



DIVISION OF
CORPORATION FINANCE

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549

October 5, 2018

David Rosa
Chief Executive Officer
NeuroOne Medical Technologies Corporation
10006 Liatris Lane
Eden Prairie, MN 55347

Re: NeuroOne Medical Technologies Corporation
Registration Statement on Form S-1
Filed September 10, 2018
File No. 333-227265

Dear Mr. Rosa:

We have reviewed your registration statement and have the following comments. In some of our comments, we may ask you to provide us with information so we may better understand your disclosure.

Please respond to this letter by amending your registration statement and providing the requested information. If you do not believe our comments apply to your facts and circumstances or do not believe an amendment is appropriate, please tell us why in your response.

After reviewing any amendment to your registration statement and the information you provide in response to these comments, we may have additional comments.

Form S-1 Filed September 10, 2018

About Us, page 1

1. If you choose to highlight that you are developing technology to address the conditions disclosed here, given your disclosure on page 34 please also disclose that addressing specific disclosed conditions will require that your technology detect single neuron brain activity, which page 33 indicates has been suggested in limited clinical testing.

Risk Factors, page 2

2. Please provide us your analysis of whether the promotional activity mentioned in your Form 8-K filed August 24, 2018 exposes you to material risks which should be disclosed in this prospectus.

Our future success depends on our ability . . . , page 17

3. We note your reference to your "scientific and physician advisory board members." In an appropriate section of your document, please clarify the nature of these boards and their relation to your organizational structure. Also, ensure your disclosure addresses the advisory board discussed in your Form 8-K filed September 27, 2018, including how that board's focus impacts your current operations.

Selling Stockholders, page 29

4. We note your disclosure in the first sentence of the second paragraph regarding selling stockholders who have had specified relationships with you or your affiliates in the past three years, but the table does not appear to present this information. Please tell us whether any of the selling securityholders have had those specified relationships and, if so, disclose the nature of those relationships and the identity of the natural persons who maintain beneficial ownership of securities held by entities with such relationships.
5. Please disclose the transaction in which the selling security holders acquired the offered shares. Include the date of the transaction and the amount the security holder paid for the offered securities.

Description of Securities to be Registered, page 31

6. Please revise to provide all information required by Regulation S-K Item 202(c) regarding the warrants overlying the securities offered.

Corporate Overview and History of NeuroOne, page 32

7. We note your disclosure in the the second paragraph of page 33 that pre-clinical tests have demonstrated specified capabilities in your technology. Given this, please revise to clarify what is meant by your disclosure that your "technology remains in product development for all of the therapeutic modalities." Your revised disclosure should clearly identify the current stage of development regarding the products you intend to produce and what capabilities have been demonstrated by objective, statistically significant data.

Our Strategy, page 36

8. We note your disclosure in the first bullet point indicating your expected timeframe for submitting a premarket notification to the FDA. In an appropriate section of your prospectus, please disclose the expected length of time between your submission of the

notification and your ability to market your intended products. Ensure your disclosure clearly identifies your anticipated timeline regarding obtaining required regulatory clearances.

9. Revise to clarify the development and testing you must perform before submitting your 510(k) submission to the FDA. For example, if you have not yet developed a product that can serve as the basis of this submission, your disclosure should indicate the current status of product development, what obstacles remain to developing the product, what resources are required to complete development and when you anticipate such product development will be completed. Provide similar disclosure regarding any required testing.

Our Technology, page 37

10. Please revise your disclosure to clarify your references to "scale-able technology," "ultra-thin electrodes" and "higher density contacts." Your disclosure should explain what these terms mean in context and how they relate to your intended products.
11. Revise to clarify the significance of the graphic presented. Your disclosure should clearly explain which pictures represent your intended products and what the significance of each picture is to your intended product.

Clinical Experience, Future Development and Clinical Trial Plans, page 38

12. Given your disclosure regarding your regulation by the FDA, please tell us the authority on which you rely to discuss your technology's safety and efficacy, as mentioned in the first paragraph.
13. Revise the disclosure in your chart to clarify what is meant by "[d]esign freeze complete" and "[i]n development" in the second column and briefly explain the various tests mentioned in the third column. Also, please ensure your disclosure regarding timeframe expectations is updated.

