
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

SCHEDULE 13D

Under the Securities Exchange Act of 1934

Hemab Therapeutics Holdings, Inc.

(Name of Issuer)

Common stock, par value \$0.0001 per share

(Title of Class of Securities)

(CUSIP Number)

Alejandro Moreno
Access Industries, Inc., 40 West 57th St., 28th Floor
New York, NY, 10019
(212) 247-6400

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Access Industries, Inc., 40 West 57th St., 28th Floor
New York, NY, 10019
(212) 247-6400

Nicholas P. Pellicani
Debevoise & Plimpton LLP, 28 Tudor Street
London, X0, EC4Y 0AY
44 20 7786 9000

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

05/04/2026

(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).

CUSIP No.

Name of reporting person

1

AI DEN-MAB 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

4,876,344.00

Number of
Shares

Shared Voting Power

Beneficially 8

Owned by

0.00

Each

Sole Dispositive Power

Reporting 9

Person

4,876,344.00

With:

Shared Dispositive Power

10

0.00

Aggregate amount beneficially owned by each reporting person

11

4,876,344.00

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

12

Percent of class represented by amount in Row (11)

13

10.4 %

Type of Reporting Person (See Instructions)

14

OO

Comment for Type of Reporting Person: Row 13. Based on an aggregate of 46,705,410 shares of Common Stock outstanding immediately following the Issuer's initial public offering, which assumes full exercise of the underwriters' option to purchase additional shares of Common Stock, as reported in the Issuer's prospectus filed pursuant to Rule 424(b)(4) with the Securities and Exchange Commission (the "SEC") on May 1, 2026.

SCHEDULE 13D**CUSIP No.**

Name of reporting person

1

Access Industries Holdings LLC

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 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

Number of Shares Beneficially

Shared Voting Power

Owned by Each Reporting Person

8

4,876,344.00

With: Sole Dispositive Power

9

0.00

Shared Dispositive Power

10

4,876,344.00

Aggregate amount beneficially owned by each reporting person

11 4,876,344.00

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

12
Percent of class represented by amount in Row (11)

13 10.4 %

Type of Reporting Person (See Instructions)

14 OO

Comment for Type of Reporting Person: Row 13. Based on an aggregate of 46,705,410 shares of Common Stock outstanding immediately following the Issuer's initial public offering, which assumes full exercise of the underwriters' option to purchase additional shares of Common Stock, as reported in the Issuer's prospectus filed pursuant to Rule 424(b)(4) with the SEC on May 1, 2026.

SCHEDULE 13D

CUSIP No.

Name of reporting person

1 AI Biotechnology 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

6 Citizenship or place of organization

DELAWARE

Sole Voting Power

7

Number of
Shares

0.00

Shared Voting Power

Beneficially

8

Owned by

4,876,344.00

Each

Sole Dispositive Power

Reporting

9

Person

0.00

With:

Shared Dispositive Power

10

4,876,344.00

Aggregate amount beneficially owned by each reporting person

11

4,876,344.00

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

12

Percent of class represented by amount in Row (11)

13

10.4 %

Type of Reporting Person (See Instructions)

14

OO

Comment for Type of Reporting Person: Row 13. Based on an aggregate of 46,705,410 shares of Common Stock outstanding immediately following the Issuer's initial public offering, which assumes full exercise of the underwriters' option to purchase additional shares of Common Stock, as reported in the Issuer's prospectus filed pursuant to Rule 424(b)(4) with the SEC on May 1, 2026.

SCHEDULE 13D

CUSIP No.

Name of reporting person

1

Access Industries Management 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

Number of
Shares

7

Sole Voting Power

Beneficially

0.00

Owned by

Shared Voting Power

Each

8

Reporting

4,876,344.00

Person With: 9 Sole Dispositive Power
 0.00
 Shared Dispositive Power
 10
 4,876,344.00
 Aggregate amount beneficially owned by each reporting person
 11
 4,876,344.00
 Check if the aggregate amount in Row (11) excludes certain shares (See Instructions)
 12

 Percent of class represented by amount in Row (11)
 13
 10.4 %
 Type of Reporting Person (See Instructions)
 14
 OO

Comment for Type of Reporting Person: Row 13. Based on an aggregate of 46,705,410 shares of Common Stock outstanding immediately following the Issuer's initial public offering, which assumes full exercise of the underwriters' option to purchase additional shares of Common Stock, as reported in the Issuer's prospectus filed pursuant to Rule 424(b)(4) with the SEC on May 1, 2026.

