

# NEUROMetrix®

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November 12, 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  
Filed October 2, 2009  
File No. 333-162303**

Dear Ms. Soehner:

NeuroMetrix, Inc. (“**NeuroMetrix**”) submits in electronic form for filing the accompanying responses of NeuroMetrix to comments received from the Staff of the Commission (the “**Staff**”) in a letter from Celia A. Soehner, dated October 27, 2009 (the “**Comment Letter**”). The discussion below is presented in the order of the numbered comments in the Comment Letter.

NeuroMetrix hereby conveys the following as its responses to the Staff:

## SEC STAFF COMMENT

### Fee Table

1. *Please tell us whether the “certain major transactions and events of default” and the “certain events specified in the warrants” have occurred. If not, it appears to be premature to register the underlying shares for resale. Please revise or provide us an analysis of the authority on which you rely.*

## REGISTRANT’S RESPONSE

1. **The language referenced in the comment, the “certain major transactions and events of default” and the “certain events specified in the warrants,” has been deleted as not applicable since shares of common stock issuable in those events are**

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**not being registered at this time. There are no conditions precedent to the sale of the warrants; the private placement was completed on September 9, 2009.**

## SEC STAFF COMMENT

### Use of Proceeds, page 19

2. *We note your disclosure regarding “the exercise covered by this prospectus.” Generally it is inconsistent with Section 5 of the Securities Act to register a transaction that was started without registration. Please provide us your analysis regarding how the registration of the exercise of the warrants is consistent with the Securities Act.*

## REGISTRANT’S RESPONSE

2. **We have modified the disclosure in the prospectus to refer to the shares of common stock covered by the prospectus which would be acquired upon exercise of the warrants. This should eliminate any suggestion that the warrants themselves are covered by the prospectus.**

## SEC STAFF COMMENT

### Selling Stockholders, page 20

3. *Given the nature and size of the transaction being registered, please tell us your basis for determining that the transaction is appropriately characterized as a transaction that is eligible to be made on a shelf basis under Rule 415(a)(1)(i). Include in your analysis:*
  - *the total shares offered by each group of affiliated selling stockholders, expressed as a percentage as a percentage of total issued and outstanding securities held by persons other than the selling stockholders, affiliates of the company, and affiliates of the selling stockholders; in this analysis, the calculation of the number of outstanding shares should not include any securities underlying any outstanding convertible securities, options, or warrants;*

- a complete explanation of the purpose and effects of the warrant redemption provisions, exercise price adjustment provisions and the delay in the warrants becoming exercisable; and
- the extent to which the beneficial ownership limitations encourage the selling stockholders to engage in public sales of your securities in connection with the exercise of the warrants.

#### REGISTRANT'S RESPONSE

3. We respectfully refer you to the broader discussion in response to SEC Staff Comment #4 below regarding the appropriate characterization of the transaction as

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a "shelf" offering under Rule 415(a)(1)(i). In response to the specific questions noted in this SEC Staff Comment #3, we respond as follows:

- The total shares offered by Deerfield Special Situations Fund, L.P. and Deerfield Special Situations Funds International Limited ("Deerfield") is 4,436,772 shares (including 43,099 shares that would be acquired upon exercise of warrants and 1,845,000 shares that were acquired in open market transactions prior to the private placement) which represents 21.9% of the total issued and outstanding securities held by persons other than Deerfield, its affiliates and affiliates of the Company as of November 2, 2009. In making such calculation, we have excluded all shares of common stock that could be acquired upon exercise of outstanding warrants or outstanding options (including the warrants that cannot be exercised prior to March 8, 2010).
- The warrants are redeemable for shares of the Company's common stock in certain limited circumstances. However, none of the shares of common stock issuable upon redemption are being registered at this time. These redemption provisions were intended to provide economic value to the holders of the warrants.
- The exercise price of the warrants is subject to typical adjustment provisions based on subsequent events that would impact the capitalization of the Company, such as dividends, distributions, subdivisions, reorganizations or recapitalizations; these adjustments are intended solely to preserve the economic value set at the time of closing of the private placement.
- The six month prohibition on the ability to exercise the warrants requires the selling stockholders to bear the economic risk for some period of time and also provides for some delay between the potential sale of the shares of common stock and the ability to exercise the warrants and sell the shares acquired thereby.
- The Company does not believe that the "blocker" provisions in the warrants would necessarily encourage the sale of other shares then held by the investor in order to allow the exercise of the warrant. The purpose of the 9.9 % provision is to avoid short swing profit issues. This provision does not apply to the selling stockholders since Deerfield already owns in excess of 10% of the outstanding common stock. The purpose of the 19.9% blocker is to comply with applicable NASDAQ Rules.

