UNITED STATES SECURITIES AND EXCHANGE COMMISSION WASHINGTON, D.C. 20549

FORM S-8 REGISTRATION STATEMENT under the **SECURITIES ACT OF 1933**

NEUROMETRIX, INC.

(Exact Name of Registrant as Specified in Its Charter)

04-3308180 Delaware

(State or Other Jurisdiction (I.R.S. Employer of Incorporation or Organization) Identification No.)

4b Gill Street Woburn, Massachusetts 01801

(781) 890-9989 (Address, Including Zip Code, of Principal Executive Offices)

NEUROMETRIX, INC. TWELFTH AMENDED AND RESTATED 2004 STOCK OPTION AND INCENTIVE PLAN NEUROMETRIX, INC. FIFTH AMENDED AND RESTATED 2010 EMPLOYEE STOCK PURCHASE PLAN

(Full Title of the Plan)

Shai N. Gozani, M.D., Ph.D. **President and Chief Executive Officer** NEUROMETRIX, INC. 4b Gill Street Woburn, Massachusetts 01801 (781) 890-9989 (Name, Address and Telephone Number, Including Area Code, of Agent For Service)

Copies to:

Megan N. Gates, Esq. Mintz, Levin, Cohn, Ferris, Glovsky and Popeo, P.C. One Financial Center Boston, MA 02111 Telephone: (617) 542-6000 Fax: (617) 542-2241

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company or an emerging growth company. See the definitions of "large accelerated filer," "accelerated filer," "smaller reporting company" and "emerging growth company" in Rule 12b-2 of the Exchange Act. (Check one):

Large accelerated filer Non-accelerated filer (do not check if a smaller reporting company)

Accelerated filer Smaller reporting company Emerging growth company

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 7(a)(2)(B) of the Securities Act.

CALCULATION OF REGISTRATION FEE

Title of Securities to be Registered	Amount to be Registered ⁽¹⁾	Proposed Maximum Offering Price Per Share ⁽²⁾	Proposed Maximum Aggregate Offering Price ⁽²⁾	Amount of Registration Fee
Common Stock, \$.0001 par value	652,500 shares	\$2.90	\$1,892,250	\$206.44
Rights to purchase Series A Junior Participating Cumulative Preferred Stock, \$.001 par value	(3)	(3)	(3)	None

- (1) The number of shares of common stock, par value \$.0001 per share ("Common Stock"), stated above consists of: (i) 500,000 shares available for issuance under the NeuroMetrix, Inc. Twelfth Amended and Restated 2004 Stock Option and Incentive Plan (together with previous versions of such plan, the "Twelfth Amended and Restated Stock Plan") plus such indeterminate number of additional shares of Common Stock as may be required pursuant to the Twelfth Amended and Restated Stock Plan in the event of a stock dividend, stock split, recapitalization, or other similar event and (ii) 152,500 shares which may be sold upon the exercise of options which may hereafter be granted under the NeuroMetrix, Inc. Fifth Amended and Restated 2010 Employee Stock Purchase Plan (the "2010 ESPP" and together with the Twelfth Amended and Restated Stock Plan, the "Plans"). The maximum number of shares which may be sold pursuant to the 2010 ESPP is subject to adjustment in accordance with certain anti-dilution and other provisions of the 2010 ESPP. Accordingly, pursuant to Rule 416(c) under the Securities Act of 1933, as amended (the "Securities Act"), this Registration Statement also covers an indeterminate number of shares which may be issuable pursuant to the Plans described herein.
- (2) This calculation is made solely for the purpose of determining the registration fee pursuant to the provisions of Rule 457(c) and (h) under the Securities Act on the basis of the average of the high and low sale prices per share of the Common Stock on the Nasdaq Capital Market as of a date (May 25, 2021) within five business days prior to filing this Registration Statement.
- (3) Pursuant to the Shareholder Rights Agreement, dated as of March 7, 2007, between NeuroMetrix, Inc. and American Stock Transfer & Trust Company, as amended, each share of Common Stock has an attached right to purchase a fraction of a share of Series A Junior Participating Cumulative Preferred Stock, par value \$0.001 per share, of the Company (the "Rights"), which Rights are not currently exercisable, on the terms set forth in the Rights Agreement. No separate consideration will be received for the Rights.

