

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

AMENDMENT NO. 12 TO
FORM S-1
REGISTRATION STATEMENT
UNDER
THE SECURITIES ACT OF 1933

NEUROMETRIX, INC.
(Exact name of registrant as specified in its charter)

Delaware
(State or other jurisdiction of
incorporation or organization)

3841
(Primary Standard Industrial
Classification Code Number)

04-3308180
(I.R.S. Employer
Identification No.)

1000 Winter Street
Waltham, Massachusetts 02451
(781) 890-9989

(Address, including zip code, and telephone number, including area code, of registrant's principal executive offices)

Shai N. Gozani, M.D., Ph.D.
Chief Executive Officer
NeuroMetrix, Inc.
1000 Winter Street
Waltham, Massachusetts 02451
(781) 890-9989

(Name, address, including zip code, 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
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Stephen E. Older, Esq.
McGuireWoods LLP
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New York, NY 10105-0106
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Approximate date of commencement of proposed sale to the public: As soon as practicable after this registration statement becomes effective.

If any of the securities being registered on this Form are to be offered on a delayed or continuous basis pursuant to Rule 415 under the Securities Act of 1933 check the following box:

If this Form is filed to register additional securities for an offering pursuant to Rule 462(b) under the Securities Act, please check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering.

If this Form is a post-effective amendment filed pursuant to Rule 462(c) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering.

If this Form is a post-effective amendment filed pursuant to Rule 462(d) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering.

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

Large accelerated filer

Accelerated filer

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

Smaller reporting company

The Registrant hereby amends this Registration Statement on such date or dates as may be necessary to delay its effective date until the Registrant shall file a further amendment which specifically states that this Registration Statement shall thereafter become effective in accordance with Section 8(a) of the Securities Act of 1933 or until the Registration Statement shall become effective on such date as the Commission, acting pursuant to said Section 8(a), may determine.

EXPLANATORY NOTE

This Amendment No. 12 to the Registration Statement on Form S-1 (Registration No. 333-188133) of NeuroMetrix, Inc. (the "Form S-1") is being filed solely for the purpose of filing Exhibits 5.1 (replacing previously filed Exhibit 5.1), Exhibit 10.23 and 23.2 (replacing previously filed Exhibit 23.2). Other than the addition of such Exhibits and corresponding changes to the exhibit index and signature page in Part II of the Form S-1, the remainder of the Form S-1 is unchanged from Amendment No. 11 to the Form S-1 as filed on May 15, 2015. Accordingly, the prospectus that forms a part of the Form S-1 is not reproduced in this Amendment No. 12.

PART II

INFORMATION NOT REQUIRED IN PROSPECTUS

Item 13. Other Expenses of Issuance and Distribution

The following table sets forth the costs and expenses, other than the underwriting discounts and commissions, payable by us in connection with this offering. All expenses are estimated except the fees payable to the SEC and the Financial Industry Regulatory Authority (FINRA).

SEC registration fee	\$	3,615
FINRA fee		5,000
Legal fees and expenses		248,000
Accounting fees and expenses		85,000
Printing expenses		25,000
Transfer agent fees		13,000
Miscellaneous		65,385
	\$	<u>445,000</u>

Item 14. Indemnification of Directors and Officers

Our amended and restated certificate of incorporation provides that we shall indemnify, to the fullest extent authorized by the Delaware General Corporation Law, each person who is involved in any litigation or other proceeding because such person is or was our director or officer or is or was serving as an officer or director of another entity at our request, against all expense, loss or liability reasonably incurred or suffered in connection therewith. Our amended and restated certificate of incorporation provides that the right to indemnification includes the right to be paid expenses incurred in defending any proceeding in advance of its final disposition, provided, however, that such advance payment will only be made upon delivery to us of an undertaking, by or on behalf of the director or officer, to repay all amounts so advanced if it is ultimately determined that such director is not entitled to indemnification. If we do not pay a proper claim for indemnification in full within 10 days after we receive a written claim for such indemnification, our amended and restated certificate of incorporation and our restated bylaws authorize the claimant to bring an action against us and prescribe what constitutes a defense to such action.

Section 145 of the Delaware General Corporation Law permits a corporation to indemnify any director or officer of the corporation against expenses (including attorney's fees), judgments, fines and amounts paid in settlement actually and reasonably incurred in connection with any action, suit or proceeding, whether civil, criminal, administrative or investigative (other than an action by or in right of the corporation) brought by reason of the fact that such person is or was a director or officer of the corporation, if such person acted in good faith and in a manner that he reasonably believed to be in, or not opposed to, the best interests of the corporation, and, with respect to any criminal action or proceeding, if he or she had no reason to believe his or her conduct was unlawful. In a derivative action, (i.e., one brought by or on behalf of the corporation), indemnification may be provided only for expenses actually and reasonably incurred by any director or officer in connection with the defense or settlement of such an action or suit if such person acted in good faith and in a manner that he or she reasonably believed to be in, or not opposed to, the best interests of the corporation, except that no indemnification shall be provided if such person shall have been adjudged to be liable to the corporation, unless and only to the extent that the court in which the action or suit was brought shall determine that the defendant is fairly and reasonably entitled to indemnity for such expenses despite such adjudication of liability.

