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

**AMENDMENT NO. 1
TO
FORM S-3
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)

04-3308180
(I.R.S. Employer
Identification Number)

**62 Fourth Avenue
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.
President and Chief Executive Officer
NeuroMetrix, Inc.
62 Fourth Avenue
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
Fax: (617) 542-2241**

Approximate date of commencement of proposed sale to the public: From time to time after this registration statement becomes effective.

If the only securities being registered on this Form are being offered pursuant to dividend or interest reinvestment plans, please check the following box.

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, other than securities offered only in connection with dividend or interest reinvestment plans, 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 registration statement pursuant to General Instruction I.D. or a post-effective amendment thereto that shall become effective upon filing with the Commission pursuant to Rule 462(e) under the Securities Act, check the following box.

If this Form is a post-effective amendment to a registration statement filed pursuant to General Instruction I.D. filed to register additional securities or additional classes of securities pursuant to Rule 413(b) under the Securities Act, check the following box.

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. 1 (the "Amendment") relates to NeuroMetrix, Inc.'s (the "Registrant") Registration Statement on Form S-3 (File No. 333-186855), initially filed with the Commission on February 25, 2013 (the "Registration Statement"). The Registrant is filing this Amendment for the sole purpose of updating the signature page to the Registration Statement and replacing Exhibit 5.1 to the Registration Statement. This Amendment does not modify any provision of Part I or Part II of the Registration Statement other than the signature page of Part II as set forth below and Item 16 of Part II.

PART II.

INFORMATION NOT REQUIRED IN PROSPECTUS

Item 14. Other Expenses of Issuance and Distribution.

SEC registration fee	\$	-
Printing and engraving		4,000*
Accounting services		5,000*
Legal fees of registrant's counsel		10,000*
Miscellaneous		1,000*
Total	\$	<u>20,000*</u>

* All amounts except the registration fee are estimates.

Item 15. Indemnification of Directors and Officers.

Our restated certificate 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 restated certificate 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 restated certificate and our restated by-laws 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 restated certificate 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.

Any underwriting agreements that we may enter into will likely provide for the indemnification of us, our controlling persons, our directors and certain of our officers by the underwriters against certain liabilities, including liabilities under the Securities Act of 1933, as amended.

Item 16. Exhibits.

The exhibits listed in the accompanying Exhibit Index are filed or incorporated by reference as part of this registration statement.

Item 17. Undertakings

(a) 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, as amended (the “Securities Act of 1933”);

(ii) to reflect in the prospectus any facts or events arising after the effective date of this 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 this 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 low or high end of the estimated maximum offering range may be reflected 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 this registration statement or any material change to such information in this registration statement;

provided, however, that paragraphs (1)(i), (1)(ii) and (1)(iii) do not apply if the information required to be included in a post-effective amendment by those paragraphs is contained in periodic reports filed with or furnished to the Commission by the registrant pursuant to Section 13 or Section 15(d) of the Securities Exchange Act of 1934, as amended (the “Exchange Act”), that are incorporated by reference in this registration statement, or is contained in a form of prospectus filed pursuant to Rule 424(b) that is part of this registration statement.

(2) That, for the purpose 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 the 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 under the Securities Act of 1933 to any purchaser:

(i) each prospectus filed by the registrant pursuant to Rule 424(b)(3) shall be deemed to be part of the registration statement as of the date the filed prospectus was deemed part of and included in the registration statement; and

(ii) each prospectus required to be filed pursuant to Rule 424(b)(2), (b)(5), or (b)(7) as part of a registration statement in reliance on Rule 430B relating to an offering made pursuant to Rule 415(a)(1)(i), (vii) or (x) for the purpose of providing the information required by Section 10(a) of the Securities Act of 1933 shall be deemed to be part of and included in the registration statement as of the earlier of the date such form of prospectus is first used after effectiveness or the date of the first contract of sale of securities in the offering described in the prospectus. As provided in Rule 430B, for liability purposes of the issuer and any person that is at that date an underwriter, such date shall be deemed to be a new effective date of the registration statement relating to the securities in the registration statement to which that prospectus relates, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof. 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 effective date, 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 effective date.

