

Mirati Therapeutics, Inc.  
Form SC 13D/A  
February 03, 2015

**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. 1)\*

Mirati Therapeutics, Inc.  
(Name of Issuer)

**Common Stock, par value \$0.0001 per share**  
(Title of Class of Securities)

**60468T105**  
(CUSIP number)

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

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

January 28, 2015  
(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)

(Page 1 of 9 Pages)

\*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  
13-4093645

CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (SEE INSTRUCTIONS)

**2**

(a) ..  
(b) ..

SEC USE ONLY

**3**

SOURCE OF FUNDS (SEE INSTRUCTIONS)

**4**

OO

CHECK IF DISCLOSURE OF LEGAL PROCEEDINGS IS REQUIRED PURSUANT TO ITEMS 2(d) OR 2(e)

**5**

..

CITIZENSHIP OR PLACE OF ORGANIZATION

**6**

Delaware

SOLE VOTING POWER

**7** 3,309,830

NUMBER OF

SHARES SHARED VOTING POWER

BENEFICIALLY **8**

OWNED BY

EACH SOLE DISPOSITIVE POWER

REPORTING **9** 3,309,830

PERSON

WITH SHARED DISPOSITIVE POWER  
**10**

AGGREGATE  
AMOUNT  
BENEFICIALLY  
OWNED BY  
**11** EACH  
REPORTING  
PERSON

3,309,830

CHECK IF THE  
AGGREGATE  
AMOUNT IN  
ROW  
**12** (11) EXCLUDES  
CERTAIN  
SHARES (SEE  
INSTRUCTIONS)

..

PERCENT OF  
CLASS  
REPRESENTED  
**13** BY AMOUNT IN  
ROW (11)

19.9% (1)(2)

TYPE OF  
REPORTING  
PERSON (SEE  
**14** INSTRUCTIONS)

IA, PN

Based on 15,786,929 shares of common stock outstanding as of January 29, 2015 plus 337,500 shares issued (1) pursuant to an option granted to the underwriters as reported in the Issuer's Prospectus filed with the SEC on January 29, 2015.

(2) See Item 5 for disclosure regarding limitations of ownership pursuant to the 2016 Warrants (defined below) and the 2017 Warrants (defined below).



CUSIP No. 60468T105

NAMES OF REPORTING PERSONS

**1**

Baker Bros. Advisors (GP) LLC  
46-3147749

CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (SEE INSTRUCTIONS)

**2**

(a) ..  
(b) ..

SEC USE ONLY

**3**

SOURCE OF FUNDS (SEE INSTRUCTIONS)

**4**

OO

CHECK IF DISCLOSURE OF LEGAL PROCEEDINGS IS REQUIRED PURSUANT TO ITEMS 2(d) OR 2(e)

**5**

..

CITIZENSHIP OR PLACE OF ORGANIZATION

**6**

Delaware

SOLE VOTING POWER

**7** 3,309,830

NUMBER OF

SHARES SHARED VOTING POWER

BENEFICIALLY **8**

OWNED BY

EACH SOLE DISPOSITIVE POWER

REPORTING **9** 3,309,830

PERSON

WITH SHARED DISPOSITIVE POWER  
**10**

AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON

**11**  
3,309,830

CHECK IF THE AGGREGATE AMOUNT IN ROW (11) EXCLUDES CERTAIN SHARES (SEE INSTRUCTIONS)

**12**  
..

PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11)

**13**  
19.9% (1)(2)

TYPE OF REPORTING PERSON (SEE INSTRUCTIONS)

**14**  
HC, OO

Based on 15,786,929 shares of common stock outstanding as of January 29, 2015 plus 337,500 shares issued (1) pursuant to an option granted to the underwriters as reported in the Issuer's Prospectus filed with the SEC on January 29, 2015.

(2) See Item 5 for disclosure regarding limitations of ownership pursuant to the 2016 Warrants (defined below) and the 2017 Warrants (defined below).

CUSIP No. 60468T105

NAMES OF REPORTING PERSONS

1

Felix J. Baker

CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (SEE INSTRUCTIONS)

2

(a) ..

