

Mirati Therapeutics, Inc.  
Form SC 13D/A  
November 20, 2017

**SECURITIES AND EXCHANGE COMMISSION**

**WASHINGTON, DC 20549**

**SCHEDULE 13D**

**(Rule 13d-102)**

**INFORMATION TO BE INCLUDED IN STATEMENTS FILED PURSUANT  
TO RULE 13d-1(a) AND AMENDMENTS THERETO FILED PURSUANT  
TO RULE 13d-2(a)**

(Amendment No. 4)\*

Mirati Therapeutics, Inc.

(Name of Issuer)

**Common Stock, par value \$0.001 per share**

(Title of Class of Securities)

**60468T105**

(CUSIP number)

Alexandra A. Toohey

Chief Financial Officer

Baker Bros. Advisors LP

860 Washington Street, 3<sup>rd</sup> Floor

New York, NY 10014

(212) 339-5690

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

November 16, 2017

(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 " .

\*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 or otherwise subject to the liabilities of that section of the Act but shall be subject to all other provisions of the Act.

CUSIP No. 60468T105

NAMES OF REPORTING PERSONS

1.

Baker Bros. Advisors LP

CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP\*

2.(a) "

(b) "

SEC USE ONLY

3.

SOURCE OF FUNDS\*

4.

OO

CHECK BOX IF DISCLOSURE OF LEGAL PROCEEDINGS IS REQUIRED PURSUANT TO ITEM 2(d) or 2(e)

5.

..

CITIZENSHIP OR PLACE OF ORGANIZATION

6.

Delaware

SOLE VOTING POWER:

7.

NUMBER  
OF SHARES

2,712,847 (1)

BENEFICIALLY  
OWNED

8.

BY EACH  
REPORTING  
PERSON WITH

0

9. SOLE DISPOSITIVE POWER:

2,712,847 (1)

SHARED DISPOSITIVE POWER:

10.

0

AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON:

11.

2,712,847 (1)

CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (11) EXCLUDES CERTAIN SHARES\*

12.

..

PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11)

13.

9.99% (2)

TYPE OF REPORTING PERSON\*

14.

IA, PN

Includes 163,386 shares of the common stock of Mirati Pharmaceuticals, Inc. (the "Issuer") underlying 163,386 (1) shares of the Issuer's common stock issuable based upon exercise of the Pre-funded Warrants (as defined in Item 4 and subject to the limitations described in Item 5) directly held.

Based on 26,993,621 shares of common stock outstanding following the Offering (as defined in Item 5) as reported (2) in the Issuer's Prospectus filed with the Securities and Exchange Commission ("SEC") on November 16, 2017 and 163,386 shares of the Issuer's common stock issuable upon the exercise of the Pre-funded Warrants (as defined in Item 4).

CUSIP No. 60468T105

NAMES OF REPORTING PERSONS

1.

Baker Bros. Advisors (GP) LLC

CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP\*

2.(a) "

(b) "

SEC USE ONLY

3.

SOURCE OF FUNDS\*

4.

OO

CHECK BOX IF DISCLOSURE OF LEGAL PROCEEDINGS IS REQUIRED PURSUANT TO ITEM 2(d) or 2(e)

5.

..

CITIZENSHIP OR PLACE OF ORGANIZATION

6.

Delaware

SOLE VOTING POWER:

7.

NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH

2,712,847 (1)

SHARED VOTING POWER:

8.

BY EACH

0

REPORTING

9. SOLE DISPOSITIVE POWER:

PERSON WITH

2,712,847 (1)

SHARED DISPOSITIVE POWER:

10.

0

AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON:

11.

2,712,847 (1)

CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (11) EXCLUDES CERTAIN SHARES\*

12.

..

PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11)

13.

9.99% (2)

TYPE OF REPORTING PERSON\*

14.

HC, OO

Includes 163,386 shares of the common stock of the Issuer underlying 163,386 shares of the Issuer's common stock (1)issuable based upon exercise of the Pre-funded Warrants (as defined in Item 4 and subject to the limitations described in Item 5) directly held.

Based on 26,993,621 shares of common stock outstanding following the Offering (as defined in Item 5) as reported (2)in the Issuer's Prospectus filed with the SEC on November 16, 2017 and 163,386 shares of the Issuer's common stock issuable upon the exercise of the Pre-funded Warrants (as definted in Item 4).

CUSIP No. 60468T105

NAMES OF REPORTING PERSONS

1.

Felix J. Baker

CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP\*

2.(a) "

(b) "

SEC USE ONLY

3.

SOURCE OF FUNDS\*

4.

OO

CHECK BOX IF DISCLOSURE OF LEGAL PROCEEDINGS IS REQUIRED PURSUANT TO ITEM 2(d) or 2(e)

5.

..

CITIZENSHIP OR PLACE OF ORGANIZATION

6.

