SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

SCHEDULE 13D

Under the Securities Exchange Act of 1934

(Amendment No. 3)*

Neuronetics, Inc.

(Name of Issuer)

Common Stock, par value $0.01 per share

(Title of Class of Securities)

(CUSIP Number)

Matthew Girandola
Chief Compliance Officer, 330 Madison Avenue, Floor 33
New York, NY, 10017
(646) 560-5490

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

11/12/2026

(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).

SCHEDULE 13D

CUSIP No.

1	Name of reporting person MADRYN ASSET MANAGEMENT, LP
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 OO

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 Beneficially Owned by Each Reporting Person With:	7	Sole Voting Power 0.00
	8	Shared Voting Power 20,809,561.00
	9	Sole Dispositive Power 0.00
	10	Shared Dispositive Power 20,809,561.00

Aggregate amount beneficially owned by each reporting person

11 20,809,561.00

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

12 ☐

Percent of class represented by amount in Row (11)

13 21.6 %

Type of Reporting Person (See Instructions)

14 PN, IA

SCHEDULE 13D

CUSIP No.

Name of reporting person

1 MADRYN HEALTH PARTNERS II, LP

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 OO

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 Owned by Each Reporting Person With:		0.00
	8	Shared Voting Power 1,435,958.00
	9	Sole Dispositive Power 0.00
	10	Shared Dispositive Power 1,435,958.00
11		Aggregate amount beneficially owned by each reporting person 1,435,958.00
12		Check if the aggregate amount in Row (11) excludes certain shares (See Instructions) ☐
13		Percent of class represented by amount in Row (11) 1.5 %
14		Type of Reporting Person (See Instructions) PN

SCHEDULE 13D

CUSIP No.

1		Name of reporting person MADRYN HEALTH PARTNERS II (CAYMAN MASTER), LP
2		Check the appropriate box if a member of a Group (See Instructions) ☐ (a) ☐ (b)
3		SEC use only
4		Source of funds (See Instructions) OO
5		Check if disclosure of legal proceedings is required pursuant to Items 2(d) or 2(e) ☐
6		Citizenship or place of organization CAYMAN ISLANDS
Number of Shares Beneficially Owned by Each Reporting Person With:	7	Sole Voting Power 0.00
	8	Shared Voting Power 17,104,530.00
	9	Sole Dispositive Power 0.00
	10	Shared Dispositive Power 17,104,530.00
11		Aggregate amount beneficially owned by each reporting person

17,104,530.00

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

12 ☐

Percent of class represented by amount in Row (11)

13 17.7 %

Type of Reporting Person (See Instructions)

14 PN

SCHEDULE 13D

CUSIP No.

Name of reporting person

1 MADRYN HEALTH ADVISORS II, LP

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 OO

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 Beneficially Owned by Each Reporting Person With:	7	Sole Voting Power 0.00
	8	Shared Voting Power 18,540,488.00
	9	Sole Dispositive Power 0.00
	10	Shared Dispositive Power 18,540,488.00

Aggregate amount beneficially owned by each reporting person

11 18,540,488.00

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

12 ☐

Percent of class represented by amount in Row (11)

13 19.2 %

Type of Reporting Person (See Instructions)

14 PN

SCHEDULE 13D

CUSIP No.

1	Name of reporting person MADRYN HEALTH ADVISORS GP II, LLC	
2	Check the appropriate box if a member of a Group (See Instructions) ☐ (a) ☐ (b)	
3	SEC use only	
4	Source of funds (See Instructions) OO	
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 With:	7	Sole Voting Power 0.00
	8	Shared Voting Power 18,540,488.00
	9	Sole Dispositive Power 0.00
	10	Shared Dispositive Power 18,540,488.00
11	Aggregate amount beneficially owned by each reporting person 18,540,488.00	
12	Check if the aggregate amount in Row (11) excludes certain shares (See Instructions) ☐	
13	Percent of class represented by amount in Row (11) 19.2 %	
14	Type of Reporting Person (See Instructions) OO	

SCHEDULE 13D

CUSIP No.

