
SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

SCHEDULE 13D

Under the Securities Exchange Act of 1934

(Amendment No. 4)*

DISC MEDICINE, INC.

(Name of Issuer)

Common Stock, \$0.0001 par value per share

(Title of Class of Securities)

254604101

(CUSIP Number)

**Attention: Ommer Chohan, CFO
Atlas Venture, 300 Technology Square, 8th Floor
Cambridge, MA, 02139
(857) 201-2700**

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

08/13/2025

(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. ☐

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).

SCHEDULE 13D

CUSIP No. 254604101

Name of reporting person

1

Atlas Venture Fund X, L.P.

2

Check the appropriate box if a member of a Group (See Instructions)

	☐ (a)
	☒ (b)
3	SEC use only
	Source of funds (See Instructions)
4	WC
	Check if disclosure of legal proceedings is required pursuant to Items 2(d) or 2(e)
5	☐
	Citizenship or place of organization
6	DELAWARE
	Sole Voting Power
7	0.00
Number of	Shared Voting Power
Shares	
Beneficially	8
Owned by	1,084,527.00
Each	Sole Dispositive Power
Reporting	9
Person	0.00
With:	Shared Dispositive Power
	10
	1,084,527.00
	Aggregate amount beneficially owned by each reporting person
11	1,084,527.00
	Check if the aggregate amount in Row (11) excludes certain shares (See Instructions)
12	☐
	Percent of class represented by amount in Row (11)
13	3.1 %
	Type of Reporting Person (See Instructions)
14	PN

SCHEDULE 13D

CUSIP No. 254604101

	Name of reporting person
1	ATLAS VENTURE ASSOCIATES X, L.P.
	Check the appropriate box if a member of a Group (See Instructions)
2	☐ (a)
	☒ (b)
3	SEC use only
	Source of funds (See Instructions)
4	AF
	Check if disclosure of legal proceedings is required pursuant to Items 2(d) or 2(e)
5	☐
	Citizenship or place of organization
6	DELAWARE
Number of	7 Sole Voting Power

Shares	
Beneficially	0.00
Owned by	Shared Voting Power
Each	8
Reporting	1,084,527.00
Person	Sole Dispositive Power
With:	9
	0.00
	Shared Dispositive Power
	10
	1,084,527.00
	Aggregate amount beneficially owned by each reporting person
11	1,084,527.00
	Check if the aggregate amount in Row (11) excludes certain shares (See Instructions)
12	☐
	Percent of class represented by amount in Row (11)
13	3.1 %
	Type of Reporting Person (See Instructions)
14	PN

SCHEDULE 13D

CUSIP No. 254604101

	Name of reporting person
1	Atlas Venture Associates X, LLC
	Check the appropriate box if a member of a Group (See Instructions)
2	☐ (a)
	☒ (b)
3	SEC use only
	Source of funds (See Instructions)
4	AF
	Check if disclosure of legal proceedings is required pursuant to Items 2(d) or 2(e)
5	☐
	Citizenship or place of organization
6	DELAWARE
	Sole Voting Power
7	0.00
	Shared Voting Power
Number of	8
Shares	1,084,527.00
Beneficially	Sole Dispositive Power
Owned by	9
Each	0.00
Reporting	Shared Dispositive Power
Person	10
With:	1,084,527.00
	Aggregate amount beneficially owned by each reporting person
11	

	1,084,527.00
12	Check if the aggregate amount in Row (11) excludes certain shares (See Instructions)
	☐
13	Percent of class represented by amount in Row (11)
	3.1 %
14	Type of Reporting Person (See Instructions)
	OO

SCHEDULE 13D

CUSIP No. 254604101

1	Name of reporting person
	Atlas Venture Fund XII, L.P.
	Check the appropriate box if a member of a Group (See Instructions)
2	☐ (a)
	☒ (b)
3	SEC use only
4	Source of funds (See Instructions)
	WC
5	Check if disclosure of legal proceedings is required pursuant to Items 2(d) or 2(e)
	☐
6	Citizenship or place of organization
	DELAWARE
	Sole Voting Power
7	0.00
Number of	Shared Voting Power
Shares	
Beneficially	8 51,000.00
Owned by	
Each	Sole Dispositive Power
Reporting	9 0.00
Person	
With:	Shared Dispositive Power
	10 51,000.00
	Aggregate amount beneficially owned by each reporting person
11	51,000.00
12	Check if the aggregate amount in Row (11) excludes certain shares (See Instructions)
	☐
13	Percent of class represented by amount in Row (11)
	0.1 %
14	Type of Reporting Person (See Instructions)
	PN

