

**SECURITIES AND EXCHANGE COMMISSION**  
**WASHINGTON, D.C. 20549**

**FORM S-8**

**REGISTRATION STATEMENT UNDER  
THE SECURITIES ACT OF 1933**

**NEUROMETRIX, INC.**

(Exact Name of Registrant as Specified in Its Charter)

**Delaware**  
(State of Incorporation)

**62 Fourth Avenue**  
**Waltham, Massachusetts 02451**  
**(781) 890-9989**

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

(Address of Registrant's principal executive offices)

**NEUROMETRIX, INC. AMENDED AND RESTATED 2004  
STOCK OPTION AND INCENTIVE PLAN**  
(Full Title of the Plan)

**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)

**With copy to:**  
H. David Henken  
Goodwin Procter LLP  
Exchange Place  
Boston, Massachusetts 02109-2881  
(617) 570-1000

**Calculation of Registration Fee**

Title of Securities to be Registered	Amount to be Registered(1)(2)	Proposed Maximum Offering Price PerShare(3)	Proposed Maximum Aggregate Offering Price(3)	Amount of Registration Fee
Common Stock, par value \$0.0001 per share	1,121,022 shares	\$27.92	\$31,298,934.24	\$3,349

- (1) This Registration Statement relates to 1,121,022 shares of Common Stock, par value \$0.0001 per share, of NeuroMetrix, Inc. ("Common Stock") available for issuance under the NeuroMetrix, Inc. Amended and Restated 2004 Stock Option and Incentive Plan (the "Plan"); plus such indeterminate number of additional shares of Common Stock as may be required pursuant to the Plan in the event of a stock dividend, stock split, recapitalization, forfeiture of stock under the Plan or other similar event.
- (2) NeuroMetrix, Inc. (the "Company") previously filed a registration statement on Form S-8 on August 9, 2004 under file number 333-118059 (the "Original Filing") identifying shares to be registered in connection with the NeuroMetrix, Inc. 2004 Stock Option and Incentive Plan (the "Original Plan"). Section 3(a) of the Original Plan provided that the maximum number of shares of Common Stock reserved for issuance under the Original Plan shall be increased, as of each December 31 following the closing of the Company's initial public offering by an additional positive number equal to fifteen percent of the shares of Common Stock issued by the Company during the fiscal year then ended (excluding shares issued in the Company's initial public offering). Since then, pursuant to Section 3(a) of the Plan, the maximum number of shares of Common Stock reserved for issuance under the Plan has increased by 121,022 shares. By filing this Registration Statement in accordance with Instruction E to Form S-8, the Company registers this additional number of shares plus the increase in 1,000,000 shares approved at the Annual Meeting of Stockholders of the Company held on May 24, 2006.
- (3) This estimate is made pursuant to Rule 457(c) and (h) under the Securities Act of 1933, as amended (the "Securities Act"), solely for the purpose of determining the amount of the registration fee. The registration fee is based upon the average of the high and low sales prices for a share of Common Stock on June 15, 2006, as reported on the Nasdaq National Market.

The Company previously filed a Registration Statement on Form S-8 with the Securities and Exchange Commission on August 9, 2004 (SEC File No. 333-118059). The Original Filing was filed in connection with the NeuroMetrix, Inc. 2004 Stock Option and Incentive Plan. This Registration Statement registers additional shares of the Company's Common Shares to be issued pursuant to the NeuroMetrix, Inc. Amended and Restated 2004 Stock Option and Incentive Plan. The contents of the Original Filing are incorporated by reference into this Registration Statement pursuant to General Instruction E of Form S-8.

**PART II**  
**INFORMATION REQUIRED IN THE REGISTRATION STATEMENT**

**Item 8. Exhibits**

The exhibits listed below represent a complete list of exhibits filed or incorporated by reference as part of this Registration Statement.

- \*5.1 Legal opinion from Goodwin Procter LLP
- \*23.1 Consent of PricewaterhouseCoopers LLP, as independent registered public accounting firm
- 23.2 Consent of Goodwin Procter LLP (contained in the opinion filed as Exhibit 5.1 to this Registration Statement)
- 24.1 Power of attorney (included on the signature page to this Registration Statement)
- 99.1 NeuroMetrix, Inc. Amended and Restated 2004 Stock Option and Incentive Plan (incorporated herein by reference to Appendix A to the Company's Definitive Proxy Statement on Schedule 14A, filed with the Securities and Exchange Commission on April 24, 2006)

\* Filed herewith.

2

**SIGNATURES**

Pursuant to the requirements of the Securities Act of 1933, as amended, the Company certifies that it has reasonable grounds to believe that it meets all of the requirements for filing on Form S-8 and has duly caused this Registration Statement to be signed on its behalf by the undersigned, thereunto duly authorized, in Waltham, Massachusetts, on this 22nd day of June, 2006.

NEUROMETRIX, INC.

