Reviewer’s report

Title: Sedative and hypnotic effects of Compound Anshen essential oil inhalation for insomnia

Version: 1 Date: 16 Aug 2019

Reviewer: Thomas Heinbockel

Reviewer's report:

In this study, the authors tested the Compound Anshen essential oil for its sedative and hypnotic effects. The authors also analyzed the volatile chemical components of the Compound Anshen essential oil. A number of problems exist with the manuscripts as detailed below. Some can be remedied by better and more detailed justifications and reorganizations of the manuscript. Overall, knowledge gain is limited.

In the abstract, the results section and conclusions are duplicated. The conclusions should be conclusions and not a repeat of the results.

Page 5, line 13: do you mean 'compatible' or 'comparable'?

P5, l32: you should give a rationale why you observed 5-HT and GABA levels in the brain rather than any other neurotransmitter.

P5, l49: what do you call modeling? This needs more explanation.

P5, l46: You do not refer to a figure for the data and you do not provide any numbers for your observations. If you do not want to include a figure reference, you need to give the data plus SEM.

P5, l51: you need to explain the purpose of the model group and the diazepam group. Why did you include them and what do you expect to find?

P6, l5: again, you do not refer to a figure but just state P values. You should include the data and refer to the corresponding figure.

P7, l38: I find the description in the text confusing. The authors should state that the aromatherapy had no significant effect on pentobarbital-induced sleeping.

P8, l16: the authors need to better justify the reason for testing neurotransmitter levels. They also need to justify why 5-HT and GABA. Finally, I do not believe that there is a significant difference in neurotransmitter levels and their control animals.

P9, l1: It is not clear how the GC-MS data help with the interpretation of the behavioral data. What is the reader supposed to learn from knowing the quality and quantities of the various essential oils in CAE?
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.

No

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 am able to assess the statistics

Quality of written English
Please indicate the quality of language in the manuscript:

Acceptable

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