1	Name of reporting person MADRYN SELECT OPPORTUNITIES, LP
2	Check the appropriate box if a member of a Group (See Instructions) ☐ (a) ☐ (b)

3	SEC use only	
4	Source of funds (See Instructions) OO	
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 With:	7	Sole Voting Power 0.00
	8	Shared Voting Power 2,269,073.00
	9	Sole Dispositive Power 0.00
	10	Shared Dispositive Power 2,269,073.00
11	Aggregate amount beneficially owned by each reporting person 2,269,073.00	
12	Check if the aggregate amount in Row (11) excludes certain shares (See Instructions) ☐	
13	Percent of class represented by amount in Row (11) 2.4 %	
14	Type of Reporting Person (See Instructions) PN	

SCHEDULE 13D

CUSIP No.

1	Name of reporting person MADRYN SELECT ADVISORS, LP	
2	Check the appropriate box if a member of a Group (See Instructions) ☐ (a) ☐ (b)	
3	SEC use only	
4	Source of funds (See Instructions) OO	
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	7	Sole Voting Power 0.00

Owned by Each Reporting Person With:	8	Shared Voting Power 2,269,073.00
	9	Sole Dispositive Power 0.00
	10	Shared Dispositive Power 2,269,073.00
11		Aggregate amount beneficially owned by each reporting person 2,269,073.00
12		Check if the aggregate amount in Row (11) excludes certain shares (See Instructions) ☐
13		Percent of class represented by amount in Row (11) 2.4 %
14		Type of Reporting Person (See Instructions) PN

SCHEDULE 13D

CUSIP No.

1		Name of reporting person MADRYN SELECT ADVISORS GP, LLC
2		Check the appropriate box if a member of a Group (See Instructions) ☐ (a) ☐ (b)
3		SEC use only
4		Source of funds (See Instructions) OO
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 With:	7	Sole Voting Power 0.00
	8	Shared Voting Power 2,269,073.00
	9	Sole Dispositive Power 0.00
	10	Shared Dispositive Power 2,269,073.00
11		Aggregate amount beneficially owned by each reporting person 2,269,073.00
12		Check if the aggregate amount in Row (11) excludes certain shares (See Instructions)

☐

Percent of class represented by amount in Row (11)

13

2.4 %

Type of Reporting Person (See Instructions)

14

OO

SCHEDULE 13D

Item 1. Security and Issuer

(a) Title of Class of Securities:

Common Stock, par value $0.01 per share

(b) Name of Issuer:

Neuronetics, Inc.

(c) Address of Issuer's Principal Executive Offices:

3222 Phoenixville Pike, Malvern, PENNSYLVANIA , 19355.

Item 1 Comment: This Amendment No. 3 (this "Amendment") amends and supplements the Schedule 13D originally filed by the Reporting Persons with the Securities and Exchange Commission on December 17, 2024 (the "Schedule 13D"). Except as specifically provided herein, this Amendment does not modify any of the information previously reported in the Schedule 13D. Capitalized terms used herein and not otherwise defined shall have the meanings set forth in the Schedule 13D.

Item 5. Interest in Securities of the Issuer

(a) The information contained on the cover pages of this Schedule 13D is incorporated herein by reference. The Reporting Persons beneficially own in the aggregate 20,809,561 shares of Common Stock, which represents approximately 21.6% of the outstanding shares of Common Stock. All calculations of percentage ownership in this Schedule 13D are based on 96,478,311 shares of Common Stock outstanding as of November 12, 2026, based on (i) 77,728,311 shares of Common Stock outstanding as of October 28, 2026, as reported on the Company's Form 10-Q for the quarter ending September 30, 2026 and filed with the U.S. Securities and Exchange Commission on November 4, 2026, plus (ii) 18,750,000 shares of Common Stock issued and sold in an underwritten public offering on November 12, 2026. Each of the Funds directly holds the number and percentage of shares of Common Stock disclosed as beneficially owned by it in the applicable table set forth on the cover page to this Statement. Madryn, as the investment advisor for each of the Funds; MHA II LP, as the general partner for each of MHP II and MHP II Cayman; MSA LP, as the general partner for MSO; MHA GP II LLC, as the general partner for MHA II LP; and MSA GP LLC, as the general partner for MSA LP, may each be deemed to have the shared power to direct the voting and disposition of shares of Common Stock beneficially owned by the Funds and, consequently, Madryn and the Advisors may be deemed to possess indirect beneficial ownership of such shares. Madryn and the Advisors disclaim beneficial ownership of such shares for all other purposes. The responses of the Reporting Persons to rows 7, 8, 9, 10, 11 and 13 on the cover pages of this Statement are incorporated herein by reference. To the knowledge of the Reporting Persons, none of the Covered Persons owns any shares of Common Stock; provided, however, that because of each Covered Persons' status as a director, executive officer, manager, member or partner of a Reporting Person, a Covered Person may be deemed to be the beneficial owner of the shares of Common Stock beneficially owned by such Reporting Person. Each of the Covered Persons disclaims beneficial ownership of the shares of the Common Stock reported herein and the filing of this Statement shall not be construed as an admission that any such Covered Person is the beneficial owner of any securities covered by this Statement.

