
**UNITED STATES
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, par value \$0.0001 per share
(Title of Class of Securities)

254604101
(CUSIP Number)

**Alejandro Moreno
Langhorne S. Perrow c/o
Access Industries, Inc.
40 West 57th Street, 28th Floor
New York, New York 10019
(212) 247-6400**

with copies to:

**Nicholas P. Pellicani
Debevoise & Plimpton LLP
65 Gresham Street
EC2V 7NQ
London
+ 44 20 7786 9000**

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

June 17, 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 filing this schedule because of Rules 13d-1(e), 13d-1(f) or 13d-1(g), check the following box.

1	NAME OF REPORTING PERSON. AI DMI 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	SOURCE OF FUNDS (SEE INSTRUCTIONS) SC, AF	
5	CHECK IF DISCLOSURE OF LEGAL PROCEEDINGS IS REQUIRED PURSUANT TO ITEMS 2(d) or 2(e) <input type="checkbox"/>	
6	CITIZENSHIP OR PLACE OF ORGANIZATION State of Delaware	
NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH	7	SOLE VOTING POWER 3,762,507 shares ⁽¹⁾
	8	SHARED VOTING POWER 0 shares
	9	SOLE DISPOSITIVE POWER 3,762,507 shares ⁽¹⁾
	10	SHARED DISPOSITIVE POWER 0 shares
11	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON 3,762,507 shares ⁽¹⁾	
12	CHECK IF THE AGGREGATE AMOUNT IN ROW (11) EXCLUDES CERTAIN SHARES (SEE INSTRUCTIONS) <input type="checkbox"/>	
13	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11); 12.6% ⁽²⁾	
14	TYPE OF REPORTING PERSON (SEE INSTRUCTIONS) OO (Limited Liability Company)	

- (1) Represents (i) 3,558,426 shares of Common Stock and (ii) 204,081 pre-funded warrants to purchase shares of Common Stock at \$0.0001 per share (the "Pre-Funded Warrants").
- (2) Based on 29,843,966 shares of Common Stock consisting of (i) 29,639,885 shares of Common Stock outstanding immediately following the Issuer's registered offering of 4,944,000 shares of Common Stock (the "Offering"), as reported in the Issuer's Prospectus Supplement filed pursuant to Rule 424(b)(5) with the Securities and Exchange Commission (the "SEC") on June 14, 2024, and (ii) 204,081 shares of Common Stock underlying the Pre-Funded Warrants.

1	NAME OF REPORTING PERSON. Access Industries Holdings 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	SOURCE OF FUNDS (SEE INSTRUCTIONS) SC, AF	
5	CHECK IF DISCLOSURE OF LEGAL PROCEEDINGS IS REQUIRED PURSUANT TO ITEMS 2(d) or 2(e) <input type="checkbox"/>	
6	CITIZENSHIP OR PLACE OF ORGANIZATION United States of America	
NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH	7	SOLE VOTING POWER 0 shares
	8	SHARED VOTING POWER 3,762,507 shares ⁽¹⁾
	9	SOLE DISPOSITIVE POWER 0 shares
	10	SHARED DISPOSITIVE POWER 3,762,507 shares ⁽¹⁾
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12	CHECK IF THE AGGREGATE AMOUNT IN ROW (11) EXCLUDES CERTAIN SHARES (SEE INSTRUCTIONS) <input type="checkbox"/>	
13	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11); 12.6% ⁽²⁾	
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(2) Based on 29,843,966 shares of Common Stock consisting of (i) 29,639,885 shares of Common Stock outstanding immediately following the Offering, as reported in the Issuer's Prospectus Supplement filed pursuant to Rule 424(b)(5) with the SEC on June 14, 2024, and (ii) 204,081 shares of Common Stock underlying the Pre-Funded Warrants.

