Reviewer's report

Title: Regulation of podocalyxin expression in the kidney of streptozotocin-induced diabetic rats with Chinese herbs (Yishen capsule)

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Reviewer: Megha Mittal

Reviewer's report:

Comments for the manuscript entitled:

Regulation of podocalyxin expression in the kidney of streptozotocin-induced diabetic rats with Chinese herbs (Yishen capsule)

Authors: Jingai Fang, Hongkun Wei, Yanyan Sun, Xiaodong Zhang, Wenyuan Liu, Qintao Chang, Ruihua Wang and Yuewen Gong.

The manuscript describes therapeutic efficacy of Yishen capsule against diabetic polyneuropathy. Authors have explained well pathological alterations in the kidney of type 2 diabetic patients and role of several membrane proteins in the regulation of these changes. These factors have also been explained well by number of authors working in the area of diabetes. The novel area of this manuscript seems to be less focused i.e. Yishen capsule. The manuscript needs to be revised thoroughly incorporating following recommendations

Major Compulsory Revisions:

1. Authors should explain in detail the beneficial aspects of Yishen capsule in the introduction section highlighting its major pharmacological actions with appropriate citations.
2. Rationale for the formulation of Yishen capsule and the role of each ingredient should be discussed well.
3. For the preparation of capsule the decoction of all the herbs was dried and filled in capsule. Authors should clarify that % composition of each herb in the decoction and dried powder remains uniform. The temperature used for drying the mixture is of great importance in medicinal herbs as high temperature may diminish the activity of herbal extracts. Thus the materials and methods section should be extensively revised.
4. Experimental protocol is highly baffling. Group II animals (Positive controls) were sacrificed at 0, 4, 12 weeks after STZ injection why not at 8 weeks. How long Group III (STZ+ Yishen) and IV (STZ + benazepril) were treated with STZ to induce diabetes.
5. What was the rational of the doses of Yishen capsule and benazepril. Authors should select multiple doses of formulation.
6. Statistical analysis of the results need to be revised again as there is no
statistical marks in the figures.

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

**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'