#### SEC STAFF COMMENT

4. Please provide us your analysis of your ability to conduct a primary offering on Form S-3.

#### REGISTRANT'S RESPONSE

4. As was previously communicated to the Staff in a telephone conversation, the Company has reduced the number of shares of common stock proposed to be

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registered for resale under the registration statement from 19,037,215 shares to 4,436,772 shares. This revised share number represents a reduction of approximately 77% of the number of shares initially proposed to be registered for resale under the registration statement. The shares sought to be registered should be considered separately, comprised of 2,591,772 shares which were acquired in the private placement by the selling stockholders or can be acquired upon exercise of warrants acquired in the private placement (the "Deerfield Placement Shares") and 1,845,000 shares that were acquired by Deerfield in open market transactions during the period from March to October, 2008 (the "Prior Deerfield Shares").

The Deerfield Placement Shares represent (i) approximately 18.4% of the total number of outstanding shares immediately prior to the private placement, (ii) approximately 19.2% of the total number of outstanding shares held by non-affiliates immediately prior to the private placement, (iii) approximately 11.3% of the total number of shares currently outstanding and (iv) approximately 11.6% of the total number of shares currently outstanding held by non-affiliates (including for such purpose the shares that would be acquired upon exercise of the warrants included in the registration although such warrants are not currently exercisable).

For purposes of this calculation, only the director and executive officers of the Company were deemed to be "affiliates" at the time of the private placement. Although Deerfield held 1,845,000 shares (13.1%) immediately prior to the private placement, Deerfield did not have a board seat or other contractual rights.

Based on the significantly reduced number of shares proposed to be registered for resale under the registration statement, we believe that the offering by the selling stockholders pursuant to the registration statement is a true secondary offering eligible to be made on a shelf basis under Rule 415(a)(1)(i) and that the Company should be permitted to proceed with the registration of 4,436,772 shares on a secondary basis on Form S-3 in accordance with the SEC guidance.

Item D.29 of the SEC's 1997 Manual of Publicly Available Telephone Interpretations sets forth six factors that an issuer should analyze to determine whether an offering is a secondary offering within the meaning of Rule 415. These factors are: how long the selling stockholders have held the shares; the circumstances under which they received them; their relationship to the issuer; the amount of shares involved; whether the sellers are in the business of underwriting securities; and, whether under all the circumstances, it appears that the seller is acting as a conduit for the issuer. An analysis of how this offering should be viewed under each of these factors is set forth below.

1. How long have the selling stockholders held the shares?

The shares sought to be registered in this registration statement were either issued in the private placement which was completed in September 2009 or, in the case of the Prior Deerfield Shares, were acquired in open market transactions and have now been held for between 12 months and 19

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months. Moreover, the expiration date of the warrants (5 years from closing) creates no immediate pressure on the holders to exercise the warrants and therefore subsequently to sell the shares that could be acquired upon exercise of the warrants. In addition, the exercise price of the warrants was set at a 10% premium above the consolidated closing bid for the Company's common stock on September 4, 2009. Finally, the Company's trading volume has been relatively modest, averaging just over 65,000 shares over the past three months. As a result, the sale into the public market of a significant portion of the offered shares could dramatically reduce the price received, which could have the effect of causing the selling stockholders to hold the securities for a longer period of time.

2. What are the circumstances under which the selling stockholders received the shares?

As described above, the securities were acquired in a private placement completed on September 9, 2009 (other than the Prior Deerfield Shares which were acquired in open market purchases between March and October 2008).