Research and Development, page 41

14. Reconcile the number of employees as disclosed here with disclosure on page 50. If appropriate, please clarify the nature of your relationships with the disclosed individuals performing research and development.

Employment Agreements, page 72

15. Please file the agreement mentioned in the last sentence of the first paragraph.

Security Ownership of Certain Beneficial Owners and Management, page 80

16. Please identify the natural persons who exercise the sole or shared voting and/or dispositive powers with respect to the shares owned by the entities listed in your table. For example, we note footnotes 4 and 6. Also, tell us why this table does not address the securities owned by Chromium 24, LLC, as discussed on page 82.

Note 1 - Organization and Nature of Operations
Merger of NeuroOne, Inc. and NeuroOne LLC, page F-8

17. We note that NeuroOne LLC was merged into NeuroOne, Inc. on October 27, 2016 in a transaction accounted for as an asset acquisition under ASC 805 and that you concluded that NeuroOne LLC is the predecessor entity in this transaction. Please explain to us why you are presenting the successor financial information for periods prior to the date of the merger transaction. Cite the authoritative guidance upon which you are relying.

Note 3 - Summary of Significant Accounting Policies
Fair Value of Financial Instruments, page F-9

18. Please revise to disclose the fair value of your common shares at each period end as it is a significant unobservable input underlying the level 3 fair value measurements. Refer to ASC 820-10-50-2bbb.

Note 6 – Accrued expenses, page F-15

19. We note from your disclosure on page F-15 and F-34 that as of December 31, 2017 and June 30, 2018 you accrued \$600,339 and \$1,118,872 for services, respectively. Given the significance of the amounts in relations to your total accrued expenses, please revise the notes to briefly describe the related services. In addition, revise MD&A to discuss the impact of these accruals on your results of operations in each reported period, as well as any impact on your future liquidity position. Refer to Item 303(A)(1) and 303(B)(1) of Regulation S-K.

Note 7 - Short-Term Promissory Notes and Unsecured Loan
Short-Term Promissory Notes, page F-15

20. You disclose here and throughout filing that the fair value of your common stock used in determining the fair value of warrants issued was based on a separate independent third-party valuation analysis. Please revise to clarify the nature and extent of your reliance on the independent third-party valuation. Also, refer to Question 141.02 of our Compliance and Disclosure Interpretations on Securities Act Sections which provides guidance on the use of third-party experts in connection with the preparation of a Securities Act registration statement.

David Rosa
NeuroOne Medical Technologies Corporation
October 5, 2018
Page 5

Note 10 - Stock-Based Compensation, page F-20

21. During the year ended December 31, 2017 you granted directors and consultants 365,716 stock options with weighted average exercise prices of \$0.04 and issued 215,453 restricted common shares with a fair value of \$0.03. You recorded approximately \$77,000 of stock-based compensation expense and we see on page F-42 that you had no remaining unrecognized compensation expense. Please address the following:
- Tell us the fair value of your common shares and clarify how it was determined as of each stock option and restricted stock grant date.
 - Clarify for us the vesting periods for the stock options granted.
 - Explain to us why the estimated fair value of your common stock as of December 31, 2017 of \$2.52 per share is significantly higher than the weighted average exercise prices of the stock options and the fair value of the restricted stock granted.

Item 15. Recent Sales of Unregistered Securities, page II-2

22. Please revise to provide the information Regulation S-K Item 701 requires concerning the transaction disclosed in your Form 8-K filed August 24, 2018 regarding your agreement with JLS Ventures, LLC.

We remind you that the company and its management are responsible for the accuracy and adequacy of their disclosures, notwithstanding any review, comments, action or absence of action by the staff.

Refer to Rules 460 and 461 regarding requests for acceleration. Please allow adequate time for us to review any amendment prior to the requested effective date of the registration statement.

You may contact Eric Atallah at 202-551-3663 or Kevin Kuhar, Accounting Branch Chief, at 202-551-3662 if you have questions regarding comments on the financial statements and related matters. Please contact Caleb French at 202-551-6947 or Amanda Ravitz, Assistant Director, at 202-551-3528 with any other questions.

Sincerely,

Division of Corporation Finance
Office of Electronics and Machinery

cc: Jeff Cahlon, Esq.