(5) 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.

(b) The undersigned registrant hereby undertakes that, for purposes of determining any liability under the Securities Act of 1933, each filing of the registrant's annual report pursuant to Section 13(a) or 15(d) of the Exchange Act (and, where applicable, each filing of an employee benefit plan's annual report pursuant to Section 15(d) of the Exchange Act) that is incorporated by reference in this registration statement 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.

(c) 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 indemnification provisions described herein, or otherwise, the registrant has been advised that in the opinion of the Commission such indemnification is against public policy as expressed in the Securities Act of 1933 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 Securities Act of 1933 and will be governed by the final adjudication of such issue.

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, as amended, the registrant certifies that it has reasonable grounds to believe that it meets all of the requirements for filing on Form S-3 and has duly caused this Registration Statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of Waltham, Massachusetts on March 12, 2013.

NeuroMetrix, Inc.

By: /s/ SHAI N. GOZANI, M.D. PH.D.
 Name: Shai N. Gozani, M.D., Ph.D.
 Title: Chairman, President and Chief Executive Officer

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

<u>Signature</u>	<u>Title</u>	<u>Date</u>
By: <u> /s/ SHAI N. GOZANI, M.D., PH.D. </u> Shai N. Gozani, M.D., Ph.D.	Chairman, President and Chief Executive Officer (principal executive officer)	March 12, 2013
By: <u> /s/ THOMAS T. HIGGINS </u> Thomas T. Higgins	Senior Vice President, Chief Financial Officer and Treasurer (principal financial and accounting officer)	March 12, 2013
By: <u> * </u> David E. Goodman, M.D.	Director	March 12, 2013
By: <u> * </u> Allen J. Hinkle M.D.	Director	March 12, 2013
By: <u> * </u> Nancy E. Katz	Director	March 12, 2013
By: <u> * </u> Timothy R. Surgenor	Director	March 12, 2013
*By: <u> /s/ THOMAS T. HIGGINS </u> Thomas T. Higgins Attorney-in-fact		March 12, 2013

EXHIBIT INDEX

Exhibit No.	Description
1 *	Form of Underwriting Agreement
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)
4.1.1	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)
4.1.2	Certificate of Amendment to Restated Certificate of Incorporation of NeuroMetrix, Inc. dated September 1, 2011 (filed as Exhibit 3.1 to the Current Report on Form 8-K filed on September 1, 2011, File No. 001-33351, and incorporated in this document by reference)
4.2	Second Amended and Restated By-laws of the Registrant (filed as Exhibit 4.2 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	Amendment No. 1 to Second Amended and Restated By-laws of the Registrant (filed as Exhibit 3.1 to the Registrant's Current Report on Form 8-K filed on September 17, 2007, File No. 001-33351, and incorporated in this document by reference)
4.3	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)
4.3.1	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)
4.4	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)
4.5	Form of Unit Warrant to purchase Common Stock (filed as Exhibit 4.5 to the Registrant's Registration Statement on Form S-1 filed on November 23, 2011, as amended, File No. 333-178165, and incorporated in this document by reference)
4.6	Form of Placement Agent Warrant (filed as Exhibit 4.6 to the Registrant's Registration Statement on Form S-1 filed on November 23, 2011, as amended, File No. 333-178165, and incorporated in this document by reference)
4.7 *	Form of Preferred Stock Certificate
4.8 *	Form of Certificate of Amendment or Designation with respect to Preferred Stock
4.9 *	Form of Warrant Agreement and Warrant Certificate
4.10 *	Form of Subscription Rights Agreement and Right Certificate
4.11 *	Form of Stock Purchase Contract
4.12 *	Form of Unit Agreement and Unit Certificate
5.1 +	Opinion of Mintz, Levin, Cohn, Ferris, Glovsky and Popeo, P.C.
23.1 **	Consent of PricewaterhouseCoopers LLP, an independent registered public accounting firm
23.2	Consent of Mintz, Levin, Cohn, Ferris, Glovsky and Popeo, P.C. (included in Exhibit 5.1)
24 **	Powers of Attorney (included in the signature page to the Registration Statement, as initially filed on February 25, 2013)

* To be filed, if applicable, by amendment or by a Current Report on Form 8-K prior to the issuance of the applicable securities.

