

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, DC 20549

SCHEDULE 13D
Under the Securities Exchange Act of 1934

(Amendment No.)*

Bellicum Pharmaceuticals, Inc.

(Name of Issuer)

Common Stock, Par Value \$0.01 Per Share

(Title of Class of Securities)

079481107

(CUSIP number)

Alexandra A. Toohy
Chief Financial Officer
Baker Bros. Advisors LP
860 Washington Street, 3rd Floor
New York, NY 10014
(212) 339-5690

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

August 16, 2019

(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).

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 2,677,818
	8.	SHARED VOTING POWER: 0
	9.	SOLE DISPOSITIVE POWER: 2,677,818
	10.	SHARED DISPOSITIVE POWER: 0
11.	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON: 2,677,818	
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) 5.8% (1)	
14.	TYPE OF REPORTING PERSON (See Instructions) IA, PN	

(1) Based on 46,254,163 shares of the common stock ("Common Stock") of Bellicum Pharmaceuticals, Inc. (the "Issuer") outstanding as of July 31, 2019, as reported in the Issuer's Form 10-Q filed with the Securities and Exchange Commission (the "SEC") on August 5, 2019.

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 2,677,818
	8.	SHARED VOTING POWER: 0
	9.	SOLE DISPOSITIVE POWER: 2,677,818
	10.	SHARED DISPOSITIVE POWER: 0
11.	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON: 2,677,818	
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) 5.8% (1)	
14.	TYPE OF REPORTING PERSON (See Instructions) HC, OO	

(1) Based on 46,254,163 shares of Common Stock outstanding as of July 31, 2019, as reported in the Issuer's Form 10-Q filed with the SEC on August 5, 2019.

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: 2,677,818
	8.	SHARED VOTING POWER: 0
	9.	SOLE DISPOSITIVE POWER: 2,677,818
	10.	SHARED DISPOSITIVE POWER: 0
11.	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON: 2,677,818	
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) 5.8% (1)	
14.	TYPE OF REPORTING PERSON (See Instructions) IN, HC	

(1) Based on 46,254,163 shares of Common Stock outstanding as of July 31, 2019, as reported in the Issuer's Form 10-Q filed with the SEC on August 5, 2019.

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: 2,677,818
	8.	SHARED VOTING POWER: 0
	9.	SOLE DISPOSITIVE POWER: 2,677,818
	10.	SHARED DISPOSITIVE POWER: 0
11.	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON: 2,677,818	
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) 5.8% (1)	
14.	TYPE OF REPORTING PERSON (See Instructions) IN, HC	

(1) Based on 46,254,163 shares of Common Stock outstanding as of July 31, 2019, as reported in the Issuer's Form 10-Q filed with the SEC on August 5, 2019.

Schedule 13D**Item 1. Security and Issuer.**

The class of equity security to which this statement on Schedule 13D relates is the common stock, par value \$0.01 per share (the "Common Stock") of Bellicum Pharmaceuticals, Inc., a corporation organized under the laws of the state of Delaware (the "Issuer"). The address of the principal executive offices of the Issuer is 2130 W. Holcombe Blvd., Ste. 800, Houston, Texas 77030. Information given in response to each item shall be deemed incorporated by reference in all other items, as applicable.

Item 2. Identity and Background.

(a) The Reporting Persons are:

1. Baker Bros. Advisors LP (the "Adviser")
2. Baker Bros. Advisors (GP) LLC (the "Adviser GP")
3. Felix J. Baker
4. Julian C. Baker

(b) The business address of each of the Reporting Persons is:

c/o Baker Bros. Advisors LP
860 Washington Street, 3rd Floor
New York, NY 10014
(212) 339-5690

(c) The Adviser is an entity engaged in investment activities, and the Adviser GP is in the business of acting as its general partner and, through the Adviser, investment activities. The principal business of each of Julian C. Baker and Felix J. Baker is to serve as a managing member of the Adviser GP.

(d) and (e) During the past five years, none of the Reporting Persons nor any of the Funds (as defined below) has been (i) convicted in a criminal proceeding (excluding traffic violations or similar misdemeanors) or (ii) a party to a civil proceeding of a judicial or administrative body of competent jurisdiction and as a result of such proceeding was or is subject to a judgment, decree or final order enjoining future violations of, or prohibiting or mandating activities subject to, federal or state securities laws or finding any violation with respect to such laws.

(f) The Adviser GP is a limited liability company organized under the laws of the State of Delaware. The Adviser is a limited partnership organized under the laws of the State of Delaware. The citizenship of each of Julian C. Baker and Felix J. Baker is the United States of America.