(b) The information set forth above in Item 5(a) is incorporated herein by reference.

(c) Except as described herein, none of the Reporting Persons or, to their knowledge, none of the Covered Persons, has had any transactions in the Common Stock during the past 60 days

(d) Except as set forth herein, to the knowledge of the Reporting Persons, no other person has the right to receive or the power to direct the receipt of dividends from, or the proceeds from the sale of, any shares of Common Stock.

(e) Not applicable

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

The information set forth in Item 3 of this Statement is hereby incorporated by reference into this Item 6. Registration Rights Agreement Simultaneously with the execution of the Arrangement Agreement, the Company and Madryn and its affiliates party thereto (the "Madryn Parties") entered into a Registration Rights Agreement (as amended by that certain Amendment No. 1 to the Registration Rights Agreement, dated as of November 1, 2024, and that certain Amendment No. 2 to the Registration Rights Agreement, dated as of March 2, 2026, the "Registration Rights

Agreement"). Pursuant to the Registration Rights Agreement, the Madryn Parties are entitled to certain registration rights in respect of the Consideration Shares (as defined in the Registration Rights Agreement) that the Madryn Parties received upon consummation of the Arrangement Agreement. In addition, the Madryn Parties have certain "piggyback" rights if the Company or other holders of Common Stock undertake a registration, subject to customary cutbacks. In addition, the Madryn Parties agreed to not acquire any additional equity securities or debt securities convertible into the Company's equity. On March 2, 2026, the Company and the Madryn Parties executed an Amendment No. 2 to the Registration Rights Agreement (the "Second Amendment"). Pursuant to the Second Amendment, (i) if the Company receives a Shelf Notice (as defined in the Registration Rights Agreement) after the effective date of the Second Amendment, the Company will prepare and file a Registration Statement covering resale from time to time of all Registrable Securities (as defined in the Registration Rights Agreement) then beneficially owned by the Madryn Parties as promptly as practicable and in any event within five (5) business days after the date the Company files its Annual Report on Form 10-K for the year ended December 31, 2025 and (ii) the Madryn Parties agree at the 2026 annual meeting of the Company to vote all shares of Common Stock owned by the Madryn Parties in accordance with the voting recommendation of the Board of Directors of the Company on certain proposals as further described in the Second Amendment. The foregoing description of the Registration Rights Agreement does not purport to be complete and is qualified in its entirety by reference to the Form of Registration Rights Agreement, Amendment No. 1 to the Registration Rights Agreement, and the Second Amendment, which are attached as Exhibits 99.3, 99.4, and 99.5 respectively, to this Statement and are incorporated herein by reference. Lock-Up Agreements On November 9, 2026, in connection with an underwritten public offering of shares of Common Stock by the Company (the "2026 Public Offering"), the Reporting Persons entered into a lock-up agreement with the representative of the underwriters, pursuant to which the Reporting Persons agreed, subject to certain customary exceptions, not to take any of the following actions during the period beginning on the date of the final prospectus relating to the 2026 Public Offering and ending at the close of business 30 days after such date (the "Madryn Lock-Up Agreement"): (i) offer, pledge, sell, contract to sell, sell any option or contract to purchase, purchase any option or contract to sell, grant any option, right or warrant to purchase, lend, or otherwise transfer or dispose of, directly or indirectly, any shares of Common Stock or any securities convertible into or exercisable or exchangeable for Common Stock; (ii) enter into any hedging, swap, forward or other agreement or transaction that transfers, in whole or in part, any of the economic consequences of ownership of the Lock-Up Securities (as defined in the Madryn Lock-Up Agreement); (iii) make any demand for or exercise any right with respect to the registration under the Securities Act of 1933, as amended, of any Lock-Up Securities; and (iv) publicly disclose the intention to do any of the foregoing. On November 9, 2026, Avinash Amin also entered into a lock-up agreement with the representative of the underwriters in connection with the 2026 Public Offering (the "Amin Lock-Up Agreement"). Pursuant to the Amin Lock-Up Agreement, Mr. Amin agreed not to take any of the actions described in items (i) through (iv) above for the period beginning on the date of the final prospectus relating to the 2026 Public Offering and ending at the close of business 90 days after such date. The foregoing descriptions of the Madryn Lock-Up Agreement and the Amin Lock-Up Agreement do not purport to be complete and are qualified in their entirety by reference to the full text of the Madryn Lock-Up Agreement and Amin Lock-Up Agreement, which are attached as Exhibits 99.6 and 99.7, respectively, to this Statement and are incorporated herein by reference. Joint Filing Agreement Pursuant to Rule 13d-1(k) promulgated under the Securities Exchange Act of 1934, as amended, the Reporting Persons have entered into an agreement with respect to the joint filing of this Statement, and any amendments hereto, which agreement is attached hereto as Exhibit 99.1 and incorporated by reference herein. Except as described above and herein in this Statement, there are no other contracts, understandings or relationships (legal or otherwise) among the parties named in Item 2 hereto and between such persons and any person with respect to any of the Common Stock owned by the Funds.

