contributions by completing and delivering to the Company, within the time specified in the Offering, an enrollment form provided by the Company. The enrollment form will specify the amount of Contributions not to exceed the maximum amount specified by the Board. Each Participant's Contributions will be credited to a bookkeeping account for such Participant under the Plan and will be deposited with the general funds of the Company except where applicable law requires that Contributions be deposited with a third party. If permitted in the Offering, a Participant may begin such Contributions with the first payroll occurring on or after the Offering Date (or, in the case of a payroll date that occurs after the end of the prior Offering but before the Offering Date of the next new Offering, Contributions from such payroll will be included in the new Offering). If permitted in the Offering, a Participant may thereafter reduce (including to zero) or increase his or her Contributions. If specifically provided in the Offering, in addition to making Contributions by payroll deductions, a Participant may make Contributions through the payment by cash or check prior to a Purchase Date.

(b) During an Offering, a Participant may cease making Contributions and withdraw from the Offering by delivering to the Company a withdrawal form provided by the Company. The Company may impose a deadline before a Purchase Date for withdrawing. Upon such withdrawal, such Participant's Purchase Right in that Offering will immediately terminate and the Company will distribute to such Participant all of his or her accumulated but unused Contributions and such Participant's Purchase Right in that Offering shall thereupon terminate. A Participant's withdrawal from that Offering will have no effect upon his or her eligibility to participate in any other Offerings under the Plan, but such Participant will be required to deliver a new enrollment form to participate in subsequent Offerings.

(c) Purchase Rights granted pursuant to any Offering under the Plan will terminate immediately if the Participant either (i) is no longer an Employee for any reason or for no reason (subject to any post-employment participation period required by law) or (ii) is otherwise no longer eligible to participate. The Company will distribute to such individual all of his or her accumulated but unused Contributions.

(d) During a Participant's lifetime, Purchase Rights will be exercisable only by such Participant. Purchase Rights are not transferable by a Participant, except by will, by the laws of descent and distribution, or, if permitted by the Company, by a beneficiary designation as described in Section 10.

(e) Unless otherwise specified in the Offering, the Company will have no obligation to pay interest on Contributions.

8. EXERCISE OF PURCHASE RIGHTS.

(a) On each Purchase Date, each Participant's accumulated Contributions will be applied to the purchase of shares of Common Stock, up to the maximum number of shares of Common Stock permitted by the Plan and the applicable Offering, at the purchase price specified in the Offering. No fractional shares will be issued unless specifically provided for in the Offering.

(b) If any amount of accumulated Contributions remains in a Participant's account after the purchase of shares of Common Stock and such remaining amount is less than the amount required to purchase one share of Common Stock on the final Purchase Date of an Offering, then such remaining amount will be held in such Participant's account for the purchase of shares of Common Stock under the next Offering under the Plan, unless such Participant withdraws from or is not eligible to participate in such Offering, in which case such amount will be distributed to such Participant after the final Purchase Date, without interest. If the amount of Contributions remaining in a Participant's account after the purchase of shares of Common Stock is at least equal to the amount required to purchase one whole share of Common Stock on the final Purchase Date of an Offering, then such remaining amount will not roll over to the next Offering and will instead be distributed in full to such Participant after the final Purchase Date of such Offering without interest.

(c) No Purchase Rights may be exercised to any extent unless the shares of Common Stock to be issued upon such exercise under the Plan are covered by an effective registration statement pursuant to the Securities Act and the Plan is in material compliance with all applicable federal, state, foreign and other securities and other laws applicable to the Plan. If on a Purchase Date the shares of Common Stock are not so registered or the Plan is not in such compliance, no Purchase Rights will be exercised on such Purchase Date, and the Purchase Date will be delayed until the shares of Common Stock are subject to such an effective registration statement and the Plan is in material compliance, except that the Purchase Date will in no event be more than 6 months from the Offering Date. If, on the Purchase Date, as delayed to the maximum extent permissible, the shares of Common Stock are not registered and the Plan is not in material compliance with all applicable laws, no Purchase Rights will be exercised and all accumulated but unused Contributions will be distributed to the Participants without interest.

