

**Manuscript No. 30764**

**Title:** Chronic antiepileptic drug use and functional network efficiency: a functional MRI study

We would like to thank the reviewers for their suggestions. In our replies below (in italic), we address all comments (original comments copied) point-by-point. Textual changes to the revised manuscript are highlighted in the manuscript. The page numbers refer to the pages of the revised manuscript.

**Reviewer #1**

the manuscript is well writtern and needs minor corrections

*Thank you*

**Reviewer #2**

This study aims at testing whether functional resting-state network measures are associated with impaired cognitive functioning. ? The study is well conducted and well written. Graphs and table are clear and informative. I would only make clear and consistent throughout the manuscript that patients on topiramate are four. This is of relevance since different group numerosity is one of the limitation of the study.

*Our response: Information about the number of patients is added throughout the manuscript (p13, p15, and p17).*

**Reviewer #3**

A well written good structured manuscript which summarizes the findings clearly. Could the authors add a figure showing the functional impairment areas and describe the resultant functional affects? (Like a figure in a previously published literature "<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4490704/figure/f3/>") (or at least add a table describing these)

*Our response: Although a few graph measures can be computed per node (i.e. per brain area), most measures can only provide information about the whole brain network. This latter is the case for global efficiency, the network measure that differed*

*between the high risk and low/intermediate risk categories. The global efficiency is a measure for functional integration in a network, and provides information about the functioning of the complete network rather than of individual brain areas. Therefore, the current analysis does unfortunately not allow for providing a figure with affected brain regions.*