

## **Reviewer's report**

**Title:** Safety evaluation of the Nigerian herbal preparation DAS-77

**Version:** 2 **Date:** 14 February 2012

**Reviewer:** li bo

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Minor Essential Revisions:

- 1, For the title of the article, it would be better if the current title change to “ a 90 days chronic toxicity study of Nigerian herbal preparation DAS-77 in rats”, because that the term of “safety evaluation” have the meaning of including of general toxicity, genetic toxicity and reproductive toxicity, however there were only general toxicity study and acute toxicity in the article.
- 2, The herbal preparation DAS-77 is a combination preparation, contains two kinds of herbs, the composition of proportions could be described in the methods of herbal product. If so, it would be helpful to reference the reader.

Major Compulsory Revisions:

- 1, For the explanation of the observation for the acute toxicity in the discussion part, the cause was explained the CNS stimulatory activity, it would not be reasonable, since the administration was through intraperitoneal, the herb preparation may stimulated the peritoneal, therefore the observation of animal behavioral showed the response to the inflammation in the peritoneal. Furthermore, there were no any more evidence showed related to the CNS.
- 2, With respect to the data of the animal weight, food and water intake in table 1, it should be a continuous data, collected weekly described in the method part, not a time-point data. The multiple time-points data shows better the tendency for the decrease or increase of the animal body weight, food and water intake. And the data of weight and food intake should be showed in a separated tables of male and female, because the body weight were quite different between male and female rats following the 60 days and 90 days study.
- 3, The explanation for the increase in neutrophils for dose of 400mg/kg and for decrease in WBC count for dose of 2000mg/kg in discussion is contradictory, lower dose showed immune boost, but the higher dose demonstrated a immune suppression response, it seems impossible.
- 4, The explanation for the results of parameters in study, such as WBC count in table 4, HDL in table 5, Ca<sup>2+</sup> in table 6, antioxidant enzymes in table 7, were not reasonable, because there were no dose-effect relationship, although there were significant difference in statistics, there maybe were no biological difference. It shows the defect of the study design, it should design more time-point for sacrifice and parameter measurement separately in 30 days and 60 days in order

to show the time-effect relationship.

5. The explanation for the reduction of the AST and ALT in discussion, is wrong, the increase of the level of ALT and AST may reflect the damage for the liver, but its decrease does not means a hepatoprotective effect, it may came from the experimental error.

**Level of interest:** An article of limited interest

**Quality of written English:** Acceptable

**Statistical review:** No, the manuscript does not need to be seen by a statistician.

**Declaration of competing interests:**

I declare that I have no competing interests.