United States

SOLE VOTING POWER:

7.

NUMBER  
OF SHARES

2,712,984 (1)

BENEFICIALLY  
OWNED

8.

BY EACH  
REPORTING  
PERSON WITH

0

9. SOLE DISPOSITIVE POWER:

2,712,984 (1)

SHARED DISPOSITIVE POWER:

10.

0

AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON:

11.

2,712,984 (1)

CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (11) EXCLUDES CERTAIN SHARES\*

12.

..

PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11)

13.

9.99% (2)

TYPE OF REPORTING PERSON\*

14.

IN, HC

Includes 163,386 shares of the common stock of the Issuer underlying 163,386 shares of the Issuer's common stock (1)issuable based upon exercise of the Pre-funded Warrants (as defined in Item 4 and subject to the limitations described in Item 5) directly held.

Based on 26,993,621 shares of common stock outstanding following the Offering (as defined in Item 5) as reported (2)in the Issuer's Prospectus filed with the SEC on November 16, 2017 and 163,386 shares of the Issuer's common stock issuable upon the exercise of the Pre-funded Warrants (as definted in Item 4).



CUSIP No. 60468T105

NAMES OF REPORTING PERSONS

1.

Julian C. Baker

CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP\*

2.(a) "

(b) "

SEC USE ONLY

3.

SOURCE OF FUNDS\*

4.

OO

CHECK BOX IF DISCLOSURE OF LEGAL PROCEEDINGS IS REQUIRED PURSUANT TO ITEM 2(d) or 2(e)

5.

..

CITIZENSHIP OR PLACE OF ORGANIZATION

6.

United States

SOLE VOTING POWER:

7.

NUMBER  
OF SHARES

2,712,984 (1)

BENEFICIALLY  
OWNED

8.

BY EACH  
REPORTING  
PERSON WITH

0

9. SOLE DISPOSITIVE POWER:

2,712,984 (1)

SHARED DISPOSITIVE POWER:

10.

0

AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON:

11.

2,712,984 (1)

CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (11) EXCLUDES CERTAIN SHARES\*

12.

..

PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11)

13.

9.99% (2)

TYPE OF REPORTING PERSON\*

14.

IN, HC

Includes 163,386 shares of the common stock of the Issuer underlying 163,386 shares of the Issuer's common stock (1)issuable based upon exercise of the Pre-funded Warrants (as defined in Item 4 and subject to the limitations described in Item 5) directly held.

Based on 26,993,621 shares of common stock outstanding following the Offering (as defined in Item 5) as reported (2)in the Issuer's Prospectus filed with the SEC on November 16, 2017 and 163,386 shares of the Issuer's common stock issuable upon the exercise of the Pre-funded Warrants (as definted in Item 4).

**Amendment No. 4 to Schedule 13D**

This Amendment No. 4 to Schedule 13D amends and supplements the statements on the previously filed Schedules 13D, as amended, filed by Baker Bros. Advisors LP (the “Adviser”), Baker Bros. Advisors (GP) LLC (the “Adviser GP”), Julian C. Baker and Felix J. Baker (collectively the “Reporting Persons”). Except as supplemented herein, such statements, as hereto amended and supplemented, remain in full force and effect.

The Adviser GP is the sole general partner of the Adviser. Pursuant to the management agreements, as amended, 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 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.

Information given in response to each item shall be deemed incorporated by reference in all other items, as applicable. All capitalized terms contained herein but not otherwise defined shall have the meanings ascribed to such terms in the Schedule 13D, as amended.

**ITEM 2. Identity and Background.**

(a) The Reporting Persons are:

1. The Adviser
2. 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, 3<sup>rd</sup> Floor

New York, NY 10014

(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 is a limited partnership organized under the laws of the State of Delaware. The Adviser GP is a limited liability company 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.**

Item 3 of Schedule 13D is supplemented and amended, as the case may be, as follows:

The disclosure in Item 4 below is incorporated herein by reference.

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

Item 4 of Schedule 13D is supplemented and superseded, as the case may be, as follows:

On November 8, 2017, the Adviser acquired beneficial ownership of 280,263 shares of common stock of Mirati Therapeutics, Inc. (the “Issuer”), held directly by 667, Life Sciences, and 14159, as a result of the exercise of 280,263 warrants to purchase the Issuer’s common stock at \$7.86 per share with an expiration date of November 21, 2017 (the “2017 Warrants”). The amount expended on acquiring the common stock was \$192,302.76 for 667, \$1,963,435.86 for Life Sciences and \$47,128.56 for 14159, totaling \$2,202,867.18. Each of the Funds funded the exercise of the 2017 Warrants with their working capital.

