

TETRAPHASE PHARMACEUTICALS INC  
Form SC 13D  
May 29, 2013  
CUSIP No. 88165N105

13D

Page 1 of 17 Pages

**UNITED STATES**  
**SECURITIES AND EXCHANGE COMMISSION**  
**WASHINGTON, DC 20549**

**SCHEDULE 13D**

**Under the Securities Exchange Act of 1934**

**(Amendment No. )\***

**Tetraphase Pharmaceuticals, Inc.**

(Name of Issuer)

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

(Title of Class of Securities)

**88165N105**

(CUSIP Number)

**Noubar B. Afeyan, Ph.D.**

**Flagship Ventures**

**One Memorial Drive, 7<sup>th</sup> Floor**

**Cambridge, Massachusetts 02142**

**(617) 868-1888**

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*with a copy to:*

**Sarah Rothermel, Esq.**

**Wilmer Cutler Pickering Hale and Dorr LLP**

**60 State Street**

**Boston, Massachusetts 02109**

**(617) 526-6000**

**(Name, Address and Telephone Number of Person Authorized to Receive Notices and Communications)**

**March 20, 2013**

**(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. "

*Note.* Schedules filed in paper format shall include a signed original and five copies of the schedule, including all exhibits. See Rule 13d-7(b) for other parties to whom copies are to be sent.

(Continued on following pages)

(Page 1 of 17 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.

(1) Names of reporting persons

Flagship Ventures Fund 2004, L.P.

(2) Check the appropriate box if a member of a group (see instructions)

(a)  (b)

(3) SEC use only

(4) Source of funds (see instructions)

WC

(5) Check if disclosure of legal proceedings is required pursuant to Items 2(d) or 2(e).

(6) Citizenship or place of organization.

Delaware, United States of America

(7) Sole voting power.

Number of

shares 0

beneficially (8) Shared voting power.

owned by

each 891,887

(9) Sole dispositive power.

reporting

person

0

with: (10) Shared dispositive power.

891,887

(11) Aggregate amount beneficially owned by each reporting person.

891,887 (see Attachment A)

(12) Check if the aggregate amount in Row (11) excludes certain shares (see instructions). "

(13) Percent of class represented by amount in Row (11).

4.5% (see Attachment A)

(14) Type of reporting person (see instructions).

PN

(1) Names of reporting persons

Flagship Ventures General Partner LLC

(2) Check the appropriate box if a member of a group (see instructions)

(a)  (b)

(3) SEC use only

(4) Source of funds (see instructions)

WC

(5) Check if disclosure of legal proceedings is required pursuant to Items 2(d) or 2(e).

(6) Citizenship or place of organization.

Delaware, United States of America

(7) Sole voting power.

Number of

shares 0

beneficially (8) Shared voting power.

owned by

each 891,887

(9) Sole dispositive power.

reporting

person

0

with: (10) Shared dispositive power.

891,887

(11) Aggregate amount beneficially owned by each reporting person.

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891,887 (see Attachment A)

(12) Check if the aggregate amount in Row (11) excludes certain shares (see instructions). "

(13) Percent of class represented by amount in Row (11).

4.5% (see Attachment A)

(14) Type of reporting person (see instructions).

OO

(1) Names of reporting persons

Flagship Ventures Fund 2007, L.P.

(2) Check the appropriate box if a member of a group (see instructions)

(a)  (b)

(3) SEC use only

(4) Source of funds (see instructions)

WC

(5) Check if disclosure of legal proceedings is required pursuant to Items 2(d) or 2(e).

(6) Citizenship or place of organization.

Delaware, United States of America

(7) Sole voting power.

Number of

shares 0

beneficially (8) Shared voting power.

owned by

each 1,165,786

(9) Sole dispositive power.

reporting

person

0

with: (10) Shared dispositive power.

1,165,786

(11) Aggregate amount beneficially owned by each reporting person.