(b) ..

SEC USE ONLY

3

SOURCE OF FUNDS (SEE INSTRUCTIONS)

4

OO

CHECK IF DISCLOSURE OF LEGAL PROCEEDINGS IS REQUIRED PURSUANT TO ITEMS 2(d) OR 2(e)

5

..

CITIZENSHIP OR PLACE OF ORGANIZATION

6

United States

SOLE VOTING POWER

7

NUMBER OF 3,309,830

SHARES SHARED VOTING POWER

BENEFICIALLY 8

OWNED BY

EACH SOLE DISPOSITIVE POWER

REPORTING 9

PERSON 3,309,830



WITH SHARED DISPOSITIVE POWER  
**10**

AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON

**11**  
3,309,830

CHECK IF THE AGGREGATE AMOUNT IN ROW (11) EXCLUDES CERTAIN SHARES (SEE INSTRUCTIONS)

**12**  
..

PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11)

**13**  
19.9% (1)(2)

TYPE OF REPORTING PERSON (SEE INSTRUCTIONS)

**14**  
IN, HC

Based on 15,786,929 shares of common stock outstanding as of January 29, 2015 plus 337,500 shares issued (1) pursuant to an option granted to the underwriters as reported in the Issuer's Prospectus filed with the SEC on January 29, 2015.

(2) See Item 5 for disclosure regarding limitations of ownership pursuant to the 2016 Warrants (defined below) and the 2017 Warrants (defined below).

CUSIP No. 60468T105

**1** NAMES OF REPORTING PERSONS Julian C. Baker

CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (SEE INSTRUCTIONS)

**2**

- (a) ..
- (b) ..

SEC USE ONLY

**3**

SOURCE OF FUNDS (SEE INSTRUCTIONS)

**4**

00

CHECK IF DISCLOSURE OF LEGAL PROCEEDINGS IS REQUIRED PURSUANT TO ITEMS 2(d) OR 2(e)

**5**

..

CITIZENSHIP OR PLACE OF ORGANIZATION

**6**

United States

SOLE VOTING POWER

**7** 3,309,830

NUMBER OF

SHARES

SHARED VOTING POWER

BENEFICIALLY **8**

OWNED BY

EACH

SOLE DISPOSITIVE POWER

REPORTING **9**

3,309,830

PERSON

WITH

SHARED DISPOSITIVE POWER

**10**

AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON

**11**  
3,309,830

CHECK IF THE AGGREGATE AMOUNT IN ROW (11) EXCLUDES CERTAIN SHARES (SEE INSTRUCTIONS)

**12**  
..

PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11)

**13**  
19.9% (1)(2)

TYPE OF REPORTING PERSON (SEE INSTRUCTIONS)

**14**  
IN, HC

Based on 15,786,929 shares of common stock outstanding as of January 29, 2015 plus 337,500 shares issued (1) pursuant to an option granted to the underwriters as reported in the Issuer's Prospectus filed with the SEC on January 29, 2015.

(2) See Item 5 for disclosure regarding limitations of ownership pursuant to the 2016 Warrants (defined below) and the 2017 Warrants (defined below).

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

This Amendment No. 1 to Schedule 13D amends and supplements the statements on the previously filed Schedules 13D 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.

### **Item 3. Source and Amount of Funds or Other Consideration**

The disclosure regarding the purchase of Common Stock pursuant to the Offering (as defined below) in Item 4 is incorporated by reference herein.

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

On January 28, 2015, Mirati Therapeutics, Inc. (the “Issuer”) entered into an underwriting agreement (the “Underwriting Agreement”) with Citigroup Global Markets, Inc. as representatives of several underwriters (the “Underwriters”), related to a public offering (the “Offering”) of 2,250,000 shares of the Issuer’s common stock at a price of \$20.00 per share. 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 337,500 shares of common stock to cover overallotments, if any. The Offering is expected to close on February 3, 2015.

Pursuant to the Offering, on January 29, 2015, 667, L.P. and Baker Brothers Life Sciences, L.P. purchased 34,065 and 390,935 shares of the Issuer’s common stock, respectively, at the offering price of \$20.00 per share, totaling 425,000 shares in the aggregate. Each of 667, L.P. and Baker Brothers Life Sciences, L.P. purchased the shares of the Issuer’s common stock with their working capital.

