

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

SCHEDULE 13G
(Rule 13d-102)

INFORMATION TO BE INCLUDED IN STATEMENTS FILED PURSUANT TO RULES 13d-1 (b),
(c) AND (d) AND AMENDMENTS THERETO FILED PURSUANT TO 13d-2 (b)
(Amendment No.)*

Natera, Inc.

(Name of Issuer)

Common Stock, par value \$0.0001 per share

(Title of Class of Securities)

632307104

(CUSIP Number)

December 31, 2015

(Date of Event Which Requires Filing of this Statement)

Check the appropriate box to designate the rule pursuant to which this Schedule is filed:

- Rule 13d-1(b)
 Rule 13d-1(c)
 Rule 13d-1(d)

*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).

CUSIP No. 632307104

13 G

1 Names of Reporting Persons.
Lightspeed Venture Partners VIII, L.P.

2 Check the Appropriate Box if a Member of a Group*

- (a)
(b) (1)

3 SEC Use Only

4 Citizenship or Place of Organization
Cayman Islands

5 Sole Voting Power
0 shares

Number of
Shares
Beneficially
Owned by
Each
Reporting
Person With

6 Shared Voting Power
3,973,594 shares (2)

7 Sole Dispositive Power
0 shares

8 Shared Dispositive Power
3,973,594 shares (2)

9 Aggregate Amount Beneficially Owned by Each Reporting Person
3,973,594 shares (2)

10 Check Box if the Aggregate Amount in Row (9) Excludes Certain Shares*

11 Percent of Class Represented by Amount in Row 9
7.9% (3)

12 Type of Reporting Person*
PN

- (1) This Schedule 13G is filed by Lightspeed Venture Partners VIII, L.P., a Cayman Islands exempted limited partnership ("Lightspeed VIII"), Lightspeed General Partner VIII, L.P., a Cayman Islands exempted limited partnership ("LGP VIII"), Lightspeed Ultimate General Partner VIII, Ltd., a Cayman Islands exempted company ("LUGP VIII"), Barry Eggers ("Eggers"), Ravi Mhatre ("Mhatre"), Peter Y. Nieh ("Nieh") and Christopher J. Schaepe ("Schaepe" and together with Lightspeed VIII, LGP VIII, LUGP VIII, Eggers, Mhatre and Nieh, collectively, the "Reporting Persons"). The Reporting Persons expressly disclaim status as a "group" for purposes of this Schedule 13G.
- (2) LUGP VIII serves as the sole general partner of LGP VIII, which serves as the sole general partner of Lightspeed VIII. Eggers, Mhatre, Nieh and Schaepe are directors of LUGP VIII and share voting and dispositive power over the shares held by Lightspeed VIII; however, they disclaim beneficial ownership of the shares held by Lightspeed VIII except to the extent of their pecuniary interests therein. The information with respect to the ownership of the Common Stock by the Reporting Persons filing this statement on Schedule 13G is provided as of December 31, 2015.
- (3) This percentage is calculated based upon 49,996,087 shares of Common Stock outstanding as of October 30, 2015 as indicated in the Issuer's Form 10-Q filed on November 13, 2015.

2

CUSIP No. 632307104

13 G

1 Names of Reporting Persons.
Lightspeed General Partner VIII, L.P.

2 Check the Appropriate Box if a Member of a Group*

(a)

(b) (1)

3 SEC Use Only

4 Citizenship or Place of Organization
Cayman Islands

5 Sole Voting Power
0 shares

Number of
Shares
Beneficially
Owned by
Each
Reporting
Person With

6 Shared Voting Power
3,973,594 shares (2)

7 Sole Dispositive Power
0 shares

8 Shared Dispositive Power
3,973,594 shares (2)

9 Aggregate Amount Beneficially Owned by Each Reporting Person
3,973,594 shares of Common Stock (2)

10 Check Box if the Aggregate Amount in Row (9) Excludes Certain Shares*

11 Percent of Class Represented by Amount in Row 9
7.9% (3)

12 Type of Reporting Person*
PN

- (1) This Schedule 13G is filed by the Reporting Persons. The Reporting Persons expressly disclaim status as a “group” for purposes of this Schedule 13G.
(2) LUGP VIII serves as the sole general partner of LGP VIII, which serves as the sole general partner of Lightspeed VIII. Eggers, Mhatre, Nieh and Schaepe are directors of LGP VIII and share voting and dispositive power over the shares held by Lightspeed VIII; however, they disclaim beneficial ownership of the shares held by Lightspeed VIII except to the extent of their pecuniary interests therein. The information with respect to the ownership of the Common Stock by the Reporting Persons filing this statement on Schedule 13G is provided as of December 31, 2015.
(3) This percentage is calculated based upon 49,996,087 shares of Common Stock outstanding as of October 30, 2015 as indicated in the Issuer’s Form 10-Q filed on November 13, 2015.

