UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM S-1 REGISTRATION STATEMENT

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) 2834

(Primary Standard Industrial Classification Code Number)

20-1450200 (LR.S. Employer **Identification Number)**

2130 W. Holcombe Blvd., Ste. 800 Houston, TX 77030 (832) 384-1100

(Address, Including Zip Code, and Telephone Number, Including Area Code, of Registrant's Principal Executive Offices)

Thomas J. Farrell **President, Chief Executive Officer** Bellicum Pharmaceuticals, Inc. 2130 W. Holcombe Blvd., Ste. 800 Houston, TX 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. Divakar Gupta, Esq. Karen E. Deschaine, Esq. **Cooley LLP** 4401 Eastgate Mall San Diego, CA 92121 (858) 550-6000

Eric W. Blanchard, Esq. Covington & Burling LLP The New York Times Building 620 Eighth Avenue New York, New York 10018 (212) 841-1000

Approximate date of commencement of proposed sale to the public: As soon as practicable after the effective	date of this registration statement.
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If any of the securities being registered on this Form are to be offered on a delayed or continuous basis pursuant to Rule 415 under the Securities Act of 1933, as amended (the "Securities Act"), check the following box. \Box

If this Form is filed to register additional securities for an offering pursuant to Rule 462(b) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering.

(File No. 333-200328)

If this Form is a post-effective amendment filed pursuant to Rule 462(c) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. \Box

If this Form is a post-effective amendment filed pursuant to Rule 462(d) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. \Box

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.

Large accelerated filer Accelerated filer

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

CALCULATION OF REGISTRATION FEE

		PROPOSED	PROPOSED	
	AMOUNT	MAXIMUM	MAXIMUM	AMOUNT OF
TITLE OF EACH CLASS OF	TO BE	OFFERING PRICE	AGGREGATE	REGISTRATION
SECURITIES TO BE REGISTERED	REGISTERED(1)	PER SHARE(2)	OFFERING PRICE(2)	FEE(2)(3)
Common Stock, \$0.01 par value per share	1,265,000	\$19.00	\$24,035,000	\$2,793

- (1) The shares being registered pursuant to this Registration Statement are in addition to the 7,187,500 shares registered pursuant to the Registrant's Registration Statement on Form S-1 (Registration No. 333-200328). Includes the shares that the underwriters have the option to purchase.
- (2) Based on the initial public offering price.
- (3) Calculated pursuant to Rule 457(a) under the Securities Act of 1933, as amended.

This Registration Statement shall become effective upon filing in accordance with Rule 462(b) under the Securities Act of 1933.

EXPLANATORY NOTE AND INCORPORATION OF CERTAIN INFORMATION BY REFERENCE

This Registration Statement is being filed with the Securities and Exchange Commission (the "Commission") with respect to the registration of additional shares of common stock, par value \$0.01 per share, of Bellicum Pharmaceuticals, Inc., a Delaware corporation, pursuant to Rule 462(b) under the Securities Act of 1933, as amended. This Registration Statement incorporates by reference the contents of, including all amendments and exhibits thereto and all information incorporated by reference therein, the Registration Statement on Form S-1 (Registration No. 333-200328), which was declared effective by the Commission on December 17, 2014, and is being filed solely for the purpose of increasing the aggregate number of shares to be offered in the public offering by 1,265,000 shares including the shares that may be sold pursuant to the underwriter's option to purchase additional shares.

The required opinions and consents are listed on the Exhibit Index attached hereto.

SIGNATURES

Pursuant to the requirements of the Securities Act, the Registrant 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 the 17th day of December, 2014.

BELLICUM PHARMACEUTICALS, INC.

/s/ Thomas J. Farrell

Thomas J. Farrell

President and Chief Executive Officer

Pursuant to the requirements of the Securities Act, this registration statement has been signed by the following persons in the capacities and on the dates indicated.

SIGNATURE	TITLE	DATE
/s/ Thomas J. Farrell Thomas J. Farrell	President, Chief Executive Officer and Member of the Board of Directors (Principal Executive Officer)	December 17, 2014
/s/ Alan A. Musso Alan A. Musso, C.P.A., C.M.A.	Chief Financial Officer and Treasurer (Principal Financial and Accounting Officer)	December 17, 2014
/s/ Kevin M. Slawin, M.D.* Kevin M. Slawin, M.D.	Chief Technology Officer and Member of the Board of Directors	December 17, 2014
/s/ Frank B. McGuyer* Frank B. McGuyer	Member of the Board of Directors	December 17, 2014
/s/ James Brown* James Brown	Member of the Board of Directors and Chairman of the Board	December 17, 2014
/s/ Reid M. Huber, Ph.D.* Reid M. Huber, Ph.D.	Member of the Board of Directors	December 17, 2014
/s/ Jon P. Stonehouse * Jon P. Stonehouse	Member of the Board of Directors	December 17, 2014
Pursuant to power of attorney		

By: ______/s/ Thomas J. Farrell

Thomas J. Farrell Attorney in fact

EXHIBIT INDEX

Exhibit <u>Number</u>	Description of Document
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(1)	Power of Attorney.
24.2(2)	Power of Attorney.