Pursuant to Section 102(b)(7) of the Delaware General Corporation Law, Article Seventh of our amended and restated certificate of incorporation eliminates the liability of a director to us or our stockholders for monetary damages for such a breach of fiduciary duty as a director, except for liabilities arising:

- from any breach of the director’s duty of loyalty to us or our stockholders;
- from acts or omissions not in good faith or which involve intentional misconduct or a knowing violation of law;
- under Section 174 of the Delaware General Corporation Law; and
- from any transaction from which the director derived an improper personal benefit.

As permitted by Section 145 of the Delaware General Corporation Law, we carry insurance policies insuring our directors and officers against certain liabilities that they may incur in their capacity as directors and officers.

Item 15. Recent Sales of Unregistered Securities

On June 26, 2014, we issued to one institutional investor 4,022,357 shares of Series A-4 convertible preferred stock (the “Series A-4 Preferred Stock”), at a price of \$1,000 per share, which is convertible into an aggregate of 1,971,744 shares of common stock, and five year warrants (the “2014 Warrants”) to purchase up to 3,921,569 shares of common stock at an exercise price of \$2.04 per share. The shares of Series A-4 Preferred Stock and 2014 Warrants described above were not initially registered under the Securities Act of 1933, as amended (the “Securities Act”), and the issuance and sale of such securities was exempt from registration pursuant to Section 4(2) of the Securities Act.

On June 10, 2013, we issued to one institutional investor 3,370,510 shares of Series A-2 convertible preferred stock (the “Series A-2 Preferred Stock”), at a price of \$1,000 per share, which is convertible into an aggregate of 1,608,835 shares of common stock, and five year warrants (the “2013 Warrants”) to purchase up to 2,365,934 shares of common stock at an exercise price of \$2.00 per share. The shares of Series A-2 Preferred Stock and 2013 Warrants described above were not initially registered under the Securities Act of 1933, and the issuance and sale of such securities was exempt from registration pursuant to Section 4(2) of the Securities Act. As of December 31, 2013, there were no shares of Series A-2 Preferred Stock outstanding, as all of which were converted into shares of our common stock.

Item 16. Exhibits and Financial Statement Schedules

The exhibits filed with this registration statement are set forth on the exhibit index following the signature page and are incorporated by reference in their entirety into this item.

Item 17. Undertakings

The undersigned registrant hereby undertakes:

- (1) To file, during any period in which offers or sales are being made, a post-effective amendment to this registration statement:
 - (i) To include any prospectus required by Section 10(a)(3) of the Securities Act of 1933;
 - (ii) To reflect in the prospectus any facts or events arising after the effective date of the registration statement (or the most recent post-effective amendment thereof) which, individually or in the aggregate, represent a fundamental change in the information set forth in the registration statement. Notwithstanding the foregoing, any increase or decrease in volume of securities offered (if the total dollar value of securities offered would not exceed that which was registered) and any deviation from the in the form of prospectus filed with the Commission pursuant to Rule 424(b) if, in the aggregate, the changes in volume and price represent no more than 20 percent change in the maximum aggregate offering price set forth in the “Calculation of Registration Fee” table in the effective registration statement;
 - (iii) To include any material information with respect to the plan of distribution not previously disclosed in the registration statement or any material change to such information in the registration statement;

- (2) That, for purposes of determining any liability under the Securities Act of 1933, each such post-effective amendment shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.
- (3) To remove from registration by means of a post-effective amendment any of the securities being registered which remain unsold at the termination of the offering.
- (4) That, for the purpose of determining liability of the registrant under the Securities Act of 1933 to any purchaser in the initial distribution of the securities:

The undersigned registrant undertakes that in a primary offering of securities of the undersigned registrant pursuant to this registration statement, regardless of the underwriting method used to sell the securities to the purchaser, if the securities are offered or sold to such purchaser by means of any of the following communications, the undersigned registrant will be a seller to the purchaser and will be considered to offer or sell such securities to such purchaser:

- (i) Any preliminary prospectus or prospectus of the undersigned registrant relating to the offering required to be filed pursuant to Rule 424;
- (ii) Any free writing prospectus relating to the offering prepared by or on behalf of the undersigned registrant or used or referred to by the undersigned registrant;
- (iii) The portion of any other free writing prospectus relating to the offering containing material information about the undersigned registrant or its securities provided by or on behalf of the undersigned registrant; and
- (iv) Any other communication that is an offer in the offering made by the undersigned registrant to the purchaser.

The undersigned registrant hereby undertakes to deliver or cause to be delivered with the prospectus, to each person to whom the prospectus is sent or given, the latest annual report, to security holders that is incorporated by reference in the prospectus and furnished pursuant to and meeting the requirements of Rule 14a-3 or Rule 14c-3 under the Securities Exchange Act of 1934; and, where interim financial information required to be presented by Article 3 of Regulation S-X is not set forth in the prospectus, to deliver, or cause to be delivered to each person to whom the prospectus is sent or given, the latest quarterly report that is specifically incorporated by reference in the prospectus to provide such interim financial information.

Insofar as indemnification for liabilities arising under the Securities Act of 1933 may be permitted to directors, officers, and controlling persons of the registrant pursuant to the foregoing provisions, or otherwise, the registrant has been advised that in the opinion of the Securities and Exchange Commission such indemnification is against public policy as expressed in the Act and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the registrant of expenses incurred or paid by a director, officer or controlling person of the registrant in the successful defense of any action, suit or proceeding) is asserted by such director, officer or controlling person in connection with the securities being registered, the registrant will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by it is against public policy as expressed in the Act and will be governed by the final adjudication of such issue.

