# UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, DC 20549

# **SCHEDULE 13D**

(Rule 13d-101)

Information to be Included in Statements Filed Pursuant to § 240.13d-1(a) and Amendments Thereto Filed Pursuant to § 240.13d-2(a)

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

# MERSANA THERAPEUTICS, INC.

(Name of Issuer)

Common Stock, \$0.0001 par value per share (Title of Class of Securities)

**59045L106** (CUSIP Number)

Bain Capital Life Sciences Investors, LLC 200 Clarendon Street Boston, MA 02116 617-516-2000

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

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. o

**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 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, as amended ("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).

| 1      | Names of Reporting Persons  Bain Capital Life Sciences Fund II, L.P.               |    |                                  |  |  |
|--------|--|----|----------------------------------|--|--|
|        |  |    |                                  |  |  |
| 2      | Check the Appropriate Box if a Member of a Group                                   |    |                                  |  |  |
|        | (a) o (b) o  |    |                                  |  |  |
| 3      | SEC Use Only   |    |                                  |  |  |
| 4      | Source of Funds  |    |                                  |  |  |
|        | WC   |    |                                  |  |  |
| 5      | Check if Disclosure of Legal Proceedings is Required Pursuant to Item 2(d) or 2(e) |    |                                  |  |  |
|        | 0  |    |                                  |  |  |
| _      | Citizenship or Place of Organization   |    |                                  |  |  |
| 6      | Cayman Islands   |    |                                  |  |  |
|        | 1  |    | Sole Voting Power                |  |  |
|        |  | 7  | 0 shares of Common Stock         |  |  |
| Number | of Shares  | 8  | Shared Voting Power              |  |  |
|        | icially  |    | 3,071,566 shares of Common Stock |  |  |
|        | by Each<br>g Person  | 9  | Sole Dispositive Power           |  |  |
|        | ith  |    | 0 shares of Common Stock         |  |  |
|        |  |    | Shared Dispositive Power         |  |  |
|        |  | 10 | 3,071,566 shares of Common Stock |  |  |
| 11     | Aggregate Amount Beneficially Owned by Each Reporting Person                       |    |                                  |  |  |
| 11     | 3,071,566 shares of Common Stock   |    |                                  |  |  |
| 12     | Check if the Aggregate Amount in Row (11) Excludes Certain Shares                  |    |                                  |  |  |
|        | 0  |    |                                  |  |  |
| 40     | Percent of Class Represented by Amount in Row (11)                                 |    |                                  |  |  |
| 13     | 5.2%   |    |                                  |  |  |
| 1.4    | Type of Reporting Person   |    |                                  |  |  |
| 14     | PN   |    |                                  |  |  |
|        | 1  |    |                                  |  |  |

|          | T  |    |                                |  |  |  |
|----------|--|----|--------------------------------|--|--|--|
| 1        | Names of Reporting Persons  BCID Life Sciences Associates LD                       |    |                                |  |  |  |
|          | BCIP Life Sciences Associates, LP  |    |                                |  |  |  |
| 2        | Check the Appropriate Box if a Member of a Group                                   |    |                                |  |  |  |
|          | (a) o (b) o  |    |                                |  |  |  |
| 3        | SEC Use Only   |    |                                |  |  |  |
| 4        | Source of Funds  |    |                                |  |  |  |
| 4        | WC   |    |                                |  |  |  |
| 5        | Check if Disclosure of Legal Proceedings is Required Pursuant to Item 2(d) or 2(e) |    |                                |  |  |  |
|          | 0  |    |                                |  |  |  |
| 6        | Citizenship or Place of Organization   |    |                                |  |  |  |
|          | Delaware   |    |                                |  |  |  |
|          |  | 7  | Sole Voting Power              |  |  |  |
|          |  |    | 0 shares of Common Stock       |  |  |  |
|          | of Shares  | 8  | Shared Voting Power            |  |  |  |
|          | ficially<br>by Each  |    | 374,101 shares of Common Stock |  |  |  |
| Reportin | ng Person  | 9  | Sole Dispositive Power         |  |  |  |
| W        | ith  |    | 0 shares of Common Stock       |  |  |  |
|          |  |    | Shared Dispositive Power       |  |  |  |
|          |  | 10 | 374,101 shares of Common Stock |  |  |  |
| 11       | Aggregate Amount Beneficially Owned by Each Reporting Person                       |    |                                |  |  |  |
|          | 374,101 shares of Common Stock   |    |                                |  |  |  |
| 12       | Check if the Aggregate Amount in Row (11) Excludes Certain Shares                  |    |                                |  |  |  |
|          | 0  | 0  |                                |  |  |  |
| 13       | Percent of Class Represented by Amount in Row (11)                                 |    |                                |  |  |  |
|          | 0.6%   |    |                                |  |  |  |
| 14       | Type of Reporting Person   |    |                                |  |  |  |
|          | PN   |    |                                |  |  |  |

