

SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

SCHEDULE 13D

Under the Securities Exchange Act of 1934

Onconova Therapeutics, Inc.

(Name of Issuer)

Common Stock, \$0.01 par value

(Title of Class of Securities)

68232V108

(CUSIP Number)

Michael B. Hoffman
712 Fifth Avenue, 36th Floor
New York, NY 10019
(212) 993-0091

with a copy to:

David J. Stoll, Esq. and Mark L. Mandel, Esq.
Milbank, Tweed, Hadley & McCloy LLP
One Chase Manhattan Plaza
New York, NY 10005-1413
(212) 530-5000

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

July 24, 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 §§240.13d-1(e), 240.13d-1(f) or 240.13d-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 §240.13d-7 for other parties to whom copies of this statement are to be sent.

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. 68232V108

1. Name of Reporting Person
Michael B. Hoffman

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

(a)

(b)

3. SEC Use Only

4. Source of Funds
PF

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
204,715(1)

Number of
Shares
Beneficially
Owned by
Each
Reporting
Person With

8. Shared Voting Power
4,372,330(2)

9. Sole Dispositive Power
204,715(3)

10. Shared Dispositive Power
4,372,330(4)

11. Aggregate Amount Beneficially Owned by Each Reporting Person
4,577,045(5)

12. Check if the Aggregate Amount in Row (11) Excludes Certain Shares

13. Percent of Class Represented by Amount in Row (11)
21.4%(6)

14. Type of Reporting Person
IN

(1) Includes (i) 202,548 options to purchase shares of shares of common stock, par value \$0.01 per share ("Common Stock"), of Onconova Therapeutics, Inc., a Delaware corporation (the "Issuer"), which are immediately exercisable, and (ii) 13,000 stock options to purchase shares of Common Stock granted to Michael B. Hoffman ("Mr. Hoffman") on July 25, 2013, of which 2,167 options vest within 60 days of the date hereof.

(2) Includes (i) 4,287,800 shares of Common Stock held by the Michael and Jane Hoffman 2013 Descendants Trust (the "2013 Trust") and (ii) 84,530 shares of Common Stock held by the Michael and Jane Hoffman 2013 Descendants Trust (Non-GST Exempt Trust) (the "2013 Non-GST Exempt Trust").

(3) Includes (i) 202,548 options to purchase shares of Common Stock, which are immediately exercisable, and (ii) 13,000 stock options to purchase shares of Common Stock granted to Mr. Hoffman on July 25, 2013, of which 2,167 options vest within 60 days of the date hereof.

(4) Includes (i) 4,287,800 shares of Common Stock held by the 2013 Trust and (ii) 84,530 shares of Common Stock held by the 2013 Non-GST Exempt Trust.

(5) Includes (i) 4,287,800 shares of Common Stock held by the 2013 Trust, of which Mr. Hoffman is donor, (ii) 84,530 shares of Common Stock held by the 2013 Non-GST Exempt Trust, of which Mr. Hoffman is donor, and (iii) 204,715 shares of Common Stock subject to outstanding options that vest within 60 days of the date hereof. Mr. Hoffman has no voting or dispositive power with regard to any of the shares held by the 2013 Trust and the 2013 Non-GST Exempt Trust. A.J. Agarwal and Jane Hoffman, Mr. Hoffman's spouse, as trustees, have voting and dispositive power with regard to the shares held by the 2013 Trust and the 2013 Non-GST Exempt Trust.

(6) See Item 5.

1. Name of Reporting Person
Michael and Jane Hoffman 2013 Descendants Trust

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

(a)

(b)

3. SEC Use Only

4. Source of Funds
WC

5. Check if Disclosure of Legal Proceedings Is Required Pursuant to Items 2(d) or 2(e)

6. Citizenship or Place of Organization
New York

7. Sole Voting Power
0

Number of
Shares
Beneficially
Owned by
Each
Reporting
Person With

8. Shared Voting Power
4,287,800(7)

9. Sole Dispositive Power
0

10. Shared Dispositive Power
4,287,800(8)

11. Aggregate Amount Beneficially Owned by Each Reporting Person
4,287,800(9)

12. Check if the Aggregate Amount in Row (11) Excludes Certain Shares

13. Percent of Class Represented by Amount in Row (11)
20.0%(10)

14. Type of Reporting Person

(7) See footnote 5 above.