The undersigned registrant hereby undertakes that:

- (1) For purposes of determining any liability under the Securities Act of 1933, the information omitted from the form of prospectus filed as part of this registration statement in reliance upon Rule 430A and contained in a form of prospectus filed by the registrant pursuant to Rule 424(b)(1) or (4) or 497(h) under the Securities Act shall be deemed to be part of this registration statement as of the time it was declared effective.
- (2) For the purpose of determining any liability under the Securities Act of 1933, each post-effective amendment that contains a form of prospectus shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of these securities at that time shall be deemed to be the initial *bona fide* offering.

- (3) For the purpose of determining liability under the Securities Act of 1933 to any purchaser, if the registrant is subject to Rule 430C, each prospectus filed pursuant to Rule 424(b) as part of a registration statement relating to an offering, other than registration statements relying on Rule 430B or other than prospectuses filed in reliance on Rule 430A, shall be deemed to be part of and included in the registration statement as of the date it is first used after effectiveness. Provided, however, that no statement made in a registration statement or prospectus that is part of the registration statement or made in a document incorporated or deemed incorporated by reference into the registration statement or prospectus that is part of the registration statement will, as to a purchaser with a time of contract of sale prior to such first use, supersede or modify any statement that was made in the registration statement or prospectus that was part of the registration statement or made in any such document immediately prior to such date of first use.

EXHIBIT INDEX

Exhibit Number	Description
1.1	Form of Underwriting Agreement (previously filed with this Registration Statement)
2.1	Asset Purchase Agreement dated November 7, 2008 by and between NeuroMetrix, Inc. and Advanced Diagnostics, LLC ⁽⁷⁾
3.1.1	Third Amended and Restated Certificate of Incorporation of NeuroMetrix, Inc. dated July 27, 2004 ⁽⁶⁾
3.1.2	Certificate of Designations for Series A Junior Cumulative Preferred Stock, par value \$0.001 per share, dated March 7, 2007 ⁽⁵⁾
3.1.3	Certificate of Amendment to Restated Certificate of Incorporation of NeuroMetrix, Inc. dated September 1, 2011 ⁽¹⁴⁾
3.1.4	Certificate of Amendment to Restated Certificate of Incorporation of NeuroMetrix, Inc. dated February 15, 2013 ⁽¹⁵⁾
3.1.5	Certificate of Designation of Preferences, Rights and Limitations of Series A-1 Convertible Preferred Stock, par value \$0.001 per share, dated June 5, 2013 ⁽²¹⁾
3.1.6	Certificate of Designation of Preferences, Rights and Limitations of Series A-2 Convertible Preferred Stock, par value \$0.001 per share, dated June 5, 2013 ⁽²¹⁾
3.1.7	Certificate of Designation of Preferences, Rights and Limitations of Series A-3 Convertible Preferred Stock, par value \$0.001 per share, dated June 24, 2014 ⁽²⁷⁾
3.1.8	Certificate of Designation of Preferences, Rights and Limitations of Series A-4 Convertible Preferred Stock, par value \$0.001 per share, dated June 24, 2014 ⁽²⁷⁾
3.1.9	Form of Certificate of Designation of Preferences, Rights and Limitations of Series B Convertible Preferred Stock, par value \$0.001 per share (previously filed with this Registration Statement)
3.2.1	Second Amended and Restated Bylaws of NeuroMetrix, Inc. ⁽⁶⁾
3.2.2	Amendment No. 1 to Second Amended and Restated Bylaws of NeuroMetrix, Inc. ⁽⁴⁾
4.1	Specimen Certificate for Shares of Common Stock ⁽¹⁾
4.2.1	Shareholder Rights Agreement, dated as of March 7, 2007, between NeuroMetrix, Inc. and American Stock Transfer & Trust Company, as Rights Agent ⁽⁵⁾
4.2.2	Amendment to Shareholder Rights Agreement, dated September 8, 2009, between NeuroMetrix, Inc. and American Stock Transfer & Trust Company, as Rights Agent ⁽⁹⁾
4.2.3	Amendment No. 2 to Shareholder Rights Agreement, dated June 5, 2013, between NeuroMetrix, Inc. and American Stock Transfer & Trust Company, as Rights Agent ⁽²¹⁾
4.2.4	Amendment No. 3 to Shareholder Rights Agreement, dated June 25, 2014, between NeuroMetrix, Inc. and American Stock Transfer & Trust Company, as Rights Agent ⁽²⁷⁾
4.3	Form of Warrant (2015) to be issued as part of a Unit (previously filed with this registration statement)
4.4	[Reserved]
4.5	Form of Underwriter's Warrant (previously filed with this registration statement)
4.6	Form of Unit Warrant to purchase Common Stock (February 2012) ⁽³⁰⁾
4.7	Form of Placement Agent Warrant (February 2012) ⁽³⁰⁾
4.8	Form of Common Stock Purchase Warrant (June 2013) ⁽²²⁾
4.9	Form of Common Stock Purchase Warrant (June 2014) ⁽²⁷⁾
4.10	Form of Warrant Agent Agreement (previously filed with this registration statement)
5.1#*	Opinion of Mintz, Levin, Cohn, Ferris, Glovsky and Popeo, P.C.
10.1.1	Lease Agreement, dated October 18, 2000, between Fourth Avenue LLC and NeuroMetrix, Inc. ⁽¹⁾
10.1.2	Amendment Number One to Lease, dated February 22, 2008, between Fourth Avenue LLC and NeuroMetrix, Inc. ⁽¹¹⁾
10.1.3	Amendment Number Two to Lease, dated June 6, 2012, between Fourth Avenue LLC and NeuroMetrix, Inc. ⁽²⁰⁾
10.1.4	Amendment Number Three to Lease, dated June 20, 2013, between Fourth Avenue LLC and NeuroMetrix, Inc. ⁽²³⁾
10.1.5	Lease Agreement, dated August 27, 2014, between Cummings Properties, LLC and NeuroMetrix, Inc. ⁽²⁸⁾

