Reviewer’s report

Title: The synergistic hepatoprotective potential of Beta vulgaris juice and 2,3-dimercapto-succinic acid in lead-intoxicated rats via improving the hepatic oxidative and inflammatory stress

Version: 0 Date: 22 Apr 2020

Reviewer: Raquel Bridi

Reviewer’s report:

BMC Complementary Medicine and Therapies BCAM-D-20-00457

This work presents data about the synergistic hepatoprotective potential of Beta vulgaris juice and 2,3-dimercaptosuccinic acid in lead-intoxicated rats via improving the hepatic oxidative and inflammatory stress.

Although the aim of the manuscript is interesting is needed an exhaustive revision.

1) The title and the abstract do not mention the type of study, that is, if it is in animals, in cells... The abstract must be rewritten.
2) The article is very long, really a quicker reading is desirable.
3) The bibliographic references are quite old, being the most current of the year 2018.
4) Line 185, Animals and experimental protocol, there is no data on how much, how and for how long the rats received the treatment.
5) The conclusion is not understood, explains what is the relationship with the brain described in the line 525.
6) Figures should be adjusting in terms of definition and size.

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:

Needs some language corrections before being published

Declaration of competing interests
Please complete a declaration of competing interests, considering the following questions:

1. Have you in the past five years received reimbursements, fees, funding, or salary from an organisation that may in any way gain or lose financially from the publication of this manuscript, either now or in the future?

2. Do you hold any stocks or shares in an organisation that may in any way gain or lose financially from the publication of this manuscript, either now or in the future?

3. Do you hold or are you currently applying for any patents relating to the content of the manuscript?

4. Have you received reimbursements, fees, funding, or salary from an organization that holds or has applied for patents relating to the content of the manuscript?

5. Do you have any other financial competing interests?

6. Do you have any non-financial competing interests in relation to this paper?

If you can answer no to all of the above, write 'I declare that I have no competing interests' below. If your reply is yes to any, please give details below.

'I declare that I have no competing interests'

I agree to the open peer review policy of the journal. I understand that my name will be included on my report to the authors and, if the manuscript is accepted for publication, my named report including any attachments I upload will be posted on the website along with the authors' responses. I agree for my report to be made available under an Open Access Creative Commons CC-BY license (http://creativecommons.org/licenses/by/4.0/). I understand that any comments which I do not wish to be included in my named report can be included as confidential comments to the editors, which will not be published.

I agree to the open peer review policy of the journal