EXPLANATORY NOTE

In accordance with the instructional Note to Part I of Form S-8 as promulgated by the Securities and Exchange Commission, the information specified by Part I of Form S-8 has been omitted from this Registration Statement on Form S-8 for offers of Common Stock pursuant to the Plans. The documents containing the information specified in Part I will be delivered to the participants in the Plans as required by Rule 428(b)(1) under the Securities Act.

The numbers in this Registration Statement reflect two 1-for-6 reverse splits of our Common Stock completed on September 1, 2011 and February 15, 2013, a 1-for-4 reverse split of our Common Stock completed on December 1, 2015, a 1-for-8 reverse split of our Common Stock completed on May 11, 2017 and a 1-for-10 reverse split of our Common Stock completed on November 18, 2019.

Twelfth Amended and Restated Stock Plan

This Registration Statement on Form S-8 hereby registers 500,000 additional shares of Common Stock for issuance under the Twelfth Amended and Restated Stock Plan. In accordance with General Instruction E to Form S-8, the Company hereby incorporates herein by reference the original Registration Statement on Form S-8 filed by the Company with respect to the Twelfth Amended and Restated Stock Plan on August 9, 2004 (File No. 333-118059) and the additional Registration Statements on Form S-8 filed by the Company with respect to the Twelfth Amended and Restated Stock Plan on June 22, 2006 (File No. 333-135242), May 27, 2008 (File No. 333-151195), June 3, 2009 (File No. 333-159713), August 3, 2012 (File No. 333-183071), June 17, 2013 (File No. 333-189393), July 14, 2014 (File No. 333-197407), July 23, 2015 (File No. 333-205827), May 13, 2016 (File No. 333-211379), June 1, 2017 (File No. 333-218431), July 19, 2018 (File No. 333-226245), and January 28, 2020 (File No. 333-236105), together with all exhibits filed therewith or incorporated therein by reference.

2010 ESPP

This Registration Statement on Form S-8 hereby registers 152,500 additional shares of Common Stock for issuance under the 2010 ESPP. In accordance with General Instruction E to Form S-8, the Company hereby incorporates herein by reference the original Registration Statement on Form S-8 filed by the Company with respect to the 2010 ESPP on May 28, 2010 (File No. 333-167180) and the additional Registration Statements on Form S-8 filed by the Company with respect to the 2010 ESPP on April 28, 2011 (File No. 333-173769), August 3, 2012 (File No. 333-183701), February 25, 2013 (File No. 333-186827), July 14, 2014 (File No. 333-197407), July 23, 2015 (File No. 333-205827), May 13, 2016 (File No. 333-211379), June 1, 2017 (File No. 333-218431), July 19, 2018 (File No. 333-226245) and January 28, 2020 (File No. 333-236105), together with all exhibits filed therewith or incorporated therein by reference.

PART II

INFORMATION REQUIRED IN THE REGISTRATION STATEMENT

Item 8. Exhibits.