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1,165,786 (see Attachment A)

(12) Check if the aggregate amount in Row (11) excludes certain shares (see instructions). "

(13) Percent of class represented by amount in Row (11).

5.9% (see Attachment A)

(14) Type of reporting person (see instructions).

PN



(1) Names of reporting persons

Flagship Ventures 2007 General Partner LLC

(2) Check the appropriate box if a member of a group (see instructions)

(a)  (b)

(3) SEC use only

(4) Source of funds (see instructions)

WC

(5) Check if disclosure of legal proceedings is required pursuant to Items 2(d) or 2(e).

(6) Citizenship or place of organization.

Delaware, United States of America

(7) Sole voting power.

Number of

shares 0

beneficially (8) Shared voting power.

owned by

each 1,165,786

(9) Sole dispositive power.

reporting

person

0

with: (10) Shared dispositive power.

1,165,786

(11) Aggregate amount beneficially owned by each reporting person.

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1,165,786 (see Attachment A)

(12) Check if the aggregate amount in Row (11) excludes certain shares (see instructions). "

(13) Percent of class represented by amount in Row (11).

5.9% (see Attachment A)

(14) Type of reporting person (see instructions).

OO

(1) Names of reporting persons

Noubar B. Afeyan, Ph.D.

(2) Check the appropriate box if a member of a group (see instructions)

(a)  (b)

(3) SEC use only

(4) Source of funds (see instructions)

WC

(5) Check if disclosure of legal proceedings is required pursuant to Items 2(d) or 2(e).

(6) Citizenship or place of organization.

United States of America

(7) Sole voting power.

Number of

shares 0

beneficially (8) Shared voting power.

owned by

each 2,057,673

(9) Sole dispositive power.

reporting

person

0

with: (10) Shared dispositive power.

2,057,673

(11) Aggregate amount beneficially owned by each reporting person.

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2,057,673 (see Attachment A)

(12) Check if the aggregate amount in Row (11) excludes certain shares (see instructions). "

(13) Percent of class represented by amount in Row (11).

10.4% (see Attachment A)

(14) Type of reporting person (see instructions).

IN

(1) Names of reporting persons

Edwin M. Kania, Jr.

(2) Check the appropriate box if a member of a group (see instructions)

(a)  (b)

(3) SEC use only

(4) Source of funds (see instructions)

WC

(5) Check if disclosure of legal proceedings is required pursuant to Items 2(d) or 2(e).

(6) Citizenship or place of organization.

United States of America

(7) Sole voting power.

Number of

shares 0

beneficially (8) Shared voting power.

owned by

each 2,057,673

(9) Sole dispositive power.

reporting

person

0

with: (10) Shared dispositive power.

2,057,673

(11) Aggregate amount beneficially owned by each reporting person.

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2,057,673 (see Attachment A)

(12) Check if the aggregate amount in Row (11) excludes certain shares (see instructions). "

(13) Percent of class represented by amount in Row (11).

10.4% (see Attachment A)

(14) Type of reporting person (see instructions).

IN

**Item 1. Security and Issuer.**

This statement on Schedule 13D relates to the Reporting Persons (as defined in Item 2 below) beneficial ownership interest in the common stock, par value \$0.001 per share (the Common Stock), of Tetrphase Pharmaceuticals, Inc., a Delaware Corporation (the Issuer). The address of the principal executive office of the Issuer is 480 Arsenal Street, Suite 110, Watertown, Massachusetts 02472. 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) This statement is filed by: Flagship Ventures Fund 2004, L.P., a Delaware limited partnership (Flagship 2004 Fund); Flagship Ventures General Partner LLC, a Delaware limited liability company (Flagship 2004 GP); Flagship Ventures Fund 2007, L.P., a Delaware limited partnership (Flagship 2007 Fund); Flagship Ventures 2007 General Partner LLC, a Delaware limited liability company (Flagship 2007 GP); Noubar B. Afeyan, Ph.D. (Afeyan); and Edwin M. Kania, Jr. (Kania).