⁽¹⁾ Included on the signature page of Registration Statement on Form S-1 (File No. 333-200328), filed with the Securities and Exchange Commission on December 9, 2014, and incorporated herein by reference.

⁽²⁾ Included on the signature page of Registration Statement on Form S-1 (File No. 333-200328), filed with the Securities and Exchange Commission on November 18, 2014, and incorporated herein by reference.



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

December 17, 2014

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

Ladies and Gentlemen:

We have represented Bellicum Pharmaceuticals, Inc., a Delaware corporation (the "*Company*"), in connection with the filing by the Company of a Registration Statement on Form S-1 (the "*Registration Statement*") with the Securities and Exchange Commission pursuant to Rule 462(b) of Regulation C promulgated under the Securities Act of 1933, as amended, relating to an aggregate of 1,265,000 shares of common stock, par value \$0.01 (the "*Shares*"), including up to 165,000 shares that may be sold by the Company pursuant to the exercise of an option to purchase additional shares. The Registration Statement incorporates by reference the Registration Statement on Form S-1 (No. 333-200328), which was declared effective on December 17, 2014, including the prospectus which forms a part of such Registration Statement (the "*Prospectus*").

In connection with this opinion, we have examined and relied upon (a) the Registration Statement and related Prospectus, (b) the Company's Amended and Restated Certificate of Incorporation, as amended, and Bylaws, as currently in effect, (c) the Company's Amended and Restated Certificate of Incorporation, filed as Exhibit 3.2 to the Registration Statement, and the Company's Amended and Restated Bylaws, filed as Exhibit 3.4 to the Registration Statement, each of which will be in effect upon the closing of the offering contemplated by the Registration Statement, and (d) the originals or copies certified to our satisfaction of such records, documents, 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. As to certain factual matters, we have relied upon a certificate of an officer of the Company and have not sought independently to verify such matters. Our opinion is expressed only with respect to the General Corporation Law of the State of Delaware. We express no opinion as to whether the laws of any particular jurisdiction are applicable to the subject matter hereof. We are not rendering any opinion as to compliance with any federal or state antifraud law, rule or regulation relating to securities, or to the sale or issuance thereof.

On the basis of the foregoing, and in reliance thereon, we are of the opinion that the Shares, when sold and issued against payment therefor as described in the Registration Statement and the related Prospectus, will be validly issued, fully paid and non-assessable.

 $4401\;EASTGATE\;MALL,\;SAN\;DIEGO,\;CA\;92121\;\;T:\;(858)\;550-6000\;\;F:\;(858)\;550-6420\;\;WWW.COOLEY.COM\;\;F:\;(858)\;550-6420\;\;WW.COOLEY.COM\;\;F:\;(858)\;550-6420\;\;WW.COOLEY.COM\;\;F:\;(858)\;550-6420\;\;WW.COOLEY.COM\;\;F:\;(858)\;550-6420\;\;WW.COOLEY.COM\;\;F:\;(858)\;550-6420\;\;WW.COOLEY.COM\;\;F:\;(858)\;550-6420\;\;WW.COOLEY.COM\;\;F:\;(858)\;550-6420\;\;WW.COOLEY.COM\;\;F:\;(858)\;550-6420\;\;WW.COOLEY.COM\;\;F:\;(858)\;550-6420\;\;WW.COOLEY.COM\;\;F:\;(858)\;550-6420\;\;WW.COOLEY.COM\;\;F:\;(858)\;550-6420\;\;WW.COOLEY.COM\;\;F:\;(858)\;550-6420\;\;WW.COOLEY.COM\;\;F:\;(858)\;550-64200\;\;WW.COOLEY.COM\;\;F:\;(858)\;550-64200\;\;WW.COOLEY.COM\;\;F:\;(858)\;550-642000\;\;F:\;(858)\;F$

We consent to the reference to our firm under the caption "Legal Matters" in the Prospectus included in the Registration Statement and to the filing of this opinion as an exhibit to the Registration Statement.
Sincerely,
Cooley LLP
/s/ Julie M. Robinson

Bellicum Pharmaceuticals, Inc.

December 17, 2014

Page Two

 $4401\ EASTGATE\ MALL,\ SAN\ DIEGO,\ CA\ 92121\ \ T:\ (858)\ 550-6000\ \ F:\ (858)\ 550-6420\ \ WWW.COOLEY.COM$

Consent of Independent Registered Public Accounting Firm

We consent to the incorporation by reference in the Registration Statement on Form S-1 filed pursuant to Rule 462(b) of the Securities Act of 1933 of the reference to our firm under the caption "Experts" and to the incorporation by reference 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 Amendment No. 1 to the Registration Statement (Form S-1 No. 333-200328) and related Prospectus of Bellicum Pharmaceuticals, Inc. for the registration of its common stock.

/s/ Ernst & Young LLP

Houston, Texas December 15, 2014