SCHEDULE 13D

CUSIP No. 254604101

1

Name of reporting person

Atlas Venture Associates XII, L.P.

Check the appropriate box if a member of a Group (See Instructions)

2

☐ (a)

☒ (b)

3

SEC use only

Source of funds (See Instructions)

4

AF

Check if disclosure of legal proceedings is required pursuant to Items 2(d) or 2(e)

5

☐

Citizenship or place of organization

6

DELAWARE

Sole Voting Power

7

0.00

Shared Voting Power

8

51,000.00

Sole Dispositive Power

9

0.00

Shared Dispositive Power

10

51,000.00

Aggregate amount beneficially owned by each reporting person

11

51,000.00

Check if the aggregate amount in Row (11) excludes certain shares (See Instructions)

12

☐

Percent of class represented by amount in Row (11)

13

0.1 %

Type of Reporting Person (See Instructions)

14

PN

SCHEDULE 13D

CUSIP No. 254604101

1

Name of reporting person

Atlas Venture Associates XII, LLC

Check the appropriate box if a member of a Group (See Instructions)

2

☐ (a)

☒ (b)

3	SEC use only
4	Source of funds (See Instructions)
	AF
5	Check if disclosure of legal proceedings is required pursuant to Items 2(d) or 2(e)
	☐
6	Citizenship or place of organization
	DELAWARE
	Sole Voting Power
7	0.00
Number of	Shared Voting Power
Shares	
Beneficially	8
Owned by	51,000.00
Each	Sole Dispositive Power
Reporting	9
Person	0.00
With:	Shared Dispositive Power
	10
	51,000.00
	Aggregate amount beneficially owned by each reporting person
11	51,000.00
	Check if the aggregate amount in Row (11) excludes certain shares (See Instructions)
12	☐
	Percent of class represented by amount in Row (11)
13	0.1 %
	Type of Reporting Person (See Instructions)
14	OO

SCHEDULE 13D

CUSIP No. 254604101

1	Name of reporting person
	Atlas Venture Opportunity Fund I, L.P.
	Check the appropriate box if a member of a Group (See Instructions)
2	☐ (a)
	☒ (b)
3	SEC use only
	Source of funds (See Instructions)
4	AF
5	Check if disclosure of legal proceedings is required pursuant to Items 2(d) or 2(e)
	☐
6	Citizenship or place of organization
	DELAWARE
Number of	Sole Voting Power
Shares	7
Beneficially	0.00

Owned by Each Reporting Person With:	8	Shared Voting Power
		592,908.00
		Sole Dispositive Power
	9	0.00
		Shared Dispositive Power
	10	592,908.00
		Aggregate amount beneficially owned by each reporting person
11		592,908.00
		Check if the aggregate amount in Row (11) excludes certain shares (See Instructions)
12		☐
		Percent of class represented by amount in Row (11)
13		1.7 %
		Type of Reporting Person (See Instructions)
14		PN

SCHEDULE 13D

CUSIP No. 254604101

1	Name of reporting person	
	Atlas Venture Associates Opportunity I, L.P.	
	Check the appropriate box if a member of a Group (See Instructions)	
2	☐ (a)	
	☒ (b)	
3	SEC use only	
4	Source of funds (See Instructions)	
	AF	
5	Check if disclosure of legal proceedings is required pursuant to Items 2(d) or 2(e)	
	☐	
6	Citizenship or place of organization	
Number of Shares Beneficially Owned by Each Reporting Person With:		Sole Voting Power
	7	0.00
		Shared Voting Power
	8	592,908.00
		Sole Dispositive Power
	9	0.00
		Shared Dispositive Power
	10	592,908.00
		Aggregate amount beneficially owned by each reporting person
11		592,908.00
12		Check if the aggregate amount in Row (11) excludes certain shares (See Instructions)