Item 3. Source and Amount of Funds or Other Consideration

The disclosure in Item 4 below is incorporated herein by reference. The securities of the Issuer purchased by 667, L.P. ("667") and Baker Brothers Life Sciences, L.P. ("Life Sciences", and together with 667, the "Funds") reported herein were purchased with working capital both in open market transactions directly with a broker dealer and in private transactions directly with the Issuer. The aggregate purchase price of the securities of the Issuer directly held by the Funds reported herein was approximately \$80,698,290.

Item 4. Purpose of the Transaction.*Public Offering*

On August 16, 2019, the Issuer entered into an underwriting agreement (the “Underwriting Agreement”) with Jefferies LLC and Wells Fargo Securities, LLC, as representatives of the several underwriters named therein (the “Underwriters”), relating to an underwritten public offering (the “Public Offering”) of 575,000 shares of the Issuer’s Series 1 Redeemable Convertible Non-Voting Preferred Stock (the “Series 1 Preferred”) and warrants (the “Public Warrants”) to purchase up to 57,500,000 shares of Common Stock. Each share of Series 1 Preferred is being sold together with a Public Warrant to purchase 100 shares of Common Stock at a combined price to the public of \$100.00. The Public Offering closed on August 21, 2019.

Pursuant to the Public Offering, on August 16, 2019, 667 and Life Sciences agreed to purchase 37,186 and 410,814 shares of Series 1 Preferred, respectively, and 37,186 and 410,814 Public Warrants, respectively, at the offering price of \$100.00 per Series 1 Preferred share and Public Warrant combined, totaling 448,000 Series 1 Preferred shares and 448,000 Public Warrants in the aggregate. Each of 667 and Life Sciences purchased the above securities with their working capital.

The Series 1 Preferred is initially convertible into 100 shares of Common Stock at any time at the option of the holder subject to the Public Beneficial Ownership Limitation (defined below).

The Public Warrants are exercisable immediately at the election of the holder for Common Stock at an exercise price of \$1.30 per share of Common Stock, or, in certain circumstances, \$130 per share for the Series 1 Preferred, to the extent that immediately prior to or after giving effect to such exercise the holders thereof and their affiliates and other attribution parties would beneficially own, for purposes of Rule 13d-3 under the Securities Exchange Act of 1934, as amended, no more than 9.99% of the outstanding shares of Common Stock (“Public Beneficial Ownership Limitation”). This Public Beneficial Ownership Limitation may be changed at the holder’s election to a lower percentage at any time or to a higher percentage not to exceed 19.9% upon 61 days’ notice to the Issuer. The Public Warrants will expire on August 21, 2026.

Private Placement

On August 16, 2019, the Issuer entered into a Securities Purchase Agreement (the “Securities Purchase Agreement”) with the Funds and another investor (the “Purchasers”), pursuant to which the Issuer agreed to issue in a private placement (i) 350,000 shares of its Series 2 Redeemable Convertible Non-Voting Preferred Stock (the “Series 2 Preferred”), at a purchase price of \$100.00 per share, and related warrants (the “Series 2 Private Warrants”) to purchase up to 28,000,000 shares of Common Stock at an exercise price of \$1.00 per share, and (ii) 250,000 shares of its Series 3 Redeemable Convertible Non-Voting Preferred Stock (the “Series 3 Preferred”), at a purchase price of \$140.00 per share, and related warrants (“Series 3 Private Warrants”, and together with “Series 2 Private Warrants, the “Private Warrants”) to purchase up to 8,750,000 shares of Common Stock at an exercise price of \$1.40 per share (the “Private Placement”). The purchase and sale of the securities issuable under the Securities Purchase Agreement may occur in two or more separate closings, each to be conducted at the Purchasers’ discretion within five days’ notice to the Issuer, and is subject to the Issuer obtaining stockholder approval for additional authorized shares of Common Stock or a reverse stock split (the “Required Stockholder Approval”), and the right of the Purchasers to purchase such securities will expire two and a half years after the Required Stockholder Approval, with respect to the Series 2 Preferred, and three years after such stockholder approval, with respect to the Series 3 Preferred, if not exercised prior to that date.

Within three business days following the execution of the Securities Purchase Agreement, the Purchasers were obligated to pay the Issuer an option fee equal to \$12,093,750 (the “Option Fee”), which represents a payment of \$0.125 for each share of Common Stock underlying the securities issuable in the Private Placement.