Exhibit Number	Description
10.1.6	Lease Agreement, dated September 10, 2014, between, Boston Properties, Inc. and NeuroMetrix, Inc. ⁽²⁸⁾
10.2.1	Loan and Security Agreement between NeuroMetrix, Inc. and Comerica Bank, dated March 5, 2010 ⁽¹²⁾
10.2.2	First Modification to Loan and Security Agreement between NeuroMetrix, Inc. and Comerica Bank, dated March 1, 2011 ⁽¹⁶⁾
10.2.3	Fifth Modification to Loan and Security Agreement between NeuroMetrix, Inc. and Comerica Bank, dated January 31, 2014 ⁽²⁶⁾
10.2.4	Sixth Modification to Loan and Security Agreement with Comerica Bank, dated January 23, 2015
10.3+	Amended and Restated 1996 Stock Option/Restricted Stock Plan ⁽¹⁾
10.4.1+	Amended and Restated 1998 Equity Incentive Plan ⁽¹⁾
10.4.2+	Second Amendment to Amended and Restated 1998 Equity Incentive Plan ⁽¹⁾
10.5.1+	Seventh Amended and Restated 2004 Stock Option and Incentive Plan ⁽²⁴⁾
10.5.2+	Form of Restricted Stock Agreement ⁽¹²⁾
10.5.3+	Form of Incentive Stock Option Agreement ⁽²⁾
10.5.4+	Form of Non-Qualified Stock Option Agreement For Company Employees ⁽²⁾
10.5.5+	Form of Non-Qualified Stock Option Agreement For Non-Employee Directors ⁽²⁾
10.6+	2010 Employee Stock Purchase Plan ⁽¹³⁾
10.7+	Second Amended and Restated 2010 Employee Stock Purchase Plan ⁽²⁵⁾
10.8+	2009 Non-Qualified Inducement Stock Plan ⁽¹⁷⁾
10.9+	Form of Indemnification Agreement between NeuroMetrix, Inc. and each of its directors ⁽¹⁾
10.10.1+	Employment Agreement, dated June 21, 2004, by and between NeuroMetrix, Inc. and Shai N. Gozani, M.D., Ph.D. ⁽¹⁾
10.10.2+	First Amendment to Employment Agreement dated December 31, 2008, by and between NeuroMetrix, Inc. and Shai N. Gozani, M.D., Ph.D. ⁽⁸⁾
10.10.3+	Indemnification Agreement dated June 21, 2004, by and between Shai N. Gozani, M.D., Ph.D., and NeuroMetrix, Inc. ⁽¹⁾
10.10.4+	NeuroMetrix, Inc. Non-Statutory Stock Option Agreement (pursuant to the Amended and Restated 1998 Equity Incentive Plan), dated as of June 21, 2004, by and between Shai N. Gozani M.D., Ph.D., and NeuroMetrix, Inc. ⁽¹⁾
10.11.1+	Letter Agreement, dated August 31, 2009, between NeuroMetrix, Inc. and Thomas T. Higgins ⁽¹⁰⁾
10.11.2+	Indemnification Agreement, dated September 10, 2009, by and between NeuroMetrix, Inc. and Thomas T. Higgins ⁽¹⁰⁾
10.11.3+	Employment Agreement, dated October 27, 2014 by and between NeuroMetrix, Inc. and Thomas T. Higgins ⁽²⁸⁾
10.12.1+	Letter Agreement, dated August 14, 2014, between NeuroMetrix, Inc. and Francis X. McGillin ⁽³²⁾
10.13	Form of Securities Purchase Agreement, dated September 8, 2009 between the Company and each investor ⁽⁹⁾
10.14+	Manufacturing and Supply Agreement, dated as of August 2, 2006, by and between Parlex Polymer Flexible Circuits, Inc. and NeuroMetrix, Inc. ⁽³⁾
10.15.1	Engagement Letter by and between NeuroMetrix, Inc. and Dawson James Securities, Inc., dated December 30, 2011 ⁽¹⁸⁾
10.15.2	First Amendment to Engagement Letter by and between NeuroMetrix, Inc. and Dawson James Securities, Inc., dated January 30, 2012 ⁽¹⁸⁾
10.16	Engagement Letter by and between NeuroMetrix, Inc. and Dawson James Securities, Inc., dated June 4, 2013 ⁽²¹⁾
10.17+	Amended and Restated 2010 Employee Stock Purchase Plan ⁽¹⁹⁾
10.18+	Management Retention and Incentive Plan, as modified, dated October 27, 2014 ⁽²⁸⁾
10.19	Securities Purchase Agreement by and between NeuroMetrix, Inc. and the purchasers named therein, dated June 4, 2013 ⁽²¹⁾