(8) See footnote 5 above.

(9) Includes (i) 3,287,800 shares of Common Stock beneficially owned by the 2013 Trust immediately prior to the consummation of the Issuer's initial public offering on July 30, 2013 (the "Offering") and (iii) 1,000,000 shares of Common Stock purchased from the underwriters on July 24, 2013 in connection with the Offering.

(10) See Item 5.

Item 1. Security and Issuer

This statement on Schedule 13D (the "Schedule 13D") relates to the shares of common stock, par value \$0.01 per share, of Onconova Therapeutics, Inc., a Delaware corporation. The address of the principal executive offices of the Issuer is 375 Pheasant Run, Newtown, PA 18940.

Item 2. Identity and Background

(a) This Schedule 13D is being filed by the following (each a "Reporting Person" and collectively, the "Reporting Persons"):

- (i) Michael and Jane Hoffman 2013 Descendants Trust, a trust organized under the laws of New York; and
- (ii) Michael B. Hoffman, an individual.

Mr. Hoffman has no voting or dispositive power with respect to any of the shares held by the 2013 Trust and the 2013 Non-GST Exempt Trust (collectively, the "Trusts"). A.J. Agarwal and Jane Hoffman, Mr. Hoffman's spouse, as trustees of the Trusts, have sole voting and dispositive power with regard to the shares held by the 2013 Trust and the 2013 Non-GST Exempt Trust. Mr. Hoffman is a donor and authorized general agent of both the 2013 Trust and the 2013 Non-GST Exempt Trust. As authorized general agent, Mr. Hoffman may execute documents and take other ministerial actions on behalf of the trustees.

(b) The principal business address of each Reporting Person is 712 Fifth Avenue, 36th Floor, New York, NY 10019.

(c) The principal business of the 2013 Trust is to hold assets for the benefit of Mr. Hoffman's descendants. Mr. Hoffman is the Chairman of the Board of Directors of the Issuer and managing director of Riverstone Holdings LLC. The principal business address for the Issuer is 375 Pheasant Run, Newtown, PA 18940 and the principal business address for Riverstone Holdings LLC is 712 Fifth Avenue, 36th Floor, New York, NY 10019.

(d) — (e) During the last five years, none of the Reporting Persons, (i) has been convicted in a criminal proceeding (excluding traffic violations or similar misdemeanors) or (ii) has been a party to a civil proceeding of a judicial or administrative body of competent jurisdiction and as a result of which such person was or is subject to a judgment, decree or final order enjoining future violations of, or prohibiting or mandating activity subject to, federal or state securities laws or finding any violation with respect to such laws.

(f) Mr. Hoffman is a citizen of the United States of America. The 2013 Trust is a trust organized under the laws of New York.

Item 3. Source and Amount of Funds or Other Consideration

The 2013 Trust purchased 1,000,000 of the shares of Common Stock from the underwriters in connection with the Offering at a price of \$15.00 per share for an aggregate purchase price of \$15,000,000. The 2013 Trust obtained the funds necessary to purchase such shares in the Offering from its existing capital. Prior to the consummation of the Offering, the 2013 Trust acquired a total of 3,507,808 shares of convertible preferred stock of the Issuer using its existing capital. In connection with the Offering, these shares of convertible preferred stock held by the 2013 Trust automatically converted into 3,287,800 shares of Common Stock immediately prior to the Offering.

Mr. Hoffman is the direct beneficial owner of the stock options to purchase shares of Common Stock set forth below. To the extent exercised, Mr. Hoffman expects to use personal funds to fund the exercise price.

Date Exercisable	Expiration Date	Number of Options	Strike Price
March 31, 2009	April 1, 2016	18,754	\$ 2.67
October 4, 2007	October 4, 2017	56,264	\$ 6.00
March 17, 2010	March 17, 2020	52,513	\$ 5.76
April 18, 2011	April 18, 2021	18,754	\$ 6.13
December 5, 2011	December 5, 2021	18,754	\$ 6.13
January 1, 2013	January 2, 2023	37,509	\$ 13.28
(11)	July 25, 2023	13,000	\$ 15.00

Item 4. Purpose of Transaction

The securities covered by this Schedule 13D were acquired for investment purposes only and were not intended to, and did not, affect any change in the control of the Issuer. As of the date of this Schedule 13D, Mr. Hoffman serves as chairman of the board of directors of the Issuer. In Mr. Hoffman's capacity as chairman of the board of directors, Mr. Hoffman has engaged and will continue to engage in discussions with management, members of the board of directors and other representatives of the Issuer, other security holders of the Issuer and other persons from time to time with respect to various matters, including the subject class of securities and the business and operations of the Issuer.