Pursuant to the Private Placement, on August 16, 2019, 667 and Life Sciences received the right to purchase 24,890 and 274,967 Series 2 Preferred shares, respectively, and 1,991,169 and 21,997,370 Series 2 Private Warrants, respectively, at the offering price of \$100.00 per combined Series 2 Preferred Share and Series 2 Private Warrant, totaling 299,857 Series 2 Preferred shares and 23,988,539 Series 2 Private Warrants in the aggregate (the "Series 2 Right"). Additionally, on August 16, 2019, 667 and Life Sciences received the right to purchase 17,778 and 196,405 Series 3 Preferred shares, respectively, and 622,240 and 6,874,178 Series 3 Private Warrants, respectively, at the offering price of \$140.00 per combined Series 3 Preferred shares and Series 3 Private Warrant, totaling 214,183 Series 3 Preferred shares and 7,496,418 Series 3 Private Warrants in the aggregate (the "Series 3 Right").

The Funds paid an Option Fee totaling \$10,361,121 for the Series 2 Right and Series 3 Right. Each of 667 and Life Sciences purchased the above securities with their working capital.

The Series 2 Preferred and Series 3 Preferred are each initially convertible into 100 shares of Common Stock at any time at the option of the holder subject to the Private Beneficial Ownership Limitation (defined below).

The Private Warrants issuable pursuant to the Securities Purchase Agreement will be immediately exercisable upon issuance, provided that the holder will be prohibited, subject to certain exceptions, from exercising a Private Warrant for shares of Common Stock to the extent that immediately prior to or after giving effect to such exercise, the holder, together with its affiliates and other attribution parties, would beneficially own more than 9.99% of the total number of shares of Common Stock then issued and outstanding ("Private Beneficial Ownership Limitation"), which percentage may be changed at the holder's election to a lower percentage at any time or to a higher percentage not to exceed 19.9% upon 61 days' notice to the Issuer. The Private Warrants will expire seven years from the date of issuance.

On August 21, 2019 prior to the close of the Public Offering and Private Placement the Funds elected to lower the Public Beneficial Ownership Limitation and Private Beneficial Ownership Limitation to 4.99%.

Concurrently with the execution of the Securities Purchase Agreement, the Issuer entered into voting agreements (each, a "Voting Agreement") with the Purchasers, pursuant to which each Purchaser agreed, in any annual, special or adjourned meeting of the stockholders of the Issuer at which the matter covered by the Required Shareholder Approval are presented to the Issuer's stockholders for approval, that it will vote, by proxy or otherwise, all of its shares of voting capital stock of the Issuer (i) in favor of such matter and any matter that would reasonably be expected to facilitate such Required Shareholder Approval, and (ii) against approval of any proposal made in opposition to such matters. The Voting Agreements terminate upon the earliest to occur of (i) the date on which the Issuer receives the Required Shareholder Approval, (ii) the termination of the Securities Purchase Agreement in accordance with its terms and (iii) December 31, 2020.

On August 16, 2019, pursuant to the Securities Purchase Agreement, the Funds received the right to designate (i) one member to the board of directors of the Issuer (the "Board") as long as the Funds collectively hold at least 4.99% of the Issuer's outstanding Common Stock and at least 50% of the securities purchased by them in the Public Offering or (ii) two members of the Board for as long as the Funds collectively hold at least 20% of the Issuer's outstanding Common Stock and at least 50% of the securities purchased by them in the Public Offering ("Board Right"). In addition when the Funds own at least 2.5% of the Issuer's outstanding Common Stock and at least 33% of the securities purchased by them in the Public Offering, the Funds shall have the right to designate one individual to be a board observer.

The foregoing descriptions of the Securities Purchase Agreement and Voting Agreement do not purport to be complete and are qualified in their entirety by reference to the full texts of the Securities Purchase Agreement and the form of Voting Agreement, which are incorporated by reference as Exhibits 99.2 and 99.3, respectively, and are incorporated herein by reference.

Subsequent to the close of the Public Offering and Private Placement, if the Purchasers may be deemed to be affiliates of the Issuer within the meaning of Rule 144 of the Securities Act of 1933, whether through exercise of their Board Right or otherwise, the Issuer shall enter into a registration rights agreement with the Purchasers in the form of exhibit C of the Securities Purchase Agreement.

The Funds hold securities of the Issuer for investment purposes. The Reporting Persons or their affiliates may purchase additional securities or dispose of securities in varying amounts and at varying times depending upon the Reporting Persons' continuing assessments of pertinent factors, including the availability of shares of Common Stock or other securities for purchase at particular price levels, the business prospects of the Issuer, other business investment opportunities, economic conditions, stock market conditions, money market conditions, the attitudes and actions of the Board and management of the Issuer, the availability and nature of opportunities to dispose of shares of the Issuer and other plans and requirements of the particular entities. The Reporting Persons may discuss items of mutual interest with the Issuer, which could include items in subparagraphs (a) through (j) of Item 4 of Schedule 13D.

