

NEUROMetrix®

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December 1, 2009

Celia A. Soehner, Esq.
Securities and Exchange Commission
Division of Corporation Finance
Mail Stop 3030
100 F Street, N.E.
Washington, D.C. 20549-6010

**Re: NeuroMetrix, Inc.
Registration Statement on Form S-3 (the "Registration Statement")
Amended November 12, 2009
File No. 333-162303**

Dear Ms. Soehner:

NeuroMetrix, Inc., a Delaware corporation (the "**Company**") submits in electronic form for filing the accompanying responses of the Company to comments received from the Staff of the Commission (the "**Staff**") in a letter from Celia A. Soehner, dated November 24, 2009 (the "**Comment Letter**"). The discussion below is presented in the order of the numbered comments in the Comment Letter.

The Company hereby conveys the following as its responses to the Staff:

SEC STAFF COMMENT

Selling Stockholders, page 17

1. We will continue to evaluate your responses to prior comments 3 and 4 after you provide us with the following information:
 - Please show us in detail your calculations supporting the percentage in the first bullet point of your response to prior comment 3. Ensure that your response shows clearly how it is reconcilable to your other disclosures regarding outstanding shares held by the selling stockholders, affiliates of the company and affiliates of the selling stockholders.
 - Please significantly expand your response to the second bullet point of prior comment 3 to clarify what you mean by the statement that the "redemption provisions were intended to provide economic value." Include in your response the events that would trigger redemption and how those events were chosen.
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- Please expand your response to prior comment 3 regarding the delay in the warrants becoming exercisable to address any acceleration of the date upon which securities can be acquired or released from lock ups due to the effectiveness of a Securities Act registration statement, such as that mentioned in section 6.11 of exhibit 10.31.
 - Please expand your response to the last bullet point of prior comment 3 to demonstrate whether the selling stockholders can exercise the warrants without first selling securities they hold.
 - Please expand your responses to prior comments 8 and 11 to address clearly affiliates of the selling stockholder and any person with whom a selling stockholder has a contractual relationship regarding the transaction.

REGISTRANT'S RESPONSE

1. In response to the specific questions noted in this SEC Staff Comment #1, we respond as follows:
 - Set forth below is a response in tabular format that calculates in the last column, the total shares offered by the selling stockholders as a percentage of the total issued and outstanding securities held by persons other than the selling stockholders, affiliates of the Company and affiliates of the selling stockholders. The prior columns and the related footnotes are to assist in the calculation. The calculations have been made excluding the number of outstanding shares underlying any outstanding options or warrants.

Total shares outstanding prior to offering	Shares being registered as percentage of pre-offering public float*	Total shares outstanding after offering	Shares being registered as percentage of post-offering public float
14,090,713	33.0%(1)	22,963,234(2)	24.8%(3)

(1) Deerfield is not being treated as an affiliate for the calculation of the public float; as previously stated, the shares owned prior to the private placement were acquired in the open market. Deerfield is a passive investor without any board seats or contractual arrangements with the Company other than those reflected in the Securities Purchase Agreements and the related Warrants. The 645,949 shares owned by the officers and directors of the Company were deducted in calculating the public float.

(2) As of November 2, 2009, based on the 10-Q for the quarter ended September 30, 2009.

(3) The officers and directors own 645,949 shares; Deerfield owns 4,393,673 shares; the total was deducted in calculating the public float. Deerfield's ownership is subject to a 19.9% "blocker" provision in the warrants and therefore Deerfield and the Company do not affirm any affiliate status with respect to Deerfield.

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- The redemption provisions of the warrants were intended to provide additional bargained for consideration for the purchasers upon the acquisition of control of the Company by a third party. This parameter dictated which events would be chosen to be trigger events for the redemption provisions. The events that trigger the redemption provisions are defined in the warrants as a change of control which is defined as:

“(A) a consolidation, merger, exchange of shares, recapitalization, reorganization, business combination or other similar event, (1) following which the holders of Common Stock immediately preceding such consolidation, merger, exchange, recapitalization, reorganization, combination or event either (a) no longer hold a majority of the shares of Common Stock or (b) no longer have the ability to elect a majority of the board of directors of the Company or (2) as a result of which shares of Common Stock shall be changed into (or the shares of Common Stock become entitled to receive) the same or a different number of shares of the same or another class or classes of stock or securities of the Company or another entity and the holders of Common Stock immediately preceding such event no longer hold a majority of such shares of the Company or another entity following such reclassification; or (B) the sale or transfer in one transaction or in a series of related transactions of all or substantially all of the assets of the Company.”

Upon certain changes in control of the Company (i.e., when the Company is acquired for stock of another public entity), to the extent the warrants are not assumed by the acquiring entity, the holder can elect to receive, subject to certain limitations and assumptions, a number of shares of the Company's common stock or, in certain circumstances (i.e., a solely cash or mixed consideration transaction), cash equal to the Black-Scholes value of the outstanding warrants. The additional shares of the Company's stock that may be issuable upon the exercise of the redemption provisions are not being registered at this time.

- The effectiveness of the Registration Statement will not affect the date of the exercisability of the warrants or the lock up provisions set forth in the Securities Purchase Agreements. The warrants do not become exercisable until the six month anniversary of the closing. In addition, although the lock-up in Section 6.11 of the Securities Purchase Agreements would terminate earlier IF there were an effective registration statement covering the shares held by non-Qualified Investors, the Registration Statement on Form S-3 filed by the Company only registers shares held by Qualified Investors (as defined in the Securities Purchase Agreements to be limited to the existing selling stockholders).
- If a selling stockholder was restricted by the "blocker" provision of the warrants due to its level of ownership in the Company and wanted to exercise all or a portion of the warrant, such selling stockholder would have to sell some of the securities that it holds below a certain level to permit the exercise of the warrant.

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- Other than the Securities Purchase Agreements and the warrants, neither Deerfield nor any of its affiliates have any contractual relationship with the Company regarding the transaction or with respect to any other matter involving the Company. Mr. James E. Flynn has been disclosed in the footnote (5) to the table on page 18 of the Amendment No. 1 to Form S-3 because he has the power to vote or dispose of the shares of common stock held by Deerfield in his role as a control person of the Deerfield-related companies. Mr. Flynn has no other relationship with the Company.

SEC STAFF COMMENT

2. We reissue prior comment 4. Please provide us your analysis of your ability to conduct a primary offering on Form S-3.

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REGISTRANT'S RESPONSE

2. The Company was eligible to conduct a primary offering on Form S-3 on October 2, 2009, the date it filed its Registration Statement on Form S-3, subject to the limitations set forth in Instruction I. B. 6. of Form S-3. The Company remains eligible to conduct a primary offering on Form S-3 subject to the limitations set forth in Instruction I. B. 6. of Form S-3.

As reflected in the above information, our documents have been amended in response to these comments. In connection with the response to the SEC's Staff's comments, all persons responsible for the filing of this document hereby acknowledge that:

1. We are responsible for the adequacy and accuracy of the disclosure in the filings.
2. We understand that staff comments or changes to disclosure in response to staff comments in the filings reviewed by the staff do not foreclose the Commission from taking any action with respect to the filing.
3. We will not assert staff comments as a defense in any proceeding initiated by the Commission or any person under the federal securities laws of the United States.

If you have any additional questions, please do not hesitate to contact me at 781-314-2789. Thank you.

Sincerely,

/s/ Shai N. Gozani, M.D., PH.D.

Shai N. Gozani, M.D., Ph.D., Chairman, CEO and President
NeuroMetrix, Inc.