

Review of: "Impending role of hippocampal neurogenesis in the development of chronic epilepsy following seizures after Kainic acid and Pentylenetetrazol treatment"

Rafael Chitolina¹

1 Universidade Federal do Rio Grande do Sul

Potential competing interests: No potential competing interests to declare.

Title: Review of the Article "Impending Role of Hippocampal Neurogenesis in the Development of Chronic Epilepsy Following Seizures after Kainic Acid and Pentylenetetrazol Treatment"

Abstract: I suggest that the authors include some basic information about the methodology used in the study.

Introduction: I recommend providing additional information about the pentylenetetrazole and kainic acid induction models that resemble the study's model.

Materials and Methods:

- There is a lack of information on how the animals were kept in the laboratory. Was there randomization? If yes, how was it conducted? How many animals per cage?
- Include more detailed protocols for analyses in the methodology (Nissl staining, Fluorojade B staining, and TUNEL assay).
- · Describe how the animals were euthanized and how sample collection was performed.
- Were any animals excluded from the study for not meeting inclusion criteria? It is unclear how many animals
 proceeded to subsequent analyses.
- How was the behavioral analysis conducted? Was it recorded on video? Was it manually analyzed, or was any software utilized?

Results: The results section is well written and specified. However, there is no mention of behavioral data. What were the results of the analysis of epileptic seizure scores during and after treatment, given that the rats from the second set in the PTZ and KA groups were regularly monitored for seizure behavior for at least one hour per day up to 8 weeks?

Discussion: The discussion is well-written for the study's purpose, but it could better discuss the behavioral results, comparing them with other studies that employed the method of chronically induced epileptic seizures.

Figures: Specify the sample size (n) for each group in all figures and the statistical tests used. In Figure 1, explain the meaning of the white arrows indicated in the images. Provide the scale used.

The study presents relevant analyses for the ongoing study of epilepsy and epileptogenesis. I recommend improving the



writing of the methodology and results for data publication.