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

DIVISION OF
CORPORATION FINANCE

October 1, 2021

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

Re: NeuroSense Therapeutics Ltd.
Amendment No. 1 to
Draft Registration Statement on Form F-1
Submitted September 21, 2021
CIK No. 0001875091

Dear Mr. Ben-Noon:

We have reviewed your amended draft 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 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 comments apply 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 these comments and your amended draft registration statement or filed registration statement, we may have additional comments.

Amendment No. 1 to Draft Registration Statement submitted September 21, 2021

Capitalization, page 55

1. The total capitalization line item should not include cash. Please remove the amount of cash and cash equivalents from the total capitalization line item.

Dilution, page 56

2. It appears that the net tangible book value per share should be $0.48 rather than $0.000475 based on 1,940,974 ordinary shares outstanding as of June 30, 2021. Please revise or advise to the appropriateness of your disclosure.

Business
Clinical Results - NST002 Phase IIa Trial in ALS, page 73

3. We note your response to our prior comment 9 which includes the p-values in the table on page 75. Please expand your disclosure to discuss the p-values and statistical significance of the results from the PrimeC trial.

4. We note your response to our prior comment 10. Please expand your disclosure on pages 75 and 76 to clarify the size of your clinical trial and the findings that support your conclusion that significant changes were observed relating to ALS-associated pathological markers, target engagement effect on ALS-related pathways and levels of TDP-43 following PrimeC treatment.

Clinical Results - NST001 Phase I Trial in ALS, page 76

5. We note your response to our prior comment 11. Please revise your disclosure further to discuss the timeline for the development of PrimeC, including an explanation of the simultaneous start of your Phase IIa NST002 and Phase I NST001 trials of PrimeC and pre-IND meeting with the FDA.

Preclinical Pipeline, page 76

6. We note your response to our prior comment 12. Please revise the introductory language in this section to address your plans, if any, to discuss or meet with the FDA regarding approval of your trial design before moving into the clinical phase and initiate Phase I/II studies for your StabiliC and CogniC product candidates.

Notes to the Condensed Interim Financial Statements
Note 4 - Material Events During the Reporting Period, page F-30

7. Please provide us with your analysis of how you concluded that a change of control event or an initial public offering is within the control of the Company under IAS 32.

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.