Response to editor and reviewers

Thank you for handling our submission (Manuscript ID: 88569). We appreciate all reviewers' comments and suggestions. We have carefully addressed all reviewers' concerns and have detailed the changes made to the manuscript.

Responses to Reviewer 1:

Thank you so much for your positive comments and careful review. We appreciate your positive feedback.

Response to Reviewer 2:

Thank you for your efforts in reviewing our manuscript. We appreciate your positive feedback.

Question 1: Maybe the manuscript may benefit from more extensive introduction to set the background for applications of EEG in psychiatry, including quantitative EEG bio-markers to predict and monitor the treatment response in depression.

Answer: This is an excellent point. As suggested, in the background section, we have described in more detail the use of EEG microstates in schizophrenia, showing as: "For example, increases in microstate C and decreases in microstate D have been consistently identified as characteristic changes in individuals with schizophrenia. These microstates, C and D, have emerged as potential endophenotypes for schizophrenia [20]. The utilization of these microstates in the clinical diagnosis and treatment of schizophrenia has garnered a significant level of consensus among various studies [21] [22]." Also, we have described the use of quantitative EEG and EEG microstates to predict and monitor depression treatment, showing as: "For example, quantitative EEG was used to predict and monitor the treatment of depression. Arns et al. [7] found that depressed patients with low theta waves in the frontal cortex and the rostral anterior cingulate are more responsive to medication. Meanwhile, a study found that those with increased quantitative EEG theta cordance showed significant improvement in depressive symptoms after 6 weeks of repetitive transcranial magnetic stimulation (rTMS) treatment [8]. This

suggests that changes in EEG theta cordance could be a potential clinical predictor." and "Lei et al. found that lower durations of microstate D, higher frequencies of microstate C, and lower transition probabilities of microstate D to B were associated with better treatment effects in patients with depression [27]. Additionally, several studies have proposed that EEG microstate can predict the treatment outcomes of selective serotonin reuptake inhibitors (SSRI) or rTMS [27] [28]."