Reviewer's report

Title: Vernonia amygdalina simultaneously suppresses gluconeogenesis and potentiates glucose oxidation via the pentose phosphate pathway in streptozotocin-induced diabetic rats

Version: 2 Date: 8 August 2014

Reviewer: Yongsoon Park

Reviewer's report:

Major Compulsory Revisions
1. In introduction, the 1st to 3rd paragraph should be shortened but previous studies regarding Antidiabetic mechanisms of VA should be discussed. Is reference 10 mentioned possible mechanism of VA?
2. Please define active component and composition of VA extract.
3. In method, total number of rats was not clearly explained. Since you measured the expression of genes on day 7 and 14, you sacrificed 3 on day 7 and 3 on day 14? Please insert number of rats on all figures.
4. In method, define the starting day of metformin and VA treatment, and type and amount of solvent was used to solubilize treatment. In addition, define method of treatment, injection or oral?
5. Please explain why there was no dose-dependent response of VA?
6. Please explain why there was no significant difference between NC and DC group on many of gene expression?
7. Why some of the 7 day data did not presented?
8. Photo of gels for all gene expression should be provided.
9. In statistical analysis, explain name of software used. SPSS? SAS?
10. Author said to use ANOVA, but data in all figures was compared with DC group, which is t-test. Statistical indication (*) in figure and results did not match.
11. Format of paper is not acceptable.
12. Name of city and state if the company is in USA should be included for all materials and instruments in method section.
13. Limitation of the study was no stated.

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

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