Exhibit Number	Description
10.20	Securities Purchase Agreement by and between NeuroMetrix, Inc. and the purchasers named therein, as amended, dated June 24, 2014 (27)
10.21	Registration Rights Agreement by and between NeuroMetrix, Inc. and the purchasers named therein, dated June 4, 2013 (21)
10.22	Registration Rights Agreement by and between NeuroMetrix, Inc. and the purchasers named therein, dated June 24, 2014 (27)
10.23*	Repurchase and Forfeiture Agreement by and between NeuroMetrix, Inc. and the parties named therein
23.1	Form of Consent of PricewaterhouseCoopers LLP, an independent registered public accounting firm (previously filed with this Registration Statement).
23.2*	Consent of Mintz, Levin, Cohn, Ferris, Glovsky and Popeo, P.C. (included in Exhibit 5.1)
24.1	Power of Attorney (included on signature page to the registration statement initially filed on April 25, 2013)
24.2	Power of Attorney for David Van Avermaete (previously filed with this registration statement)
101	The following materials from NeuroMetrix, Inc.'s Annual Report on Form 10-K for the year ended December 31, 2014, formatted in XBRL (eXtensible Business Reporting Language); (i) Balance Sheets as of December 31, 2014 and 2013, (ii) Statements of Operations for the years ended December 31, 2014, 2013, and 2012, (iii) Statements of Changes in Stockholders' Equity for the years ended December 31, 2014, 2013, and 2012, (iv) Statements of Cash Flows for the years ended December 31, 2014, 2013, and 2012, and (v) Notes to Financial Statements (29)

Replaces exhibit with the same number previously filed with this Registration Statement on Form S-1.

* Filed herewith.

** To be filed by amendment.

+ Indicates management contract or any compensatory plan, contract or arrangement.

† Confidential treatment has been granted with respect to certain portions of this Exhibit, which portions have been omitted and filed separately with the Securities and Exchange Commission as part of an application for confidential treatment pursuant to the Securities Exchange Act of 1934, as amended.

- (1) Incorporated herein by reference to NeuroMetrix, Inc.'s Registration Statement on Form S-1 filed on May 13, 2004, as amended (Registration No. 333-115440).
- (2) Incorporated herein by reference to NeuroMetrix, Inc.'s Quarterly Report on Form 10-Q filed on November 15, 2004 (File No. 000-50856).
- (3) Incorporated herein by reference to NeuroMetrix, Inc.'s Current Report on Form 8-K filed on August 2, 2006 (File No. 000-50856).
- (4) Incorporated herein by reference to NeuroMetrix, Inc.'s Current Report on Form 8-K filed on September 17, 2007 (File No. 001-33351).
- (5) Incorporated herein by reference to NeuroMetrix, Inc.'s Form 8-A12(b) filed on March 8, 2007 (File No. 001-33351).
- (6) Incorporated herein by reference to NeuroMetrix, Inc.'s Registration Statement on Form S-8 filed on August 9, 2004 (File No. 333-118059).
- (7) Incorporated herein by reference to NeuroMetrix, Inc.'s Current Report on Form 8-K filed on November 26, 2008 (File No. 001-33351).
- (8) Incorporated herein by reference to NeuroMetrix, Inc.'s Annual Report on Form 10-K filed on March 20, 2009 (File No. 001-33351).
- (9) Incorporated herein by reference to NeuroMetrix, Inc.'s Current Report on Form 8-K filed September 14, 2009 (File No. 001-33351).
- (10) Incorporated herein by reference to NeuroMetrix, Inc.'s Current Report on Form 8-K filed September 15, 2009 (File No. 001-33351).
- (11) Incorporated herein by reference to NeuroMetrix, Inc.'s Current Report on Form 8-K filed on February 27, 2008 (File No. 001-33351).

- (12) Incorporated herein by reference to NeuroMetrix, Inc.'s Quarterly Report on Form 10-Q filed on May 14, 2010 (File No. 001-33351).
- (13) Incorporated herein by reference to Appendix A to NeuroMetrix, Inc.'s Proxy Statement on Schedule 14A filed on April 8, 2010 (File No. 001-33351).
- (14) Incorporated herein by reference to NeuroMetrix, Inc.'s Current Report on Form 8-K filed on September 1, 2011 (File No. 001-33351).
- (15) Incorporated herein by reference to NeuroMetrix, Inc.'s Current Report on Form 8-K filed on February 15, 2013 (File No. 001-33351).
- (16) Incorporated herein by reference to NeuroMetrix, Inc.'s Current Report on Form 8-K filed on March 3, 2011 (File No. 001-33351).
- (17) Incorporated herein by reference to NeuroMetrix, Inc.'s Registration Statement on Form S-8 filed on June 3, 2009 (File No. 333-159712).
- (18) Incorporated herein by reference to NeuroMetrix, Inc.'s Registration Statement on Form S-1 filed on November 23, 2011, as amended (Registration No. 333-178165).
- (19) Incorporated herein by reference to Appendix B NeuroMetrix, Inc.'s Proxy Statement on Schedule 14A filed on April 16, 2012 (File No. 001-33351).
- (20) Incorporated herein by reference to NeuroMetrix, Inc.'s Quarterly Report on Form 10-Q filed on August 3, 2012 (File No. 001-33351).
- (21) Incorporated herein by reference to NeuroMetrix, Inc.'s Current Report on Form 8-K filed on June 6, 2013 (File No. 001-33351).
- (22) Incorporated herein by reference to NeuroMetrix, Inc.'s Amendment No. 1 to its Current Report on Form 8-K filed on June 7, 2013 (File No. 001-33351).
- (23) Incorporated herein by reference to NeuroMetrix, Inc.'s Quarterly Report on Form 10-Q filed on July 26, 2013 (File No. 001-33351).
- (24) Incorporated herein by reference to Appendix A to NeuroMetrix, Inc.'s Proxy Statement on Schedule 14A filed on March 30, 2015 (File No. 001-33351)
- (25) Incorporated herein by reference to Appendix B to NeuroMetrix, Inc.'s Proxy Statement on Schedule 14A filed on April 7, 2014 (File No. 001-33351).
- (26) Incorporated herein by reference to NeuroMetrix, Inc.'s Quarterly Report on Form 10-Q filed on April 24, 2014 (File No. 001-33351).
- (27) Incorporated herein by reference to NeuroMetrix, Inc.'s Current Report on Form 8-K filed on June 25, 2014 (File No. 001-33351).
- (28) Incorporated herein by reference to NeuroMetrix, Inc.'s Quarterly Report on Form 10-Q filed on October 28, 2014 (File No. 001-33351).
- (29) Incorporated herein by reference to NeuroMetrix, Inc.'s Annual Report on Form 10-K filed on February 25, 2015 (File No. 001-33351).
- (30) Incorporated herein by reference to NeuroMetrix, Inc.'s Amendment No. 2 to its Registration Statement on Form S-1 filed on January 31, 2012 (File No. 333-178165)
- (31) Incorporated herein by reference to NeuroMetrix, Inc.'s Quarterly Report on Form 10-Q filed on April 23, 2015.