The Reporting Persons intend to periodically review their investment in the Issuer, and based on a number of factors, including the Reporting Person's evaluation of the Issuer's business prospects and financial condition, the market for the Issuer's shares, general economic and stock market conditions and other investment opportunities, the Reporting Persons may acquire additional securities of the Issuer or dispose of the securities reported herein through open market or privately negotiated transactions in accordance with applicable securities laws.

Except as otherwise set forth herein, the Reporting Persons do not have any current plans or proposals which would relate to or would result in any of the events or matters described in (a) — (j) of Item 4 of Schedule 13D. Notwithstanding the foregoing, the Reporting Persons intend to review and analyze their investments in the Issuer on a continuing basis. As a result of such review and analysis, the Reporting Persons may, at any time and from time to time, plan and/or propose to effect and/or cause one or more actions relating to and/or resulting in one or more of the actions specified in (a) — (j) of Item 4 of Schedule 13D.

Item 5. Interest in Securities of the Issuer

The information contained in Item 3 of this Schedule 13D is incorporated by reference herein.

(a)-(b) The responses of each of the Reporting Persons with respect to Rows 11, 12 and 13 of the cover pages of this Schedule 13D that relate to the aggregate number and percentage of shares of Common Stock (including but not limited to footnotes to such information) are incorporated herein by reference.

The responses of each of the Reporting Persons with respect to Rows 7, 8, 9 and 10 of the cover pages of this Schedule 13D that relate to the number of shares of Common Stock as to which each of the Reporting Persons referenced in Item 2 above has sole or shared power to vote or to direct the vote and sole or shared power to dispose or to direct the disposition (including but not limited to footnotes to such information) are incorporated herein by reference.

Mr. Hoffman is the direct beneficial owner of stock options to purchase 204,715 shares of Common Stock that vest within 60 days of the date hereof. Mr. Hoffman has no voting or dispositive power over the shares of Common Stock beneficially owned by the 2013 Trust and the 2013 Non-GST Exempt Trust and therefore disclaims beneficial ownership over the shares of Common Stock beneficially owned by the 2013 Trust and the 2013 Non-GST Exempt Trust, and this Schedule 13D shall not be deemed an admission that he is the beneficial owner of such securities for purposes of Section 13 of the Act or for any other purpose.

The aggregate percentage of shares of Common Stock reported as beneficially owned by each Reporting Person was calculated based on 21,389,278 shares of Common Stock outstanding as of July 30, 2013, the closing date of the Issuer's initial public offering. The calculation of the total outstanding shares of Common Stock is based on 15,447,611 shares of Common Stock outstanding prior to the Offering, as reported in the Issuer's prospectus filed

(11) This option, representing a right to purchase a total of 13,000 shares of Common Stock, will vest over 12 months from July 25, 2013, with 1/12th vesting on August 25, 2013 and 11/12th vesting in 11 equal monthly installments thereafter, subject to continued service to the Issuer through each vesting date.

with the Securities and Exchange Commission (the "SEC") on July 25, 2013 in connection with the Issuer's initial public offering, plus 5,941,667 shares of Common Stock sold in the Offering, as reported in the Issuer's Form 8-K filed with the SEC on July 30, 2013 announcing the consummation of the Offering.

(c) During the past 60 days, the Reporting Persons have entered into the following transactions in the Common Stock of the Issuer:

- On July 24, 2013, the 2013 Trust purchased 1,000,000 shares of Common Stock in connection with the Offering at a price of \$15.00 per share for an aggregate purchase price of \$15,000,000.
- On July 25, 2013, Mr. Hoffman was granted 13,000 stock options to purchase shares of Common Stock of which 2,167 options vest within 60 days of the date hereof at a strike price of \$15.00 per share.