1	NAME OF REPORTING PERSON. Access Industries Management, 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	SOURCE OF FUNDS (SEE INSTRUCTIONS) SC, AF	
5	CHECK IF DISCLOSURE OF LEGAL PROCEEDINGS IS REQUIRED PURSUANT TO ITEMS 2(d) or 2(e) <input type="checkbox"/>	
6	CITIZENSHIP OR PLACE OF ORGANIZATION State of Delaware	
NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH	7	SOLE VOTING POWER 0 shares
	8	SHARED VOTING POWER 3,762,507 shares ⁽¹⁾
	9	SOLE DISPOSITIVE POWER 0 shares
	10	SHARED DISPOSITIVE POWER 3,762,507 shares ⁽¹⁾
11	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON 3,762,507 shares ⁽¹⁾	
12	CHECK IF THE AGGREGATE AMOUNT IN ROW (11) EXCLUDES CERTAIN SHARES (SEE INSTRUCTIONS) <input type="checkbox"/>	
13	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11); 12.6% ⁽²⁾	
14	TYPE OF REPORTING PERSON (SEE INSTRUCTIONS) OO (Limited Liability Company)	

(1) Represents (i) 3,558,426 shares of Common Stock and (ii) 204,081 Pre-Funded Warrants.

(2) Based on 29,843,966 shares of Common Stock consisting of (i) 29,639,885 shares of Common Stock outstanding immediately following the Offering, as reported in the Issuer's Prospectus Supplement filed pursuant to Rule 424(b)(5) with the SEC on June 14, 2024, and (ii) 204,081 shares of Common Stock underlying the Pre-Funded Warrants.

1	NAME OF REPORTING PERSON. Len Blavatnik	
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	SOURCE OF FUNDS (SEE INSTRUCTIONS) SC, AF	
5	CHECK IF DISCLOSURE OF LEGAL PROCEEDINGS IS REQUIRED PURSUANT TO ITEMS 2(d) or 2(e) <input type="checkbox"/>	
6	CITIZENSHIP OR PLACE OF ORGANIZATION United States of America	
NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH	7	SOLE VOTING POWER 0 shares
	8	SHARED VOTING POWER 3,762,507 shares ⁽¹⁾
	9	SOLE DISPOSITIVE POWER 0 shares
	10	SHARED DISPOSITIVE POWER 3,762,507 shares ⁽¹⁾
11	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON 3,762,507 shares ⁽¹⁾	
12	CHECK IF THE AGGREGATE AMOUNT IN ROW (11) EXCLUDES CERTAIN SHARES (SEE INSTRUCTIONS) <input type="checkbox"/>	
13	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11); 12.6% ⁽²⁾	
14	TYPE OF REPORTING PERSON (SEE INSTRUCTIONS) IN	

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(2) Based on 29,843,966 shares of Common Stock consisting of (i) 29,639,885 shares of Common Stock outstanding immediately following the Offering, as reported in the Issuer's Prospectus Supplement filed pursuant to Rule 424(b)(5) with the SEC on June 14, 2024, and (ii) 204,081 shares of Common Stock underlying the Pre-Funded Warrants.

This Amendment No. 4 to Schedule 13D is being filed by AI DMI LLC (“AI DMI”), Access Industries Holdings LLC (“AIH”), Access Industries Management, LLC (“AIM”) and Len Blavatnik (collectively, the “Reporting Persons”, and each, a “Reporting Person”), in respect of the common stock, par value \$0.0001 per share (the “Common Stock”), of Disc Medicine, Inc. (the “Issuer”). The shares of Common Stock of the Issuer are listed on the Nasdaq Global Market under the symbol “IRON.”

The Schedule 13D filed by the Reporting Persons with the Securities and Exchange Commission (the “SEC”) on January 9, 2023, as amended and supplemented by Amendment No. 1 to the Schedule 13D filed by the Reporting Persons with the SEC on February 17, 2023, Amendment No. 2 to the Schedule 13D filed by the Reporting Persons with the SEC on June 20, 2023 and Amendment No. 3 to the Schedule 13D filed by the Reporting Persons on November 13, 2023 (together, the “Schedule”), is hereby amended and supplemented by the Reporting Persons as set forth below in this Amendment No. 4. This amendment is filed by the Reporting Persons in accordance with Rule 13d-2 of the Securities Exchange Act of 1934, as amended, and refers only to information that has materially changed since the filing of the Schedule. The items identified below, or the particular paragraphs of such items which are identified below, are amended as set forth below. Unless otherwise indicated, all capitalized terms used and not defined herein have the respective meanings assigned to them in the Schedule.