+ Replaces previously filed Exhibit.

** Previously filed.

March 12, 2013

NeuroMetrix, Inc.
62 Fourth Avenue
Waltham, MA 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-3 (the "Registration Statement"), pursuant to which the Company is registering under the Securities Act of 1933, as amended (the "Securities Act"), the following:

- (i) common stock, \$0.0001 par value per share (the "Common Stock");
- (ii) preferred stock, \$0.001 par value per share (the "Preferred Stock");
- (iii) warrants to purchase Common Stock and/or Preferred Stock (the "Warrants"), which may be issued under warrant agreements, to be dated on or about the date of the first issuance of the applicable Warrants thereunder, by and between the Company and a warrant agent to be selected by the Company (each, a "Warrant Agreement");
- (iv) rights to purchase Common Stock or Preferred Stock (the "Rights"), which may be issued pursuant to a rights agreement and certificates issued thereunder, to be dated on or about the date of the first issuance of the applicable Rights thereunder, by and between the Company and a rights agent to be selected by the Company (each, a "Rights Agreement");
- (v) purchase contracts, including contracts obligating holders to purchase from the Company and for the Company to sell to such holders, or obligating the Company to purchase from holders and for such holders to sell to the Company, a specific or variable number of shares of Common Stock, Preferred Stock, Warrants or Rights, or securities of an entity unaffiliated with the Company, or any combination thereof, at a future date or dates (each, a "Purchase Contract"); and
- (vi) units comprised of one or more shares of Common Stock, shares of Preferred Stock, Rights, Purchase Contracts and Warrants, in any combination (the "Units"), which may be issued under unit agreements, to be dated on or about the date of the first issuance of the applicable Units thereunder, by and between the Company and a unit agent to be selected by the Company (each, a "Unit Agreement").

The Common Stock, the Preferred Stock, the Warrants, the Rights, the Purchase Contracts and the Units are collectively referred to herein as the "Securities." The Securities are being registered for offering and sale from time to time on a delayed or continuous basis pursuant to Rule 415 under the Securities Act. The maximum aggregate public offering price of the Securities being registered will be \$20,000,000. Each share of Common Stock that the Company issues includes a right to purchase Series A Junior Participating Cumulative Preferred Stock, par value \$.001 per share (an "Existing Right"), 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 "Existing Rights Agreement"). Each share of Common Stock has an attached Existing Right to purchase one ten-thousandth of a share of Series A Junior Participating Cumulative Preferred Stock, which Existing Rights are not currently exercisable, on the terms set forth in the Existing Rights Agreement.

In connection with this opinion, we have examined the Company's Amended and Restated Certificate of Incorporation (the "Certificate of Incorporation"), Second Amended and Restated By-Laws, as amended (the "By-Laws"), and the Existing Rights Agreement, 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, as well as the Registration Statement and the exhibits thereto.

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

BOSTON | LONDON | LOS ANGELES | NEW YORK | SAN DIEGO | SAN FRANCISCO | STAMFORD | WASHINGTON

In our capacity as counsel to the Company in connection with such registration, we are familiar with the proceedings taken and proposed to be taken by the Company in connection with the authorization and issuance of the Securities. For purposes of this opinion, we have assumed that such proceedings that have not yet been completed will be timely and properly completed, in accordance with all requirements of applicable federal and Delaware laws, in the manner presently proposed.

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, photostatic or facsimile copies and the authenticity of the originals of such copies.