9. COVENANTS OF THE COMPANY.

The Company will seek to obtain from each federal, state, foreign or other regulatory commission or agency having jurisdiction over the Plan such authority as may be required to grant Purchase Rights and issue and sell shares of Common Stock thereunder. If, after commercially reasonable efforts, the Company is unable to obtain the authority that counsel for the Company deems necessary for the grant of Purchase Rights or the lawful issuance and sale of Common Stock under the Plan, and at a commercially reasonable cost, the Company will be relieved from any liability for failure to grant Purchase Rights and/or to issue and sell Common Stock upon exercise of such Purchase Rights.

10. DESIGNATION OF BENEFICIARY.

(a) The Company may, but is not obligated to, permit a Participant to submit a form designating a beneficiary who will receive any shares of Common Stock and/or Contributions from the Participant's account under the Plan if the Participant dies before such shares and/or Contributions are delivered to the Participant. The Company may, but is not obligated to, permit the Participant to change such designation of beneficiary. Any such designation and/or change must be on a form approved by the Company.

(b) If a Participant dies, and in the absence of a valid beneficiary designation, the Company will deliver any shares of Common Stock and/or Contributions to the executor or administrator of the estate of the Participant. If no executor or administrator has been appointed (to the knowledge of the Company), the Company, in its sole discretion, may deliver such shares of Common Stock and/or Contributions to the Participant's spouse, dependents or relatives, or if no spouse, dependent or relative is known to the Company, then to such other person as the Company may designate.

11. ADJUSTMENTS UPON CHANGES IN COMMON STOCK; CORPORATE TRANSACTIONS.

(a) In the event of a Capitalization Adjustment, the Board will appropriately and proportionately adjust: (i) the class(es) and maximum number of securities subject to the Plan pursuant to Section 3(a), (ii) the class(es) and number of securities subject to, and the purchase price applicable to outstanding Offerings and Purchase Rights, and (iii) the class(es) and number of securities that are the subject of the purchase limits under each ongoing Offering. The Board will make these adjustments, and its determination will be final, binding and conclusive.

(b) In the event of a Corporate Transaction, then: (i) any surviving corporation or acquiring corporation (or the surviving or acquiring corporation's parent company) may assume or continue outstanding Purchase Rights or may substitute similar rights (including a right to acquire the same consideration paid to the stockholders in the Corporate Transaction) for outstanding Purchase Rights, or (ii) if any surviving or acquiring corporation (or its parent company) does not assume or continue such Purchase Rights or does not substitute similar rights for such Purchase Rights, then the Participants' accumulated Contributions will be used to purchase shares of Common Stock within ten business days prior to the Corporate Transaction under the outstanding Purchase Rights, and the Purchase Rights will terminate immediately after such purchase.

12. AMENDMENT, TERMINATION OR SUSPENSION OF THE PLAN.

(a) The Board may amend the Plan at any time in any respect the Board deems necessary or advisable. However, except as provided in Section 11(a) relating to Capitalization Adjustments, stockholder approval will be required for any amendment of the Plan for which stockholder approval is required by applicable law or listing requirements, including any amendment that either (i) materially increases the number of shares of Common Stock available

for issuance under the Plan, (ii) materially expands the class of individuals eligible to become Participants and receive Purchase Rights, (iii) materially increases the benefits accruing to Participants under the Plan or materially reduces the price at which shares of Common Stock may be purchased under the Plan, (iv) materially extends the term of the Plan, or (v) expands the types of awards available for issuance under the Plan, but in each of (i) through (v) above only to the extent stockholder approval is required by applicable law or listing requirements.

(b) The Board may suspend or terminate the Plan at any time. No Purchase Rights may be granted under the Plan while the Plan is suspended or after it is terminated.