In addition, the transaction documents contain provisions that are relevant to the selling stockholders' intent to resell the shares. The selling stockholders represented and warranted in the securities purchase agreement they were acquiring the shares for their own account and not with a view towards, or for resale in connection with, a public sale or distribution. The selling stockholders further represented that they had no agreement or understanding, directly or indirectly, with any person to resell or distribute the securities.

Additionally, Deerfield is subject to a lock up provision in the securities purchase agreements that it will not, directly or indirectly, sell, offer to sell, contract to sell (including, without limitation, any short sale), grant any option to purchase, or otherwise transfer or dispose of (other than by bona fide gift to donees who agree to be similarly bound) any Registrable Securities (as defined therein) until the earlier of (i) March 8, 2010 and (ii) the date upon which a registration statement covering all of the shares issued to the other investors has been declared effective. Furthermore, none of the shares or warrant shares issued to the other investors are being registered at this time.

3. What is the relationship of the selling stockholders to the issuer?

There are no other relationships between the selling stockholders and the Company other than those arising from the private placement and the ownership of shares and warrants by the selling stockholders. The terms of the private placement were fully negotiated at arm's length, and there is no

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relationship or commonality between any of these selling stockholders or their principals and the control persons of the Company. The private placement did not confer on any selling stockholder any special rights relating to control or direction of management of the Company.

4. What is the amount of shares involved?

To address the Staff's concern regarding the size of the proposed registration, as described above, the Company has reduced the size of the offering from 19,037,215 shares to 4,436,772 shares, which includes 2,548,673 shares issued to Deerfield in the private placement, 43,099 shares issuable upon exercise of the warrants held by Deerfield that were acquired in the private placement and the 1,845,000 Prior Deerfield Shares that were acquired in open market purchases between March and October of 2008. The registration of the Prior Deerfield Shares should be viewed as distinct from the registration analysis undertaken with respect to the shares and warrants issued in the private placement. Excluding the Prior Deerfield Shares, as so cut-back, the offering is consistent with the SEC's previously stated position that the inclusion of shares which represent not more than 30% of the public float prior to the private placement would be consistent with a secondary offering.

5. Are the selling stockholders in the business of selling securities?

To the knowledge of the Company, neither of the selling stockholders is in the business of selling securities. Furthermore, each of the selling stockholders has represented that it has no agreement or understanding to resell or distribute the securities.

6. Considering all circumstances, does it appear that the selling stockholders are acting as a conduit for the issuer?

The Company believes that none of the conditions on which the Staff is basing its policy to limit abusive, "conduit" shelf offerings pursuant to Rule 415 is present in this offering. The terms of the transaction were based on arms' length negotiations

between the parties and there were a number of unrelated investors. There is currently not a significant trading market for the Company's common stock, which would make it difficult for the selling stockholders to act as conduits even if they wanted to do so. Consequently, the Company believes that the circumstances demonstrate that the selling stockholders are not acting as a conduit for the issuer.

**SEC STAFF COMMENT**

5. *With a view toward disclosure, please tell us when and how Deerfield acquired the 1,845,000 offered shares "prior to the consummation of the private placement." Include*

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*in your response the nature and amount of the consideration paid, the date the consideration was paid, and the filing date of the Exchange Act report in which your unregistered securities issuance was disclosed per Regulation S-K Item 701.*

**REGISTRANT'S RESPONSE**

5. **Based on information provided by Deerfield, Deerfield acquired the 1,845,000 offered shares in open market transactions on the NASDAQ market between March 2008 and October 2008. Accordingly, there were no prior sales of unregistered securities by the Company to Deerfield.**

**SEC STAFF COMMENT**

6. *Please provide us, with a view toward disclosure in the prospectus, with tabular disclosure of the dollar amount of each payment (including the value of any payments to be made in common stock) in connection with the September 2009 unregistered transaction that you have made or may be required to make to any selling stockholder, any affiliate of a selling stockholder, or any person with whom any selling stockholder has a contractual relationship regarding the transaction (including any interest payments, liquidated damages, payments made to "finders" or "placement agents," and any other payments or potential payments). Please provide footnote disclosure of the terms of each such payment.*