The Reporting Persons may also be deemed to beneficially own 313,756 warrants to purchase shares of common stock at \$6.74 with an expiration date of April 4, 2016 (“2016 Warrants”) and 280,263 warrants to purchase shares of common stock at \$7.86 with an expiration date of November 21, 2017 (“2017 Warrants”). The 2016 Warrants and the 2017 Warrants each include standard adjustment provisions for stock splits, stock dividends, mergers, recapitalizations and the like as well as a cashless exercise feature.

As a result of certain purchases of Common Stock made by the Funds, subject to certain limitations, the Funds have pre-emptive rights with respect to any proposed future issuances of the Issuer's securities. In the event that the Issuer proposes to issue any class or series of our equity securities, any voting securities, or any securities convertible or exchangeable into, or entitling purchase of, any of the foregoing, the Issuer must provide written notice to the Funds specifying the terms and conditions of the proposed issue. After the receipt of the Issuer's notice, the Funds may subscribe for up to their pro rata share of offered securities, which share is calculated in proportion to the aggregate holding of securities by each Fund in relation to the total number of securities issued and outstanding immediately prior to the issuance of offered securities. Also, the Funds have a right to acquire any offered securities that are subject to the pre-emptive rights but which are not otherwise purchased by another eligible investor pursuant to such pre-emptive rights. The pre-emptive rights continue until November 12, 2016.

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 Amendment No. 1.

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, exercise of some or all of the 2016 Warrants and/ or 2017 Warrants, 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. 1.

**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 of shares of Common Stock of the Issuer 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 exercise of the Issuer's 2016 Warrants and the Issuer's 2017 Warrants by the Funds, subject to the limitations on exercise described below.

Holder	Shares of Common Stock	2016 Warrants	2017 Warrants
Baker Bros. Investments II, L.P.	-	274	-
667, L.P.	159,934	-	24,466
Baker Brothers Life Sciences, L.P.	2,604,832	310,003	249,801
14159, L.P.	40,308	3,479	5,996
Total	2,805,074	313,756	280,263

Pursuant to the terms of the 2016 Warrants, the Issuer shall not affect any exercise of the 2016 Warrants, and the holder shall not have the right to exercise any portion of the 2016 Warrant, to the extent that after giving effect to such exercise, the holder (together with the holders affiliate) would beneficially own in excess of 19.9% of the Common Shares outstanding immediately after giving effect to such exercise. As a result of this restriction, the number of shares that may be issued upon exercise of the 2016 Warrants by the above holders may change depending upon changes in the outstanding shares of Common Stock.

Pursuant to the terms of the 2017 Warrants, the holder shall not have the right to exercise any portion of the 2017 Warrant to the extent that after giving effect to such exercise, the Holder would beneficially own in excess of 19.99% of the Common Shares. As a result of this restriction, the number of shares that may be issued upon exercise of the 2017 Warrants by the above holders may change depending upon changes in the outstanding shares of Common Stock.

The limitations on ownership pursuant to the 2016 Warrants and the 2017 Warrants described above are based on beneficial ownership under Quebec securities regulations. To the extent that the beneficial ownership regulations of Quebec differ from the beneficial ownership regulations under the U.S. federal securities laws and the Reporting Persons are deemed to be beneficial owners of all of the Common Stock underlying the 2016 Warrants and the 2017 Warrants, the reporting persons would be deemed to beneficially own 20.3% of the Issuer's Common Stock.

(c) The disclosure regarding the purchase of Common Stock pursuant to the Offering described in Item 4 is incorporated by reference herein. Except as described in this Amendment No. 1, 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, L.P. 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 Baker Brothers Life Sciences, L.P. 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, L.P. 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.

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

(e) Not applicable.

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

The disclosure regarding the 2016 warrants and 2017 warrants in Item 4 is incorporated by reference herein.





**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.

EXECUTED as a sealed instrument this 2nd day of February, 2015

**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