(c) Any benefits, privileges, entitlements and obligations under any outstanding Purchase Rights granted before an amendment, suspension or termination of the Plan will not be materially impaired by any such amendment, suspension or termination except (i) with the consent of the person to whom such Purchase Rights were granted, (ii) as necessary to comply with any laws, listing requirements, or governmental regulations (including, without limitation, the provisions of Section 423 of the Code and the regulations and other interpretive guidance issued thereunder relating to Employee Stock Purchase Plans) including without limitation any such regulations or other guidance that may be issued or amended after the date the Plan is adopted by the Board, or (iii) as necessary to obtain or maintain favorable tax, listing, or regulatory treatment. To be clear, the Board may amend outstanding Purchase Rights without a Participant's consent if such amendment is necessary to ensure that the Purchase Right and/or the Plan complies with the requirements of Section 423 of the Code.

13. EFFECTIVE DATE OF PLAN.

The Plan will become effective immediately prior to and contingent upon the IPO Date. No Purchase Rights will be exercised unless and until the Plan has been approved by the stockholders of the Company, which approval must be within 12 months before or after the date the Plan is adopted (or if required under Section 12(a) above, materially amended) by the Board.

14. MISCELLANEOUS PROVISIONS.

(a) Proceeds from the sale of shares of Common Stock pursuant to Purchase Rights will constitute general funds of the Company.

(b) A Participant will not be deemed to be the holder of, or to have any of the rights of a holder with respect to, shares of Common Stock subject to Purchase Rights unless and until the Participant's shares of Common Stock acquired upon exercise of Purchase Rights are recorded in the books of the Company (or its transfer agent).

(c) The Plan and Offering do not constitute an employment contract. Nothing in the Plan or in the Offering will in any way alter the at will nature of a Participant's employment or be deemed to create in any way whatsoever any obligation on the part of any Participant to continue in the employ of the Company or a Related Corporation, or on the part of the Company or a Related Corporation to continue the employment of a Participant.

(d) The provisions of the Plan will be governed by the laws of the State of Delaware without resort to that state's conflicts of laws rules.

15. DEFINITIONS.

As used in the Plan, the following definitions will apply to the capitalized terms indicated below:

(a) “**Board**” means the Board of Directors of the Company.

(b) “**Capital Stock**” means each and every class of common stock of the Company, regardless of the number of votes per share.

(c) “**Capitalization Adjustment**” means any change that is made in, or other events that occur with respect to, the Common Stock subject to the Plan or subject to any Purchase Right after the date the Plan is adopted by the Board without the receipt of consideration by the Company through merger, consolidation, reorganization, recapitalization, reincorporation, stock dividend, dividend in property other than cash, large nonrecurring cash dividend, stock split, liquidating dividend, combination of shares, exchange of shares, change in corporate structure or other similar equity restructuring transaction, as that term is used in Financial Accounting Standards Board Accounting Standards Codification Topic 718 (or any successor thereto). Notwithstanding the foregoing, the conversion of any convertible securities of the Company will not be treated as a Capitalization Adjustment.

(d) “**Code**” means the Internal Revenue Code of 1986, as amended, including any applicable regulations and guidance thereunder.

(e) “**Committee**” means a committee of one or more members of the Board to whom authority has been delegated by the Board in accordance with Section 2(c).

(f) “**Common Stock**” means, as of the IPO Date, the common stock of the Company, having 1 vote per share.

(g) “**Company**” means Bellicum Pharmaceuticals, Inc., a Delaware corporation.

(h) “**Contributions**” means the payroll deductions and other additional payments specifically provided for in the Offering that a Participant contributes to fund the exercise of a Purchase Right. A Participant may make additional payments into his or her account if specifically provided for in the Offering, and then only if the Participant has not already had the maximum permitted amount withheld during the Offering through payroll deductions.

(i) “**Corporate Transaction**” means the consummation, in a single transaction or in a series of related transactions, of any one or more of the following events:

(i) a sale or other disposition of all or substantially all, as determined by the Board in its sole discretion, of the consolidated assets of the Company and its Subsidiaries;

(ii) a sale or other disposition of at least 90% of the outstanding securities of the Company;

(iii) a merger, consolidation or similar transaction following which the Company is not the surviving corporation; or

(iv) a merger, consolidation or similar transaction following which the Company is the surviving corporation but the shares of Common Stock outstanding immediately preceding the merger, consolidation or similar transaction are converted or exchanged by virtue of the merger, consolidation or similar transaction into other property, whether in the form of securities, cash or otherwise.