	☐	Percent of class represented by amount in Row (11)
13		1.7 %
		Type of Reporting Person (See Instructions)
14		PN

SCHEDULE 13D

CUSIP No. 254604101

1	Name of reporting person	
	Atlas Venture Associates Opportunity I, LLC	
	Check the appropriate box if a member of a Group (See Instructions)	
2	☐ (a)	
	☒ (b)	
3	SEC use only	
	Source of funds (See Instructions)	
4	AF	
	Check if disclosure of legal proceedings is required pursuant to Items 2(d) or 2(e)	
5	☐	
	Citizenship or place of organization	
6	DELAWARE	
	Sole Voting Power	
7	0.00	
	Shared Voting Power	
8	592,908.00	
	Sole Dispositive Power	
9	0.00	
	Shared Dispositive Power	
10	592,908.00	
	Aggregate amount beneficially owned by each reporting person	
11	592,908.00	
	Check if the aggregate amount in Row (11) excludes certain shares (See Instructions)	
12	☐	
	Percent of class represented by amount in Row (11)	
13	1.7 %	
	Type of Reporting Person (See Instructions)	
14	PN	

SCHEDULE 13D

1

Name of reporting person

Atlas Venture Opportunity Fund II, L.P.

Check the appropriate box if a member of a Group (See Instructions)

2

☐ (a)

☒ (b)

3

SEC use only

4

Source of funds (See Instructions)

5

AF

Check if disclosure of legal proceedings is required pursuant to Items 2(d) or 2(e)

6

☐

Citizenship or place of organization

7

DELAWARE

Sole Voting Power

8

0.00

Shared Voting Power

9

420,549.00

Sole Dispositive Power

10

0.00

Shared Dispositive Power

11

420,549.00

Aggregate amount beneficially owned by each reporting person

12

Check if the aggregate amount in Row (11) excludes certain shares (See Instructions)

13

☐

Percent of class represented by amount in Row (11)

14

1.2 %

Type of Reporting Person (See Instructions)

PN

SCHEDULE 13D

1

Name of reporting person

Atlas Venture Associates Opportunity II, LP

Check the appropriate box if a member of a Group (See Instructions)

2

☐ (a)

☒ (b)

3

SEC use only

4

Source of funds (See Instructions)

	AF
5	Check if disclosure of legal proceedings is required pursuant to Items 2(d) or 2(e)
	☐
6	Citizenship or place of organization
	Sole Voting Power
7	0.00
Number of Shares Beneficially Owned by Each Reporting Person With:	Shared Voting Power
8	420,549.00
	Sole Dispositive Power
9	0.00
	Shared Dispositive Power
10	420,549.00
11	Aggregate amount beneficially owned by each reporting person
	420,549.00
12	Check if the aggregate amount in Row (11) excludes certain shares (See Instructions)
	☐
13	Percent of class represented by amount in Row (11)
	1.2 %
14	Type of Reporting Person (See Instructions)
	PN

SCHEDULE 13D

CUSIP No. 254604101

1	Name of reporting person
	Atlas Venture Associates Opportunity II, LLC
	Check the appropriate box if a member of a Group (See Instructions)
2	☐ (a)
	☒ (b)
3	SEC use only
4	Source of funds (See Instructions)
	AF
5	Check if disclosure of legal proceedings is required pursuant to Items 2(d) or 2(e)
	☐
6	Citizenship or place of organization
	DELAWARE
Number of Shares Beneficially Owned by Each Reporting Person	Sole Voting Power
7	0.00
	Shared Voting Power
8	420,549.00
9	Sole Dispositive Power

Person	
With:	0.00
	Shared Dispositive Power
10	420,549.00
	Aggregate amount beneficially owned by each reporting person
11	420,549.00
	Check if the aggregate amount in Row (11) excludes certain shares (See Instructions)
12	☐
	Percent of class represented by amount in Row (11)
13	1.2 %
	Type of Reporting Person (See Instructions)
14	OO

SCHEDULE 13D

Item 1. Security and Issuer

Title of Class of Securities:

(a) Common Stock, \$0.0001 par value per share

Name of Issuer:

(b) DISC MEDICINE, INC.