SCHEDULE 13D

CUSIP No.

1 Name of reporting person
 Len Blavatnik
 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
 UNITED STATES
 Sole Voting Power
 7
 0.00
 Number of Shares Beneficially Owned by Each Reporting Person With:
 Shared Voting Power
 8
 4,876,344.00
 Sole Dispositive Power
 9
 0.00
 Shared Dispositive Power
 10
 4,876,344.00
 Aggregate amount beneficially owned by each reporting person
 11
 4,876,344.00

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



Percent of class represented by amount in Row (11)

13

10.4 %

Type of Reporting Person (See Instructions)

14

IN

Comment for Type of Reporting Person: Row 13. Based on an aggregate of 46,705,410 shares of Common Stock outstanding immediately following the Issuer's initial public offering, which assumes full exercise of the underwriters' option to purchase additional shares of Common Stock, as reported in the Issuer's prospectus filed pursuant to Rule 424(b)(4) with the SEC on May 1, 2026.

SCHEDULE 13D

Item 1. Security and Issuer

Title of Class of Securities:

(a)

Common stock, par value \$0.0001 per share

Name of Issuer:

(b)

Hemab Therapeutics Holdings, Inc.

Address of Issuer's Principal Executive Offices:

(c)

101 Main Street, Suite 1220, Cambridge, MASSACHUSETTS , 02142.

Item 1 Comment: This Schedule 13D is being filed by AI DEN-MAB LLC ("AI DMAB"), AI Biotechnology LLC ("AI Biotechnology"), 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 Hemab Therapeutics Holdings, Inc. (the "Issuer").

Item 2. Identity and Background

The identities and backgrounds of the Reporting Persons are set forth on Annex A, filed as Exhibit 99.1 attached hereto and incorporated by reference herein. The agreement among the Reporting Persons relating to the joint filing of this Schedule 13D is filed as Exhibit 99.4 hereto. None of the Reporting Persons has, during the last five years: (i) been convicted in a criminal proceeding (excluding traffic violations or similar misdemeanors); or (ii) 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 violations of, or prohibiting or mandating activities subject to, federal or state securities laws or finding any violation with respect to such laws.

(a)

The information set forth in Item 2(a) of this Schedule 13D is incorporated herein by reference.

(b)

The information set forth in Item 2(a) of this Schedule 13D is incorporated herein by reference.

(c)

The information set forth in Item 2(a) of this Schedule 13D is incorporated herein by reference.

(d)

The information set forth in Item 2(a) of this Schedule 13D is incorporated herein by reference.

(e)

The information set forth in Item 2(a) of this Schedule 13D is incorporated herein by reference.

(f)

The information set forth in Item 2(a) of this Schedule 13D is incorporated herein by reference.

Item 3. Source and Amount of Funds or Other Consideration

On February 15, 2023, AI DMAB acquired 114,435 series B preference shares of Hemab ApS (the "Hemab ApS Series B Preferred Shares"), at a per share price of \$305.85 in cash, for an aggregate purchase price of \$34,999,944.75. AI DMAB funded this purchase using capital contributed from affiliated entities, which funded that capital using cash on hand. On October 23, 2025, AI DMAB acquired 57,217 series C preference shares of Hemab ApS (the "Hemab ApS Series C Preferred Shares"), at a per share price of \$305.85 in cash, for an aggregate purchase price of \$17,499,819.45. AI DMAB funded this purchase using capital contributed from affiliated entities, which funded that capital using cash on hand. On March 30, 2026, pursuant to a Share Contribution and Exchange Agreement by and among the Issuer, Hemab ApS and the holders party thereto, AI DMAB contributed its Hemab ApS Series B Preferred Shares and Hemab ApS Series C Preferred Shares to the Issuer in exchange for 114,435 shares of series B preferred stock of the Issuer, par value \$0.0001 per share (the "Series B Preferred Stock"), and 57,217 shares of series C preferred stock of the Issuer, par value \$0.0001 per share (the "Series C Preferred Stock"), respectively. No cash consideration was paid by AI DMAB in connection with such exchange. Upon the completion of the Issuer's initial public offering on May 4, 2026, and after giving effect to the Issuer's 22-for-one stock split of the Issuer's issued and outstanding Common Stock, AI DMAB's 114,435 shares of Series B Preferred Stock automatically converted into 2,517,570 shares of Common Stock and AI DMAB's 57,217 shares of Series C Preferred Stock automatically converted into 1,258,774 shares of Common Stock, in each case for no consideration. On May 4, 2026, AI DMAB purchased 1,100,000 shares of Common Stock in the Issuer's initial public offering at the