(j) “**Director**” means a member of the Board.

(k) “**Eligible Employee**” means an Employee who meets the requirements set forth in the document(s) governing the Offering for eligibility to participate in the Offering, provided that such Employee also meets the requirements for eligibility to participate set forth in the Plan.

(l) “**Employee**” means any person, including an Officer or Director, who is “employed” for purposes of Section 423(b)(4) of the Code by the Company or a Related Corporation. However, service solely as a Director, or payment of a fee for such services, will not cause a Director to be considered an “Employee” for purposes of the Plan.

(m) “**Employee Stock Purchase Plan**” means a plan that grants Purchase Rights intended to be options issued under an “employee stock purchase plan,” as that term is defined in Section 423(b) of the Code.

(n) “**Exchange Act**” means the Securities Exchange Act of 1934, as amended and the rules and regulations promulgated thereunder.

(o) “**Fair Market Value**” means, as of any date, the value of the Common Stock determined as follows:

(i) If the Common Stock is listed on any established stock exchange or traded on any established market, the Fair Market Value of a share of Common Stock will be, unless otherwise determined by the Board, the **closing sales price** for such stock as quoted on such exchange or market (or the exchange or market with the greatest volume of trading in the Common Stock) **on the date of determination**, as reported in such source as the Board deems reliable. Unless otherwise provided by the Board, if there is no closing sales price for the Common Stock on the date of determination, then the Fair Market Value will be the closing sales price on the last preceding date for which such quotation exists.

(ii) In the absence of such markets for the Common Stock, the Fair Market Value will be determined by the Board in good faith in compliance with applicable laws and in a manner that complies with Sections 409A of the Code.

(iii) Notwithstanding the foregoing, for any Offering that commences on the IPO Date, the Fair Market Value of the shares of Common Stock on the Offering Date will be the price per share at which shares are first sold to the public in the Company’s initial public offering as specified in the final prospectus for that initial public offering.

(p) “**IPO Date**” means the date of the underwriting agreement between the Company and the underwriter(s) managing the initial public offering of the Common Stock, pursuant to which the Common Stock is priced for the initial public offering.

(q) “**Offering**” means the grant to Eligible Employees of Purchase Rights, with the exercise of those Purchase Rights automatically occurring at the end of one or more Purchase Periods. The terms and conditions of an Offering will generally be set forth in the “**Offering Document**” approved by the Board for that Offering.

(r) “**Offering Date**” means a date selected by the Board for an Offering to commence.

(s) “**Officer**” means a person who is an officer of the Company or a Related Corporation within the meaning of Section 16 of the Exchange Act.

(t) “**Participant**” means an Eligible Employee who holds an outstanding Purchase Right.

(u) “**Plan**” means this Bellicum Pharmaceuticals, Inc. 2014 Employee Stock Purchase Plan.

(v) “**Purchase Date**” means one or more dates during an Offering selected by the Board on which Purchase Rights will be exercised and on which purchases of shares of Common Stock will be carried out in accordance with such Offering.

(w) “**Purchase Period**” means a period of time specified within an Offering, generally beginning on the Offering Date or on the first Trading Day following a Purchase Date, and ending on a Purchase Date. An Offering may consist of one or more Purchase Periods.

(x) “**Purchase Right**” means an option to purchase shares of Common Stock granted pursuant to the Plan.

(y) “**Related Corporation**” means any “parent corporation” or “subsidiary corporation” of the Company whether now or subsequently established, as those terms are defined in Sections 424(e) and (f), respectively, of the Code.

(z) “**Securities Act**” means the Securities Act of 1933, as amended.

(aa) “**Trading Day**” means any day on which the exchange(s) or market(s) on which shares of Common Stock are listed, including but not limited to the NYSE, Nasdaq Global Select Market, the Nasdaq Global Market, the Nasdaq Capital Market or any successors thereto, is open for trading.

