Reviewer’s report

Title: Occipital event-related potentials to addiction-related stimuli in detoxified patients with alcohol dependence, and their association with three-month relapse

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Reviewer: Valentin Flaudias

Reviewer's report:

The authors investigate an interesting and important topic about the event related potential and addiction. In particular, they explored P100 and N170 and cue-reactivity on detoxified alcohol dependent patient. Their results show no significant difference about amplitudes of N170 for patients as control but not for P100. To conclude, these results are important to better understand the link between automatic and controlled behavior for this patient. This paper favoring an early and automatic treatment of alcohol stimuli.

I would be able to recommend the publication of this article in BMC Psychiatry with few modifications.

In detail, modifications concern:

1/ Abstract section : a point about P100 is need on the results section of the abstract.

2/ I suggest to make an effort concerning references which were not on the same norm. Example : line 67 "Carter and Tiffany", line 70 : "Little et al"…. Please be careful on this for all the document. (These references are not on the "reference" section).

3/ Line 153 : Please add reference concerning "half-life" of zopiclone and clonazepam.

4/ Line 168 : It's a good thing to avoid acute nicotine deprivation, but this is also problematic because nicotine is known to enhance cognitive abilities. How this point is take into account ?

5/ Concerning data analysis, I think it would be interesting to have response times analyze with errors analyze.

6/ Another problem I think to make clear conclusion is that there is a difference between control and patient with level of depression. This is important to understand how stimulus
is process. Authors speak about this on discussion but minor this impact. I suggest to use BDI as co-variable on analyze to avoid this problem.

To conclude, I think this paper need to better explore the difficulty concerning level of depression and maybe response time to the go nogo task.

**Are the methods appropriate and well described?**
If not, please specify what is required in your comments to the authors.
Yes

**Does the work include the necessary controls?**
If not, please specify which controls are required in your comments to the authors.
Yes

**Are the conclusions drawn adequately supported by the data shown?**
If not, please explain in your comments to the authors.
Yes

**Are you able to assess any statistics in the manuscript or would you recommend an additional statistical review?**
If an additional statistical review is recommended, please specify what aspects require further assessment in your comments to the editors.
I recommend additional statistical review

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Please indicate the quality of language in the manuscript:
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