

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

October 15, 2021

Alon Ben-Noon Chief Executive Officer NeuroSense Therapeutics Ltd. Medinat ha-Yehudim Street 85 Herzliya 4676670 Israel

Re: NeuroSense Therapeutics Ltd.
Amendment No. 2 to
Draft Registration Statement on Form F-1
Submitted October 7, 2021
CIK No. 0001875091

Dear Mr. Ben-Noon:

We have reviewed your amended draft registration statement and have the following comment.

Please respond to this letter by providing the requested information and either submitting an amended draft registration statement or publicly filing your registration statement on EDGAR. If you do not believe our comment applies to your facts and circumstances or do not believe an amendment is appropriate, please tell us why in your response.

After reviewing the information you provide in response to this comment and your amended draft registration statement or filed registration statement, we may have additional comments. Unless we note otherwise, our references to prior comments are to comments in our October 1, 2021 letter.

Amendment No. 2 to Draft Registration Statement on Form F-1 submitted October 7, 2021

Efficacy Endpoints of Our PrimeC Trial versus PRO-ACT, page 75

1. We note your response to prior comment 5. Please expand your disclosure on pages 75 and 76 to discuss the data that support your conclusion that significant changes were observed in key biomarkers of ALS between ALS and healthy subjects (such as TDP-43 and LC3) and address the related statistical significance of your findings.

Alon Ben-Noon NeuroSense Therapeutics Ltd. October 15, 2021 Page 2

You may contact Tracie Mariner at 202-551-3744 or Vanessa Robertson at 202-551-3649 if you have questions regarding comments on the financial statements and related matters. Please contact Jane Park at 202-551-7439 or Irene Paik at 202-551-6553 with any other questions.

Sincerely,

Division of Corporation Finance Office of Life Sciences

cc: Brian K. Rosenzweig, Esq.