Each of the foregoing is referred to as a Reporting Person and collectively as the Reporting Persons.

Pursuant to the provisions of General Instruction C to Schedule 13D, information in Items 2 through 6 of this Schedule 13D is provided with respect to Flagship 2004 GP, Flagship 2007 GP, Afeyan, and Kania.

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

One Memorial Drive, 7<sup>th</sup> Floor

Cambridge, Massachusetts 02142

- (c) The present principal business of each of the Reporting Persons is the venture capital investment business.
- (d) No Reporting Person, during the last five years, has been convicted in a criminal proceeding (excluding traffic violations or similar misdemeanors).
- (e) No Reporting Person, during the last five years, has been 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) Citizenship:

Flagship 2004 Fund  
Flagship 2004 GP  
Flagship 2007 Fund  
Flagship 2007 GP  
Afeyan  
Kania

Delaware, United States of America  
Delaware, United States of America  
Delaware, United States of America  
Delaware, United States of America  
United States of America  
United States of America

Additional information concerning the Reporting Persons is set forth on Attachment A hereto and is incorporated by reference herein.

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

On August 8, 2006, the Reporting Persons acquired 2,090,000 shares of the Issuer's Series A convertible preferred stock at a price per share of \$1.00, for an aggregate purchase price of \$2,090,000.00. These shares were acquired with working capital.

On June 24, 2008, the Reporting Persons acquired 2,726,086 shares of the Issuer's Series A-2 convertible preferred stock at a price per share of approximately \$1.15, for an aggregate purchase price of \$3,135,000.00. These shares were acquired with working capital.



On September 11, 2009, the Reporting Persons acquired 11,422,045 shares of the Issuer's Series B convertible preferred stock at a price per share of approximately \$0.18, for an aggregate purchase price of \$2,000,000.00. These shares were acquired with working capital.

On May 14, 2010, the Reporting Persons acquired 29,171,528 shares of the Issuer's Series C convertible preferred stock at a price per share of approximately \$0.26, for an aggregate purchase price of \$7,500,000.00. These shares were acquired with working capital.

Following completion of the Issuer's initial public offering on March 20, 2013 (the "IPO"), the Reporting Persons' shares of the Issuer's Series A convertible preferred stock, Series A-2 convertible preferred stock, Series B convertible preferred stock, and Series C convertible preferred stock converted into shares of Common Stock on a 1-for-29 basis. After the conversion of the Series A convertible preferred stock, the Series A-2 convertible preferred stock, the Series B convertible preferred stock, and the Series C convertible preferred stock, the Reporting Persons owned, in aggregate, 1,565,849 shares of the Issuer's Common Stock.

In conjunction with the Issuer's IPO, the Reporting Persons acquired 491,824 shares of Common Stock. These shares were acquired with working capital at the initial public offering price of \$7.00 per share for an aggregate purchase price of \$3,442,768.00. Following the purchase of such shares in the IPO, the Reporting Persons owned, in aggregate, 2,057,673 shares of the Issuer's Common Stock.

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

The shares of Common Stock reported herein were acquired solely for investment purposes. None of the Reporting Persons have any present plans or proposals that relate to or would result in any change in the business, policies, management, structure or capitalization of the Issuer. The Reporting Persons reserve the right to acquire, or dispose of, additional securities of the Issuer in the ordinary course of their business, to the extent deemed advisable in light of their general investment and trading policies, market conditions or other factors. The Reporting Persons may engage in discussions from time to time with other stockholders of the Issuer regarding the acquisition by the Reporting Persons of shares of the Issuer's Common Stock or other securities of the Issuer held by such stockholders.

