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March 24, 2021

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

Attn: Abby Adams
Chris Edwards
Tara Harkins
Angela Connell

Re: NeuroPace, Inc.
Draft Registration Statement on Form S-1
Submitted January 29, 2021
CIK No. 0001528287

Ladies and Gentlemen:

On behalf of NeuroPace, Inc. (the "***Company***"), we are responding to the comments (the "***Comments***") of the staff (the "***Staff***") of the Securities and Exchange Commission (the "***Commission***") contained in its letter, dated February 25, 2021, relating to the above referenced confidential draft Registration Statement on Form S-1 (the "***DRS***"). The Company is concurrently filing a revised Registration Statement on Form S-1, which includes changes that reflect the responses to the Comments (the "***Registration Statement***").

For ease of reference, set forth below are the Company's responses to the Comments. The numbering of the paragraphs below corresponds to the numbering of the Comments, which for your convenience we have incorporated into this response letter. Page references in the text of this response letter correspond to the page numbers of the Registration Statement. Capitalized terms used in this letter but not otherwise defined herein have the meanings set forth in the Registration Statement.

Draft Registration Statement on Form S-1, Submitted January 29, 2021

Risk Factors, page 15

1. *Please revise this section to relocate any generic risk factors you present to the end of the section, under the caption "General Risk Factors." See Item 105(a) of Regulation S-K.*

   Response: In response to the Staff's comment, the Company has revised the disclosure on pages 65 through 70 of the Registration Statement.

Management's Discussion and Analysis of Financial Condition and Results of Operations
Critical Accounting Policies, Significant Judgments and Use of Estimates
Common Stock Valuation and Stock-Based Compensation, page 96

2. *Once you have an estimated offering price or range, please explain to us how you determined the fair value of the common stock underlying your equity issuances and the reasons for any differences between the recent valuations of your common stock leading up to the IPO and the estimated offering price. This information will help facilitate our review of your accounting for equity issuances, including stock compensation and beneficial conversion features. Please discuss with the staff how to submit your response.*

   Response: The Company will provide the Staff with the requested information once it has an estimated offering range.

Business, page 100

3. *We note your statements that you intend to broaden the application of your product for use in generalized epilepsy, as well as potential applications in other brain disorders including depression, impulse control disorders, memory disorders, and post-traumatic stress disorder. Please state whether your product will require modification to treat these other indications and whether you will need FDA approval for any other these potential applications.*

   Response: The Company has revised the disclosure on pages 1, 104 and 110 of the Registration Statement.

Significant and improving seizure reduction in all areas of the brain, page 113

4. *We note your disclosure that the results observed from a retrospective study across eight epilepsy centers were statistically significant. Please expand your disclosure to provide the p-values.*

   Response: In response to the Staff's comment, the Company has revised the disclosure on pages 2, 7, 105 and 118 of the Registration Statement to include the p-values for the results observed from the retrospective study that the Company has identified as statistically significant.

Clinical Data, page 115

5. *Please clearly disclose the number and type of all serious adverse events for each clinical trial discussed, whether or not treatment-related.*

   Response: In response to the Staff's comment, the Company has revised the disclosure on page 120 of the Registration Statement.

Intellectual Property
Patents, page 123

6. *Please revise this section to more specifically describe your patent portfolio. For example, if they are material to your business, please disclose the nature of the 104 patents not related to your*

RNS system, the specific products, product groups and technologies to which such patents relate, whether they are owned or licensed, the type of patent protection you have, the expiration dates, the applicable jurisdictions and whether there are any contested proceedings or third-party claims. Provide similar clarification for your RNS system-related patents.

Response: In response to the Staff's comment, the Company has revised the disclosure on page 128 of the Registration Statement and respectfully advises the Staff that the Company is not a party to any material legal proceedings, as disclosed on page 144 of the Registration Statement.

7. *Revise to disclose all material terms of the Medtronic cross-license and file the license as an exhibit pursuant to Item 601(b)(10) of Regulation S-K.*

Response: The Company acknowledges the Staff's comment and respectfully advises the Staff that the cross-license agreement (the "**Medtronic Cross-License**") with Medtronic, Inc. ("**Medtronic**") does not fit within the definition of material contract under Item 601(b)(10) of Regulation S-K.

Item 601(b)(10)(i) provides that a material contract is "every contract not made in the ordinary course of business that is material to the registrant and is to be performed in whole or in part at or after the filing of the registration statement or report." Further, Item 601(b)(10)(ii) requires that contracts, even if made in the ordinary course, under that subsection be filed "except where immaterial in amount or significance." Although the Medtronic Cross-License was not made in the ordinary course of business, it is immaterial in amount and significance to the Company for the following reasons.

- Although certain of the patents that the Company has licensed from Medtronic pursuant to the Medtronic Cross-License are in the field of use in which the Company operates, all of those patents have expired since the Company entered into the Medtronic Cross-License in 2005. None of the active patents that the Company has licensed from Medtronic have claims directed to any of its existing products, including the RNS System, or any of its planned future products or enhancements of existing products. If the Medtronic Cross-License were to be terminated for any reason and the Company lost the rights to the active patents licensed from Medtronic thereunder, the Company believes that it would not be precluded from operating and growing its business, as now conducted or as presently proposed to be conducted, in any way.

- As disclosed on page 170 of the Registration Statement, Medtronic was entitled to approximately $0.3 million, $0.4 million, and $0.4 million of royalty payments during the years ended December 31, 2018, 2019 and 2020, respectively, which constituted approximately 1.0% of the Company's revenue for each such year.