Item 3 Source and Amount of Funds and Other Consideration.

The disclosure in Item 3 to the Schedule is hereby supplemented by adding the following at the end thereof:

On June 17, 2024, AI DMI purchased 416,667 shares of Common Stock at a purchase price of \$36.00 per share of Common Stock pursuant to the prospectus filed with the SEC on June 14, 2024 pursuant to Rule 424(b)(5) in a registered offering. AI DMI funded the purchase of shares of Common Stock using capital contributed from affiliated entities, which funded that capital using cash on hand.

Item 5 Interest in Securities of the Issuer

Item 5 to the Schedule is hereby amended and restated as follows:

(a) and (b) The responses of each of the Reporting Persons with respect to Rows 11, 12, and 13 of the cover pages of this Schedule 13D that relate to the aggregate number and percentage of Common Stock (including but not limited to footnotes to such information) are incorporated herein by reference.

The responses of each of the Reporting Persons with respect to Rows 7, 8, 9, and 10 of the cover pages of this Schedule 13D that relate to the number of shares of Common Stock as to which each of the persons or entities referenced in Item 2 above has sole or shared power to vote or to direct the vote of and sole or shared power to dispose of or to direct the disposition of (including but not limited to footnotes to such information) are incorporated herein by reference.

3,558,426 shares of Common Stock and 204,081 Pre-Funded Warrants are owned directly by AI DMI and may be deemed to be beneficially owned by AIH, AIM and Mr. Blavatnik because (i) Len Blavatnik controls AIM and holds a majority of the outstanding voting interests in AIH, (ii) AIM controls AIH and (iii) AIH indirectly controls all of the outstanding voting interests in AI DMI. Each of the Reporting Persons (other than AI DMI), and each of their affiliated entities and the officers, partners, members and managers thereof, disclaims beneficial ownership of these securities.

(c) The following transactions in the Issuer’s securities have been effected by Reporting Persons within the 60 days prior to this filing: The information set forth in Item 3 of this Schedule 13D is incorporated herein by reference.

(d) Not applicable.

(e) Not applicable.

Item 7 Materials to Be Filed as Exhibits

The disclosure in Item 7 is hereby supplemented by adding the following in appropriate numerical order:

Exhibit	Description
99.11	Joint Filing Agreement, dated as of June 20, 2024.

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.

Date: June 20, 2024

AI DMI LLC

By: Access Industries Management, LLC, its Manager

/s/ Alejandro Moreno

Name: Alejandro Moreno

Title: Executive Vice President

ACCESS INDUSTRIES HOLDINGS LLC

By: Access Industries Management, LLC, its Manager

/s/ Alejandro Moreno

Name: Alejandro Moreno

Title: Executive Vice President

ACCESS INDUSTRIES MANAGEMENT, LLC

/s/ Alejandro Moreno

Name: Alejandro Moreno

Title: Executive Vice President

/s/ *

Name: Leonard Blavatnik

* The undersigned, by signing his name hereto, executes this Schedule 13D pursuant to the Limited Power of Attorney executed on behalf of Mr. Blavatnik and filed herewith.

By: /s/ Alejandro Moreno

Name: Alejandro Moreno

Attorney-in-Fact

Joint Filing Agreement

The undersigned hereby agree that they are filing this statement jointly pursuant to Rule 13d-1(k)(1). Each of them is responsible for the timely filing of such Schedule 13D 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 accordance with Rule 13d-1(k)(1) promulgated under the Securities Exchange Act of 1934, as amended, the undersigned hereby agree to the joint filing with each other on behalf of each of them of such a statement on Schedule 13D (and any amendments thereto) with respect to the shares of Common Stock owned by each of them, of Disc Medicine, Inc., a corporation incorporated under the laws of the State of Delaware. This Joint Filing Agreement shall be included as an exhibit to such Schedule 13D.

[Signature Page Follows]

