Reviewer's report

Title: Evaluation of the effect of hydroalcoholic leaves extract of indigofera spicata forssk. (fabaceae) on blood glucose level of normal, oral glucose loaded and alloxan induced diabetic rodents

Version: 8
Date: 7 July 2015
Reviewer: Priyankar Dey

Reviewer's report:

Major Compulsory Revisions

• Introduction, Line 99: what does DM mean?
• Introduction line 101: the prediction of increase in the rate of diabetes according to the reference 4 & 5 dates back to 10-13 years. Please use current references while mentioning such likelihoods.
• The authors should specify in the introduction part which type of diabetes mellitus they have investigated. Type I or Type II.
• Streptozotocin is more reliable that Alloxan in the induction of diabetes in rodents. Literature search will show that alloxan possess various drawbacks as a diabetogenic agent because of the ability of animals to reverse the diabetes condition (to normal) when induced when alloxan. Thus, some of the findings might be due to the reversal and not the actual treatment in the intervention trial.
• Please elaborate the rationale behind the usage of 80% hydro-methanol extract for the treatment.
• The authors have performed the preliminary phytochemical analysis, however proper standardization of the extract using chromatographic methods is highly encouraged. The basic bioactive constituents in the extract remained completely unknown.
• The authors have evaluated the anti-hyperglycaemic activities viz. anti-diabetic activities only by means of glucose level measurement. However, type I diabetes (alloxan induced) affects various other biophysical and chemical parameters of the body. Therefore, other parameters such as normalization of serum insulin level, hepatic and muscular glycogen level, serum and tissue antioxidative enzymes and malondialdehyde levels needs to be evaluated.

Level of interest: An article of limited interest

Quality of written English: Needs some language corrections before being published

Statistical review: Yes, but I do not feel adequately qualified to assess the statistics.
Declaration of competing interests:

I declare that I have no competing interests.