Exhibit No.	Identification of Exhibits
4.1	Third Amended and Restated Certificate of Incorporation of the Registrant (filed as Exhibit 4.1 to the Registrant's Registration Statement on Form S-8 filed on August 9, 2004, File No. 333-118059, and incorporated in this document by reference).
4.2.1	Certificate of Designations for Series A Junior Cumulative Preferred Stock (filed as Exhibit 3.1 to the Registration Statement on Form 8-A filed on March 8, 2007, File No. 001-33351, and incorporated in this document by reference).
4.2.2	Certificate of Designation of Preferences, Rights and Limitations of Series A-1 Convertible Preferred Stock (filed as Exhibit 3.1 to the Registrant's Current Report on Form 8-K filed on June 6, 2013, File No. 001-33351, and incorporated in this document by reference).
4.2.3	Certificate of Designation of Preferences, Rights and Limitations of Series A-2 Convertible Preferred Stock (filed as Exhibit 3.2 to the Registrant's Current Report on Form 8-K filed on June 6, 2013, File No. 001-33351, and incorporated in this document by reference).
4.2.4	Certificate of Designation of Preferences, Rights and Limitations of Series A-3 Convertible Preferred Stock (filed as Exhibit 3.1 to the Registrant's Current Report on Form 8-K filed on June 25, 2014, File No. 001-33351, and incorporated in this document by reference).
4.2.5	Certificate of Designation of Preferences, Rights and Limitations of Series A-4 Convertible Preferred Stock (filed as Exhibit 3.2 to the Registrant's Current Report on Form 8-K filed on June 25, 2014, File No. 001-33351, and incorporated in this document by reference).
4.2.6	Certificate of Designation of Preferences, Rights and Limitations of Series B Convertible Preferred Stock (filed as Exhibit 3.1 to the Registrant's Current Report on Form 8-K filed on May 29, 2015, File No. 001-33351, and incorporated in this document by reference).
4.2.7	Certificate of Designation of Preferences, Rights and Limitations of Series C Convertible Preferred Stock (filed as Exhibit 3.1 to the Registrant's Current Report on Form 8-K filed on December 30, 2015, File No. 001-33351, and incorporated in this document by reference).
4.2.8	Certificate of Designation of Preferences, Rights and Limitations of Series D Convertible Preferred Stock (filed as Exhibit 3.1 to the Registrant's Current Report on Form 8-K filed on June 3, 2016, File No. 001-33351, and incorporated in this document by reference).
4.2.9	Certificate of Designation of Preferences, Rights and Limitations of Series E Convertible Preferred Stock (filed as Exhibit 3.1 to the Registrant's Current Report on Form 8-K filed on December 29, 2016, File No. 001-33351, and incorporated in this document by reference).
4.2.10	Certificate of Designation of Preferences, Rights and Limitations of Series F Convertible Preferred Stock (filed as Exhibit 3.1 to the Registrant's Current Report on Form 8-K filed on July 11, 2017, File No. 001-33351, and incorporated in this document by reference).
4.3	Certificate of Amendment to Restated Certificate of Incorporation of NeuroMetrix, Inc., dated September 1, 2011 (filed as Exhibit 3.1 to the Registrant's Current Report on Form 8-K filed on September 1, 2011, File No. 001-33351, and incorporated in this document by reference).
4.4	Certificate of Amendment to Restated Certificate of Incorporation of NeuroMetrix, Inc., dated February 15, 2013 (filed as Exhibit 3.1 to the Registrant's Current Report on Form 8-K filed on February 15, 2013, File No. 001-33351, and incorporated in this document by reference).
4.5	Certificate of Amendment to Restated Certificate of Incorporation of NeuroMetrix, Inc., dated December 1, 2015 (filed as Exhibit 3.1 to the Registrant's Current Report on Form 8-K filed on December 1, 2015, File No. 001-33351, and incorporated in this document by reference).
4.6	Certificate of Amendment to Restated Certificate of Incorporation of NeuroMetrix, Inc., dated May 11, 2017 (filed as Exhibit 3.1 to the Registrant's Current Report on Form 8-K filed on May 12, 2017, File No. 001-33351, and incorporated in this document by reference).