*Further, please provide us, with a view toward disclosure in the prospectus, with disclosure of the net proceeds to the issuer in the September 2009 unregistered sale of securities and the total possible payments to all selling stockholders and any of their affiliates in the first year following the unregistered sale.*

**REGISTRANT'S RESPONSE**

6. **The Company respectfully informs the Staff that no payments were made by the Company or are required to be made by the Company in connection with the private placement to any selling stockholder, any affiliate of a selling stockholder, or any person with whom any selling stockholder has a contractual relationship:**

**SEC STAFF COMMENT**

7. *Please provide us, with a view toward disclosure in the prospectus, with tabular disclosure of:*
- *the total possible profit to be realized as a result of any conversion discounts for securities underlying any other warrants, options, notes, or other securities of the issuer that are held by the selling stockholders or any affiliates of the selling stockholders, presented in a table with the following information disclosed separately;*

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- *market price per share of the underlying securities on the dates of the sale of that other security;*
- *the conversion/exercise price per share as of the date of the sale of that other security, calculated as follows:*
  - *if the conversion/exercise price per share is set at a fixed price, use the price per share on the date of the sale of that other security; and*
  - *if the conversion/exercise price per share is not set at a fixed price and, instead, is set at a floating rate in relationship to the market price of the underlying security, use the conversion/exercise discount rate and the market rate per share on the date of the sale of that other security and determine the conversion price per share as of that date;*
- *the total possible shares to be received under the particular securities (assuming complete conversion/exercise);*
- *the combined market price of the total number of underlying shares, calculated by using the market price per share on the date of the sale of that other security and the total possible shares to be received;*
- *the total possible shares to be received and the combined conversion price of the total number of shares underlying that other security calculated by using the conversion price on the date of the sale of that other security and the total possible number of underlying shares; and*
- *the total possible discount to the market price as of the date of the sale of that other security, calculated by subtracting the total conversion/exercise price on the date of the sale of that other security from the combined market price of the total number of underlying shares on that date.*

**REGISTRANT'S RESPONSE**

7. We respectfully advise the Staff that neither Deerfield nor any affiliate of Deerfield holds any types of equity interests in the Company whereby Deerfield would be able to realize a profit as a result of any conversion discount. The warrant exercise price is \$2.20 per share which represented a 10% premium over the consolidated closing bid price for the Company's common stock as reported on the NASDAQ Global Market on September 4, 2009 (the stock purchase agreements were entered into on September 8, 2009 (Labor Day was September 7, 2009)). The warrants are not exercisable prior to March 8, 2010. The ultimate profit realized will be a function of the market price per share as of the date the shares acquired upon exercise of the

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warrants are sold. Deerfield holds warrants to acquire 2,421,239 shares of common stock in the aggregate, only 43,099 shares of which are being registered in this Registration Statement.

**SEC STAFF COMMENT**

8. Please provide us, with a view toward disclosure in the prospectus, with tabular disclosure of all prior securities transactions between the issuer (or any of its predecessors) and the selling stockholders, any affiliates of the selling stockholders, or any person with whom any selling stockholder has a contractual relationship regarding the transaction (or any predecessors of those persons), with the table including the following information disclosed separately for each transaction:
- the date of the transaction;
  - the number of shares of the class of securities subject to the transaction that were outstanding prior to the transaction;
  - the number of shares of the class of securities subject to the transaction that were outstanding prior to the transaction and held by persons other than the selling stockholders, affiliates of the company, or affiliates of the selling stockholders;
  - the number of shares of the class of securities subject to the transaction that were issued or issuable in connection with the transaction;
  - the percentage of total issued and outstanding securities that were issued or issuable in the transaction (assuming full issuance), with the percentage calculated by taking the number of shares issued or issuable in connection with the applicable transaction, and dividing that number by the number of shares issued and outstanding prior to the applicable transaction and held by persons other than the selling stockholders, affiliates of the company, or affiliates of the selling stockholders;
  - the market price per share of the class of securities subject to the transaction; and
  - the current market price per share of the class of securities subject to the transaction.