public offering price of \$18.00 per share. AI DMAB funded this purchase using capital contributed from affiliated entities, which funded that capital using cash on hand.

Item 4. Purpose of Transaction

The Reporting Persons who hold Common Stock directly acquired those securities as an investment in the regular course of their businesses. The Reporting Persons may engage in discussions with management, the Issuer's board of directors, other stockholders of the Issuer and other relevant parties concerning the business, operations, board composition, management, strategy and future plans of the Issuer. Subject to the terms of the Investors' Rights Agreement (as defined below), the Reporting Persons intend to re-examine their investment from time to time and, depending on prevailing market conditions, other investment opportunities, liquidity requirements or other investment considerations the Reporting Persons deem material, the Reporting Persons may from time to time acquire additional Common Stock in the open market, block trades, negotiated transactions, or otherwise and may also dispose of all or a portion of the Issuer's securities, in open market or privately negotiated transactions, and/or enter into derivative transactions with institutional counterparties with respect to the Issuer's securities, in each case, subject to limitations under applicable law. The Reporting Persons have not yet determined which, if any, of the above courses of action they may ultimately take. The Reporting Persons' future actions with regard to the Issuer are dependent on their evaluation of the factors listed above, circumstances affecting the Issuer in the future, including prospects of the Issuer, general market and economic conditions and other factors deemed relevant. The Reporting Persons reserve the right to determine in the future whether to change the purpose or purposes described above or whether to adopt plans or proposals of the type specified above or otherwise.

Item 5. Interest in Securities of the Issuer

(a) 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 of shares and percentage of Common Stock (including but not limited to footnotes to such information) are incorporated herein by reference.

(b) 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.

(c) The following transactions in the Issuer's securities have been effected by the 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) 4,876,344 shares of Common Stock are held directly by AI DMAB and may be deemed to be beneficially owned by AI Biotechnology, AIH, AIM and Len Blavatnik because (i) Mr. Blavatnik controls AIM and AIH, (ii) AIM controls AIH and AI Biotechnology, (iii) AIH owns all of the voting units of AI Biotechnology and (iv) AI Biotechnology owns all of the voting units of AI DMAB. Each of AI Biotechnology, AIH, AIM and Mr. Blavatnik, and each of their affiliated entities and the officers, partners, members and managers thereof, disclaims beneficial ownership of these securities, except to the extent of its or his pecuniary interest therein, and this Schedule 13D shall not be construed as an admission that any such Reporting Person is the beneficial owner of any of the securities reported herein.

(e) Not applicable.