- 4.7 Certificate of Amendment to Restated Certificate of Incorporation of NeuroMetrix, Inc., dated November 18, 2019 (filed as Exhibit 3.1 to the Registrant's Current Report on Form 8-K filed on November 18, 2019, File No. 001-33351, and incorporated in this document by reference).
- 4.8 Shareholder Rights Agreement, dated as of March 7, 2007, between NeuroMetrix, Inc. and American Stock Transfer & Trust Company, as Rights Agent (filed as Exhibit 4.1 to the Registration Statement on Form 8-A filed on March 8, 2007, File No. 001-33351, and incorporated in this document by reference).
- 4.9 Amendment to Shareholder Rights Agreement, dated September 8, 2009, between NeuroMetrix, Inc. and American Stock Transfer & Trust Company, as Rights Agent (filed as Exhibit 4.1 to the Registrant's Current Report on Form 8-K filed on September 14, 2009, File No. 001-33351, and incorporated in this document by reference).
- 4.10 Amendment No. 2 to Shareholder Rights Agreement, dated June 5, 2013, between NeuroMetrix, Inc. and American Stock Transfer & Trust Company, as Rights Agent (filed as Exhibit 4.1 to the Registrant's Current Report on Form 8-K filed on June 6, 2013, File No. 001-33351, and incorporated in this document by reference).
- 4.11 Amendment No. 3 to Shareholder Rights Agreement, dated June 25, 2014, between NeuroMetrix, Inc. and American Stock Transfer & Trust Company, as Rights Agent (filed as Exhibit 4.2 to the Registrant's Current Report on Form 8-K filed on June 25, 2014, File No. 001-33351, and incorporated in this document by reference).
- 4.12 Amendment No. 4 to Shareholder Rights Agreement, dated May 28, 2015, between NeuroMetrix, Inc. and American Stock Transfer & Trust Company, as Rights Agent (filed as Exhibit 4.1 to the Registrant's Quarterly Report on Form 10-Q filed on July 23, 2015, File No. 001-33351, and incorporated in this document by reference).
- 4.13 Amendment No. 5 to Shareholder Rights Agreement, dated December 29, 2015, between NeuroMetrix, Inc. and American Stock Transfer & Trust Company, as Rights Agent (filed as Exhibit 4.1 to the Registrant's Current Report on Form 8-K filed on December 30, 2015, File No. 001-33351, and incorporated in this document by reference).
- 4.14 Amendment No. 6 to Shareholder Rights Agreement, dated June 3, 2016, between NeuroMetrix, Inc. and American Stock Transfer & Trust Company, as Rights Agent(filed as Exhibit 4.3 to the Registrant's Current Report on Form 8-K filed on June 3, 2016, File No. 001-33351, and incorporated in this document by reference).
- 4.15 Amendment No. 7 to Shareholder Rights Agreement, dated December 28, 2016, between NeuroMetrix, Inc. and American Stock Transfer & Trust Company, as Rights Agent (filed as Exhibit 4.2 to the Registrant's Current Report on Form 8-K filed on December 29, 2016, File No. 001-33351, and incorporated in this document by reference).
- 4.16 Amendment No. 8 to Shareholder Rights Agreement, dated February 8, 2017, between NeuroMetrix, Inc. and American Stock Transfer & Trust Company, as Rights Agent (filed as Exhibit 4.2.9 to the Registrant's Annual Report on Form 10-K filed on February 8, 2017, File No. 001-33351, and incorporated in this document by reference).
- 4.17 Amendment No. 9 to Shareholder Rights Agreement, dated July 10, 2017, between NeuroMetrix, Inc. and American Stock Transfer & Trust Company, as Rights Agent (filed as Exhibit 4.2 to the Registrant's Current Report on Form 8-K filed on July 11, 2017, File No. 001-33351, and incorporated in this document by reference).
- 4.18 Amendment No. 10 to Shareholder Rights Agreement, dated February 5, 2018, between NeuroMetrix, Inc. and American Stock Transfer & Trust Company, as Rights Agent (filed as Exhibit 4.2.11 to the Registrant's Annual Report on Form 10-K filed on February 8, 2018, File No. 001-33351, and incorporated in this document by reference).
- 4.19 Amendment No. 11 to Shareholder Rights Agreement, dated January 21, 2019, between NeuroMetrix, Inc. and American Stock Transfer & Trust Company, as Rights Agent (filed as Exhibit 4.2.12 to the Registrant's Annual Report on Form 10-K filed on January 24, 2019, File No. 001-33351, and incorporated in this document by reference).
- 4.20 Amendment No. 12 to Shareholder Rights Agreement, dated January 24, 2020, between NeuroMetrix, Inc. and American Stock Transfer & Trust Company, as Rights Agent (filed as Exhibit 4.3.13 to the Registrant's Annual Report on Form 10-K filed on January 27, 2020, File No. 001-33351, and incorporated in this document by reference).