**REGISTRANT'S RESPONSE**

8. There are no prior securities transactions between the Company and Deerfield, the sole selling stockholders based on the proposed revised number of shares sought to be registered. As described in response to SEC Staff Comment #5, prior to the private placement, Deerfield acquired shares of Company common stock in open market purchases.

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**SEC STAFF COMMENT**

9. Please provide us, with a view toward disclosure in the prospectus, with tabular disclosure comparing:
- the number of shares outstanding that are held by persons other than the selling stockholders, affiliates of the company, and affiliates of the selling stockholders;
  - the number of shares registered for resale by the selling stockholders or affiliates of the selling stockholders in prior registration statements;
  - the number of shares registered for resale by the selling stockholders or affiliates of the selling stockholders that continue to be held by the selling stockholders or affiliates of the selling stockholders;
  - the number of shares that have been sold in registered resale transactions by the selling stockholders or affiliates of the selling stockholders; and
  - the number of shares registered for resale on behalf of the selling stockholders or affiliates of the selling stockholders in the current transaction.

In this analysis, the calculation of the number of outstanding shares should not include any securities underlying any outstanding convertible securities, options, or warrants.

**REGISTRANT'S RESPONSE**

9. As cut-back, the sole selling stockholders are the two affiliated Deerfield funds, referred to herein as "Deerfield." We request that in light of this change in the number of shares sought to be registered and the limitation to two selling stockholders that the information not be provided in a tabular form. Rather, we advise you that:

- 17,923,612 is the number of shares outstanding that are held by persons other than the selling stockholders, affiliates of the company, and affiliates of the selling stockholders.
- Neither Deerfield nor its affiliates has registered for sale shares of the Company's common stock in prior registration statements.
- Deerfield, as the sole selling stockholder, has registered all of the shares it holds (including the Prior Deerfield Shares) for resale. Deerfield will continue to hold warrants to acquire 2,378,140 shares of the Company's common stock which underlying shares are not registered in this secondary offering. Notwithstanding such registration, as stated in the prospectus, because the selling stockholders may sell all or some of their shares from time to time, or

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in another permitted manner, we have no assurance as to the actual number of shares (if any) that will be sold by the selling stockholders or the timeframe in which such sales will occur.

- Deerfield has not sold any shares of Company common stock in registered resale transactions.
- 4,436,772 shares (including the Prior Deerfield Shares and 43,099 shares to be acquired upon exercise of Warrants) have been registered for resale on behalf of Deerfield.

#### SEC STAFF COMMENT

10. Please tell us, with a view toward disclosure in the prospectus, whether — based on information obtained from the selling stockholders — any of the selling stockholders have an existing short position in the company's common stock and if so:

- the date on which each such selling stockholder entered into that short position; and
- the relationship of the date on which each such selling stockholder entered into that short position to the date of the announcement of the warrant transaction and the filing of the registration statement (e.g., before or after the announcement of the warrant transaction, before the filing or after the filing of the registration statement, etc.).

#### REGISTRANT'S RESPONSE

10. Deerfield represented in the securities purchase agreements that, as of the date of execution, it had not established any hedge or other position in the common stock (which would include a short sale) that is designed to or could reasonably be expected to lead to or result in a disposition of the common stock. Further Deerfield is subject to a covenant in the securities purchase agreements that it will not, directly or indirectly, sell, offer to sell, contract to sell (including, without limitation, any short sale), grant any option to purchase, or otherwise transfer or dispose of (other than by bona fide gift to donees who agree to be similarly bound) any Registrable Securities (as defined therein) until the earlier of (i) March 8, 2010 and (ii) the date upon which a registration statement covering all of the shares issued to the other investors has been declared effective.

Accordingly, to the Company's knowledge, Deerfield has no short position. We have added language in the prospectus confirming the foregoing under the caption "Plan of Distribution."