With respect to our opinion regarding the nature of the Existing 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 Existing 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 Existing Rights Agreement; and (iii) have addressed the Existing Rights and the Existing Rights Agreement in their entirety, and it is not settled whether the invalidity of any particular provision of the Existing Rights Agreement or the Existing Rights issued thereunder would result in invalidating the Existing Rights in their entirety.

Members of our firm are admitted to the Bar of the Commonwealth of Massachusetts, and we do not express any opinion as to the laws of any other jurisdiction other than the General Corporation Law of the State of Delaware (including the applicable provisions of the Delaware Constitution and the reported judicial decisions interpreting such laws) and the United States federal laws. To the extent that any applicable document is stated to be governed by the laws of another jurisdiction, we have assumed for purposes of this opinion that the laws of such jurisdiction are identical to the state laws of the Commonwealth of Massachusetts. No opinion is expressed herein with respect to (i) the qualification of the Securities or the Existing Rights under the securities or blue sky laws of any state or any foreign jurisdiction or (ii) the compliance with any federal or state law, rule or regulation relating to securities, or to the sale or issuance thereof. The Securities may be offered and sold from time to time on a delayed or continuous basis, but this opinion is limited to the laws, including the rules and regulations thereunder, as in effect on the date hereof.

Based upon the foregoing and in reliance thereon, and subject to the qualifications herein stated, we are of the opinion that:

1. With respect to the Common Stock, when (i) specifically authorized for issuance by the Company's Board of Directors or an authorized committee thereof (the "Authorizing Resolutions"), (ii) the Registration Statement, as finally amended (including all post-effective amendments), has become effective under the Securities Act, (iii) an appropriate prospectus supplement with respect to the applicable shares of Common Stock has been prepared, delivered and filed in compliance with the Securities Act and the applicable rules and regulations thereunder, (iv) if the applicable shares of Common Stock are to be sold pursuant to a purchase, underwriting or similar agreement (an "Underwriting Agreement"), such Underwriting Agreement with respect to the applicable shares of Common Stock in the form filed as an exhibit to the Registration Statement, any post-effective amendment thereto or to a Current Report on Form 8-K, has been duly authorized, executed and delivered by the Company and the other parties thereto, (v) the terms of issuance and sale of the Common Stock have been duly established in conformity with the Company's then operative Certificate of Incorporation and By-Laws and do not violate any applicable law or result in a default under or breach of any agreement or instrument binding on the Company and comply with any requirement or restriction imposed by any court or governmental body having jurisdiction over the Company, (vi) the Common Stock has been issued and sold as contemplated by the Registration Statement and the prospectus included therein, and (vii) the Company has received the consideration provided for in the Authorizing Resolutions and, if applicable, the Underwriting Agreement, the Common Stock and the Existing Rights will be validly issued, fully paid and nonassessable.

2. With respect to the Preferred Stock, when (i) specifically authorized for issuance by the Authorizing Resolutions, (ii) the Registration Statement, as finally amended (including all post-effective amendments), has become effective under the Securities Act, (iii) an appropriate prospectus supplement with respect to the applicable shares of Preferred Stock has been prepared, delivered and filed in compliance with the Securities Act and the applicable rules and regulations thereunder, (iv) if the applicable shares of Preferred Stock are to be sold pursuant to an Underwriting Agreement, such Underwriting Agreement with respect to the applicable shares of Preferred Stock in the form filed as an exhibit to the Registration Statement, any post-effective amendment thereto or to a Current Report on Form 8-K, has been duly authorized, executed and delivered by the Company and the other parties thereto, (v) an appropriate Certificate or Certificates of Amendment or Designation relating to a class or series of the Preferred Stock to be sold under the Registration Statement has been duly authorized and adopted and filed with the Secretary of State of Delaware, (vi) the terms of issuance and sale of shares of such class or series of Preferred Stock have been duly established in conformity with the Company's then operative Certificate of Incorporation and By-Laws and do not violate any applicable law or result in a default under or breach of any agreement or instrument binding upon the Company and comply with any requirement or restriction imposed by any court or governmental body having jurisdiction over the Company, (vii) shares of such class or series of Preferred Stock have been duly issued and sold as contemplated by the Registration Statement and the prospectus included therein, and (viii) the Company has received the consideration provided for in the Authorizing Resolutions and, if applicable, the Underwriting Agreement, such Preferred Stock will be validly issued, fully paid and nonassessable.