On November 16, 2017, the Issuer entered into an underwriting agreement (the “Underwriting Agreement”) with Cowen and Company LLC and Barclays Capital Inc., as representatives of the several underwriters listed on Schedule A thereto (the “Underwriters”), related to an underwritten public offering (the “Offering”) of 2,015,901 shares of the Issuer’s Common Stock at a price to the public of \$13.00 per share and 4,137,999 warrants to purchase the common stock of the Issuer at purchase price of \$12.999 per warrant. The warrants have an exercise price of \$0.001 per share with no expiration date (the “Pre-Funded warrants”). In addition, the Issuer granted the Underwriters an option exercisable for 30 days from the date of the Underwriting Agreement to purchase, at the public offering price less any underwriting discounts and commissions, up to an additional 923,085 shares of common stock to cover overallocments, if any. The Offering is expected to close on November 20, 2017.

Pursuant to the Offering, on November 16, 2017, 667 and Life Sciences (collectively the “Purchasing Funds”) purchased 304,392 and 1,618,684 Pre-Funded Warrant shares, respectively, at the offering price of \$12.999 per share. The Purchasing Funds purchased the shares of the Issuer’s Common Stock with their working capital.

In connection with the Offering, the Funds and the Issuer entered into a Board Observer and Director Rights Agreement under which the Funds have the right to nominate a board observer to the Board of Directors of the Issuer (the “Board”) as long as the Funds and their affiliates own at least 3MM shares in aggregate of common stock and Pre-Funded Warrants and have the right to nominate a director to the Board as long as the Funds and their affiliates own at least 3MM shares in the aggregate of the common stock and Pre-Funded Warrants of the Issuer and 8% of the outstanding common stock of the Issuer (“Board Rights”). These Board Rights supersede the existing rights to appoint an observer or director to the Board under the Securities Purchase Agreement dated November 9, 2012 by and among the Funds and MethylGene Inc.

The foregoing description of the Board Observer and Director Rights Agreement does not purport to be complete and is qualified in its entirety by reference to the full text of the Board Observer and Directors Rights Agreement, which is

incorporated by reference as Exhibit 99.2, and is incorporated herein by reference.

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 of directors and management of the Issuer, the availability and nature of opportunities to dispose of shares in 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 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. Additionally, the reporting persons have a representative acting as a board observer of the Issuer and have a right to nominate one person to the board of directors of the Issuer, subject to certain limitations.

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 Amendment No. 4.

**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. 4 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 26,993,621 shares of common stock outstanding following the Offering as reported in the Issuer’s Prospectus filed with the SEC on November 16, 2017 and 163,386 shares issuable upon the exercise of the Pre-Funded Warrants, subject to limitations described below. Such percentage figures were calculated in accordance with Rule 13d-3 under the Securities Exchange Act of 1934, as amended.

Holder	<b>Number of Shares of Common Stock we own or have the right to acquire within 60 days</b>	<b>Percent of Class Outstanding</b>	
667, L.P.	304,630	1.12	%
Baker Brothers Life Sciences, L.P.	2,535,604	9.35	%
14159, L.P.	35,999	0.13	%

The Pre-Funded Warrants are only exercisable to the extent that after giving effect to such exercise the holders thereof and their affiliates would beneficially own, for purposes of Rule 13d-3 under the Securities Exchange Act of 1934, as amended (the “Exchange Act”), no more than 9.99% of the outstanding shares of Common Stock of the Issuer. As a result of this restriction, the number of shares that may be issued upon exercise of the Pre-Funded Warrants by the above holders may change depending upon changes in the outstanding shares of Common Stock.

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 held by each of the Funds, and this Amendment No. 4 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.

(c) The disclosure regarding the exercise of the 2017 Warrants described in Item 4 is incorporated by reference herein. Except as described in this Amendment No. 4, none of the Reporting Persons has effected any transaction in the securities of the Issuer in 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 Securities of the Issuer**

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

The disclosure in Item 4 of the exercise of the 2017 Warrants and the purchase of the Pre-Funded Warrants above is incorporated herein by reference. The form of warrant for the Pre-Funded Warrants is incorporated by reference as Exhibit 99.1 and is incorporated by reference herein.

The disclosure in Item 4 of the Board Rights above is incorporated herein by reference. The Board Observer and Director Rights Agreement is incorporated by reference as Exhibit 99.2 and is incorporated by reference herein.

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

##### Exhibit Description

99.1 Form of Warrant to Purchase Common Stock, dated November 16, 2017, by and between Mirati Therapeutics, Inc., 667, L.P., and Baker Brothers Life Sciences, L.P. (incorporated by reference to Exhibit 4.1 to the Issuer's Form 8-K, filed with the SEC on November 16, 2017).

99.2 Board Observer and Director Rights Agreement, by and between Mirati Therapeutics, Inc., 667, L.P., Baker Brothers Life Sciences, L.P. and 14159, L.P.



**SIGNATURES**

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

November 20, 2017

**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