Address of Issuer's Principal Executive Offices:

(c) 321 ARSENAL STREET, SUITE 101, WATERTOWN, MASSACHUSETTS , 02472.

Item 1 This Amendment No. 4 to Schedule 13D ("Amendment No. 4") is being filed as an amendment to the statement on
Comment: Schedule 13D relating to common stock, par value \$0.0001 per share of Disc Medicine, Inc., a Delaware corporation, as filed with the Securities and Exchange Commission (the "SEC") on February 16, 2021 (the "Initial Schedule 13D") and later amended on February 14, 2023 ("Amendment No. 1") , September 21, 2023 ("Amendment No. 2") and January 24, 2024 ("Amendment No. 3" and together with the Initial Schedule 13D, Amendment No. 1 and Amendment No. 2 the "Prior Schedule 13D"). All capitalized terms not otherwise defined herein shall have the meanings ascribed to the terms in the Prior Schedule 13D. The Prior Schedule 13D is hereby amended and supplemented as follows and, except as expressly amended below, the Prior Schedule 13D remains in full force and effect.

Item 5. Interest in Securities of the Issuer

(a) As of the date hereof, Atlas X is the record owner of 1,084,527 shares of Common Stock. AVA X LP is the general partner of Atlas X and AVA X LLC is the general partner of AVA X LP. Each of Atlas X, AVA X LP and AVA X LLC has shared voting and dispositive power over the shares held by Atlas X. As such, each of Atlas X, AVA X LP and AVA X LLC may be deemed to beneficially own the shares held by Atlas X. As of the date hereof, Atlas XII is the record owner of 51,000 shares of Common Stock. AVA XII LP is the general partner of Atlas XII and AVA XII LLC is the general partner of AVA XII LP. Each of Atlas XII, AVA XII LP and AVA XII LLC has shared voting and dispositive power over the shares held by Atlas XII. As such, each of Atlas XII, AVA XII LP and AVA XII LLC may be deemed to beneficially own the shares held by Atlas XII. As of the date hereof, AVOF is the record owner of 592,908 shares of Common Stock. AVAO LP is the general partner of AVOF and AVAO LLC is the general partner of AVAO LP. Each of AVOF, AVAO LP and AVAO LLC has shared voting and dispositive power over the shares held by AVOF. As such, each of AVOF, AVAO LP and AVAO LLC may be deemed to beneficially own the shares held by AVOF. As of the date hereof, AVOF II is the record owner of 420,549 shares of Common Stock. AVAO II LP is the general partner of AVOF II and AVAO II LLC is the general partner of AVAO II LP. Each of AVOF II, AVAO II LP and AVAO II LLC has shared voting and dispositive power over the shares held by AVOF II. As such, each of AVOF II, AVAO II LP and AVAO II LLC may be deemed to beneficially own the shares held by AVOF II. Each of the Fund X Reporting Persons, Fund XII Reporting Persons, Opportunity Fund Reporting Persons and Opportunity Fund II Reporting Persons may be deemed to beneficially own 3.1%, 0.1%, 1.7% and 1.2%, respectively, of the Issuer's outstanding Common Stock, which percentages are calculated based upon 34,765,581 shares of Common Stock outstanding as of July 31, 2025, as reported in the Issuer's Quarterly Report pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934 for the quarterly period ended June 30 on Form 10-Q, filed with the Securities and Exchange Commission on August 7, 2025. Collectively, the Reporting Persons beneficially own an aggregate of 2,148,984 shares of Common Stock, which represents an estimated 6.2% of the Issuer's outstanding Common Stock.

The Fund X Reporting Persons, Fund XII Reporting Persons, Opportunity Fund Reporting Persons and the Opportunity Fund II Reporting Persons are under common control and as a result, the Reporting Persons may be deemed to be members of a group. However, the Reporting Persons disclaim such group membership, and this Schedule 13D shall not be deemed an admission that the Reporting Persons are members of a group for purposes of Section 13 or for any other purposes.

