## **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. 4)

# **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)

> April 13, 2022 (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.  $\Box$ 

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 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	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) 🗆	(b)					
3	SEC use only						
4	Source of funds						
	WC						
5	Check if	Check if disclosure of legal proceedings is required pursuant to Item 2(d) or 2(e)					
6	place of organization						
Cayman Islands							
<b> </b>	Cujiiui	7	Sole voting power				
			0 shares of Common Stock				
N	umber of	8	Shared voting power				
	shares	-					
	neficially	0	3,294,423 shares of Common Stock				
	ed by each	9	Sole dispositive power				
	son with:		0 shares of Common Stock				
		10	Shared dispositive power				
			3,294,423 shares of Common Stock				
11	Aggrega	Aggregate amount beneficially owned by each reporting person					
	3 294 42	3 shai	res of Common Stock				
12			ggregate amount in Row (11) excludes certain shares				
13	Percent of	of clas	ss represented by amount in Row (11)				
14		3.9%					
14	Type of reporting person						
	PN						

1	1 Names of reporting persons						
	BCIP Lit	fe Scie	ences Associates, LP				
2	Check th	Check the appropriate box if a member of a group					
	(a) 🗆	(b)					
3	SEC use only						
4	Source of funds						
	WC						
5	Check if	Check if disclosure of legal proceedings is required pursuant to Item 2(d) or 2(e)					
6	6 Citizenship or place of organization						
	Delaware						
		7	Sole voting power				
			0 shares of Common Stock				
	umber of	8	Shared voting power				
	shares neficially		401,244 shares of Common Stock				
own	ed by each	9	Sole dispositive power				
	eporting son with:		0 shares of Common Stock				
per	son with.	10	Shared dispositive power				
			401 244 shares of Common Stools				
11	Aggregat	401,244 shares of Common Stock   Aggregate amount beneficially owned by each reporting person					
	401 244	ahara	s of Common Stock				
12			ggregate amount in Row (11) excludes certain shares				
13	Percent of	of clas	ss represented by amount in Row (11)				
14	0.5% Type of r	eporti	ing person				
	PN	PN					

1	1 Names of reporting persons					
	BCLS II Investco, LP					
2	Check the appropriate box if a member of a group (a) $\Box$ (b) $\Box$					
	(a) 🗆	(0)				
3	SEC use only					
4	Source of funds					
	WC					
5	Check if	Check if disclosure of legal proceedings is required pursuant to Item 2(d) or 2(e)				
6 Citizenship or place of organization		nip or	place of organization			
		7	Sole voting power			
			0 shares of Common Stock			
Nı	umber of	8	Shared voting power			
	shares neficially		4,041,733 shares of Common Stock			
own	ed by each	9	Sole dispositive power			
	porting son with:		0 shares of Common Stock			
per		10	Shared dispositive power			
			4.041.722 shares of Common Stock			
11	4,041,733 shares of Common Stock   Aggregate amount beneficially owned by each reporting person					
	4 041 72	2 char	tes of Common Stock			
12	4,041,733 shares of Common Stock Check if the aggregate amount in Row (11) excludes certain shares					
		-				
13	Percent of	of clas	is represented by amount in Row (11)			
14	4.8% Type of reporting person					
	PN					

This Amendment No. 4 to Schedule 13D relates to the Common Stock of Mersana Therapeutics, Inc. and amends the initial statement on Schedule 13D filed by the Reporting Persons on April 17, 2020, as amended by Amendment No. 1 filed on January 12, 2021, Amendment No. 2 filed on January 3, 2022 and Amendment No. 3 filed on February 8, 2022 (the "Initial Statement" and, as further amended by this Amendment No. 4, the "Schedule 13D"). Capitalized terms used but not defined herein shall have the meanings ascribed to them in the Initial Statement.

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

Item 3 of the Initial Statement is hereby amended and supplemented to add the following:

On April 12, 2022, BCLS II Investco purchased 598,086 shares of Common Stock at a purchase price of \$4.1798 per share. On April 13, 2022, BCLS II Investco purchased an additional 617,284 shares of Common Stock at a purchase price of \$4.05 per share. The shares of Common Stock were purchased through the Issuer's ATM facility. Cowen and Company, LLC acted as sales agent for the ATM facility. BCLS II Investco used its own working capital to acquire the shares of Common Stock.

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

Item 5 of the Initial Statement is hereby amended and restated as follows:

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 3,294,423 shares of Common Stock, representing approximately 3.9% of the outstanding shares of Common Stock, BCIPLS holds 401,244 shares of Common Stock, representing approximately 0.5% of the outstanding shares of Common Stock, and BCLS II Investo holds 4,041,733 shares of Common Stock, representing approximately 4.8% 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 7,737,400 shares of Common Stock, representing approximately 9.1% 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) 83,389,806 shares of Common Stock outstanding as of February 25, 2022, as reported by the Issuer in its Annual Report on Form 10-K for the year ended December 31, 2021 and (ii) the issuance and sale to BCLS II Investo of an aggregate of 1,215,370 shares of Common Stock under the ATM facility.

(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.

#### SIGNATURES

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

Dated: April 14, 2022

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 Name: Andrew Hack Title: Managing Director
- BCIP Life Sciences Associates, LP
- By: Boylston Coinvestors, LLC, its general partner
- By: /s/ Andrew Hack Name: Andrew Hack Title: Authorized Signatory
- BCLS II Investco, LP
- By: BCLS II Investco (GP), LLC, its general partner
- By: Bain Capital Life Sciences Fund II, L.P., its manager
- By: Bain Capital Life Sciences Investors II, LLC, its general partner
- By: Bain Capital Life Sciences Investors, LLC, its manager
- By: <u>/s/ Andrew Hack</u> Name: Andrew Hack Title: Managing Director