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

**POWER OF ATTORNEY**

KNOW ALL BY THESE PRESENTS that each individual whose signature appears below constitutes and appoints each of Shai N. Gozani, M.D., Ph.D. and W. Bradford Smith as such person's true and lawful attorney-in-fact and agent with full power of substitution and resubstitution, for such person in such person's name, place and stead, in any and all capacities, to sign any and all amendments (including post-effective amendments) to this Registration Statement (or any Registration Statement for the same offering that is to be effective upon filing pursuant to Rule 462(b) under the Securities Act of 1933), and to file the same, with all exhibits thereto, and all documents in connection therewith, with the Securities and Exchange Commission, granting unto each said attorney-in-fact and agent full power and authority to do and perform each and every act and thing requisite and necessary to be done in and about the premises, as fully to all intents and purposes as such person might or could do in person, hereby ratifying and confirming all that any said attorney-in-fact and agent, or any substitute or substitutes of any of them, may lawfully do or cause to be done by virtue hereof.

Pursuant to the requirements of the Securities Act of 1933, this Registration Statement has been signed by the following persons in the capacities and on the date indicated. Each person listed below has signed this Registration Statement as an officer or director of NeuroMetrix, Inc.

3

Signature	Title	Date
<u>/s/ SHAI N. GOZANI, M.D., PH.D.</u> Shai N. Gozani, M.D., Ph.D.	President, Chief Executive Officer and Director (Principal Executive Officer)	June 22, 2006
<u>/s/ W. BRADFORD SMITH</u> W. Bradford Smith	Chief Financial Officer (Principal Financial Officer and Principal Accounting Officer)	June 22, 2006
<u>/s/ DAVID E. GOODMAN, M.D.</u> David E. Goodman, M.D.	Director	June 22, 2006
<u>/s/ ALLEN J. HINKLE, M.D.</u> Allen J. Hinkle, M.D.	Director	June 22, 2006
<u>/s/ CHARLES R. LAMANTIA</u> Charles R. LaMantia	Director	June 22, 2006
<u>/s/ JONATHAN T. LORD, M.D.</u> Jonathan T. Lord, M.D.	Director	June 22, 2006
<u>/s/ W. MARK LORTZ</u> W. Mark Lortz	Director	June 22, 2006

### EXHIBIT INDEX

Exhibit Number	Description
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\* Filed herewith.

**Goodwin Procter LLP  
Counsellors at Law  
Exchange Place  
Boston, MA 02109**

**T: 617.570.1000  
F: 617.523.1231  
goodwinprocter.com**

June 22, 2006

NeuroMetrix, Inc.  
62 Fourth Avenue  
Waltham, Massachusetts 02451

Re: Securities Being Registered under Registration Statement on Form S-8

Ladies and Gentlemen:

This opinion letter is furnished to you in connection with your filing of a Registration Statement on Form S-8 (the "Registration Statement") pursuant to the Securities Act of 1933, as amended (the "Securities Act"), on or about the date hereof relating to an aggregate of 1,121,022 shares (the "Shares") of Common Stock, \$0.0001 par value per share, of NeuroMetrix, Inc., a Delaware corporation (the "Company"), that may be issued pursuant to the Company's Amended and Restated 2004 Stock Option and Incentive Plan (the "Plan").

We have reviewed such documents and made such examination of law as we have deemed appropriate to give the opinion expressed below. We have relied, without independent verification, as to matters of fact material to the opinion set forth below, on certificates of officers of the Company.

For purposes of the opinion expressed below, and without limiting any other exceptions or qualifications set forth herein, we have assumed that after the issuance of the Shares under the Registration Statement, the total number of issued shares of the Company's Common Stock reserved for issuance upon the exercise, exchange or conversion, as the case may be, of any exercisable, exchangeable or convertible security, as the case may be, then outstanding, will not exceed the total number of authorized shares of Common Stock under the Company's certificate of incorporation, as amended and then in effect.

The opinion expressed below is limited to the Delaware General Corporation Law (which includes applicable provisions of the Delaware Constitution and reported judicial decisions interpreting the Delaware General Corporation Law and the Delaware Constitution).

Based on the foregoing, we are of the opinion that the Shares have been duly authorized and, upon issuance and delivery against payment therefor in accordance with the terms of the Plan, will be validly issued, fully paid and nonassessable.

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NeuroMetrix, Inc.  
June 22, 2006  
Page 2

We hereby consent to the inclusion of this opinion as Exhibit 5.1 to the Registration Statement. In giving our consent, we do not 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 thereunder.

Very truly yours,

/s/ GOODWIN PROCTER LLP

GOODWIN PROCTER LLP

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CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We hereby consent to the incorporation by reference in this Registration Statement on Form S-8 of our report dated March 16, 2006 relating to the financial statements, management's assessment of the effectiveness of internal control over financial reporting and the effectiveness of internal control over financial reporting, which appears in NeuroMetrix, Inc.'s Annual Report on Form 10-K for the year ended December 31, 2005.

*Priscilla M. Hancock CP*

Boston, Massachusetts

June 22, 2006

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