- (b) As of the date hereof, each of Atlas X, AVA X LP and AVA X LLC have shared voting power and shared dispositive power over 1,084,527 shares of Common Stock. As of the date hereof, each of Atlas XII, AVA XII LP and AVA XII LLC have shared voting power and shared dispositive power over 51,000 shares of Common Stock. As of the date hereof, each of AVOF, AVAO LP and AVAO LLC have shared voting power and shared dispositive power over 592,908 shares of Common Stock. As of the date hereof, each of AVOF II, AVAO II LP and AVAO II LLC have shared voting power and shared dispositive power over 420,549 shares of Common Stock.
- (c) The transactions in the common stock by the Reporting Persons during the past sixty days are set forth in Exhibit 99.1 and are incorporated herein by reference.
- Item 7. Material to be Filed as Exhibits.
Joint Filing Agreement

SIGNATURE

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.

Atlas Venture Fund X, L.P.

Signature: /s/ Ommer Chohan

Name/Title: By: Atlas Venture Associates X, L.P., its general partner, By: Atlas Venture Associates X, LLC, its general partner, By Ommer Chohan, CFO

Date: 08/15/2025

ATLAS VENTURE ASSOCIATES X, L.P.

Signature: /s/ Ommer Chohan

Name/Title: By: Atlas Venture Associates X, LLC, its general partner, By Ommer Chohan, CFO

Date: 08/15/2025

Atlas Venture Associates X, LLC

Signature: /s/ Ommer Chohan

Name/Title: Ommer Chohan, CFO

Date: 08/15/2025

Atlas Venture Fund XII, L.P.

Signature: /s/ Ommer Chohan

Name/Title: By: Atlas Venture Associates XII, L.P., its general partner, By: Atlas Venture Associates XII, LLC, its general partner, By Ommer Chohan, CFO

Date: 08/15/2025

Atlas Venture Associates XII, L.P.

Signature: /s/ Ommer Chohan

Name/Title: By: Atlas Venture Associates XII, LLC, its general partner, By Ommer Chohan, CFO

Date: 08/15/2025

Atlas Venture Associates XII, LLC

Signature: /s/ Ommer Chohan

Name/Title: Ommer Chohan, CFO

Date: 08/15/2025

Atlas Venture Opportunity Fund I, L.P.

Signature: /s/ Ommer Chohan

Name/Title: By: Atlas Venture Associates Opportunity I, L.P., its GP, By: Atlas Venture Associates Opportunity

I, LLC, its GP, By Ommer Chohan, CFO

Date: 08/15/2025

Atlas Venture Associates Opportunity I, L.P.

Signature: /s/ Ommer Chohan

Name/Title: By: Atlas Venture Associates Opportunity I, LLC,
its GP, By Ommer Chohan, CFO

Date: 08/15/2025

Atlas Venture Associates Opportunity I, LLC

Signature: /s/ Ommer Chohan

Name/Title: Ommer Chohan, CFO

Date: 08/15/2025

Atlas Venture Opportunity Fund II, L.P.

Signature: /s/ Ommer Chohan

Name/Title: By: Atlas Venture Associates Opportunity II, L.P.,
its GP, By: Atlas Venture Associates Opportunity
II, LLC, its GP, By Ommer Chohan, CFO

Date: 08/15/2025

Atlas Venture Associates Opportunity II, LP

Signature: /s/ Ommer Chohan

Name/Title: By: Atlas Venture Associates Opportunity II,
LLC, its GP, By Ommer Chohan, CFO