(d) A.J. Agarwal and Jane Hoffman, Mr. Hoffman's spouse, are trustees of the 2013 Trust and the 2013 Non-GST Exempt Trust and have sole voting and dispositive power with regard to the shares held by the 2013 Trust and the 2013 Non-GST Exempt Trust. As trustees, both Mr. Agarwal and Mrs. Hoffman have the power to direct the receipt of dividends from, or any proceeds from the sale of, the shares of Common Stock held by the Trusts.

(e) Not applicable.

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

In connection with the Offering, the Reporting Persons entered into a letter agreement in substantially the form attached hereto as Exhibit 1 (the "Lock-Up Agreement") with the Issuer and the representatives of the several underwriters for the Offering (the "Representatives"), pursuant to which the Reporting Persons agreed that, during the "Lock-Up Period" as defined below and subject to certain limited exceptions specified in the Lock-Up Agreement, the Reporting Persons will not offer, sell, contract to sell, pledge or otherwise dispose of, (or enter into any transaction which is designed to, or might reasonably be expected to, result in the disposition (whether by actual disposition or effective economic disposition due to cash settlement or otherwise) by the Reporting Persons or any affiliate of the Reporting Persons or any person in privity with the Reporting Persons or any affiliate of the Reporting Persons), directly or indirectly, including the filing (or participation in the filing) of a registration statement with the SEC in respect of, or establish or increase a put equivalent position or liquidate or decrease a call equivalent position within the meaning of Section 16 of the Act and the rules and regulations of the SEC promulgated thereunder with respect to any shares of Common Stock or any securities convertible into, or exchangeable or exercisable for, shares of Common Stock, or

publicly announce an intention to effect any such transaction during the Lock-Up Period, without, in each case, the prior written consent of the Representatives. The "Lock-Up Period" is defined in the Lock-Up Agreement as the period from the date of each Lock-Up Agreement until 180 days after the date of the underwriting agreement entered into by the Issuer and the Representatives.

The agreement between the Reporting Persons to file this Schedule 13D jointly in accordance with Rule 13d-1(k)(1) under the Act is attached hereto as Exhibit 2.

The descriptions of the Lock-Up Agreement and the Joint Filing Agreement are summaries only and are qualified in their entireties by the actual terms of each of such agreements, copies of which are filed as Exhibits to this Statement on Schedule 13D and incorporated herein by reference.

Except for the Lock-Up Agreement and the Joint Filing Agreement, the Reporting Persons have not entered into any contracts, arrangements, understandings or relationships with respect to securities of the Issuer.

Item 7. Material to be Filed as an Exhibit

Exhibit	Description and Date of Document
1	Form of Lock-Up Agreement*
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2	Joint Filing Agreement of the Reporting Persons
	* Filed as Exhibit A of Exhibit 1.1 to the Issuer's Registration Statement on Form S-1/A (File No. 333-189358), filed with the Securities and Exchange Commission on July 18, 2013, and incorporated herein by reference.
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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.

Date: August 2, 2013

THE MICHAEL AND JANE HOFFMAN 2013 DESCENDANTS TRUST

By: /s/ Jane Hoffman
Name: Jane Hoffman
Title: Trustee

MICHAEL B. HOFFMAN

By: /s/ Michael B. Hoffman
Name: Michael B. Hoffman

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Exhibit 2

Joint Filing Agreement

Joint Filing Agreement

In accordance with Rule 13d-1(k)(1) under the Securities Exchange Act of 1934, as amended, the undersigned agree to the joint filing on behalf of each of them of a Statement on Schedule 13D (including amendments thereto) with respect to the shares of common stock, \$0.01 par value per share, of Onconova Therapeutics, Inc., a Delaware corporation, and further agree that this Joint Filing Agreement be included as an Exhibit to such joint filings. This Joint Filing Agreement may be executed in any number of counterparts, all of which taken together shall constitute one and the same instrument. In evidence thereof, the undersigned, being duly authorized, have executed this Joint Filing Agreement this the 2nd day of August, 2013.

IN WITNESS WHEREOF, this Joint Filing Agreement has been duly executed and delivered by each party hereto, or by its officer thereunto duly authorized, as of the date first above written.

THE MICHAEL AND JANE HOFFMAN 2013 DESCENDANTS TRUST

By: /s/ Jane Hoffman

Name: Jane Hoffman

Title: Trustee

MICHAEL B. HOFFMAN

By: /s/ Michael B. Hoffman

Name: Michael B. Hoffman