Douglas Cole, M.D. is a member of the Board of Directors of the Issuer and is also a member of Flagship 2004 GP and Flagship 2007 GP. Mr. Cole does not own any shares of the Issuer's Common Stock in his individual capacity and has no voting or investment control over the shares of Common Stock held by Flagship 2004 Fund or Flagship 2007 Fund. Mr. Cole disclaims beneficial ownership of the shares of Common Stock held by Flagship 2004 Fund and Flagship 2007 Fund, except to the extent of his pecuniary interest therein. Mr. Cole owns 20,000 non-qualified stock options representing the right to acquire shares of the Issuer's Common Stock on a 1-for-1 basis. The options vest in quarterly installments over a three-year period measured from March 25, 2013.

The Reporting Persons may seek information from management and the Issuer's Board of Directors, and may engage in further discussions with management, the Issuer's Board of Directors, other stockholders of the Issuer and other relevant parties, concerning the business, operations, governance, management, strategy, capitalization and/or future plans of the Issuer, or in proposing one or more of the other actions described in subparagraphs (a) through (j) of this Item 4. In addition, the Reporting Persons may exercise their rights under the Investors' Rights Agreement, as defined below.

Other than as described above and as set forth in the Investors' Rights Agreement, as defined below, the Reporting Persons do not have any plans or proposals which would result in any of the following:

- (a) the acquisition by any person of additional securities of the Issuer, or the disposition of securities of the Issuer;
- (b) an extraordinary corporate transaction, such as a merger, reorganization or liquidation, involving the Issuer or any of its subsidiaries;
- (c) a sale or transfer of a material amount of assets of the Issuer or any of its subsidiaries;
- (d) any change in the present Issuer's board of directors or management of the Issuer, including any plans or proposals to change the number or term of directors or to fill any existing vacancies on the board;

- (e) any material change in the present capitalization or dividend policy of the Issuer;
- (f) any other material change in the Issuer's business or corporate structure;
- (g) changes in the Issuer's charter, bylaws or instruments corresponding thereto or other actions that may impede the acquisition of control of the Issuer by any person;
- (h) causing a class of securities of the Issuer to be delisted from a national securities exchange or to cease to be authorized to be quoted in an inter-dealer quotation system of a registered national securities association;
- (i) a class of equity securities of the Issuer becoming eligible for termination of registration pursuant to Section 12(g)(4) of the Securities Exchange Act of 1934, as amended; or
- (j) any action similar to any of those enumerated above.

**Item 5. Interest in Securities of the Issuer.**

The aggregate percentage of shares of Common Stock reported beneficially owned by each person named herein has been determined in accordance with SEC rules and is based upon 19,867,967 shares of Common Stock outstanding, which is the total number of shares of Common Stock outstanding as reported in the Issuer's final prospectus filed with the Securities and Exchange Commission on March 20, 2013 in connection with the Issuer's IPO. The applicable SEC rules generally attribute beneficial ownership of securities to persons who possess sole or shared voting power or investment power with respect to those securities and include shares of Common Stock issuable upon the conversion or exercise of other securities that are immediately convertible or exercisable, or are convertible or exercisable within 60 days of the filing of this Report.

**A. Flagship Ventures Fund 2004, L.P.**

- (a) As of the closing of business on May 29, 2013, Flagship 2004 Fund was the record owner and beneficial owner of 891,887 shares of the Issuer's Common Stock (the 2004 Record Shares), representing a beneficial ownership interest of approximately 4.49% of the outstanding shares of Common Stock.
- (b)

|    |  |         |
|----|--|---------|
| 1. | Sole power to vote or direct vote:                 | 0       |
| 2. | Shared power to vote or direct vote:               | 891,887 |
| 3. | Sole power to dispose or direct the disposition:   | 0       |
| 4. | Shared power to dispose or direct the disposition: | 891,887 |
- (c) The Reporting Persons have not effected any transactions in the Common Stock of the Issuer in the past 60 days, except as described in Item 3 of this Schedule 13D, which is incorporated herein by reference.