3

CUSIP No. 632307104

13 G

1 Names of Reporting Persons.
Lightspeed Ultimate General Partner VIII, Ltd.

2 Check the Appropriate Box if a Member of a Group*

(a)

(b) (1)

3 SEC Use Only

4 Citizenship or Place of Organization
Cayman Islands

5 Sole Voting Power
0 shares

Number of
Shares
Beneficially
Owned by

6 Shared Voting Power
3,973,594 shares (2)

Each
Reporting
Person With

7 Sole Dispositive Power
0 shares

8 Shared Dispositive Power
3,973,594 shares (2)

9 Aggregate Amount Beneficially Owned by Each Reporting Person
3,973,594 shares (2)

10 Check Box if the Aggregate Amount in Row (9) Excludes Certain Shares*

11 Percent of Class Represented by Amount in Row 9
7.9% (3)

12 Type of Reporting Person*
OO

- (1) This Schedule 13G is filed by the Reporting Persons. The Reporting Persons expressly disclaim status as a “group” for purposes of this Schedule 13G.
(2) LUGP VIII serves as the sole general partner of LGP VIII, which serves as the sole general partner of Lightspeed VIII. Eggers, Mhatre, Nieh and Schaepe are directors of LGP VIII and share voting and dispositive power over the shares held by Lightspeed VIII; however, they disclaim beneficial ownership of

the shares held by Lightspeed VIII except to the extent of their pecuniary interests therein. The information with respect to the ownership of the Common Stock by the Reporting Persons filing this statement on Schedule 13G is provided as of December 31, 2015.

(3) This percentage is calculated based upon 49,996,087 shares of Common Stock outstanding as of October 30, 2015 as indicated in the Issuer's Form 10-Q filed on November 13, 2015.

4

CUSIP No. 632307104

13 G

1 Names of Reporting Persons.
Barry Eggers

2 Check the Appropriate Box if a Member of a Group*

(a)

(b) (1)

3 SEC Use Only

4 Citizenship or Place of Organization
United States of America

5 Sole Voting Power
0 shares

Number of
Shares
Beneficially
Owned by
Each
Reporting
Person With

6 Shared Voting Power
3,973,594 shares (2)

7 Sole Dispositive Power
0 shares

8 Shared Dispositive Power
3,973,594 shares (2)

9 Aggregate Amount Beneficially Owned by Each Reporting Person
3,973,594 shares (2)

10 Check Box if the Aggregate Amount in Row (9) Excludes Certain Shares*

11 Percent of Class Represented by Amount in Row 9
7.9% (3)

12 Type of Reporting Person*
IN

(1) This Schedule 13G is filed by the Reporting Persons. The Reporting Persons expressly disclaim status as a "group" for purposes of this Schedule 13G.

(2) LUGP VIII serves as the sole general partner of LGP VIII, which serves as the sole general partner of Lightspeed VIII. Eggers, Mhatre, Nieh and Schaepe are directors of LGP VIII and share voting and dispositive power over the shares held by Lightspeed VIII; however, they disclaim beneficial ownership of the shares held by Lightspeed VIII except to the extent of their pecuniary interests therein. The information with respect to the ownership of the Common Stock by the Reporting Persons filing this statement on Schedule 13G is provided as of December 31, 2015.

(3) This percentage is calculated based upon 49,996,087 shares of Common Stock outstanding as of October 30, 2015 as indicated in the Issuer's Form 10-Q filed on November 13, 2015.

5

CUSIP No. 632307104

13 G

1		Names of Reporting Persons. Ravi Mhatre
2		Check the Appropriate Box if a Member of a Group*
	(a)	o
	(b)	x (1)
3		SEC Use Only
4		Citizenship or Place of Organization United States of America
	5	Sole Voting Power 0 shares
Number of Shares Beneficially Owned by Each Reporting Person With	6	Shared Voting Power 3,973,594 shares (2)
	7	Sole Dispositive Power 0 shares
	8	Shared Dispositive Power 3,973,594 shares (2)
9		Aggregate Amount Beneficially Owned by Each Reporting Person 3,973,594 shares (2)
10		Check Box if the Aggregate Amount in Row (9) Excludes Certain Shares* o
11		Percent of Class Represented by Amount in Row 9 7.9% (3)
12		Type of Reporting Person* IN

(1) This Schedule 13G is filed by the Reporting Persons. The Reporting Persons expressly disclaim status as a “group” for purposes of this Schedule 13G.

(2) LUGP VIII serves as the sole general partner of LGP VIII, which serves as the sole general partner of Lightspeed VIII. Eggers, Mhatre, Nieh and Schaepe are directors of LGP VIII and share voting and dispositive power over the shares held by Lightspeed VIII; however, they disclaim beneficial ownership of the shares held by Lightspeed VIII except to the extent of their pecuniary interests therein. The information with respect to the ownership of the Common Stock by the Reporting Persons filing this statement on Schedule 13G is provided as of December 31, 2015.

