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

Schedule 13G

Under the Securities Exchange Act of 1934
(Amendment No.)*

Omega Therapeutics, Inc.
(Name of Issuer)

Common Stock, par value \$0.001 per share
(Title of Class of Securities)

68217N105
(CUSIP Number)

December 31, 2021
(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 the disclosures provided in a prior cover page.

The information required in 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, as amended (the "Exchange Act") or otherwise subject to the liabilities of that section of the Exchange Act but shall be subject to all other provisions of the Exchange Act (however, see the Notes).

| | | |
|--|--|--------------------------|
| 1 | NAMES OF REPORTING PERSONS | |
| | HarbourVest Partners L.P. | |
| 2 | CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (SEE INSTRUCTIONS) (a) <input type="checkbox"/> (b) <input type="checkbox"/> | |
| 3 | SEC USE ONLY | |
| 4 | CITIZENSHIP OR PLACE OF ORGANIZATION | |
| | Delaware | |
| NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH | 5 | SOLE VOTING POWER |
| | | 0 |
| | 6 | SHARED VOTING POWER |
| | | 2,647,059 |
| | 7 | SOLE DISPOSITIVE POWER |
| | | 0 |
| | 8 | SHARED DISPOSITIVE POWER |
| | | 2,647,059 |
| 9 | AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON | |
| | 2,647,059 | |
| 10 | CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES (SEE INSTRUCTIONS) | |
| | <input type="checkbox"/> | |
| 11 | PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (9) | |
| | 5.5%(1) | |
| 12 | TYPE OF REPORTING PERSON (SEE INSTRUCTIONS) | |
| | IA | |

- (1) All percentages calculated in this Schedule 13G are based upon an aggregate of 47,774,939 shares of common stock outstanding as reported in Omega Therapeutics, Inc.'s (the "Issuer") Quarterly Report on Form 10-Q as filed with the Securities and Exchange Commission (the "Commission") on November 10, 2021.

| | | |
|--|--|--------------------------|
| 1 | NAMES OF REPORTING PERSONS | |
| | HarbourVest Partners, LLC | |
| 2 | CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (SEE INSTRUCTIONS) (a) <input type="checkbox"/> (b) <input type="checkbox"/> | |
| 3 | SEC USE ONLY | |
| 4 | CITIZENSHIP OR PLACE OF ORGANIZATION | |
| | Delaware | |
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| | | 0 |
| | 6 | SHARED VOTING POWER |
| | | 2,647,059 |
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(1) All percentages calculated in this Schedule 13G are based upon an aggregate of 47,774,939 shares of common stock outstanding as reported in the Issuer's Quarterly Report on Form 10-Q as filed with the SEC on November 10, 2021.

| | | |
|--|--|--------------------------|
| 1 | NAMES OF REPORTING PERSONS | |
| | SMRS-TOPE LLC | |
| 2 | CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (SEE INSTRUCTIONS) (a) <input type="checkbox"/> (b) <input type="checkbox"/> | |
| 3 | SEC USE ONLY | |
| 4 | CITIZENSHIP OR PLACE OF ORGANIZATION | |
| | Delaware | |
| NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH | 5 | SOLE VOTING POWER |
| | | 2,647,059 |
| | 6 | SHARED VOTING POWER |
| | | 0 |
| | 7 | SOLE DISPOSITIVE POWER |
| | | 2,647,059 |
| | 8 | SHARED DISPOSITIVE POWER |
| | | 0 |
| 9 | AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON | |
| | 2,647,059 | |
| 10 | CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES (SEE INSTRUCTIONS) | |
| | <input type="checkbox"/> | |
| 11 | PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (9) | |
| | 5.5%(1) | |
| 12 | TYPE OF REPORTING PERSON (SEE INSTRUCTIONS) | |
| | OO | |

(1) All percentages calculated in this Schedule 13G are based upon an aggregate of 47,774,939 shares of common stock outstanding as reported in the Issuer's Quarterly Report on Form 10-Q as filed with the SEC on November 10, 2021.