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May 20, 2015

NeuroMetrix, Inc.
1000 Winter Street
Waltham, Massachusetts 02451

Ladies and Gentlemen:

We have acted as 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-1 (Registration No. 333-188133) (the "Registration Statement"). This opinion is furnished to you in connection with the filing of the Registration Statement with the Commission under the Securities Act, in which the Company is registering 145,000 units (the "Units") to purchase (i) up to an aggregate of 145,000 shares (the "Preferred Shares") of Series B Convertible Preferred Stock, par value \$0.001 per share (the "Series B Preferred Stock") and (ii) warrants to purchase up to 11,455,000 shares of the Company's Common Stock (the "Offering Warrants"). The Registration Statement also registers (i) 11,455,000 shares of Common Stock issuable upon conversion of the Series B Preferred Stock (the "Conversion Shares"), 11,455,000 shares of Common Stock issuable upon exercise of the Offering Warrants, (iii) warrants to purchase 286,375 shares of Common Stock to be issued to the Underwriters (the "Underwriter Warrants" and together with the Offering Warrants, the "Warrants") and (iv) 286,375 shares of Common Stock issuable upon exercise of the Underwriter Warrants. The Preferred Shares and Offering Warrants are being offered and sold pursuant to an Underwriting Agreement to be entered into between the Company and Maxim Group LLC, as representative for the underwriters (the "Underwriting Agreement"), which Underwriting Agreement was filed as an exhibit to the Registration Statement. The shares of Common Stock to be issued by the Company upon the exercise of the Warrants are hereinafter collectively referred to as the "Warrant Shares" (together with the Conversion Shares, the "Shares"). The Shares also include share purchase rights (the "Share Purchase Rights") under the Company's Shareholder Rights Agreement dated March 7, 2007, as amended, between the Company and American Stock Transfer & Trust Company, as Rights Agent (the "Shareholder Rights Agreement") that may be issued at a future date in accordance with the terms of the Shareholder Rights Agreement.

In connection with this opinion, we have examined the Company's Restated Certificate of Incorporation, as amended, and Amended and Restated Bylaws, both as currently in effect; the Shareholder Rights Agreement; the minutes of all pertinent meetings of the directors of the Company relating to the Registration Statement, the Underwriting Agreement and the transactions contemplated thereby; 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.

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

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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.

Based upon the foregoing, and subject to the limitations set forth below, we are of the opinion that (i) the Units, when issued and delivered by the Company in accordance with the terms and conditions of the Underwriting Agreement, will be duly and validly issued and will represent binding obligations of the Company pursuant to the laws of the State of Delaware, (ii) the Preferred Shares that will be sold as part of the Units have been duly authorized for issuance and, when the Preferred Shares are issued and paid for in accordance with the terms and conditions of the Underwriting Agreement, the Preferred Shares will be duly and validly issued, fully paid and non-assessable; (iii) the Offering Warrants that will be sold as part of the Units, when issued and delivered by the Company in accordance with the terms and conditions of the Underwriting Agreement, will be duly and validly issued, and will represent binding obligations of the Company pursuant to the laws of the State of Delaware and the State of New York; (iv) the Underwriter Warrants, when issued and delivered by the Company, will be duly and validly issued, and will represent binding obligations of the Company pursuant to the laws of the State of Delaware and the State of New York; (v) the Shares, when issued and delivered by the Company upon conversion of the Preferred Shares or exercise of the Warrants (and payment therefor as contemplated by the Warrants), will be duly and validly issued, fully paid and non-assessable; and (vi) upon the issuance of any Conversion Shares or Warrant Shares, the Share Purchase Rights that will attach to and trade with such Conversion Shares and Warrant Shares will be duly and validly issued.