2014 EMPLOYEE STOCK PURCHASE PLAN
OFFERING DOCUMENT

ADOPTED BY THE BOARD OF DIRECTORS: DECEMBER 4, 2014

In this document, capitalized terms not otherwise defined will have the same definitions of such terms as in the Bellicum Pharmaceuticals, Inc. 2014 Employee Stock Purchase Plan.

1. GRANT; OFFERING DATE.

(a) The Board hereby authorizes a series of Offerings pursuant to the terms of this Offering document.

(b) The first Offering hereunder (the “*Initial Offering*”) will begin on the IPO Date and will end on December 10, 2016, unless terminated earlier as provided below. The Initial Offering will consist of four Purchase Periods, with the first Purchase Period ending on June 10, 2015, the second Purchase Period ending on December 10, 2015, the third Purchase Period ending on June 10, 2016 and the fourth Purchase Period and the Initial Offering ending on December 10, 2016.

(c) After the Initial Offering ends, a new Offering will automatically begin over the term of the Plan on the day that immediately follows the conclusion of the preceding Offering. Each new Offering will be approximately 24 months in duration. Each Offering will consist of four Purchase Periods approximately six months in duration ending on June 10 and December 10 each year. Except as provided below, a Purchase Date is the last day of a Purchase Period or of an Offering, as the case may be.

(d) The first day of an Offering shall be that Offering’s “Offering Date,” except as provided in Section 2 below, and the last day of a Purchase Period shall be that Purchase Period’s “Purchase Date.” Notwithstanding the foregoing: (i) if any Offering Date falls on a day that is not a Trading Day, then such Offering Date will instead fall on the next subsequent Trading Day, and (ii) if the last day of either a Purchase Period or an Offering Period (and therefore any Purchase Date) falls on a day that is not a Trading Day, then such last day of the Purchase Period or Offering Period (and therefore the Purchase Date) will instead fall on the immediately preceding Trading Day.

(e) Prior to the commencement of any Offering, the Board or Committee may change any or all terms of such Offering and any subsequent Offerings. The granting of Purchase Rights pursuant to each Offering hereunder will occur on each respective Offering Date unless (i) prior to such date the Board or Committee determines that such Offering will not occur, or (ii) no shares of Common Stock remain available, as of the Offering Date, for issuance under the Plan in connection with such Offering.

(f) Notwithstanding anything in this Section 1 to the contrary, if the Fair Market Value of a share of Common Stock on any Purchase Date during an Offering is less than or equal to the Fair Market Value of a share of Common Stock on the Offering Date for that Offering, then that Offering shall terminate immediately following the purchase of shares of Common Stock on such Purchase Date. Participants in the terminated Offering automatically shall be enrolled in the Offering that commences immediately after such Purchase Date. Thereafter, notwithstanding the provisions of Section 1(c) above, instead of a new Offering commencing pursuant to Section 1(c), a new Offering shall begin on the 24 month anniversary of the new Offering that commences pursuant to this Section 1(f) and every 24 months thereafter. It is intended that Sections 1(c) and 1(f) shall operate so that only one Offering shall be outstanding at any time under the Plan, and that at all times one Offering shall be outstanding under the Plan. Notwithstanding anything to the contrary set forth herein, a new Offering shall only commence pursuant to this Section 1(f) if the Fair Market Value of a share of Common Stock on a Purchase Date within an Offering is less than the Fair Market Value on the Offering Date that is the first day of the 24 month offering period, irrespective of the Fair Market Value on a subsequent Offering Date for any individual who becomes an Eligible Employee during an Offering pursuant to Section 2(b)(i) below.

2. ELIGIBLE EMPLOYEES.

(a) Each Eligible Employee who (1) is either (i) an employee of the Company; (ii) an employee of a Related Corporation incorporated in the United States; or (iii) an employee of a Related Corporation that is not incorporated in the United States but whose employees the Board or Committee has designated as eligible to participate in the Offering, and (2) has completed the necessary enrollment paperwork (including any enrollment form) by the applicable deadline, will be granted a Purchase Right on the Offering Date of such Offering.