3. With respect to the Warrants, when (i) specifically authorized for issuance by the Authorizing Resolutions, (ii) the Registration Statement, as finally amended (including all post-effective amendments), has become effective under the Securities Act, (iii) the Warrant Agreement relating to the Warrants has been duly authorized, executed and delivered, (iv) an appropriate prospectus supplement with respect to the applicable Warrants has been prepared, delivered and filed in compliance with the Securities Act and the applicable rules and regulations thereunder, (v) if the applicable Warrants are to be sold pursuant to an Underwriting Agreement, such Underwriting Agreement with respect to the applicable Warrants in the form filed as an exhibit to the Registration Statement, any post-effective amendment thereto or to a Current Report on Form 8-K, has been duly authorized, executed and delivered by the Company and the other parties thereto, (vi) the terms of the Warrants and of their issuance and sale have been duly established in conformity with the Warrant Agreement and do not violate any applicable law or result in a default under or breach of any agreement or instrument binding upon the Company and comply with any requirement or restriction imposed by any court or governmental body having jurisdiction over the Company, (vii) the Warrants have been duly executed and countersigned in accordance with the Warrant Agreement and issued and sold as contemplated by the Registration Statement and the prospectus included therein, and (viii) the Company has received the consideration provided for in the Authorizing Resolutions and, if applicable, the Underwriting Agreement, the Warrants will constitute valid and legally binding obligations of the Company.

4. With respect to the Rights, when (i) specifically authorized for issuance by the Authorizing Resolutions, (ii) the Registration Statement, as finally amended (including all post-effective amendments), has become effective under the Securities Act, (iii) the Rights Agreement and any certificates relating to the Rights have been duly authorized, executed and delivered, (iv) an appropriate prospectus supplement with respect to the applicable Rights has been prepared, delivered and filed in compliance with the Securities Act and the applicable rules and regulations thereunder, (v) if the applicable Rights are to be sold pursuant to an Underwriting Agreement, such Underwriting Agreement with respect to the applicable Rights in the form filed as an exhibit to the Registration Statement, any post-effective amendment thereto or to a Current Report on Form 8-K, has been duly authorized, executed and delivered by the Company and the other parties thereto, (vi) the terms of the Rights and of their issuance and sale have been duly established in conformity with the Rights Agreement and any rights certificates and do not violate any applicable law or result in a default under or breach of any agreement or instrument binding upon the Company and comply with any requirement or restriction imposed by any court or governmental body having jurisdiction over the Company, (vii) the Rights have been duly executed and countersigned in accordance with the Rights Agreement and issued and sold as contemplated by the Registration Statement and the prospectus included therein, and (viii) the Company has received the consideration provided for in the Authorizing Resolutions and, if applicable, the Underwriting Agreement, the Rights will constitute valid and legally binding obligations of the Company.