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(d) Except as disclosed herein, no other person is known to have the right to receive or the power to direct the receipt of dividends from, or the proceeds from the sale of, the shares of Common Stock beneficially owned by each of the Reporting Persons.

(e) Not applicable.

Please see Attachment A for additional information.

### **B. Flagship Ventures General Partner LLC**

(a) In its capacity as general partner of Flagship 2004 Fund, Flagship 2004 GP may be deemed to be the beneficial owner of the 2004 Record Shares, representing a beneficial ownership interest of approximately 4.49% of the outstanding shares of Common Stock.

|     |   |         |
|-----|---|---------|
| (b) | 1. Sole power to vote or direct vote:                 | 0       |
|     | 2. Shared power to vote or direct vote:               | 891,887 |
|     | 3. Sole power to dispose or direct the disposition:   | 0       |
|     | 4. Shared power to dispose or direct the disposition: | 891,887 |

- (c) The Reporting Persons have not effected any transactions in the Common Stock of the Issuer in the past 60 days, except as described in Item 3 of this Schedule 13D, which is incorporated herein by reference.
- (d) Except as disclosed herein, no other person is known to have the right to receive or the power to direct the receipt of dividends from, or the proceeds from the sale of, the shares of Common Stock beneficially owned by each of the Reporting Persons.
- (e) Not applicable.

Please see Attachment A for additional information.

**C. Flagship Ventures Fund 2007, L.P.**

- (a) As of the closing of business on May 29, 2013, Flagship 2007 Fund was the record owner and beneficial owner of 1,165,786 shares of the Issuer's Common Stock (the 2007 Record Shares), representing a beneficial ownership interest of approximately 5.87% of the outstanding shares of Common Stock.

|     |   |           |
|-----|---|-----------|
| (b) | 1. Sole power to vote or direct vote:                 | 0         |
|     | 2. Shared power to vote or direct vote:               | 1,165,786 |
|     | 3. Sole power to dispose or direct the disposition:   | 0         |
|     | 4. Shared power to dispose or direct the disposition: | 1,165,786 |

- (c) The Reporting Persons have not effected any transactions in the Common Stock of the Issuer in the past 60 days, except as described in Item 3 of this Schedule 13D, which is incorporated herein by reference.
- (d) Except as disclosed herein, no other person is known to have the right to receive or the power to direct the receipt of dividends from, or the proceeds from the sale of, the shares of Common Stock beneficially owned by each of the Reporting Persons.
- (e) Not applicable.

Please see Attachment A for additional information.

**D. Flagship Ventures 2007 General Partner LLC**

- (a) In its capacity as general partner of Flagship 2007 Fund, Flagship 2007 GP may be deemed to be the beneficial owner of the 2007 Record Shares, representing a beneficial ownership interest of approximately 5.87% of the outstanding shares of Common Stock.

|     |                                       |   |
|-----|---------------------------------------|---|
| (b) | 1. Sole power to vote or direct vote: | 0 |
|-----|---------------------------------------|---|

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|   |           |
|---|-----------|
| 2. Shared power to vote or direct vote:               | 1,165,786 |
| 3. Sole power to dispose or direct the disposition:   | 0         |
| 4. Shared power to dispose or direct the disposition: | 1,165,786 |

(c) The Reporting Persons have not effected any transactions in the Common Stock of the Issuer in the past 60 days, except as described in Item 3 of this Schedule 13D, which is incorporated herein by reference.

(d) Except as disclosed herein, no other person is known to have the right to receive or the power to direct the receipt of dividends from, or the proceeds from the sale of, the shares of Common Stock beneficially owned by each of the Reporting Persons.

(e) Not applicable.

Please see Attachment A for additional information.