(b) Each person who, during the course of an Offering (and prior to the commencement of the final Purchase Period for such Offering), first becomes an Eligible Employee will be granted a Purchase Right under that Offering on the first Trading Day of the first Purchase Period that commences after the date such person becomes an Eligible Employee, which Purchase Right will thereafter be deemed to be a part of that Offering; *provided, however*, that as a condition to the grant of such Purchase Right, such Eligible Employee must submit the necessary enrollment paperwork (including any enrollment form) required by the Company at least five business days (or such other period of time as determined by the Company and communicated to Participants) before the start of such Purchase Period. Such Purchase Right will have the same characteristics as any Purchase Rights originally granted under that Offering, as described herein, except that:

(i) the date on which such Purchase Right is granted will be the "Offering Date" of such Purchase Right for all purposes, including determination of the exercise price of such Purchase Right, except for the application of the provision of Section 1(f) above (the application of which will be determined only by using the Offering Date of the ongoing Offering that is the first day of the Offering); and

(ii) the period of the Offering with respect to such Purchase Right will begin on its Offering Date and end coincident with the end of the original Offering.

(c) Notwithstanding the foregoing, the following Employees will **not** be Eligible Employees or be granted Purchase Rights under an Offering:

(i) Employees whose customary employment is 20 hours per week or less or 5 months per calendar year or less;

(ii) five percent stockholders (including ownership through unexercised and/or unvested stock options) as described in Section 5(c) of the Plan;

or

(iii) Employees in jurisdictions outside of the United States if, as of the Offering Date of the Offering, the grant of such Purchase Rights under this Offering document would not be in compliance with the applicable laws, regulations or requirements of any jurisdiction in which the Employee resides or is employed, as determined in the sole discretion of the Board.

3. PURCHASE RIGHTS; PURCHASE LIMITS.

(a) Subject to the limitations herein and in the Plan, a Participant's Purchase Right will permit the purchase of the number of shares of Common Stock purchasable with up to 15% of such Participant's Earnings paid during the Offering, beginning as of the date such Participant first commences participation in that Offering; *provided, however*, that no Participant may have more than 15% of such Participant's Earnings applied to purchase shares of Common Stock under all ongoing Offerings under the Plan and all other plans of the Company and Related Corporations that are intended to qualify as employee stock purchase plans under Section 423 of the Code. In the case of a payroll date that falls after the Purchase Date of one Purchase Period but prior to the first Trading Day of the immediately following Purchase Period, if applicable, Earnings from such payroll will be included in the new Purchase Period. In the case of a payroll date that falls after the last Purchase Date of an Offering but prior to the Offering Date of the next new Offering, Earnings from such payroll will be included in the new Offering (provided the Eligible Employee continues to participate in the new Offering).

(b) For Offerings hereunder, "**Earnings**" means the regular cash W-2 compensation paid to a Participant, including all base salary and base wages (including the value of such amounts elected to be deferred by such Participant under any 401(k) plan or other deferred compensation program or arrangement established by the Company or a Related Corporation), but excluding all of the following: overtime pay, commissions, and bonuses, all other cash remuneration paid directly to the Participant, profit sharing contributions, the cost of employee benefits paid for by the Company or a Related Corporation, education or tuition reimbursements, imputed income (whether or not arising under any Company or Related Corporation group insurance or benefit program), traveling expenses, business expense reimbursements, moving expense reimbursements, housing and living allowances, income received, reported or otherwise recognized in connection with stock options and other equity awards, contributions made by the Company or a Related Corporation under any employee benefit plan, and other similar items of compensation.

