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. 6)

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)

 $November\ 13,\ 2024$ (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 filin 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 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 Excharact 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	Mana		nadio a sassa		
1	Names of reporting persons				
	Bain Capital Life Sciences Fund II, L.P.				
2			ppropriate box if a member of a group		
	(a) 🗆	(b) 🗆		
3	SEC u	ise on	ly		
4	G	0.0			
4	Source	e of fu	inds		
	WC				
5		if dis	closure of legal proceedings is required pursuant to Item 2(d) or 2(e)		
6	Citize	nship	or place of organization		
	Carren	I.l.	1		
	Cayma	an Isia	Sole voting power		
		,	Sole voting power		
Number of			0 shares of Common Stock		
	hares	8	Shared voting power		
	eficially ned by				
	each		3,294,423 shares of Common Stock		
reporting		9	Sole dispositive power		
	erson		0 shares of Common Stock		
'	with:	10	Shared dispositive power		
			3,294,423 shares of Common Stock		
11	Aggre	gate a	mount beneficially owned by each reporting person		
	2.204	400 1			
12			hares of Common Stock aggregate amount in Row (11) excludes certain shares		
12	Check	. II tile	aggregate amount in Row (11) excludes certain shares		
13	Percer	nt of c	lass represented by amount in Row (11)		
	2.7%				
14	4 Type of reporting person				
	PN				

1	Names of reporting persons					
			Sciences Associates, LP			
2	Check the appropriate box if a member of a group (a) □ (b) □					
3	SEC u	se on	ly			
4	Source of funds					
	WC					
5	Check if disclosure of legal proceedings is required pursuant to Item 2(d) or 2(e)					
6	Citize	nship	or place of organization			
	Delaw	are				
•		7	Sole voting power			
	mber of		0 shares of Common Stock			
	hares eficially	8	Shared voting power			
	ned by		401,244 shares of Common Stock			
reporting		9	Sole dispositive power			
person with:			0 shares of Common Stock			
		10	Shared dispositive power			
			401,244 shares of Common Stock			
11	Aggregate amount beneficially owned by each reporting person					
	401,244 shares of Common Stock					
12	Check if the aggregate amount in Row (11) excludes certain shares					
13	Percent of class represented by amount in Row (11)					
	0.3%					
14	Type of reporting person					
	PN					

1	Names of reporting persons					
	BCLS II Investco, LP					
2	Check the appropriate box if a member of a group (a) □ (b) □					
3	SEC u	se onl	ly			
4	Source	e of fu	inds			
	WC					
5	Check	if dis	closure of legal proceedings is required pursuant to Item 2(d) or 2(e)			
6	Citize	nship	or place of organization			
	Delaw	are				
		7	Sole voting power			
	mber of		0 shares of Common Stock			
	hares eficially	8	Shared voting power			
	ned by		4,968,006 shares of Common Stock			
rej	porting	9	Sole dispositive power			
person with:			0 shares of Common Stock			
		10	Shared dispositive power			
			4,968,006 shares of Common Stock			
11	Aggregate amount beneficially owned by each reporting person					
	4,968,006 shares of Common Stock					
12	Check if the aggregate amount in Row (11) excludes certain shares					
13	Percer	nt of c	lass represented by amount in Row (11)			
	4.0%					
14	Type of reporting person					
	PN					

This Amendment No. 6 to Schedule 13D relates to the Common Stock of Mersana Therapeutics, Inc. (the "Issuer") 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, Amendment No. 3 filed on February 8, 2022, Amendment No. 4 filed on April 14, 2022 and Amendment No. 5 filed on May 11, 2022 (the "Initial Statement" and, as further amended by this Amendment No. 6, the "Schedule 13D"). Capitalized terms used but not defined herein shall have the meanings ascribed to them in the Initial Statement.

On November 13, 2024, the Issuer filed its Quarterly Report on Form 10-Q for the quarter ended September 30, 2024 with the Securities and Exchange Commission, which disclosed that the Issuer's total number of outstanding shares of Common Stock had increased to 123,532,909. This Amendment No. 6 is being filed to report a decrease in the percentage of outstanding shares of Common Stock that the Reporting Persons may be deemed to beneficially own.

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) (b) As of the date hereof, BCLS II holds 3,294,423 shares of Common Stock, representing approximately 2.7% of the outstanding shares of Common Stock, BCIPLS holds 401,244 shares of Common Stock, representing approximately 0.3% of the outstanding shares of Common Stock, and BCLS II Investco holds 4,968,006 shares of Common Stock, representing approximately 4.0% 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 8,663,673 shares of Common Stock, representing approximately 7.0% of the outstanding shares of Common Stock. The percentage of the outstanding shares of Common Stock held by the Reporting Persons is based on 123,532,909 shares of Common Stock outstanding as of November 8, 2024, as reported by the Issuer in its Quarterly Report on Form 10-Q for the quarter ended September 30, 2024.
- (c) Not applicable.
- (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 form 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: November 15, 2024

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: Partner

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 managing member

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: Partner