**E. Noubar B. Afeyan, Ph.D.**

(a) In his capacity as managing member of each of Flagship 2004 GP and Flagship 2007 GP, Afeyan may be deemed to be the beneficial owner of the 2004 Record Shares and the 2007 Record Shares, representing a beneficial ownership interest of approximately 10.36% of the outstanding shares of Common Stock.

|     |   |           |
|-----|---|-----------|
| (b) | 1. Sole power to vote or direct vote:                 | 0         |
|     | 2. Shared power to vote or direct vote:               | 2,057,673 |
|     | 3. Sole power to dispose or direct the disposition:   | 0         |
|     | 4. Shared power to dispose or direct the disposition: | 2,057,673 |

(c) The Reporting Persons have not effected any transactions in the Common Stock of the Issuer in the past 60 days, except as described in Item 3 of this Schedule 13D, which is incorporated herein by reference.

(d) Except as disclosed herein, no other person is known to have the right to receive or the power to direct the receipt of dividends from, or the proceeds from the sale of, the shares of Common Stock beneficially owned by each of the Reporting Persons.

(e) Not applicable.

Please see Attachment A for additional information.

**F. Edwin M. Kania, Jr.**

(a) In his capacity as managing member of each of Flagship 2004 GP and Flagship 2007 GP, Kania may be deemed to be the beneficial owner of the 2004 Record Shares and the 2007 Record Shares, representing a beneficial ownership interest of approximately 10.36% of the outstanding shares of Common Stock.

|     |   |           |
|-----|---|-----------|
| (b) | 1. Sole power to vote or direct vote:                 | 0         |
|     | 2. Shared power to vote or direct vote:               | 2,057,673 |
|     | 3. Sole power to dispose or direct the disposition:   | 0         |
|     | 4. Shared power to dispose or direct the disposition: | 2,057,673 |

(c) The Reporting Persons have not effected any transactions in the Common Stock of the Issuer in the past 60 days, except as described in Item 3 of this Schedule 13D, which is incorporated herein by reference.

(d) Except as disclosed herein, no other person is known to have the right to receive or the power to direct the receipt of dividends from, or the proceeds from the sale of, the shares of Common Stock beneficially owned by each of the Reporting Persons.

(e) Not applicable.

Please see Attachment A for additional information.

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

**Third Amended and Restated Investors Rights Agreement**

Flagship 2004 Fund and Flagship 2007 Fund are parties to a Second Amended and Restated Registration Rights Agreement, dated as of May 14, 2010, by and among the Issuer and certain of its stockholders (the "Registration Rights Agreement"). Upon the closing of the Issuer's IPO, holders of a total of 8,933,817 shares of Common Stock as of December 31, 2012, including for this purpose 8,828,438 shares of Common Stock issued upon conversion of the Issuer's preferred stock upon the closing of the IPO and 54,751 shares of Common Stock issuable upon the exercise of outstanding warrants to purchase shares of the Issuer's Series A-1 convertible preferred stock and Series C convertible preferred stock, will have the right to require the Issuer to register such shares under the Securities Act of 1933, as amended (the "Securities Act") under specified circumstances and will have incidental registration rights as described below. After registration pursuant to these rights, these shares will become freely tradable without restriction under the Securities Act.

Certain of the Issuer's principal stockholders who purchased shares of Common Stock in conjunction with the IPO have the registration rights described below with respect to any such purchased shares.

#### *Demand Registration Rights*

Beginning on the 180th day after March 19, 2013, subject to specified limitations set forth in the Registration Rights Agreement, at any time the holders of at least 40% of the then outstanding registrable securities, as defined in the Registration Rights Agreement, acting together, may demand in writing that the Issuer register their registrable securities under the Securities Act so long as the total amount of registrable securities registered has an aggregate proposed offering price of at least \$5.0 million. The Issuer is not obligated to file a registration statement pursuant to this demand provision on more than two occasions, subject to specified exceptions.