- 4.21 Amendment No. 13 to Shareholder Rights Agreement, dated January 24, 2020, between NeuroMetrix, Inc. and American Stock Transfer & Trust Company, as Rights Agent (filed as Exhibit 4.3.14 to the Registrant's Annual Report on Form 10-K filed on January 29, 2021, File No. 001-33351, and incorporated in this document by reference).
- 4.22 Specimen certificate for shares of Common Stock (filed as Exhibit 4.1 to the Registrant's Registration Statement on Form S-1 filed on May 13, 2004, as amended, File No. 333-115440, and incorporated in this document by reference).
- 5.1 * Opinion of Mintz, Levin, Cohn, Ferris, Glovsky and Popeo, P.C.
- 23.1 Consent of Mintz, Levin, Cohn, Ferris, Glovsky and Popeo, P.C. (included in Exhibit 5.1).
- 23.2 * Consent of Moody, Famiglietti & Andronico, LLP.
- 24.1 Powers of Attorney (included in the signature page to this Registration Statement).
- 99.1 NeuroMetrix, Inc. Twelfth Amended and Restated 2004 Stock Option and Incentive Plan (filed as Appendix A to the Registrant's Proxy Statement for its 2021 Annual Meeting of Stockholders, filed on March 16, 2021, File No. 001-33351, and incorporated in this document by reference).
- 99.2 NeuroMetrix, Inc. Fifth Amended and Restated 2010 Employee Stock Purchase Plan, as amended (filed as Appendix B to the Registrant's Proxy Statement for its 2021 Annual Meeting of Stockholders, filed on March 16, 2021, File No. 001-33351, and incorporated in this document by reference).

^{*} Filed herewith.

SIGNATURES

The Registrant. Pursuant to the requirements of the Securities Act of 1933, the Registrant certifies that it has reasonable grounds to believe that it meets all of the requirements for filing on Form S-8 and has duly caused this Registration Statement to be signed on its behalf by the undersigned, thereunto duly authorized, in Woburn, Massachusetts on this 25th day of May, 2021.

NEUROMETRIX, INC.

By <u>/s/ SHAI N. GOZANI, M.D., PH.D.</u> Shai N. Gozani, M.D., Ph.D. President and Chief Executive Officer

Each person whose signature appears below constitutes and appoints Shai N. Gozani, M.D., Ph.D. and Thomas T. Higgins, and each of them singly, his true and lawful attorneys-in-fact and agents, with full power of substitution and resubstitution in each of them singly, for him and in his name, place and stead, and in any and all capacities, to sign any and all amendments (including post-effective amendments) to this Registration Statement on Form S-8 of NeuroMetrix, Inc., and to file the same, with all exhibits thereto and other documents in connection therewith, with the Securities and Exchange Commission, granting to the attorneys-in-fact and agents, and each of them, full power and authority to do and perform each and every act and thing requisite or necessary to be done in or about the premises, as full to all intents and purposes as he or she might or could do in person, hereby ratifying and confirming all that the attorneys-in-fact and agents or any of each of them or their substitute may lawfully do or cause to be done by virtue hereof.

Pursuant to the requirements of the Securities Act of 1933, this Registration Statement has been signed by the following persons in the capacities and on the dates indicated.

Signature <u>Title</u> <u>Date</u>

/s/ SHAI N. GOZANI, M.D., PH.D. President, Chief Executive May 26, 2021 Shai N. Gozani, M.D., Ph.D. Officer and Director (principal executive officer)

<u>/s/ THOMAS T. HIGGINS</u> Senior Vice President, May 26, 2021
Thomas T. Higgins Chief Financial Officer and
Treasurer (principal financial
and accounting officer)

/s/ DAVID E. GOODMAN, M.D. Director May 26, 2021 David E. Goodman, M.D.

/s/ NANCY E. KATZ Director May 26, 2021 Nancy E. Katz

/s/ DAVID VAN AVERMAETE Director May 26, 2021
David Van Avermaete

One Financial Center Boston, MA 02111 617 542 6000 mintz.com

May 26, 2021

NeuroMetrix, Inc. 4b Gill Street Woburn, Massachusetts 01801

Ladies and Gentlemen:

