

UNITED STATES  
SECURITIES AND EXCHANGE COMMISSION  
WASHINGTON, DC 20549

SCHEDULE 13D  
Under the Securities Exchange Act of 1934

(Amendment No. 1)\*

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**Bellicum Pharmaceuticals, Inc.**

(Name of Issuer)

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Common Stock, Par Value \$0.01 Per Share

(Title of Class of Securities)

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079481107

(CUSIP number)

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Alexandra A. Toohey  
Chief Financial Officer  
Baker Bros. Advisors LP  
667 Madison Avenue, 21<sup>st</sup> Floor  
New York, NY 10065  
(212) 339-5690

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(Name, address and telephone number of person authorized to receive notices and communications)

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January 15, 2016

(Date of event which requires filing of this statement)

If the filing person has previously filed a statement on Schedule 13G to report the acquisition that is the subject of this Schedule 13D, and is filing this schedule because of Rule 13d-1(e), 13d-1(f) or 13d-1(g), check the following box.

(Continued on the following pages)

**Note:** Schedules filed in paper format shall include a signed original and five copies of the schedule, including all exhibits. See Rule 13d-7 for other parties to whom copies are to be sent.

\*The remainder of this cover page shall be filled out for a reporting person's initial filing on this form with respect to the subject class of securities, and for any subsequent amendment containing information which would alter disclosures provided in a prior cover page.

The information required on the remainder of this cover page shall not be deemed to be "filed" for the purpose of Section 18 of the Securities Exchange Act of 1934 ("Act") or otherwise subject to the liabilities of that section of the Act but shall be subject to all other provisions of the Act (however, see the Notes).

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1.	NAMES OF REPORTING PERSONS Baker Bros. Advisors LP		
2.	CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP*		(a) <input type="checkbox"/> (b) <input type="checkbox"/>
3.	SEC USE ONLY		
4.	SOURCE OF FUNDS* OO		
5.	CHECK BOX IF DISCLOSURE OF LEGAL PROCEEDINGS IS REQUIRED PURSUANT TO ITEM 2(d) or 2(e) <input type="checkbox"/>		
6.	CITIZENSHIP OR PLACE OF ORGANIZATION Delaware		
NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH	7.	SOLE VOTING POWER 4,865,647	
	8.	SHARED VOTING POWER: 0	
	9.	SOLE DISPOSITIVE POWER: 4,865,647	
	10.	SHARED DISPOSITIVE POWER: 0	
11.	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON: 4,865,647		
12.	CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (11) EXCLUDES CERTAIN SHARES (See Instructions) <input type="checkbox"/>		
13.	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11) 18.0% (1)		
14.	TYPE OF REPORTING PERSON (See Instructions) IA, PN		

(1) Based on 26,998,423 shares of common stock outstanding as of January 12, 2016, as reported in the Issuer's Form S-3 filed with the SEC on January 15, 2016.

1.	NAMES OF REPORTING PERSONS Baker Bros. Advisors (GP) LLC		
2.	CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP*		(a) <input type="checkbox"/> (b) <input type="checkbox"/>
3.	SEC USE ONLY		
4.	SOURCE OF FUNDS* OO		
5.	CHECK BOX IF DISCLOSURE OF LEGAL PROCEEDINGS IS REQUIRED PURSUANT TO ITEM 2(d) or 2(e) <input type="checkbox"/>		
6.	CITIZENSHIP OR PLACE OF ORGANIZATION Delaware		
NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH	7.	SOLE VOTING POWER 4,865,647	
	8.	SHARED VOTING POWER: 0	
	9.	SOLE DISPOSITIVE POWER: 4,865,647	
	10.	SHARED DISPOSITIVE POWER: 0	
11.	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON: 4,865,647		
12.	CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (11) EXCLUDES CERTAIN SHARES (See Instructions) <input type="checkbox"/>		
13.	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11) 18.0% (1)		
14.	TYPE OF REPORTING PERSON (See Instructions) HC, OO		

(1) Based on 26,998,423 shares of common stock outstanding as of January 12, 2016, as reported in the Issuer's Form S-3 filed with the SEC on January 15, 2016.

