Reviewer’s report

Title: Antioxidant, antidiabetic and hypolipidemic effects of Tulbaghia violacea Harv. (wild garlic) rhizome methanolic extracts in a diabetic rat model

Version: 4
Date: 17 October 2015
Reviewer: Jaures K Noumedem

Reviewer’s report:

The manuscript clearly demonstrated the hypoglycaemic, antioxidant, hepatoprotective and hypolipidemic effects of Tulbaghia violacea rhizome methanol extract in STZ-induced diabetic rats. I really appreciate the efforts of the authors. They have answered the points quite sufficiently, but they should make a few corrections before the publication of the manuscript.

Major Compulsory Revisions

Comment 1- The whole manuscript has to be edited as there are a few typos. Some of these will be find highlighted in yellow in the attached file. Many of them are related to citations. Square brackets [ ] should be used and not brackets ( ).

Minor Essential Revisions

Comment 2- Title : “extracts” should without ‘s’ as I believe only one extract were studied

Comment 3- Page 5 : Line 11 : add space between “-4°C” an “for later”

Comment 4- Page 5 : Line 28 : “for the 7 week” add s at week

Comment 5- Page 6 : Line 2 : add space between “number” and “045/13/Animal”

Comment 6- Page 6 : 2.7. Study design : precision should be gived on the number of rats included in each group

Comment 7- Page 6 : Line 9-10 : Change “Animals with a fasting blood glucose concentration >25mmol/L were considered to be diabetic and included in this study” into “Animals with a fasting blood glucose concentration >25mmol/L were included in this study as diabetic rat.”

Comment 8- Page 6 : Line 31- Page 7 : Line 1: were the samples stored at 70, -70°C or … ?


Comment 9- Page 8 : Line 22 : Replace “ was used as a standard” by was used as standard

Comment 10- Page 9 : Line 16 : add space between “p<0.05.” and “D+TVL120”

Comment 11- Page 10 : Line 11-12 : add space between “35%,” and “p<0.05”
as well as between “40 %,” and “p<0.01”

Comment 12- Page 10 : Line 23-25 change « although there was a tendency towards a reduction in AUCglucose in both TVL treated groups compared to the diabetic control group ». into although there was a tendency towards a reduction in AUCglucose in both TVL treated groups compared to the diabetic control group after 100 minutes. Or delete completely this assertion

Comment 13- Page 12 : Line 11-12. It is claimed that “Treatment with 60 mg dose of TVL significantly enhanced the activity of …. GPx (p<0.05)”, but in table 3, there is no sign to show this significativity. Reconsider that.

Comment 14- Page 14 : Line 24-25. Rephrase “Liver hypertrophy could be attributed to hypoinsulinaemia induced influx of fatty acids”

Comment 15- Page 33 delete “Figure 6” which appears at the beginning of the page

Comment 16- Page 9, line 16 : "There were no significant differences between the pre-treated body weights of the various experimental groups". please repeat the statistical analysis to make sure that this assertion is true since the body weight of NDC group seems really high. This difference (significant or not) should be consiered in the discussion of this manuscript

Comment 17- Table 2 : The % HW of D+TVL60 and D+glibenclamide have exactly the same value. Is there any explannation why one of these values, should be Significantly different from DC and not the other ? if not, reconsider the Statistical analysis

Level of interest: An article whose findings are important to those with closely related research interests

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"