We have acted as legal counsel to NeuroMetrix, Inc., a Delaware corporation (the "Company"), in connection with the preparation and filing with the Securities and Exchange Commission (the "Commission") of a Registration Statement on Form S-8 (the "Registration Statement"), pursuant to which the Company is registering the issuance under the Securities Act of 1933, as amended (the "Securities Act"), of an aggregate of 500,000 shares (the "Plan Shares") of the Company's common stock, \$0.0001 par value per share (the "Common Stock") that may be issued pursuant to the Company's Twelfth Amended and Restated 2004 Stock Option and Incentive Plan (the "Stock Plan") and 152,500 shares (the "ESPP Shares" and together with the Plan Shares, the "Shares") of Common Stock that may be issued pursuant to the Company's Fifth Amended and Restated 2010 Employee Stock Purchase Plan (the "2010 ESPP" and together with the Stock Plan, the "Plans"), and the associated rights to purchase Preferred Stock (the "Rights") issuable pursuant to the Shareholder Rights Agreement, dated as of March 7, 2007, as amended, between the Company and American Stock Transfer & Trust Company (the "Rights Agreement"). Each Share has an attached Right to purchase a fraction of a share of Series A Junior Participating Cumulative Preferred Stock, par value \$0.001 per share, which Rights are not currently exercisable, on the terms set forth in the Rights Agreement. This opinion is being rendered in connection with the filing of the Registration Statement with the Commission. All capitalized terms used herein and not otherwise defined shall have the respective meanings given to them in the Registration Statement.

In connection with this opinion, we have examined the Company's Restated Certificate of Incorporation, as amended, the Rights Agreement and Amended and Restated Bylaws, each as currently in effect; such other records of the corporate proceedings of the Company and certificates of the Company's officers as we have deemed relevant; and the Registration Statement and the exhibits thereto.

In our examination, we have assumed the genuineness of all signatures, the legal capacity of natural persons, the authenticity of all documents submitted to us as originals, the conformity to original documents of all documents submitted to us as certified or photostatic copies and the authenticity of the originals of such copies. In addition, we have assumed that the Company will receive any required consideration in accordance with the terms of the Plans.

With respect to our opinion regarding the nature of the Rights as binding obligations of the Company, we (i) express no opinion as to the determination that a court of competent jurisdiction may make regarding whether the Company's Board of Directors would be required to redeem or terminate, or take other action with respect to the Rights at some future time based on the facts and circumstances existing at that time; (ii) have assumed that the members of the Company's Board of Directors have acted in a manner consistent with their fiduciary duties as required under applicable law in adopting the Rights Agreement;

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and (iii) have addressed the Rights and the Rights Agreement in their entirety, and it is not settled whether the invalidity of any particular

provision of the Rights Agreement or the Rights issued thereunder would result in invalidating the Rights in their entirety.

Our opinion is limited to the General Corporation Law of the State of Delaware and we express no opinion with respect to the laws of any other jurisdiction. No opinion is expressed herein with respect to the qualification of the Shares or the Rights under the securities or blue sky laws of any state or any foreign jurisdiction.

Please note that we are opining only as to the matters expressly set forth herein, and no opinion should be inferred as to any other matters. This opinion is based upon currently existing statutes, rules, regulations and judicial decisions, and we disclaim any obligation to advise you of any change in any of these sources of law or subsequent legal or factual developments which might affect any matters or opinions set forth herein.

Based upon the foregoing, we are of the opinion that (i) the Shares, when issued and delivered in accordance with the terms of the Plans, will be validly issued, fully paid and non-assessable and (ii) the Rights, when the Shares are issued and delivered in accordance with the terms of the Plans, will constitute binding obligations of the Company.

We understand that you wish to file this opinion with the Commission as an exhibit to the Registration Statement in accordance with the requirements of Item 601(b)(5) of Regulation S-K promulgated under the Securities Act, and we hereby consent thereto. In giving this consent, we do not admit that we are within the category of persons whose consent is required under Section 7 of the Securities Act or the rules and regulations of the Commission promulgated thereunder.

Very truly yours,

/s/ Mintz, Levin, Cohn, Ferris, Glovsky and Popeo, P.C.

Mintz, Levin, Cohn, Ferris, Glovsky and Popeo, P.C.

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We hereby consent to the incorporation by reference in this Registration Statement on Form S-8 of our report dated January 28, 2021, relating to the financial statements and schedule of NeuroMetrix, Inc. (the "Company") as of and for the years ended December 31, 2020 and 2019, appearing in the Company's Annual Report on Form 10-K for the year ended December 31, 2020. Our report contains an explanatory paragraph regarding the Company's ability to continue as a going concern.

/s/ Moody, Famiglietti & Andronico

Tewksbury, Massachusetts

May 26, 2021