Depending upon their assessments of the above factors, the Reporting Persons or their affiliates may change their present intentions as stated above and they may assess whether to make suggestions to the management of the Issuer regarding financing, and whether to acquire additional securities of the Issuer, including shares of Common Stock (by means of open market purchases, privately negotiated purchases, or otherwise) or to dispose of some or all of the securities of the Issuer, including shares of Common Stock, under their control.

Except as otherwise disclosed herein, at the present time, the Reporting Persons do not have any plans or proposals with respect to any extraordinary corporate transaction involving the Issuer including, without limitation, those matters described in subparagraphs (a) through (j) of Item 4 of Schedule 13D.

Item 5. Interest in Securities of the Issuer.

The disclosure in Item 4 is incorporated by reference herein.

(a) and (b) Items 7 through 11 and 13 of each of the cover pages of this Schedule 13D are incorporated herein by reference. Set forth below is the aggregate number of shares of Common Stock directly held by each of the Funds, which may be deemed to be indirectly beneficially owned by the Reporting Persons, as well as shares of Common Stock that may be acquired upon conversion of the Series 1 Preferred and exercise of the Public Warrants, and conversion or exercise of the Series 2 Preferred and Series 2 Private Warrants and Series 3 Preferred and Series 3 Private Warrants underlying the Series 2 Rights and Series 3 Rights, respectively, subject to the limitation on exercise described in Item 4.

Name	Common Stock	Series 1 Preferred as Converted to Common	Public Warrants as converted to common	Series 2 Right		Series 3 Right	
				Series 2 Preferred as Converted to Common	Series 2 Private Warrants as converted to common	Series 3 Preferred as Converted to Common	Series 3 Private Warrants as converted to common
667, L.P.	234,631	3,718,600	3,718,600	2,489,000	1,991,169	1,770,800	622,240
Baker Brothers Life Sciences, L.P.	2,443,187	41,081,400	41,081,400	27,496,700	21,997,370	19,640,500	6,874,178
Total	2,677,818	44,800,000	44,800,000	29,985,700	23,988,539	21,411,300	7,496,418

The Adviser GP is the sole general partner of the Adviser. Pursuant to the management agreements, as amended, among the Adviser, Life Sciences and 667 and their respective general partners, the Funds respective general partners relinquished to the Adviser all discretion and authority with respect to the investment and voting power of the securities held by the Funds, and thus the Adviser has complete and unlimited discretion and authority with respect to the Funds' investments and voting power over investments. The Adviser GP, Felix J. Baker and Julian C. Baker as managing members of the Adviser GP, and the Adviser may be deemed to be beneficial owners of securities of the Issuer directly held by the Funds.

(c) The information set forth in Item 4 is hereby incorporated by reference into this Item 5(c). Except as disclosed herein, 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 managing 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 managing members of Baker Brothers Life Sciences Capital (GP), LLC.

(e) Not applicable.

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

The disclosure in Item 4 is incorporated by reference herein.

The Securities Purchase Agreement is incorporated by reference as Exhibit 99.2 and is incorporated herein by reference.

The form of Voting Agreement is incorporated by reference as Exhibit 99.3 and is incorporated herein by reference.

Item 7. Material to be Filed as Exhibits.

Exhibit	Description
99.1	Agreement Regarding the Joint Filing of Schedule 13D by and among the Reporting Persons.
99.2	Securities Purchase Agreement, dated August 16, 2019, by and among the Issuer, the Funds and another investor (incorporated by reference to Exhibit 10.1 to the Issuer's Current Report on Form 8-K, filed with the SEC on August 19, 2019).
99.3	Form of Voting Agreement, dated August 16, 2019, by and among the Issuer, the Funds and another investor (incorporated by reference to Exhibit D to Exhibit 10.1 to the Issuer's Current Report on Form 8-K, filed with the SEC on August 19, 2019).

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: August 22, 2019

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

JOINT FILING AGREEMENT

Pursuant to Rule 13d-1(k)(1) under the Securities Exchange Act of 1934, as amended, the undersigned hereby agree that only one statement containing the information required by Schedule 13D need be filed with respect to the ownership by each of the undersigned of the shares of Common Stock of Bellicum Pharmaceuticals, Inc.

This Agreement may be executed in any number of counterparts, each of which shall be deemed an original.

EXECUTED as of this 22nd day of August 2019

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