In rendering our opinion regarding the Share Purchase Rights, we have assumed that the Board of Directors of the Company has acted and will act in accordance with its fiduciary duties with respect to the administration of the Shareholder Rights Agreement and the issuance of the Share Purchase Rights thereunder. In connection with the foregoing, our opinion does not address the determination a court of competent jurisdiction may make regarding whether the Board of Directors of the Company would be required to redeem or terminate, or take other action with respect to, the Share Purchase Rights at some future time. Further, our opinion addresses the Shareholder Rights Agreement and the Share Purchase Rights in their entirety and not any particular provision of them, and it is not settled whether the invalidity of any particular provision would invalidate the Share Purchase Rights in their entirety.

Our opinion is limited to the laws of the State of Delaware (including the applicable provisions of the Delaware Constitution and the reported judicial decisions interpreting such laws), the laws of the State of New York (including applicable provisions of the New York Constitution and the reported judicial decisions interpreting those laws) and the United States Federal Laws, 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 under the securities or blue sky laws of any state or any foreign jurisdiction.

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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 statutes, rule regulations and judicial decisions existing on the date hereof, and we disclaim any obligation to advise you of any change in any of these sources of law or legal or factual developments after the date hereof which might affect any matters or opinions set forth herein.

We hereby consent to the filing of 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 to the use of this Firm's name therein and in the related prospectus under the caption "Legal Matters." In giving such consent, we do not hereby admit that we are in the category of persons whose consent is required under Section 7 of the Securities Act or the rules and regulations of the Commission.

Very truly yours,

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

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

REPURCHASE AND FORFEITURE AGREEMENT

This REPURCHASE AND FORFEITURE AGREEMENT (this "Agreement") is made as of May __, 2015, by and among (i) NeuroMetrix, Inc., a Delaware corporation (the "Company"), (ii) the parties identified on Exhibit A hereto (the "Investors").

WHEREAS, the Investors hold an aggregate of 3,206,357 shares of the Company's Series A-4 Preferred Stock in the amounts identified on Exhibit A (the "Preferred Stock");

WHEREAS, the Investors are also the holders of certain warrants with an exercise price of \$2.04 per share, which were issued pursuant to a Securities Purchase Agreement dated as of June 24, 2014 (the "Warrants") to purchase an aggregate of 3,921,569 shares of Common Stock of the Company, par value \$0.0001 per share ("Common Stock"), in the amounts identified on Exhibit A;

WHEREAS, the Company has filed a registration statement on Form S-1 for the offer and sale of units consisting of Series B Preferred Stock and warrants to purchase Common Stock of the Company (the "Offering");

WHEREAS, the Investors have indicated an interest in purchasing units in the Offering, provided that the Company repurchases certain shares of Preferred Stock in connection with the closing of the Offering; and

WHEREAS, in connection with the closing of the Offering, the Company desires to repurchase from the Investors, and the Investors desire to sell to the Company, the Preferred Stock (the "Repurchased Shares") for an aggregate agreed upon purchase price of \$3,206,357 (the "Repurchase Price") and, in connection with such transaction, the Investors have agreed to forfeit an aggregate of 1,571,744 of the Warrants identified on Exhibit A.

NOW, THEREFORE, in consideration of the mutual covenants contained herein and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the parties hereby agree as follows:

1. Repurchase of the Preferred Stock and Forfeiture of Warrants.

(a) At the closing of the Offering, the Company hereby agrees to repurchase from the Investors, and the Investors hereby agree to sell, transfer and assign to the Company, free and clear of any and all Encumbrances (as defined below), the Repurchased Shares at a price per share equal to \$1,000.00, and for an aggregate purchase price equal to the Repurchase Price. In addition, the Company and the Investors hereby acknowledge that, on the date hereof, the Investors have forfeited 1,571,744 Warrants identified on Exhibit A under the caption "Securities Repurchased and Forfeited in the Transaction", which shall be null and void upon the closing of the Offering. The repurchase of the Preferred Stock and the related forfeiture of the 1,571,744 Warrants are collectively referred to herein as the "Transaction". The Transaction shall have no effect on the remaining Warrants or on any other securities of the Company held by the Investors, which shall remain outstanding.

(b) On or prior to the Closing (as defined below), each Investor hereby agrees to deliver to the Company:

(i) the certificate representing all of the Repurchased Shares;

(ii) a duly executed stock assignment in the form attached hereto as Exhibit B-1 and B-2, as applicable; and

(iii) certificate(s) representing 1,571,744 Warrants. The Company will, as soon as practicable following the date hereof, reissue Warrants to the applicable Investor representing the remainder of the shares of Common Stock underlying such Warrants.

(c) Upon payment of the Repurchase Price, the Preferred Stock shall cease to be outstanding for any and all purposes, and the Investors shall no longer have any rights as a holder of the Preferred Stock.

(d) The closing of the Transaction (the "Closing") shall take place at the offices of Mintz, Levin, Cohn, Ferris, Glovsky and Popeo, P.C., on the same date and immediately following the closing of the Offering.

2. Representations and Warranties of Investors. Each Investor hereby represents and warrants to the Company as follows:

(a) Ownership. All of the Repurchased Shares and Warrants are owned of record and beneficially by each Investor, and each Investor has good and marketable title to the Repurchased Shares, free and clear of any security interest, claims, liens, pledges, options, encumbrances, charges, agreements, voting trusts, proxies or other arrangements or restrictions whatsoever (collectively, "Encumbrances"), except for such legend and related transfer restrictions as are required under the Securities Act of 1933, as amended. As of the date hereof, each Investor will deliver to the Company good and marketable title to the Repurchased Shares, free and clear of any Encumbrances.