(c) However, the maximum number of shares of Common Stock that a Participant may purchase on any Purchase Date in an Offering will be such number of shares as has a Fair Market Value (determined as of the Offering Date for such Offering) equal to (1) \$25,000 multiplied by the number of calendar years in which the Purchase Right under such Offering has been outstanding at any time, minus (2) the Fair Market Value of any other shares of Common Stock (determined as of the relevant Offering Date with respect to such shares) that, for purposes of the limitation of Section 423(b)(8) of the Code, are attributed to any of such calendar years in which the Purchase Right has been outstanding. In all cases, this \$25,000 limit will be determined in accordance with regulations applicable under Section 423(b)(8) of the Code. In particular, the amount in clause (2) will be determined based on (i) the number of shares previously purchased with respect to such calendar years pursuant to such Offering or any other Offering under the Plan, and pursuant to any other Company or Related Corporation plans intended to qualify as an employee stock purchase plan under Section 423 of the Code, and (ii) the number of shares subject to other Purchase Rights outstanding on the Offering Date for such Offering pursuant to the Plan and any other such Company or Related Corporation plan intended to qualify as an Employee Stock Purchase Plan.

(d) In addition, the maximum number of shares of Common Stock that may be purchased on any single Purchase Date by any one Participant is 3,000 shares.

(e) In all cases, the maximum aggregate number of shares of Common Stock available to be purchased by all Participants under an Offering will be the number of shares of Common Stock remaining available under the Plan on the Offering Date, rounded down to the nearest whole share, taking into account the Purchase Rights granted or to be granted under all other contemporaneous Offerings under the Plan. If the aggregate number of shares of Common Stock to be purchased upon the exercise of all outstanding Purchase Rights on a single Purchase Date under all on-going Offerings would exceed the foregoing limit, the Board will make a pro rata allocation (based on each Participant's accumulated Contributions) on the applicable Purchase Date of the shares available (as of the Offering Date) in a uniform and equitable manner.

(f) In addition, the maximum number of shares of Common Stock that may be purchased on any single Purchase Date by all Eligible Employees shall not exceed 40,000 shares.

(g) Any Contributions not applied to the purchase of shares of Common Stock as a result of the application of the limits set forth in this Section 3 will be refunded to the Participants as provided in the Plan.

4. PURCHASE PRICE.

The purchase price of shares of Common Stock under an Offering will be the lesser of: (i) 85% of the Fair Market Value of such shares of Common Stock on the Offering Date, and (ii) 85% of the Fair Market Value of such shares of Common Stock on the applicable Purchase Date, in each case rounded up to the nearest whole cent per share. For the Initial Offering, the Fair Market Value of the shares of Common Stock on the Offering Date will be the price per share at which shares are first sold to the public in the Company's initial public offering, as specified in the final prospectus for that initial public offering.

5. PARTICIPATION.

(a) An Eligible Employee's election to participate in an Offering is effective on the Offering Date. An Eligible Employee must elect his or her Contribution rate on the enrollment form provided by the Company. The completed enrollment form must be delivered to the Company at least five business days prior to the Offering Date, unless a different time is set by the Company for all Eligible Employees with respect to a given Offering. Contribution rates must be expressed in whole percentages of Earnings, with a minimum percentage of 1% (except as otherwise provided herein) and a maximum percentage of 15%. Contributions may only be made through payroll deductions.

(b) A Participant may increase or decrease his or her Contribution level, with such change effective as of the next Purchase Period or Offering, as applicable, by delivering the required election form at least five business days (or such other period of time as determined by the Company and communicated to Participants) prior to the start of the Purchase Period or Offering, as applicable, for which it is to be effective. However, the Company may determine in its sole discretion at any time, including at any time following the commencement of an Offering or Purchase Period, that it will no longer accept Participant requests to increase Contribution levels.

(c) A Participant may increase his or her Contribution level once during a Purchase Period as to Contributions to be made during that Purchase Period. A Participant may decrease (including a decrease to 0%) his or her Contribution level no more than two times during a Purchase Period (and the second decrease in Contribution level must be to 0%). The Participant must deliver an election form stating the new decreased Contribution level at least five business days (or such other period of time as determined by the Company and communicated to Participants) prior to the payroll date for which it is to be effective. Any Participant who has not increased his or her Contribution level from 0% to at least 1% at least five business days (or such other period of time as determined by the Company and communicated to Participants) prior to the start of a new Offering will be withdrawn from the Plan effective as of the first day of that new Offering.