1.	NAMES OF REPORTING PERSONS Julian C. Baker		
2.	CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP*		(a) <input type="checkbox"/> (b) <input type="checkbox"/>
3.	SEC USE ONLY		
4.	SOURCE OF FUNDS* OO		
5.	CHECK BOX IF DISCLOSURE OF LEGAL PROCEEDINGS IS REQUIRED PURSUANT TO ITEM 2(d) or 2(e) <input type="checkbox"/>		
6.	CITIZENSHIP OR PLACE OF ORGANIZATION United States		
NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH	7.	SOLE VOTING POWER: 4,865,647	
	8.	SHARED VOTING POWER: 0	
	9.	SOLE DISPOSITIVE POWER: 4,865,647	
	10.	SHARED DISPOSITIVE POWER: 0	
11.	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON: 4,865,647		
12.	CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (11) EXCLUDES CERTAIN SHARES (See Instructions) <input type="checkbox"/>		
13.	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11) 18.0% (1)		
14.	TYPE OF REPORTING PERSON (See Instructions) IN, HC		

(1) Based on 26,998,423 shares of common stock outstanding as of January 12, 2016, as reported in the Issuer's Form S-3 filed with the SEC on January 15, 2016.

1.	NAMES OF REPORTING PERSONS Felix J. Baker		
2.	CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP*		(a) <input type="checkbox"/> (b) <input type="checkbox"/>
3.	SEC USE ONLY		
4.	SOURCE OF FUNDS (See Instructions) OO		
5.	CHECK BOX IF DISCLOSURE OF LEGAL PROCEEDINGS IS REQUIRED PURSUANT TO ITEM 2(d) or 2(e) <input type="checkbox"/>		
6.	CITIZENSHIP OR PLACE OF ORGANIZATION United States		
NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH	7.	SOLE VOTING POWER: 4,865,647	
	8.	SHARED VOTING POWER: 0	
	9.	SOLE DISPOSITIVE POWER: 4,865,647	
	10.	SHARED DISPOSITIVE POWER: 0	
11.	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON: 4,865,647		
12.	CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (11) EXCLUDES CERTAIN SHARES (See Instructions) <input type="checkbox"/>		
13.	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11) 18.0% (1)		
14.	TYPE OF REPORTING PERSON (See Instructions) IN, HC		

(1) Based on 26,998,423 shares of common stock outstanding as of January 12, 2016, as reported in the Issuer's Form S-3 filed with the SEC on January 15, 2016.

### **Amendment No. 1 to Schedule 13D**

This Amendment No. 1 to Schedule 13D amends and supplements the previously filed Schedule 13D filed by Baker Bros. Advisors LP (the “Adviser”), Baker Bros. Advisors (GP), LLC (the “Adviser GP”), Julian C. Baker and Felix J. Baker. Except as supplemented herein, such statements, as heretofore amended and supplemented, remain in full force and effect. All capitalized terms contained herein but not otherwise defined shall have the meanings ascribed to such terms in the previously filed Schedule 13D.

The Adviser GP is the sole general partner of the Adviser. Pursuant to the amended and restated management agreements, among the Adviser, Baker Brothers Life Sciences, L.P. (“Life Sciences”), 14159, L.P. (“14159”), and 667, L.P. (“667”, and together with Life Sciences and 14159, the “Funds”), and their respective general partners, the Adviser has complete and unlimited discretion and authority with respect to the Funds’ investments and voting power over investments.

#### **Item 5. Interest in Securities of the Issuer.**

(a) and (b) Items 7 through 11 and 13 of each of the cover pages of this Amendment No. 1 are incorporated herein by reference. Set forth below is the aggregate number and percentage of shares of Common Stock directly held, as of the date hereof, by each of the following based upon 26,998,423 shares of Common Stock outstanding as of January 12, 2016, as reported in the Issuer’s Form S-3 filed with the SEC on January 15, 2016. Such percentage figures were calculated in accordance with Rule 13d-3 under the Securities Exchange Act of 1934, as amended.

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Name	Number of Shares of Common Stock we own or have the right to acquire within 60 days	Percent of Class Outstanding
667, L.P.	419,271	1.6%
Baker Brothers Life Sciences, L.P.	4,375,912	16.1%
14159, L.P.	70,464	0.3%
Total	4,865,647	18.0%

The Adviser GP, Felix J. Baker and Julian C. Baker as principals of the Adviser GP, and the Adviser may be deemed to be beneficial owners of securities of the Issuer directly held by the Funds, and may be deemed to have the power to vote or direct the vote of and the power to dispose or direct the disposition of such securities.