(b) Legal Capacity. Each Investor has full legal capacity to enter into and perform its obligations set forth in this Agreement. This Agreement, when executed and delivered by each Investor, will constitute the valid and legally binding obligation of the Investor, enforceable in accordance with its terms (except as enforceability may be limited by principles of public policy, applicable bankruptcy, insolvency, reorganization, moratorium, fraudulent conveyance or other similar laws affecting the enforcement of creditors' rights and remedies generally or general principles of equity (regardless of whether considered and applied in a proceeding at law or in equity)).

(c) Conflicts. The execution, delivery and performance of this Agreement by each Investor does not, and will not, conflict with or result in a breach of any agreement, instrument, order, judgment, decree, law or governmental regulation to which Investor or the Repurchased Shares are subject.

(d) Acknowledgment. Each Investor believes that it has received all the information it considers necessary or appropriate for deciding whether to sell the Preferred Stock to the Company pursuant to this Agreement. Each Investor has not been induced to agree to and execute this Agreement by any statement, act or representation of any kind or character by anyone, except as contained herein. Each Investor further represents that such Investor has fully reviewed this Agreement and has full knowledge of its terms, and executes this Agreement of his or her own choice and free will, after having received (or been given the opportunity to receive) the advice of his or her attorney(s).

3. Miscellaneous.

(a) All representations and warranties contained herein or made in writing by any party in connection herewith will survive the execution and delivery of this Agreement and the closing of the transactions contemplated hereby, regardless of any investigation made by the Company or on its behalf.

(b) This Agreement shall be governed by and construed in accordance with the internal laws of the State of New York, without giving any effect to any choice of law or conflict of law provision or rule (whether of the State of New York or any other jurisdiction) that would cause the application of the laws of any jurisdiction other than the State of New York.

(c) This Agreement may be executed in one or more counterparts (including signature pages by means of facsimile, emailed .pdf file or other similar form of electronic transmission), all of which taken together shall constitute one and the same instrument.

(d) This Agreement contains the entire agreement and understanding among the parties with respect to the subject matter hereof and supersedes all prior agreements and understandings, whether written or oral, relating to such subject matter in any way.

* * * * *

Signature Page to Repurchase and Forfeiture Agreement

IN WITNESS WHEREOF, the parties hereto have executed this Repurchase Agreement on the date first written above.

NEUROMETRIX, INC.

By: _____
Name: Thomas T. Higgins
Title: Chief Financial Officer

SABBY VOLATILITY WARRANT MASTER FUND, LTD.

By: _____
Name:
Title:

SABBY HEALTHCARE VOLATILITY MASTER FUND, LTD.

By: _____
Name:
Title:

InvestorsSecurities Repurchased and Forfeited in Transaction

<u>Holder</u>	<u>Series A-4 Preferred Stock (to be repurchased)</u>	<u>Warrants to Purchase Common Stock (to be forfeited)</u>
Sabby Volatility Warrant Master Fund, Ltd.	996.943	488,698 Exercise Price: \$2.04 Original Issue Date: 6/26/14
Sabby Healthcare Volatility Master Fund, Ltd.	2,209.414	1,083,046 Exercise Price: \$2.04 Original Issue Date: 6/26/14
Total:	3,206.357	1,571,744

Securities to Remain Outstanding Following Transaction

<u>Holder</u>	<u>Warrants to Purchase Common Stock (to remain outstanding)</u>
Sabby Volatility Warrant Master Fund, Ltd.	1,079,930 Exercise Price: \$2.04 Original Issue Date: 6/26/14
Sabby Healthcare Volatility Master Fund, Ltd.	1,269,895 Exercise Price: \$2.04 Original Issue Date: 6/26/14
Total:	2,349,825

ASSIGNMENT SEPARATE FROM CERTIFICATE

FOR VALUE RECEIVED, Sabby Volatility Warrant Master Fund, Ltd. ("Investor") does hereby sell, assign and transfer unto NeuroMetrix, Inc., a Delaware corporation (the "Company"), 996.943 shares of Series A-4 Preferred Stock, \$0.001 par value per share, of the Company, standing in the undersigned's name on the books of the Company represented by Stock Certificate No(s) PA40001 provided herewith and does hereby irrevocably constitute and appoint each officer of the Company (acting alone or with one or more other such officers) as attorney-in-fact to transfer the said securities on the books of the Company with full power of substitution in the premises.

Dated: _____, 2015

Sabby Volatility Warrant Master Fund, Ltd.

Name:
Title:

IN PRESENCE OF

Witness

ASSIGNMENT SEPARATE FROM CERTIFICATE

FOR VALUE RECEIVED, Sabby Healthcare Volatility Master Fund, Ltd. ("Investor") does hereby sell, assign and transfer unto NeuroMetrix, Inc., a Delaware corporation (the "Company"), 2,209.414 shares of Series A-4 Preferred Stock, \$0.001 par value per share, of the Company, standing in the undersigned's name on the books of the Company represented by Stock Certificate No(s) PA40001 provided herewith and does hereby irrevocably constitute and appoint each officer of the Company (acting alone or with one or more other such officers) as attorney-in-fact to transfer the said securities on the books of the Company with full power of substitution in the premises.

Dated: _____, 2015

Sabby Healthcare Volatility Master Fund, Ltd.

Name:
Title:

IN PRESENCE OF

Witness
