Reviewer's report

Title: Anxiolytic-like effects of compound Valeriana jatamansi Jones in mice

Version: 2 Date: 25 April 2012

Reviewer: Oliver Grundmann

Reviewer's report:

The manuscript submitted by You et al. entitled "Anxiolytic-like effects of compound Valeriana jatamansi Jones in mice" evaluates the anxiolytic effects of an abstract mixture of plant extracts in the EPM and the LDT. The paper includes valuable information although some of this information has been included in prior publications by the authors.

1. Is the question posed by the authors well defined?

Yes, the question addressed is the anxiolytic activity of Valeriana jatamansi and if it exerts any muscle relaxant or sedative effects.

2. Are the methods appropriate and well described?

Yes, although the authors should include if the control animals have also been given saline solution over the course of the treatment period.

3. Are the data sound?

The EPM % results appear very low with only 0.2 to 0.4% spent on open arms. Usually, this should be at least around 5-10%. Furthermore, diazepam was not antagonized with flumazenil to confirm the antagonist activity. Different concentrations of diazepam were used for the EPM and the LDT which makes interpretation and correlation of the two models difficult.

4. Does the manuscript adhere to the relevant standards for reporting and data deposition?

Yes.

5. Are the discussion and conclusions well balanced and adequately supported by the data?

The authors mention orthogonal experiments - but this is not apparent from the study design. Clarification on this issue would help to provide the reader with a better understanding of what has been evaluated. The authors also refer to a former publication in which the formulation had been evaluated - how does this new publication advance the understanding of the formulation?

6. Are limitations of the work clearly stated?

No. The authors do not provide much information about the limitations of their
work although they address what further research will have to be completed to elucidate the exact mechanism for the formulation.

7. Do the authors clearly acknowledge any work upon which they are building, both published and unpublished?

Partially. The authors refer to prior publications but in some regards do not point to publications that have been done on Valeriana extracts in the past that addressed this issue as well.

8. Do the title and abstract accurately convey what has been found?

Yes.

9. Is the writing acceptable?

No, the authors should contact a native English speaker to correct grammar and word structure. The current format and phrasing of the manuscript is not acceptable for publication.

Major compulsory revisions - statistical analysis, clarification of formulation, inclusion of diazepam antagonism by flumazenil.

Minor essential revisions - grammar and spelling.

Level of interest: An article of limited interest

Quality of written English: Not suitable for publication unless extensively edited

Statistical review: Yes, and I have assessed the statistics in my report.

Declaration of competing interests:

I declare that I have no competing interests