Date: 08/15/2025

Atlas Venture Associates Opportunity II, LLC

Signature: /s/ Ommer Chohan

Name/Title: Ommer Chohan, CFO

Date: 08/15/2025

Transactions in Common Stock During the Past Sixty Days

Reporting Person	Nature of the Transaction	Amount of Securities Purchased/Sold	Weighted Average Price (\$)	Date of Purchase/Sale	Low Price (\$)	High Price (\$)
Atlas X	Sale of Common Stock	1,184	61.13	7/18/2025	60.96	61.33
AVOF	Sale of Common Stock	664	61.13	7/18/2025	60.96	61.33
Atlas X	Sale of Common Stock	53,215	60.97	7/23/2025	60.95	61.10
AVOF	Sale of Common Stock	29,837	60.97	7/23/2025	60.95	61.10
Atlas X	Sale of Common Stock	23,245	61.17	7/24/2025	60.95	61.55
AVOF	Sale of Common Stock	13,033	61.17	7/24/2025	60.95	61.55
Atlas X	Sale of Common Stock	15,146	61.04	7/30/2025	60.95	61.35
AVOF	Sale of Common Stock	8,492	61.04	7/30/2025	60.95	61.35
Atlas X	Sale of Common Stock	705	60.95	8/5/2025	60.95	60.95
AVOF	Sale of Common Stock	395	60.95	8/5/2025	60.95	60.95
Atlas X	Sale of Common Stock	44,520	61.15	8/13/2025	60.95	61.615
AVOF	Sale of Common Stock	24,962	61.15	8/13/2025	60.95	61.615
Atlas X	Sale of Common Stock	12,862	60.99	8/14/2025	60.95	61.11
AVOF	Sale of Common Stock	7,212	60.99	8/14/2025	60.95	61.11

JOINT FILING AGREEMENT

Pursuant to Rule 13d-1(k)(1) promulgated pursuant to the Securities Exchange Act of 1934, as amended, the undersigned agree that the attached Schedule 13D is being filed on behalf of each of the undersigned.

Date: August 15, 2025

Atlas Venture Fund X, L.P.

By: Atlas Venture Associates X, L.P., its general partner
By: Atlas Venture Associates X, LLC, its general partner

By: /s/ Ommer Chohan

Name: Ommer Chohan
Title: Chief Financial Officer

Atlas Venture Associates X, L.P.

By: Atlas Venture Associates X, LLC, its general partner

By: /s/ Ommer Chohan

Name: Ommer Chohan
Title: Chief Financial Officer

Atlas Venture Associates X, LLC

By: /s/ Ommer Chohan

Name: Ommer Chohan
Title: Chief Financial Officer

Atlas Venture Fund XII, L.P.

By: Atlas Venture Associates XII, L.P., its general partner
By: Atlas Venture Associates XII, LLC, its general partner

By: /s/ Ommer Chohan

Name: Ommer Chohan
Title: Chief Financial Officer

Atlas Venture Associates XII, L.P.

By: Atlas Venture Associates XII, LLC, its general partner

By: /s/ Ommer Chohan

Name: Ommer Chohan
Title: Chief Financial Officer

Atlas Venture Associates XII, LLC

By: /s/ Ommer Chohan

Name: Ommer Chohan
Title: Chief Financial Officer

Atlas Venture Opportunity Fund I, L.P.

By: Atlas Venture Associates Opportunity I, L.P., its general partner
By: Atlas Venture Associates Opportunity I, LLC, its general partner

By: /s/ Ommer Chohan

Name: Ommer Chohan
Title: Chief Financial Officer

Atlas Venture Associates Opportunity I, L.P.

By: Atlas Venture Associates Opportunity I, LLC, its general partner

By: /s/ Ommer Chohan

Name: Ommer Chohan
Title: Chief Financial Officer

Atlas Venture Associates Opportunity I, LLC

By: /s/ Ommer Chohan

Name: Ommer Chohan

Title: Chief Financial Officer

Atlas Venture Opportunity Fund II, L.P.

By: Atlas Venture Associates Opportunity II, L.P., its general partner

By: Atlas Venture Associates Opportunity II, LLC, its general partner

By: /s/ Ommer Chohan

Name: Ommer Chohan

Title: Chief Financial Officer

Atlas Venture Associates Opportunity II, L.P.

By: Atlas Venture Associates Opportunity II, LLC, its general partner

By: /s/ Ommer Chohan

Name: Ommer Chohan

Title: Chief Financial Officer

Atlas Venture Associates Opportunity II, LLC

By: /s/ Ommer Chohan

Name: Ommer Chohan

Title: Chief Financial Officer