(3) This percentage is calculated based upon 49,996,087 shares of Common Stock outstanding as of October 30, 2015 as indicated in the Issuer’s Form 10-Q filed on November 13, 2015.

1		Names of Reporting Persons. Peter Y. Nieh
2		Check the Appropriate Box if a Member of a Group*
	(a)	o
	(b)	x (1)
3		SEC Use Only

4 Citizenship or Place of Organization
United States of America

5 Sole Voting Power
0 shares

Number of Shares Beneficially Owned by Each Reporting Person With

6 Shared Voting Power
3,973,594 shares (2)

7 Sole Dispositive Power
0 shares

8 Shared Dispositive Power
3,973,594 shares (2)

9 Aggregate Amount Beneficially Owned by Each Reporting Person
3,973,594 shares (2)

10 Check Box if the Aggregate Amount in Row (9) Excludes Certain Shares*

11 Percent of Class Represented by Amount in Row 9
7.9% (3)

12 Type of Reporting Person*
IN

- (1) This Schedule 13G is filed by the Reporting Persons. The Reporting Persons expressly disclaim status as a "group" for purposes of this Schedule 13G.
- (2) LUGP VIII serves as the sole general partner of LGP VIII, which serves as the sole general partner of Lightspeed VIII. Eggers, Mhatre, Nieh and Schaepe are directors of LGP VIII and share voting and dispositive power over the shares held by Lightspeed VIII; however, they disclaim beneficial ownership of the shares held by Lightspeed VIII except to the extent of their pecuniary interests therein. The information with respect to the ownership of the Common Stock by the Reporting Persons filing this statement on Schedule 13G is provided as of December 31, 2015.
- (3) This percentage is calculated based upon 49,996,087 shares of Common Stock outstanding as of October 30, 2015 as indicated in the Issuer's Form 10-Q filed on November 13, 2015.

CUSIP No. 632307104

13 G

1 Names of Reporting Persons.
Christopher J. Schaepe

2 Check the Appropriate Box if a Member of a Group*

(a)

(b) (1)

3 SEC Use Only

4 Citizenship or Place of Organization
United States of America

Number of Shares Beneficially Owned by Each Reporting Person With

5 Sole Voting Power
0

6 Shared Voting Power
3,973,594 shares (2)

7	Sole Dispositive Power 0
8	Shared Dispositive Power 3,973,594 shares (2)
9	Aggregate Amount Beneficially Owned by Each Reporting Person 3,973,594 shares (2)
10	Check Box if the Aggregate Amount in Row (9) Excludes Certain Shares* o
11	Percent of Class Represented by Amount in Row 9 7.9% (3)
12	Type of Reporting Person* IN

- (1) This Schedule 13G is filed by the Reporting Persons. The Reporting Persons expressly disclaim status as a “group” for purposes of this Schedule 13G.
- (2) LUGP VIII serves as the sole general partner of LGP VIII, which serves as the sole general partner of Lightspeed VIII. Eggers, Mhatre, Nieh and Schaepe are directors of LGP VIII and share voting and dispositive power over the shares held by Lightspeed VIII; however, they disclaim beneficial ownership of the shares held by Lightspeed VIII except to the extent of their pecuniary interests therein. The information with respect to the ownership of the Common Stock by the Reporting Persons filing this statement on Schedule 13G is provided as of December 31, 2015.
- (3) This percentage is calculated based upon 49,996,087 shares of Common Stock outstanding as of October 30, 2015 as indicated in the Issuer’s Form 10-Q filed on November 13, 2015.

Introductory Note: This Statement on Schedule 13G (this “Statement”) is filed on behalf of the Reporting Persons, in respect of shares of Common Stock, par value \$0.0001 per share (“Common Stock”), of Natera, Inc. (the “Issuer”).

Item 1

- (a) Name of Issuer:
Natera, Inc.
-
- Address of Issuer’s Principal Executive Offices:
201 Industrial Road, Suite 410
San Carlos, CA 94070

Item 2

- (a) Name of Person(s) Filing:
Lightspeed Venture Partners VIII, L.P. (“Lightspeed VIII”)
Lightspeed General Partner VIII, L.P. (“LGP VIII”)
Lightspeed Ultimate General Partner VIII, Ltd. (“LUGP VIII”)
Barry Eggers (“Eggers”)
Ravi Mhatre (“Mhatre”)
Peter Y. Nieh (“Nieh”)
Christopher J. Schaepe (“Schaepe”)
-
- (b) Address of Principal Business Office:
c/o Lightspeed Venture Partners
2200 Sand Hill Road
Menlo Park, CA 94025
-
- (b) Citizenship:
- | | | | |
|--------------|-----------------|---|--------------------------|
| Entities: | Lightspeed VIII | - | Cayman Islands |
| | LGP VIII | - | Cayman Islands |
| | LUGP VIII | - | Cayman Islands |
| Individuals: | Eggers | - | United States of America |
| | Mhatre | - | United States of America |
| | Nieh | - | United States of America |
| | Schaepe | - | United States of America |
-
- (d) Title of Class of Securities:
Common Stock

Item 3 Not applicable.