#### Item 1. Security and Issuer

This Schedule 13D relates to shares of common stock, \$0.0001 par value per share (the "Common Stock"), of Mersana Therapeutics, Inc., a Delaware corporation (the "Issuer"). The principal executive office of the Issuer is 840 Memorial Drive, Cambridge, MA 02139.

#### Item 2. Identity and Background

(a) This Schedule 13D is being filed jointly by Bain Capital Life Sciences Fund II, L.P., a Cayman exempted limited partnership ("BCLS II"), and BCIP Life Sciences Associates, LP, a Delaware limited partnership ("BCIPLS" and, together with BCLS II, the "Reporting Persons").

Bain Capital Life Sciences Investors, LLC, a Delaware limited liability company ("BCLSI"), whose managers are Jeffrey Schwartz and Adam Koppel, is the manager of Bain Capital Life Sciences Investors II, LLC, a Cayman limited liability company ("BCLSI II"), which is the general partner of BCLS II.

Boylston Coinvestors, LLC, a Delaware limited liability company ("Boylston"), is the general partner of BCIPLS. BCLSI governs the investment strategy and decision-making process with respect to investments held by BCIPLS.

As a result, each of BCLSI, Mr. Schwartz and Dr. Koppel may be deemed to share voting and dispositive power with respect to the securities held by the Reporting Persons.

The Reporting Persons have entered into a Joint Filing Agreement, dated April 17, 2020, pursuant to which the Reporting Persons have agreed to file this Schedule 13D jointly in accordance with the provisions of Rule 13d-1(k)(1) promulgated under the Act.

- (b) The principal business address of each of the Reporting Persons, BCLSI, BCLSI II, Boylston, Mr. Schwartz and Dr. Koppel is 200 Clarendon Street, Boston, MA 02116.
- (c) Each of the Reporting Persons, BCLSI, BCLSI II and Boylston are principally engaged in the business of investment in securities. Mr. Schwartz and Dr. Koppel are Managing Directors of BCLSI.
- (d) During the last five years, none of the Reporting Persons, BCLSI, BCLSI II, Boylston, Mr. Schwartz or Dr. Koppel have been convicted in a criminal proceeding (excluding traffic violations or similar misdemeanors).
- (e) During the last five years, none of the Reporting Persons, BCLSI, BCLSI II, Boylston, Mr. Schwartz or Dr. Koppel have been a 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 violation of, or prohibiting or mandating activities subject to, federal or state securities laws or finding any violation with respect to such laws.
- (f) BCLS II and BCLSI II are organized under the laws of the Cayman Islands. BCIPLS, BCLSI and Boylston are organized under the laws of the State of Delaware. Mr. Schwartz and Dr. Koppel are citizens of the United States.

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

On April 7, 2020, each of BCLS II and BCIPLS purchased 2,496,000 shares and 304,000 shares, respectively, of Common Stock at a purchase price of \$5.59 per share and 575,566 shares and 70,101 shares, respectively, of Common Stock at a purchase price of \$7.74 per share, in each case the market price at the time of sale. The shares of Common Stock were purchased through the Issuer's At-the-Market ("ATM") facility. Cowen and Company, LLC acted as sales agent for the ATM facility. Each of the Reporting Persons used its own working capital to acquire the shares of Common Stock.

#### Item 4. Purpose of Transaction

The information set forth in Item 3 of this Schedule 13D is incorporated by reference in its entirety into this Item 4.

Andrew Hack, M.D., Ph.D., a Managing Director of BCLSI, has served as a member of the Issuer's board of directors (the "Board") since January 2017.