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

Lock-up Agreement In connection with the Issuer's initial public offering, on March 17, 2026, AI DMAB entered into a lock-up agreement (the "Lock-up Agreement") with Goldman Sachs & Co. LLC, Jefferies LLC and Evercore Group L.L.C., as representatives of the underwriters. Pursuant to the Lock-up Agreement, AI DMAB has agreed that it will not, directly or indirectly, offer, sell, contract to sell, pledge, grant any option, right or warrant to purchase, purchase any option or contract to sell, lend or otherwise transfer or dispose of any ordinary shares or preference shares of Hemab ApS, any shares of Common Stock, or any options or warrants to purchase any shares of Common Stock, or any securities convertible into, exchangeable for or that represent the right to receive shares of Common Stock, enter into any hedging, swap or other arrangement that transfers, in whole or in part, the economic consequences of ownership of Common Stock, make any demand for or exercise any right with respect to the registration of any such equity securities, or make any public announcement of an intention to do any of the foregoing for a period of 180 days following April 30, 2026, the date of the Issuer's prospectus filed pursuant to Rule 424(b)(4) with the SEC, without the prior written consent of Goldman Sachs & Co. LLC, Jefferies LLC and Evercore Group L.L.C., subject to certain exceptions. Goldman Sachs & Co. LLC, Jefferies LLC and Evercore Group L.L.C., on behalf of the underwriters, may release all or any portion of the securities subject to the Lock-up Agreement at any time and without notice before the termination of the 180-day period. The foregoing description of the Lock-up Agreement does not purport to be complete and is qualified in its entirety by reference to such, which is filed as an exhibit and incorporated herein by reference. Investors' Rights Agreement AI DMAB is party to an investors' rights agreement (the "Investors' Rights Agreement"), dated March 30, 2026, by and among the Issuer and certain of its stockholders named therein. Pursuant to the terms of the Investors' Rights Agreement, beginning 180 days after April 30, 2026, the effective date of the registration statement for the Issuer's initial public offering, holders who are party to the Investors' Rights Agreement and who collectively hold at least 30% of the then outstanding Registrable Securities (as defined therein) have the right to require the Issuer to file a registration statement on Form S-1 to register at least 25% of the then outstanding Registrable Securities, or a lesser percent if the anticipated aggregate offering price, net of selling expenses, would exceed \$10 million, subject to customary terms and conditions. At any time the Issuer is eligible to use a Form S-3 registration statement, holders who are party to the Investors' Rights Agreement and who collectively hold at least 20% of the then outstanding Registrable Securities have the right to require the Issuer to file a registration statement on Form S-3 to register outstanding Registrable Securities of such holders having an

anticipated aggregate offering price, net of selling expenses, of at least \$5 million, subject to customary terms and conditions. Pursuant to the Investors' Rights Agreement, AI DMAB and its permitted transferees have customary piggyback registration rights, subject to customary terms and conditions. The foregoing description of the Investors' Rights Agreement does not purport to be complete and is qualified in its entirety by reference to such, which is filed as an exhibit and incorporated herein by reference. Joint Filing Agreement A Joint Filing Agreement, dated May 11, 2026, by and among the Reporting Persons has been executed by the Reporting Persons, a copy of which is attached hereto as Exhibit 99.4 and is incorporated herein by reference.

Item 7. Material to be Filed as Exhibits.

99.1 Annex A. 99.2 Lock-up Agreement, dated as of March 17, 2026, by and between AI DEN-MAB LLC, Goldman Sachs & Co. LLC, Jefferies LLC and Evercore L.L.C. as representatives of the several underwriters. 99.3 Investors' Rights Agreement, dated as of March 30, 2026, by and among Hemab Therapeutics Holdings, Inc. and certain of its stockholders (incorporated herein by reference to Exhibit 4.3 to the Issuer's Amendment No. 2 to the Form S-1 filed with the Securities and Exchange Commission on April 28, 2026). 99.4 Joint Filing Agreement, dated as of May 11, 2026. 99.5 Limited Power of Attorney.

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.

AI DEN-MAB LLC

Signature: /s/ Alejandro Moreno

By: Access Industries Management, LLC, its
Name/Title: manager; its Executive Vice President, General
Counsel/Alejandro Moreno

Date: 05/11/2026

Access Industries Holdings LLC

Signature: /s/ Alejandro Moreno

By: Access Industries Management, LLC, its
Name/Title: manager; its Executive Vice President, General
Counsel/Alejandro Moreno

Date: 05/11/2026

AI Biotechnology LLC

Signature: /s/ Alejandro Moreno

By: Access Industries Management, LLC, its
Name/Title: manager; its Executive Vice President, General
Counsel/Alejandro Moreno

Date: 05/11/2026

Access Industries Management LLC

Signature: /s/ Alejandro Moreno

By: Executive Vice President, General
Name/Title: Counsel/Alejandro Moreno

Date: 05/11/2026

Len Blavatnik

Signature: */s/ Alejandro Moreno

By: Alejandro Moreno as Attorney-in-Fact for
Name/Title: Len Blavatnik

Date: 05/11/2026

**Comments
accompanying
signature:**

* The above signed, 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.