5. With respect to the Purchase Contracts, when (i) specifically authorized for issuance by the Authorizing Resolutions, (ii) the Registration Statement, as finally amended (including all post-effective amendments), has become effective under the Securities Act, (iii) the Purchase Contracts have been duly authorized, executed and delivered, (iv) an appropriate prospectus supplement with respect to the applicable Purchase Contracts has been prepared, delivered and filed in compliance with the Securities Act and the applicable rules and regulations thereunder, (v) if the applicable Purchase Contracts are to be sold pursuant to an Underwriting Agreement, such Underwriting Agreement with respect to the applicable Purchase Contracts in the form filed as an exhibit to the Registration Statement, any post-effective amendment thereto or to a Current Report on Form 8-K, has been duly authorized, executed and delivered by the Company and the other parties thereto, (vi) the terms of the Purchase Contracts and of their issuance and sale have been duly established in conformity with the Purchase Contracts and do not violate any applicable law or result in a default under or breach of any agreement or instrument binding upon the Company and comply with any requirement or restriction imposed by any court or governmental body having jurisdiction over the Company, (vii) the Purchase Contracts have been duly executed, countersigned, issued and sold as contemplated by the Registration Statement and the prospectus included therein, and (viii) the Company has received the consideration provided for in the Authorizing Resolutions and, if applicable, the Underwriting Agreement, the Purchase Contracts will constitute valid and legally binding obligations of the Company.

6. With respect to the Units, when (i) specifically authorized for issuance by the Authorizing Resolutions, (ii) the Registration Statement, as finally amended (including all post-effective amendments), has become effective under the Securities Act, (iii) the Unit Agreement relating to the Units has been duly authorized, executed and delivered, (iv) an appropriate prospectus supplement with respect to the applicable Units has been prepared, delivered and filed in compliance with the Securities Act and the applicable rules and regulations thereunder (v) if the applicable Units are to be sold pursuant to an Underwriting Agreement, such Underwriting Agreement with respect to the applicable Units in the form filed as an exhibit to the Registration Statement, any post-effective amendment thereto or to a Current Report on Form 8-K, has been duly authorized, executed and delivered by the Company and the other parties thereto, (vi) the terms of the Units and of their issuance and sale have been duly established in conformity with the Unit Agreement and do not violate any applicable law or result in a default under or breach of any agreement or instrument binding upon the Company and comply with any requirement or restriction imposed by any court or governmental body having jurisdiction over the Company, (vii) the Units have been duly executed and countersigned in accordance with the Unit Agreement and issued and sold as contemplated by the Registration Statement and the prospectus included therein, and (viii) the Company has received the consideration provided for in the Authorizing Resolutions and, if applicable, the Underwriting Agreement, the Units will constitute valid and legally binding obligations of the Company.

The opinions set forth above are subject to the following exceptions, limitations and qualifications: (i) the effect of bankruptcy, insolvency, reorganization, fraudulent conveyance, moratorium or other similar laws now or hereafter in effect relating to or affecting the rights and remedies of creditors; (ii) the effect of general principles of equity, whether enforcement is considered in a proceeding in equity or at law, and the discretion of the court before which any proceeding therefor may be brought; (iii) the unenforceability under certain circumstances under law or court decisions of provisions providing for the indemnification of, or contribution to, a party with respect to a liability where such indemnification or contribution is contrary to public policy; and (iv) we express no opinion concerning the enforceability of any waiver of rights or defenses with respect to stay, extension or usury laws.

We have relied as to certain matters on information obtained from public officials, officers of the Company, and other sources believed by us to be responsible and we have assumed that the Warrant Agreement, Rights Agreement and Unit Agreement will be duly authorized, executed, and delivered by the warrant agent, rights agent and unit agent, respectively, thereunder and the Purchase Contracts will be duly authorized, executed, and delivered by the other parties thereto. With respect to our opinion as to the Common Stock and Securities convertible into or exercisable for shares of Common Stock, we have assumed that, at the time of issuance and sale, a sufficient number of shares of Common Stock are authorized and available for issuance under the Company's Certificate of Incorporation as then in effect and that the consideration for the issuance and sale of the Common Stock (or Purchase Contracts, Preferred Stock convertible into Common Stock or Warrants or Rights exercisable for Common Stock or any Units of such Securities) is in an amount that is not less than the par value of the Common Stock. With respect to our opinion as to the Preferred Stock and Securities convertible into or exercisable for shares of Preferred Stock, we have assumed that, at the time of issuance and sale, a sufficient number of shares of Preferred Stock are authorized, designated and available for issuance and that the consideration for the issuance and sale of the Preferred Stock (or Purchase Contracts convertible into Preferred Stock or Warrants or Rights exercisable for Preferred Stock or any Units of such Securities) is in an amount that is not less than the par value of the Preferred Stock. We have also assumed that any Warrants, Rights, Purchase Contracts and Units offered under the Registration Statement, and the related Warrant Agreement, Rights Agreement, Purchase Contract and Unit Agreement, as applicable, will be executed in the forms filed as exhibits to the Registration Statement or incorporated by reference therein. We have not independently verified any of the foregoing assumptions.