The Reporting Persons disclaim beneficial ownership of the securities of the Issuer held by each of the Funds, and this Amendment No. 1 shall not be deemed an admission that the Reporting Persons are the beneficial owners of such securities for purposes of Section 13(d) or for any other purpose, except to the extent that any such Reporting Persons actually exercises voting or dispositive power with respect to such securities.

Except as disclosed herein, or in the previously filed Schedule 13D, none of the Reporting Persons or their affiliates has effected any other transactions in securities of the Issuer during the past 60 days.

(d) Certain securities of the Issuer are held directly by 667, a limited partnership the sole general partner of which is Baker Biotech Capital, L.P., a limited partnership the sole general partner of which is Baker Biotech Capital (GP), LLC. Julian C. Baker and Felix J. Baker are the controlling members of Baker Biotech Capital (GP), LLC.

Certain securities of the Issuer are held directly by Life Sciences, a limited partnership the sole general partner of which is Baker Brothers Life Sciences Capital, L.P., a limited partnership the sole general partner of which is Baker Brothers Life Sciences Capital (GP), LLC. Julian C. Baker and Felix J. Baker are the controlling members of Baker Brothers Life Sciences Capital (GP), LLC.

Certain securities of the Issuer are held directly by 14159, a limited partnership the sole general partner of which is 14159 Capital, L.P., a limited partnership the sole general partner of which is 14159 Capital (GP), LLC. Julian C. Baker and Felix J. Baker are the controlling members of 14159 Capital (GP), LLC.

(e) Not applicable.

**Item 6. Contracts, Arrangements, Understandings or Relationships with Respect to the Securities of the Issuer.**

Item 6 of this Schedule 13D is hereby supplemented and amended, as the case may be, as follows:

On January 15, 2016, the Issuer entered into a registration rights agreement (the “Registration Rights Agreement”) with the Funds. Under the Registration Rights Agreement, the Issuer agreed that following a demand by the Funds that the Issuer register their shares of Common Stock for resale under the Securities Act of 1933, as amended, the Issuer would be obligated to effect such registration. The Issuer’s registration obligations under the Registration Rights Agreement cover all shares of Common Stock now held or later acquired by the Funds, will continue in effect for up to ten years, and include the Issuer’s obligation to facilitate certain underwritten public offerings of Common Stock by the Funds in the future. The Funds have the right to one underwritten public offering per calendar year, but no more than three underwritten public offerings in total. The Issuer will bear all expenses incurred by it in effecting any registration pursuant to the Registration Rights Agreement as well as the legal expenses of the Funds of up to \$50,000 per underwritten public offering effected pursuant to the Registration Rights Agreement.

In addition, as a condition of the Issuer’s execution and delivery of the Registration Rights Agreement the Funds and their affiliates irrevocably waived any and all prior registration rights pursuant to the Second Amended and Restated Investor Rights Agreement dated August 22, 2014, by and among the Issuer and the investors set forth therein and party thereto.

The foregoing description of the Registraton Rights Agreement does not purport to be complete and is qualified in its entirety by reference to the full text of the Registration Rights Agreement, which is incorporated by reference as Exhibit 99.1, and is incorporated herein by reference.

**Item 7. Material to be Filed as Exhibits.**

<u>Exhibit</u>	<u>Description</u>
99.1	Registration Rights Agreement, dated January 15, 2016, by and between Bellicum Pharmaceuticals, Inc., 667, L.P., Baker Brothers Life Sciences, L.P. and 14159, L.P. (incorporated by reference to Exhibit 4.3 to the Issuer’s Form S-3, filed with the SEC on January 15, 2016).

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**SIGNATURE**

After reasonable inquiry and to the best of my knowledge and belief, I certify that the information set forth in this statement is true, complete and correct.

Dated: January 19, 2016

**BAKER BROS. ADVISORS LP**

By: Baker Bros. Advisors (GP) LLC, its general partner

By: /s/ Scott L. Lessing

Name: Scott L. Lessing

Title: President

**BAKER BROS. ADVISORS (GP) LLC**

By: /s/ Scott L. Lessing

Name: Scott L. Lessing

Title: President

/s/ Julian C. Baker

Julian C. Baker

/s/ Felix J. Baker

Felix J. Baker

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