(d) A Participant may withdraw from an Offering and receive a refund of his or her Contributions (reduced to the extent, if any, such Contributions have been used to acquire shares of Common Stock for the Participant on any prior Purchase Date) without interest, at any time prior to the end of the Offering, but excluding the five business day period immediately preceding a Purchase Date (or such other period of time determined by the Company and communicated to Participants), by delivering the required form of withdrawal notice. A Participant who has withdrawn from an Offering may not again participate in that Offering, but may participate in subsequent Offerings.

(e) Eligible Employees may not make an investment decision regarding participation in an Offering, including electing a Contribution level, until a registration statement covering the shares reserved under the Plan for that Offering has been filed by the Company and has become effective. The Company may establish procedures to enable the purposes of the Plan to be satisfied while complying with applicable securities laws.

(f) For the Initial Offering only, each Eligible Employee who is employed on the Offering Date for the Initial Offering automatically will be enrolled in the Initial Offering, with a Purchase Right to purchase up to the number of shares of Common Stock that are purchasable with 15% of the Eligible Employee's Earnings attributable to the Initial Offering, subject to the limitations set forth in Section 3 above. Immediately following the filing of an effective registration statement pursuant to a Form S-8, Eligible Employees will have a two week period (unless otherwise provided by the Company) (with the last such day of that period referred to as the "**Election Date**") within which to (i) withdraw from the Plan or (ii) authorize Contributions through payroll deductions for the purchase of shares during the Initial Offering (which may be for a percentage that is less than 15% of the Eligible Employee's Earnings, including 0%). Authorized payroll deductions will begin on the first regularly scheduled payroll payday that occurs at least five business days following the Election Date (unless an earlier payday is selected by the Company). If an Eligible Employee fails to authorize payroll deductions at a Contribution level of at least 1% by the Election Date, the Eligible Employee will be deemed to have elected a 0% Contribution Rate for the first Purchase Period of the Initial Offering and no shares will be purchased for the Eligible Employee on the first Purchase Date of the Initial Offering. However, this Eligible Employee's Purchase Right will remain outstanding and he or she may still authorize payroll deductions for the second Purchase Period of the Initial Offering. If the Eligible Employee has not timely elected payroll deductions at the rate of at least 1% before the start of the second Purchase Period of the Initial Offering, his or her Purchase Right for the Initial Offering will be immediately terminated, he or she will be automatically withdrawn from the Plan, and he or she must affirmatively enroll and authorize payroll deductions in accordance with Section 5(a) above to participate in future Offerings.

(g) Once an Eligible Employee affirmatively enrolls in an Offering and authorizes Contributions (including in connection with the Initial Offering), the Eligible Employee automatically will be enrolled for all subsequent Offerings until he or she elects to withdraw from an Offering pursuant to Section 5(d) above, is deemed to have withdrawn pursuant to Section 5(c) above, or otherwise terminates his or her participation in the Plan (including through termination of employment).

6. PURCHASES.

Subject to the limitations contained herein, on each Purchase Date, each Participant's Contributions (without any increase for interest) will be applied to the purchase of whole shares of Common Stock, up to the maximum number of shares permitted under the Plan and the Offering.

7. NOTICES AND AGREEMENTS.

Any notices or agreements provided for in an Offering or the Plan will be given in writing, in a form provided by the Company (including documents delivered in electronic form, if authorized by the Committee). Unless specifically provided for in the Plan or this Offering, notices and agreements will be deemed effectively given upon receipt (including documents delivered in electronic form).

8. EXERCISE CONTINGENT ON STOCKHOLDER APPROVAL.

The Purchase Rights granted under an Offering are subject to the approval of the Plan by the stockholders of the Company as required for the Plan to obtain treatment as an Employee Stock Purchase Plan.

9. OFFERING SUBJECT TO PLAN.

Each Offering is subject to all the provisions of the Plan, and the provisions of the Plan are hereby made a part of the Offering. The Offering is further subject to all interpretations, amendments, rules and regulations which may from time to time be promulgated and adopted pursuant to the Plan. In the event of any conflict between the provisions of an Offering and those of the Plan (including interpretations, amendments, rules and regulations which may from time to time be promulgated and adopted pursuant to the Plan), the provisions of the Plan will control.