NeuroMetrix, Inc.

March 12, 2013

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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 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.

We hereby consent to the filing of this opinion as an exhibit to the Registration Statement in accordance with the requirements of Item 601(b)(5) of Regulation S-K under the Securities Act and to the use of this Firm's name therein and in the prospectus included therein 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.

March 12, 2013

VIA EDGAR & FEDEX

Securities and Exchange Commission
Division of Corporation Finance
100 F Street, N.E.
Washington, D.C. 20549

Attention: Jeffrey Riedler
Jay Mumford

**Re: NeuroMetrix, Inc.
Registration Statement on Form S-3
File No. 333-186855**

Ladies and Gentlemen:

We are submitting this letter on behalf of NeuroMetrix, Inc. (the “**Company**”) in response to comments from the staff (the “**Staff**”) of the Securities and Exchange Commission (the “**Commission**”) received by telephone on March 11, 2013 (the “**Comments**”) from Jay Mumford to me, as the Company’s outside counsel, relating to the above-referenced registration statement on Form S-3 of the Company filed February 25, 2013 (the “**Registration Statement**”) and the prospectus contained therein. In conjunction with this letter, the Company is filing via EDGAR for review by the Staff Amendment No. 1 (“**Amendment No. 1**”) to the Registration Statement.

For convenient reference, we have set forth below in italics each of the Staff’s Comments and have keyed the Company’s responses to the numbering of the Comments. All of the responses are based on information provided to Mintz, Levin, Cohn, Ferris, Glovsky and Popeo, P.C. by representatives of the Company. Where appropriate, the Company has responded to the Staff’s Comments by making changes to the disclosure in the Registration Statement as set forth in Amendment No. 1. Page numbers referred to in the responses reference the applicable pages of Amendment No. 1.

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

BOSTON | LONDON | LOS ANGELES | NEW YORK | SAN DIEGO | SAN FRANCISCO | STAMFORD | WASHINGTON

Part II. Signatures

1. *Please identify the officers that currently serve as the Company's principal executive officer, principal financial officer and principal accounting officer.*

Response: In response to the Staff's comment, the Company has revised the disclosure on page II-4 of Amendment No. 1.

Exhibit Index

2. *Please revise the legal opinion filed as Exhibit 5.1 to remove the following phrase: "It is understood that this opinion is to be used only in connection with the offer and sale of Securities while the Registration Statement is in effect."*

Response: In response to the Staff's comment, the Company's legal counsel has revised its legal opinion and the Company has re-filed Exhibit 5.1 with Amendment No. 1.

* * * * *

When appropriate, the Company will provide a written request for acceleration of the effective date of the Registration Statement and will include the requested "Tandy" language therein. The Company is aware of its obligations under Rules 460 and 461 regarding requesting acceleration of the effectiveness of the Registration Statement.

We hope that the above responses and the related revisions to the Registration Statement will be acceptable to the Staff. Please do not hesitate to call me at (617) 542-6000 with any comments or questions regarding the Registration Statement and this letter. We thank you for your time and attention.

Sincerely,

/s/ MEGAN N. GATES

Megan N. Gates

cc: Securities and Exchange Commission
Jeffrey Riedler, Assistant Director
Jay Mumford

NeuroMetrix, Inc.
Shai Gozani, M.D., Ph.D.
Thomas Higgins

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