

# Review of: "A Simple Preprocessing Method Enhances Machine Learning Application to EEG Data for Differential Diagnosis of Autism"

Anupallavi S<sup>1</sup>

<sup>1</sup> Acharya Institutes

Potential competing interests: No potential competing interests to declare.

1. Could you provide more details on the sample size justification and any potential biases in the selection of ASD and NPD subjects?
2. How generalizable are the findings, considering the specific population characteristics?
3. Is there external validation performed on the predictive model, and if so, what were the outcomes?
4. Can you elaborate on the clinical significance of the 38 figures derived from the new pre-processing method?
5. It would be beneficial to have more information on the computational time required for the proposed method, especially for practical applications.
6. Were there any challenges or limitations encountered during the study that might impact the broader application of the presented methodology?
7. Considering the evolving nature of machine learning, how robust is the KNN algorithm compared to other potential algorithms, and have you explored alternative models?
8. Clarify how the study accounts for potential confounding factors that might influence EEG data and the subsequent machine learning outcomes.
9. Please discuss any potential ethical considerations or implications related to the use of machine learning in psychiatric diagnoses.
10. Can you provide insights into the clinical relevance and implications of achieving a 93.2% accuracy in distinguishing between ASD and NPD subjects?