In addition, at any time after the Issuer becomes eligible to file a registration statement on Form S-3 under the Securities Act, subject to specified limitations, the holders of at least 40% of the outstanding registrable securities may demand in writing that the Issuer register on Form S-3 the registrable securities held by them so long as the total amount of registrable securities being registered has an aggregate offering price of at least \$2.0 million. The Issuer is not obligated to file a Form S-3 pursuant to this provision within six months of the effective date of any other registration statement that it may file.

#### *Incidental Registration Rights*

If, at any time after the closing of the IPO, the Issuer proposes to file a registration statement to register any of its securities under the Securities Act, either for the Issuer's own account or for the account of any of its stockholders, other than pursuant to the demand registration rights described above and other than pursuant to a Form S-4 or Form S-8, the holders of the Issuer's registrable securities are entitled to notice of registration and, subject to specified exceptions, the Issuer will be required to use commercially reasonable efforts to register the registrable securities then held by such holders and for which such holders request registration.

#### *Expenses*

Pursuant to the Registration Rights Agreement, the Issuer is required to pay all registration expenses, including registration and filing fees, printing expenses, fees and disbursements of its counsel and accountants, fees and expenses incurred in connection with complying with state securities or blue sky laws, fees of the Financial Industry Regulatory Authority, Inc., transfer taxes, fees of transfer agents and registrations, any insurance costs and reasonable fees and disbursements of one counsel representing the selling stockholders, other than any underwriting discounts and commissions, related to any demand or incidental registration. The Registration Rights Agreement contains customary cross-indemnification provisions, pursuant to which the Issuer is obligated to indemnify the selling stockholders in the event of material misstatements or omissions in the registration statement attributable to the Issuer, and the selling stockholders are obligated to indemnify the Issuer for material misstatements or omissions in the registration statement attributable to them.

\*\*\*\*\*

The foregoing description of the terms of the Registration Rights Agreement is intended as a summary only and is qualified in its entirety by reference to the Registration Rights Agreement, itself, which is filed as an exhibit to this Schedule 13D and incorporated by reference herein. Other than as described in this Schedule 13D, to the best of the Reporting Persons' knowledge, there are no other contracts, arrangements, understandings or relationships (legal or otherwise) among the persons named in Item 2 and between such persons and any person with respect to any securities of the Issuer.



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

The following documents are filed as Exhibits to this statement:

| <b>Exhibit Number</b> | <b>Exhibit Description</b>   |
|-----------------------|--|
| 99.1                  | Joint Filing Agreement   |
| 99.2                  | Second Amended and Restated Registration Rights Agreement dated May 14, 2010, among the Issuer and the Issuer's securityholders listed therein (Incorporated by reference to Exhibit 10.1 of the Issuer's Registration Statement on Form S-1 (File No. 333-186574), filed with the Securities and Exchange Commission on February 11, 2013). |

**SIGNATURES**

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.

**FLAGSHIP VENTURES FUND 2004, L.P.**

By: Flagship Ventures General Partner LLC,  
its general partner

By: /s/ Noubar B. Afeyan, Ph.D.  
Name: Noubar B. Afeyan, Ph.D.  
Title: Managing Member

**FLAGSHIP VENTURES GENERAL PARTNER  
LLC**

By: /s/ Noubar B. Afeyan, Ph.D.  
Name: Noubar B. Afeyan, Ph.D.  
Title: Managing Member

**FLAGSHIP VENTURES FUND 2007, L.P.**

By: Flagship Ventures 2007 General Partner LLC,  
its general partner

By: /s/ Noubar B. Afeyan, Ph.D.  
Name: Noubar B. Afeyan, Ph.D.  
Title: Managing Member

**FLAGSHIP VENTURES 2007 GENERAL  
PARTNER LLC**

By: /s/ Noubar B. Afeyan, Ph.D.  
Name: Noubar B. Afeyan, Ph.D.  
Title: Managing Member

/s/ Noubar B. Afeyan, Ph.D.  
Noubar B. Afeyan, Ph.D.

/s/ Edwin M. Kania, Jr.  
Edwin M. Kania, Jr.