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Mirati Therapeutics, Inc. Form SC 13D/A June 09, 2016
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, DC 20549
SCHEDULE 13D
(Rule 13d-102)
INFORMATION TO BE INCLUDED IN STATEMENTS FILED PURSUANT
TO RULE 13d-l(a) AND AMENDMENTS THERETO FILED PURSUANT
TO RULE 13d-2(a)
(Amendment No. 3)*
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
667 Madison Avenue, 21st Floor
New York, NY 10065
(212) 339-5690
(Name, address and telephone number of person authorized to receive notices and communications)
June 7, 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 ".
constant 102, and is iming and something continue 100 1(0), 100 1(1) of 100 1(g), encounted the result of 100 1
*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.

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CUSIP 60468T105
No.
     NAMES OF
     REPORTING
     PERSONS
1
     Baker Bros.
     Advisors LP
     CHECK THE
     APPROPRIATE
     BOX IF A
     MEMBER OF A
     GROUP (SEE
     INSTRUCTIONS)
2
     (a) "
     (b) "
     SEC USE ONLY
3
     SOURCE OF
     FUNDS (SEE
4
     INSTRUCTIONS)
     00
     CHECK IF
     DISCLOSURE OF
     LEGAL
     PROCEEDINGS
     IS REQUIRED
5
     PURSUANT TO
```

ITEMS 2(d) OR

2(e)

CITIZENSHIP OR PLACE OF

6 ORGANIZATION

Delaware

SOLE VOTING POWER

7 2,549,461 (1)

NUMBER OF

SHARES SHARED VOTING POWER

BENEFICIALLY8 0

OWNED BY

EACH SOLE DISPOSITIVE POWER

REPORTING **9** 2,549,461 (1)

PERSON

WITH SHARED DISPOSITIVE POWER

10 0

AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON

11

2,549,461 (1)

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

..

PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11)

13

12.6% (1)(2)

TYPE OF REPORTING PERSON (SEE INSTRUCTIONS)

14

IA, PN

- (1) Includes 280,263 shares of common stock issuable upon the exercise of the 2017 Warrants (as defined below).
- (2) Based on 19,906,776 shares of common stock outstanding as of May 2, 2016, as disclosed in the Issuer's Form 10-Q filed with the Securities and Exchange Commission ("SEC") on May 5, 2016.

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NAMES OF
     REPORTING
     PERSONS
1
     Baker Bros.
     Advisors (GP) LLC
     CHECK THE
     APPROPRIATE
     BOX IF A
     MEMBER OF A
     GROUP (SEE
     INSTRUCTIONS)
2
     (a) "
     (b) "
     SEC USE ONLY
3
     SOURCE OF
     FUNDS (SEE
4
     INSTRUCTIONS)
     00
     CHECK IF
     DISCLOSURE OF
     LEGAL
     PROCEEDINGS
     IS REQUIRED
5
     PURSUANT TO
     ITEMS 2(d) OR
```

2(e)

CUSIP 60468T105

No.

CITIZENSHIP OR PLACE OF

6 ORGANIZATION

Delaware

SOLE VOTING POWER

7 2,549,461 (1)

NUMBER OF

SHARES SHARED VOTING POWER

BENEFICIALLY8 0

OWNED BY

EACH SOLE DISPOSITIVE POWER

REPORTING **9** 2,549,461 (1)

PERSON

WITH SHARED DISPOSITIVE POWER

10 0

AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON

11

2,549,461 (1)

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

..

PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11)

13

12.6% (1)(2)

TYPE OF REPORTING PERSON (SEE INSTRUCTIONS)

14

HC, OO

- (1) Includes 280,263 shares of common stock issuable upon the exercise of the 2017 Warrants (as defined below).
- (2) Based on 19,906,776 shares of common stock outstanding as of May 2, 2016, as disclosed in the Issuer's Form 10-Q filed with the SEC on May 5, 2016.

```
CUSIP 60468T105
No.
     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
4
     INSTRUCTIONS)
     OO
     CHECK IF
     DISCLOSURE OF
     LEGAL
     PROCEEDINGS
     IS REQUIRED
```

PURSUANT TO ITEMS 2(d) OR

2(e)

5

CITIZENSHIP OR PLACE OF ORGANIZATION

United States

SOLE VOTING POWER

7 2,549,598 (1)

NUMBER OF

SHARES SHARED VOTING POWER

BENEFICIALLY8 0

OWNED BY

EACH SOLE DISPOSITIVE POWER

REPORTING **9** 2,549,598 (1)

PERSON

WITH SHARED DISPOSITIVE POWER

10 0

AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON

11

2,549,598 (1)

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

..

PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11)

13

12.6% (1)(2)

TYPE OF REPORTING PERSON (SEE INSTRUCTIONS)

14

IN, HC

- (1) Includes 280,263 shares of common stock issuable upon the exercise of the 2017 Warrants (as defined below).
- (2) Based on 19,906,776 shares of common stock outstanding as of May 2, 2016, as disclosed in the Issuer's Form 10-Q filed with the SEC on May 5, 2016.

```
NAMES OF
     REPORTING
     PERSONS
1
     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
4
     INSTRUCTIONS)
     00
     CHECK IF
     DISCLOSURE OF
     LEGAL
     PROCEEDINGS
     IS REQUIRED
5
     PURSUANT TO
     ITEMS 2(d) OR
     2(e)
```

CUSIP 60468T105

No.

CITIZENSHIP OR PLACE OF ORGANIZATION

United States

SOLE VOTING POWER

7 2,549,598 (1)

NUMBER OF

SHARES SHARED VOTING POWER

BENEFICIALLY8 0

OWNED BY

EACH SOLE DISPOSITIVE POWER

REPORTING **9** 2,549,598 (1)

PERSON

WITH SHARED DISPOSITIVE POWER

10 0

AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON

11

2,549,598 (1)

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

..

PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11)

13

12.6% (1)(2)

TYPE OF REPORTING PERSON (SEE INSTRUCTIONS)

14

IN, HC

- (1) Includes 280,263 shares of common stock issuable upon the exercise of the 2017 Warrants (as defined below).
- (2) Based on 19,906,776 shares of common stock outstanding as of May 2, 2016, as disclosed in the Issuer's Form 10-Q filed with the SEC on May 5, 2016.

Amendment No. 3 to Schedule 13D

This Amendment No. 3 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.

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 4. Purpose of the Transaction.

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

This Amendment No. 3 is being filed to report the sale of shares of the Issuer's Common Stock reported in Item 5(c) that resulted in a more than 1 percent change in beneficial ownership. The disclosure regarding the sales in Item 5(c) below is incorporated herein by reference.

As a result of certain previous purchases of common stock of the Issuer made by 667, L.P. ("667"), 14159, L.P. ("14159") and Baker Brothers Life Sciences, L.P. ("Life Sciences") (collectively 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 sell additional securities or purchase 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 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, exercise of some or all of the 2017 Warrants (as defined below), 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. 3.

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. 3 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 2017 Warrants (as defined below) by the Funds, subject to the limitations on exercise described below.

Holder	Shares of Common Stock	2017 Warrants
667, L.P.	116,778	24,466
Baker Brothers Life Sciences, L.P.	2,122,417	249,801
14159, L.P.	30,003	5,996
Total	2,269,198	280,263

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

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 outstanding shares of common stock. 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.

Pursuant to management agreements, as amended, among the Adviser, each of 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.

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. 3 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 following transactions in the Issuer's Common Stock were effected by the Funds noted below during the sixty days preceding the filing of this statement. All sale transactions were effected in the open market directly with a broker-dealer. Except as described in this Amendment No. 3, none of the Reporting Persons has effected any transaction in the securities of the Issuer in the past 60 days.

Name	Date	Number of Shares	Transaction	Price/ Share	Footnotes
667, L.P.	6/7/2016	16,493	3 Sale	9.4378	1
Baker Brothers Life Sciences, L.P.	6/7/2016	275,506	Sale	9.4378	1
14159, L.P.	6/7/2016	4,20	l Sale	9.4378	1
667, L.P.	6/8/2016	8,417	7 Sale	9.2124	2
Baker Brothers Life Sciences, L.P.	6/8/2016	147,529	Sale	9.2124	2
14159, L.P.	6/8/2016	2,154	4Sale	9.2124	2
667, L.P.	6/9/2016	19,970	Sale	9.4000	
Baker Brothers Life Sciences, L.P.	6/9/2016	349,919	Sale	9.4000	
14159, L.P.	6/9/2016	5,111	l Sale	9.4000	
667, L.P.	6/9/2016	9,056	6Sale	9.5586	3
Baker Brothers Life Sciences, L.P.	6/9/2016	158,684	Sale	9.5586	3
14159, L.P.	6/9/2016	2,318	3 Sale	9.5586	3

The reported price is a weighted average price. These shares were traded in multiple transactions at prices ranging from \$9.25 to \$10.21. The Reporting Persons undertake to provide the staff of the Securities and Exchange Commission (the "Staff"), upon request, full information regarding the number of shares traded at each separate price within the ranges set forth in this footnote.

The reported price is a weighted average price. These shares were traded in multiple transactions at prices ranging (2) from \$9.15 to \$9.40. The Reporting Persons undertake to provide the Staff, upon request, full information regarding the number of shares traded at each separate price within the ranges set forth in this footnote.

The reported price is a weighted average price. These shares were traded in multiple transactions at prices ranging (3) from \$9.40 to \$9.82. The Reporting Persons undertake to provide the Staff, upon request, full information regarding the number of shares traded at each separate price within the ranges set forth in this footnote.

(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.

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.

June 9, 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