Based on the reasons above, the Company respectfully submits that the Medtronic Cross-License is immaterial in amount and significance to the Company. As such, the Medtronic Cross-License is not a material contract within the meaning of Item 601(b)(10) of Regulation S-K and that filing the Medtronic Cross-License as a material contract would not enable investors to form a more informed view of the Company's business as a whole. Moreover, because the Medtronic Cross-

License is not a material contract, disclosure of all material terms of that agreement would not be material to an understanding of the Company's business.

Manufacturing and Supply, page 125

8. *We note here and in the risk factor on page 61 brief mention of your risks related to single source suppliers. Identify the suppliers and the material and provide us your analysis regarding whether you are substantially dependent upon these suppliers such that the contracts are required to be filed as an exhibit pursuant to Item 601(b)(10)(ii) of Regulation S-K.*

   Response: The Company has revised the disclosure on pages 21 and 130 of the Registration Statement to identify the single source suppliers on which the Company is substantially dependent and has filed the agreements with such suppliers as Exhibits 10.18, 10.19 and 10.20 to the Registration Statement. The Company respectfully advises the Staff that the Company is not substantially dependent on its other single source suppliers because there are other alternative suppliers that the Company could use and the Company typically maintains sufficient inventory on hand to cover in the event it needs to find and qualify an alternative supplier.

Certain Relationships and Related Party Transactions, page 163

9. *You have identified agreements with RBrooks Group, Inc. Davenport Executive Search that were paid in advance by KCK Ltd. We note the relationship between KCK and two of your directors as disclosed in the footnote to the table on this same page. Revise the disclosure of these reimbursements to clarify the relationship and/or control your board members have over KCK Ltd. in order to clarify "the name of the related person and the basis on which they are related" and the related persons' interests in the transactions, as required by Item 404(a). Clarify if any related parties have any interests in RBrooks or Davenport.*

   Response: In response to the Staff's comment, the Company has revised the disclosure on page 170 of the Registration Statement.

Principal Stockholders, page 166

10. *Please identify the natural person or persons who directly or indirectly exercise sole or shared voting and/or dispositive power with respect to the common stock held by Covidien and Leerink. Refer to Item 403 of Regulation S-K.*

    Response: In response to the Staff's comment, the Company has revised the disclosure on page 172 of the Registration Statement.

Notes to Financial Statements
Note 13. Subsequent Events, page F-30

11. *We note that your board of directors re-priced all of your stock options for employees, officers and consultants to a market price of $0.01 per share and that you are currently evaluating the impact of the repricing. Please explain to us how you are accounting for the re-pricing of these options under ASC 718-20-35.*

Response: The Company respectfully advises the Staff that it accounted for the re-pricing of the stock options as follows:

- On November 30, 2020, the Company's Board of Directors approved a reduction in the exercise price of all outstanding stock options to $0.01 per share. Before the repricing, outstanding stock options had an exercise price of either $14.00 or $22.00 per share. A total of 443,212 shares were subject to the re-priced options.

- In accordance with ASC 718-20-35, the repricing was considered a modification, with incremental compensation cost measured as the excess of the fair value of the modified awards over the fair value of the original awards immediately before the modification. Accordingly, the Company calculated the fair value of the options immediately before the modification and after the modification using a Black-Scholes model. All assumptions used in the Black-Scholes model were the same before and after the modification, other than the strike price.

- The Company had 409A valuations of its common stock performed by an unrelated third-party valuation firm as of August 31, 2020 and as of December 31, 2020. In order to determine the common stock price used as an input to the Black-Scholes model, the Company performed a linear interpolation between the concluded common stock value as of August 31, 2020 of $0.005 per share and the concluded common stock value as of December 31, 2020 of $0.40 per share. The linear interpolation resulted in a common stock value of $0.30 as of the repricing date.

- The result from the Black-Scholes model was a fair value of $0.000 per share prior to the modification and a fair value of $0.289 per share after the modification, for a total difference in fair value of approximately $128,000 which represents incremental compensation cost to be recognized by the Company over the service period of the awards. Of this total, $92,000 was attributed to awards that were vested as of the repricing date and $36,000 was attributed to unvested awards. The Company recorded $92,000 as additional compensation expense in the fourth quarter of 2020. The compensation expense of $36,000 for the remaining service period was immaterial.

General

12. *Please supplementally provide us with copies of all written communications, as defined in Rule 405 under the Securities Act, that you, or anyone authorized to do so on your behalf, present to potential investors in reliance on Section 5(d) of the Securities Act, whether or not they retain copies of the communications.*

Response: The Company is providing to the Staff, on a supplemental basis, copies of the written communications, as defined in Rule 405 under the Securities Act of 1933, as amended (the "**Securities Act**"), that have been used in meetings with potential investors in reliance on Section 5(d) of the Securities Act. These materials were only made available for viewing by potential investors during the Company's presentations, and no copies were retained by any potential investor. Pursuant to Rule 418 under the Securities Act, the copies supplementally provided shall not be deemed to be filed with, or a part of, or included in, the Registration Statement.

To the extent the Company conducts additional meetings, it expects to use the same or similar materials, and the Company undertakes to provide the Staff with copies of any additional written communications that are presented to potential investors in the future by it or anyone authorized to do so on its behalf in reliance on Section 5(d) of the Securities Act, whether or not such potential investors retain copies of such communications.

Please contact me at (650) 843-5011, Seth Gottlieb at (650) 843-5864 or Brett White at (650) 843-5191 with any questions or further comments regarding the Company's response to the Staff's comments.

Sincerely,

/s/ Mark B. Weeks

Mark B. Weeks
Cooley LLP

cc: Michael Favet, NeuroPace, Inc.
Rebecca Kuhn, NeuroPace, Inc.
Irina Ridley, NeuroPace, Inc.
Seth Gottlieb, Cooley LLP
Brett White, Cooley LLP
Alan Denenberg, Davis Polk & Wardell LLP

Enclosures