| | | |
|--|--|---|
| 1 | NAMES OF REPORTING PERSONS | |
| | HVST-TOPE LLC | |
| 2 | CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (SEE INSTRUCTIONS) (a) <input type="checkbox"/> (b) <input type="checkbox"/> | |
| 3 | SEC USE ONLY | |
| 4 | CITIZENSHIP OR PLACE OF ORGANIZATION Delaware | |
| NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH | 5 | SOLE VOTING POWER 0 |
| | 6 | SHARED VOTING POWER 2,647,059 |
| | 7 | SOLE DISPOSITIVE POWER 0 |
| | 8 | SHARED DISPOSITIVE POWER 2,647,059 |
| 9 | AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON 2,647,059 | |
| 10 | CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES (SEE INSTRUCTIONS) <input type="checkbox"/> | |
| 11 | PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (9) 5.5%(1) | |
| 12 | TYPE OF REPORTING PERSON (SEE INSTRUCTIONS) OO | |

(1) All percentages calculated in this Schedule 13G are based upon an aggregate of 47,774,939 shares of common stock outstanding as reported in the Issuer's Quarterly Report on Form 10-Q as filed with the SEC on November 10, 2021.

Item 1.

(a) Name of Issuer:

Omega Therapeutics, Inc. (the "Issuer")

(b) Address of Issuer's Principal Executive Offices:

20 Acorn Park Drive
Cambridge, MA 02140
(617) 949-4360

Item 2.

(a) Name of Person Filing:

HarbourVest Partners, LLC
HarbourVest Partners L.P.
HVST-TOPE LLC
SMRS-TOPE LLC

SMRS-TOPE LLC, HVST-TOPE LLC, HarbourVest Partners L.P. and HarbourVest Partners, LLC have entered into a Joint Filing Agreement, dated February 14, 2022, a copy of which is filed with this Schedule 13G as Exhibit 1, pursuant to which such reporting persons have agreed to file this statement jointly in accordance with the provisions of Rule 13d-1(k)(1) under the Securities Exchange Act of 1934, as amended (the "Exchange Act").

(b) Address of Principal Business Office or, if none, Residence

The principal business office of each reporting person is One Financial Center, 44th Floor, Boston, MA 02111.

(c) Citizenship:

Reporting entities are all organized and exist under the laws of the State of Delaware.

(d) Title of Class of Securities:

Common stock, par value \$0.001 per share (the "Common Stock")

(e) CUSIP Number:

68217N105

Item 3. If this statement is filed pursuant to §§240.13d-1(b), or 240.13d-2(b) or (c), check whether the person filing is a:

- (a) Broker or dealer registered under section 15 of the Act (15 U.S.C. 78o);
- (b) Bank as defined in section 3(a)(6) of the Act (15 U.S.C. 78c);
- (c) Insurance company as defined in section 3(a)(19) of the Act (15 U.S.C. 78c);

- (d) Investment company registered under section 8 of the Investment Company Act of 1940 (15 U.S.C. 80a-8);
- (e) An investment adviser in accordance with §240.13d-1(b) (1)(ii)(E);
- (f) An employee benefit plan or endowment fund in accordance with §240.13d-1(b) (1)(ii)(F);
- (g) A parent holding company or control person in accordance with §240.13d-1(b) (1)(ii)(G);
- (h) A savings associations as defined in Section 3(b) of the Federal Deposit Insurance Act (12 U.S.C. 1813);
- (i) A church plan that is excluded from the definition of an investment company under section 3(c)(14) of the Investment Company Act of 1940 (15 U.S.C. 80a-3);
- (j) A non-U.S. institution in accordance with § 240.13d-1(b)(1)(ii)(J);
- (k) Group, in accordance with § 240.13d-1(b)(1)(ii)(K).

Not Applicable.

Item 4. Ownership

Provide the following information regarding the aggregate number and percentage of the class of securities of the issuer identified in Item 1.

(a) Amount beneficially owned:

Consists of 2,647,059 shares of Common Stock owned directly by SMRS-TOPE LLC.

HarbourVest Partners, LLC (“HarbourVest”) is the general partner of HarbourVest Partners L.P., which is the manager of HVST-TOPE LLC, which is the managing member of SMRS-TOPE LLC. Each of HarbourVest, HarbourVest Partners L.P. and HVST-TOPE LLC may be deemed to have a beneficial interest in the shares held by SMRS-TOPE LLC.

Voting and investment power over the securities owned directly by SMRS-TOPE LLC is exercised by the Investment Committee of HarbourVest. Each of HarbourVest, HarbourVest Partners L.P. and HVST-TOPE LLC and the members of the HarbourVest Investment Committee disclaim beneficial ownership of the shares held directly by SMRS-TOPE LLC.