The Reporting Persons acquired the securities reported herein for investment purposes. In their capacity as significant stockholders of the Issuer, the Reporting Persons intend to take an active role in working with the Issuer's management and the Board on operational, financial and strategic initiatives. The Reporting Persons review and intend to continue to review, on an ongoing and continuing basis, their investment in the Issuer. Depending upon the factors discussed below and subject to applicable law, the Reporting Persons may from time to time acquire additional securities of the Issuer or sell or otherwise dispose of some or all of their securities of the Issuer. Any transactions that the Reporting Persons may pursue may be made at any time and from time to time without prior notice and will depend upon a variety of factors, including, without limitation, current and anticipated future trading prices of the securities of the Issuer, the financial condition, results of operations and prospects of the Issuer, general economic, financial market and industry conditions, other investment and business opportunities available to the Reporting Persons, tax considerations and other factors.

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

The information set forth in Items 2 and 3 and on the cover pages of this Schedule 13D is incorporated by reference in its entirety into this Item 5.

- (a) (c) As of the date hereof, BCLS II holds 3,071,566 shares of Common Stock, representing approximately 5.2% of the outstanding shares of Common Stock, and BCIPLS holds 374,101 shares of Common Stock, representing approximately 0.6% of the outstanding shares of Common Stock. As a result of the foregoing and the relationships described in Item 2(a) of this Schedule 13D, the Reporting Persons may be deemed to beneficially own in the aggregate 3,445,667 shares of Common Stock, representing approximately 5.8% of the outstanding shares of Common Stock. The percentage of the outstanding shares of Common Stock held by the Reporting Persons is based on (i) 48,006,049 shares of Common Stock outstanding as of March 31, 2020, as reported by the Issuer in its Prospectus Supplement filed with the Securities and Exchange Commission pursuant to Rule 424(b)(5) under the Securities Act of 1933, as amended, on April 9, 2020 and (ii) the issuance and sale of an aggregate of approximately 10,900,000 shares of Common Stock under its ATM facility, as disclosed by the Issuer in a press release dated April 7, 2020.
- (d) Except as otherwise described in this Item 5, no one other than the Reporting Persons has the right to receive, or the power to direct the receipt of, dividends from, or the proceeds from the sale of, any of the Common Stock beneficially owned by the Reporting Persons as described in this Item 5.
- (e) Not applicable.

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

The information set forth in Items 3 and 4 of this Schedule 13D is incorporated by reference in its entirety into this Item 6.

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

Exhibit A Joint Filing Agreement

#### **SIGNATURES**

After reasonable inquiry and to the best of its knowledge and belief, the undersigned certifies that the information in this statement is true, complete and correct.

Dated: April 17, 2020

## Bain Capital Life Sciences Fund II, L.P.

By: Bain Capital Life Sciences Investors II, LLC

its general partner

By: Bain Capital Life Sciences Investors, LLC

its manager

By: /s/ Andrew Hack, M.D., Ph.D.

Name: Andrew Hack, M.D., Ph.D.
Title: Managing Director

## **BCIP Life Sciences Associates, LP**

By: Boylston Coinvestors, LLC

its general partner

By: /s/ Andrew Hack, M.D., Ph.D.

Name: Andrew Hack, M.D., Ph.D.
Title: Authorized Signatory

#### AGREEMENT REGARDING THE JOINT FILING OF

#### **SCHEDULE 13D**

The undersigned being duly authorized thereunto, hereby execute this agreement as an exhibit to this Schedule 13D to evidence the agreement of the below-named parties, in accordance with the rules promulgated pursuant to the Securities Exchange Act of 1934, as amended, to file this Schedule 13D (including amendments thereto) jointly on behalf of each such party.

Dated: April 17, 2020

#### Bain Capital Life Sciences Fund II, L.P.

By: Bain Capital Life Sciences Investors II, LLC

its general partner

By: Bain Capital Life Sciences Investors, LLC

its manager

By: /s/ Andrew Hack, M.D., Ph.D.

Name: Andrew Hack, M.D., Ph.D.

Title: Managing Director

# **BCIP Life Sciences Associates, LP**

By: Boylston Coinvestors, LLC

its general partner

By: /s/ Andrew Hack, M.D., Ph.D.

Name: Andrew Hack, M.D., Ph.D. Title: Authorized Signatory