9

Item 4 Ownership.

The following information with respect to the ownership of the Common Stock by the Reporting Persons filing this statement on Schedule 13G is provided as of December 31, 2015:

Reporting Persons (1)	Shares Held Directly	Sole Voting Power	Shared Voting Power	Sole Dispositive Power	Shared Dispositive Power	Beneficial Ownership	Percentage of Class (2)
Lightspeed VIII	3,973,594	—	3,973,594	—	3,973,594	3,973,594	7.9%
LGP VIII	—	—	3,973,594	—	3,973,594	3,973,594	7.9%
LUGP VIII	—	—	3,973,594	—	3,973,594	3,973,594	7.9%
Eggers	—	—	3,973,594	—	3,973,594	3,973,594	7.9%
Mhatre	—	—	3,973,594	—	3,973,594	3,973,594	7.9%
Nieh	—	—	3,973,594	—	3,973,594	3,973,594	7.9%
Schaepe	—	—	3,973,594	—	3,973,594	3,973,594	7.9%

(1) The shares are held by Lightspeed VIII. Eggers, Mhatre, Nieh and Schaepe are directors of LUGP VIII and share voting and dispositive power over the shares held by Lightspeed VIII; however, they disclaim beneficial ownership of the shares held by Lightspeed VIII except to the extent of their pecuniary interests therein.

(2) This percentage is calculated based upon 49,996,087 shares of Common Stock outstanding as of October 30, 2015 as indicated in the Issuer's From 10-Q filed on November 13, 2015.

Item 5 Ownership of Five Percent or Less of a Class.

If this statement is being filed to report the fact that as of the date hereof, the Reporting Persons have ceased to be the beneficial owner of more than five percent of the class of securities, check the following:

Item 6 Ownership of More than Five Percent on Behalf of Another Person.

Not applicable.

Item 7 Identification and Classification of the Subsidiary Which Acquired the Security Being Reported on By the Parent Holding Company.

Not applicable.

Item 8 Identification and Classification of Members of the Group.

Not applicable.

Item 9 Notice of Dissolution of Group.

Not applicable.

10

Item 10 Certification.

Not applicable.

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: February 16, 2016

Lightspeed Venture Partners VIII, L.P.

By: Lightspeed General Partner VIII, L.P.

Its: General Partner
By: Lightspeed Ultimate General Partner VIII, Ltd.
Its: General Partner
By: /s/ Christopher J. Schaepe
Authorized Representative

Lightspeed General Partner VIII, L.P.

By: Lightspeed Ultimate General Partner VIII, Ltd.
Its: General Partner
By: /s/ Christopher J. Schaepe
Authorized Representative

Lightspeed Ultimate General Partner VIII, Ltd.

By: /s/ Christopher J. Schaepe
Authorized Representative
By: /s/ Barry Eggers
Barry Eggers
By: /s/ Ravi Mhatre
Ravi Mhatre
By: /s/ Peter Y. Nieh
Peter Y. Nieh
By: /s/ Christopher J. Schaepe
Christopher J. Schaepe

Exhibit(s):

A - Joint Filing Statement

EXHIBIT A
JOINT FILING STATEMENT

We, the undersigned, hereby express our agreement that the attached Schedule 13G (or any amendments thereto) relating to the Common Stock of Natera, Inc. is filed on behalf of each of us.

Dated: February 16, 2016

Lightspeed Venture Partners VIII, L.P.

By: Lightspeed General Partner VIII, L.P.
Its: General Partner
By: Lightspeed Ultimate General Partner VIII, Ltd.
Its: General Partner
By: /s/ Christopher J. Schaepe
Authorized Representative

Lightspeed General Partner VIII, L.P.

By: Lightspeed Ultimate General Partner VIII, Ltd.

Its: General Partner

By: /s/ Christopher J. Schaepe
Authorized Representative

Lightspeed Ultimate General Partner VIII, Ltd.

By: /s/ Christopher J. Schaepe
Authorized Representative

By: /s/ Barry Eggers
Barry Eggers

By: /s/ Ravi Mhatre
Ravi Mhatre

By: /s/ Peter Y. Nieh
Peter Y. Nieh

By: /s/ Christopher J. Schaepe
Christopher J. Schaepe