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#### SEC STAFF COMMENT

11. Please provide us, with a view toward disclosure in the prospectus, with:

- a materially complete description of the relationships and arrangement that have existed in the past three years or are to be performed in the future between the issuer (or any of its predecessors) and the selling stockholders, any affiliates of the selling stockholders, or any person with whom any selling stockholder has a contractual relationship regarding the transaction (or any predecessors of those persons) — the information provided should include, in reasonable detail, a complete description of the rights and obligations of the parties in connection with the sale of the warrants; and
- copies of all agreements between the issuer (or any of its predecessors) and the selling stockholders, any affiliates of the selling stockholders, or any person with whom any selling stockholder has a contractual relationship regarding the transaction (or any predecessors of those persons) in connection with the sale of the warrants.

If it is your view that such a description of the relationships and arrangements between and among those parties already is presented in the prospectus and that all agreements between and/or among those parties are included as exhibits to the registration statement, please provide us with confirmation of your view in this regard.

#### REGISTRANT'S RESPONSE

11. There are no relationships or arrangements that have existed in the past three years between the Company and Deerfield. Copies of all agreements between the Company and Deerfield have been filed as exhibits to the registration statement, namely the securities purchase agreements and the warrant. The applicable provisions regarding the exercise of the warrants are disclosed in the second paragraph under the caption "Selling Stockholders". Additional disclosure has been added to the prospectus in this section to describe the rights and obligations of the parties in connection with the warrants upon certain changes in control of the Company.

SEC STAFF COMMENT

12. *Please provide us, with a view toward disclosure in the prospectus, with a description of the method by which the company determined the number of shares it seeks to register in connection with this registration statement.*

REGISTRANT'S RESPONSE

12. **As cut-back, the number of shares sought to be registered was determined principally by reference to the SEC's previously articulated position that a secondary offering in which the issuer sought to register more than 30% of its**

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public float prior to the transaction might be a disguised primary offering. The manner of the cut-back relative to the initial number of shares that the Company sought to register is based on the applicable provisions of the securities purchase agreements. As a result, the only shares eligible to be registered are those shares of common stock, and a limited number of warrants issued to Deerfield, in the private placement. In addition, the Company seeks to register on behalf of Deerfield 1,845,000 shares which Deerfield had acquired in open market transactions between March and October 2008. Deerfield has held these shares for in excess of a one year period and, accordingly has borne the risk of the investment. Deerfield has no other contractual relationship with the Company other than those related to the registration rights and rights under the warrants acquired in connection with the private placement. We have been advised that Deerfield is not in the business of buying and selling securities. Deerfield did not acquire these shares with a view to their distribution (as evidenced by the foregoing factors) and should not be viewed as an underwriter. We have included the 1,845,000 shares at Deerfield's request because of concerns that Deerfield may, by virtue of its percentage of ownership of the Company's common stock following the private placement, be viewed as an "affiliate" of the Company and be subject to the volume limitations imposed by Rule 144. We have not modified the disclosure in the registration statement because we did not believe this analysis is material to other stockholders. We have, however, added disclosure in the prospectus at the end of the third paragraph under the caption "Selling Stockholders" regarding the Company's future obligation to register the other shares (including shares that may be acquired upon exercise of warrants) that were issued in the private placement.

SEC STAFF COMMENT

13. *Please tell us which selling stockholders are broker-dealers and which are affiliates of a broker-dealer. For any selling stockholder that is not a broker-dealer, please tell us whether the stockholder is in the business of buying and selling securities.*

REGISTRANT'S RESPONSE

13. **As the offering has been revised to be limited to shares being offered for resale by Deerfield, based on information provided to the Company by Deerfield, we advise you that Deerfield is not a broker-dealer nor an affiliate of a broker-dealer. Further, we have been advised that Deerfield is not in the business of buying and selling securities.**

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SEC STAFF COMMENT

14. *Where you have not already done so, please identify the individuals who beneficially own your shares held in the name of the entities mentioned in the table and footnotes.*

REGISTRANT'S RESPONSE

14. **Footnote 5 to the beneficial ownership table included under the caption "Selling Stockholders" of the prospectus identifies James E. Flynn as the individual who has the power to vote or dispose of the shares of common stock held by Deerfield.**

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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.  
NeuroMetrix, Inc.

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