(b) Percent of class:

5.5% (based on 47,774,939 shares of Common Stock outstanding, as reported in the Issuer’s Quarterly Report on Form 10-Q, filed with the SEC on November 10, 2021).

(c) Number of shares as to which the person has:

(i) Sole power to vote or to direct the vote:

SMRS-TOPE LLC has the sole power to vote or to direct the vote of 2,647,059 shares of Common Stock.

(ii) Shared power to vote or to direct the vote:

HarbourVest, HarbourVest Partners L.P. and HVST-TOPE LLC may be deemed to have shared power to vote or direct the vote of 2,647,059 shares of Common Stock. Each of HarbourVest, HarbourVest Partners L.P. and HVST-TOPE LLC disclaim such beneficial ownership of such shares.

(iii) Sole power to dispose or to direct the disposition of:

SMRS-TOPE LLC has the sole power to dispose or to direct the disposition of 2,647,059 shares of Common Stock.

(iv) Shared power to dispose or to direct the disposition of:

HarbourVest, HarbourVest Partners L.P. and HVST-TOPE LLC may be deemed to have shared power to dispose or direct the disposition of 2,647,059 shares of Common Stock. Each of HarbourVest, HarbourVest Partners L.P. and HVST-TOPE LLC disclaim such beneficial ownership of such shares.

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

Not Applicable.

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 or Control Person.

Not Applicable.

Item 8. Identification and Classification of Members of the Group.

Not Applicable.

Item 9. Notice of Dissolution of Group.

Not Applicable.

Item 10. Certification.

Not Applicable.

Exhibit Index

Exhibit 1 Agreement of Joint Filing as required by Rule 13d-1(k)(1) under the Exchange Act.

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: February 14, 2022

HARBOURVEST PARTNERS, LLC

By: /s/ Paula Drake
Name: Paula Drake
Title: Chief Compliance Officer, Managing Director and
General Counsel

HARBOURVEST PARTNERS L.P.

By: HarbourVest Partners, LLC, its General Partner

By: /s/ Paula Drake
Name: Paula Drake
Title: Chief Compliance Officer, Managing Director and
General Counsel

HVST-TOPE LLC

By: HarbourVest Partners L.P., its Manager
By: HarbourVest Partners, LLC, its General Partner

By: /s/ Paula Drake
Name: Paula Drake
Title: Chief Compliance Officer, Managing Director and
General Counsel

SMRS-TOPE LLC

By: HVST-TOPE LLC, its Managing Member
By: HarbourVest Partners L.P., its Manager
By: HarbourVest Partners, LLC, its General Partner

By: /s/ Paula Drake
Name: Paula Drake
Title: Chief Compliance Officer, Managing Director and
General Counsel

[Schedule 13G Signature Page]

AGREEMENT REGARDING THE JOINT FILING OF SCHEDULE 13G

Pursuant to Rule 13d-1(k)(1) promulgated under the Securities Exchange Act of 1934, as amended, the undersigned agree that the Statement on Schedule 13G to which this Exhibit is attached is filed on behalf of each of them. Each of them is individually eligible to use the Schedule 13G to which this Exhibit is attached. Each of them is responsible for the timely filing of such Schedule 13G and any amendments thereto, and for the completeness and accuracy of the information concerning such person contained therein; but none of them is responsible for the completeness or accuracy of the information concerning the other persons making the filing, unless such person knows or has reason to believe that such information is inaccurate.

IN WITNESS WHEREOF, the undersigned hereby execute this Joint Filing Agreement as of February 14, 2022.

HARBOURVEST PARTNERS, LLC

By: /s/ Paula Drake
Name: Paula Drake
Title: Chief Compliance Officer, Managing Director and
General Counsel

HARBOURVEST PARTNERS L.P.

By: HarbourVest Partners, LLC, its General Partner

By: /s/ Paula Drake
Name: Paula Drake
Title: Chief Compliance Officer, Managing Director and
General Counsel

HVST-TOPE LLC

By: HarbourVest Partners L.P., its Manager
By: HarbourVest Partners, LLC, its General Partner

By: /s/ Paula Drake
Name: Paula Drake
Title: Chief Compliance Officer, Managing Director and
General Counsel

SMRS-TOPE LLC

By: HVST-TOPE LLC, its Managing Member
By: HarbourVest Partners L.P., its Manager
By: HarbourVest Partners, LLC, its General Partner

By: /s/ Paula Drake
Name: Paula Drake
Title: Chief Compliance Officer, Managing Director and
General Counsel