Item 7. Material to be Filed as Exhibits.

Exhibit 99.1 Joint Filing Agreement, dated December 17, 2024 (incorporated by reference to Exhibit 99.1 of Madryn's Schedule 13D filed on December 17, 2024). Exhibit 99.2 Arrangement Agreement, dated August 11, 2024, by and between the Company and Greenbrook (incorporated by reference to Exhibit 2.1 of the Company's Form 8-K filed on August 13, 2024). Exhibit 99.3 Form of Registration Rights Agreement, dated August 11, 2024 (incorporated by reference to Exhibit 10.4 of the Company's Form 8-K filed on August 13, 2024). Exhibit 99.4 Amendment No. 1 to the Registration Rights Agreement, dated November 1, 2024, by and among the Company and the Funds (incorporated by reference to Exhibit 10.1 of the Company's Form 8-K filed on November 1, 2024). Exhibit 99.5 Amendment No. 2 to the Registration Rights Agreement, dated March 2, 2026, by and among the Company and the Funds (incorporated by reference to Exhibit 10.1 of the Company's Form 8-K filed on March 2, 2026). Exhibit 99.6 Madryn Lock-Up Agreement, dated November 9, 2026. Exhibit 99.7 Amin Lock-Up Agreement, dated November 9, 2026.

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.

MADRYN ASSET MANAGEMENT, LP

Signature: /s/ Matthew Girandola
Name/Title: Matthew Girandola / Chief Compliance Officer
Date: 11/16/2026

MADRYN HEALTH PARTNERS II, LP

Signature: /s/ Matthew Girandola
Name/Title: Matthew Girandola / Chief Compliance Officer
Date: 11/16/2026

MADRYN HEALTH PARTNERS II (CAYMAN MASTER), LP

Signature: /s/ Matthew Girandola
Name/Title: Matthew Girandola / Chief Compliance Officer
Date: 11/16/2026

MADRYN HEALTH ADVISORS II, LP

Signature: /s/ Matthew Girandola
Name/Title: Matthew Girandola / Chief Compliance Officer
Date: 11/16/2026

MADRYN HEALTH ADVISORS GP II, LLC

Signature: /s/ Matthew Girandola
Name/Title: Matthew Girandola / Chief Compliance Officer
Date: 11/16/2026

MADRYN SELECT OPPORTUNITIES, LP

Signature: /s/ Matthew Girandola
Name/Title: Matthew Girandola / Chief Compliance Officer
Date: 11/16/2026

MADRYN SELECT ADVISORS, LP

Signature: /s/ Matthew Girandola
Name/Title: Matthew Girandola / Chief Compliance Officer
Date: 11/16/2026

MADRYN SELECT ADVISORS GP, LLC

Signature: /s/ Matthew Girandola
Name/Title: Matthew Girandola / Chief Compliance Officer
Date: 11/16/2026

Comments accompanying signature: In accordance with Rule 13d-1(k)(1)(iii) under the Securities Exchange Act of 1934, as amended, the persons named above agree to the joint filing on behalf of each of them of this Statement on Schedule 13D with respect to the Common Stock.