Reviewer’s report

Title: Acute oral toxicity of Insampaedok-san, a traditional herbal formula, in rats and its protective effects against ovalbumin-induced asthma via anti-inflammatory and antioxidant properties

Version: 3 Date: 14 June 2014

Reviewer: Saurabh Gupta

Major justification which is must for author
1. Abstract are not uniform as well as very much confusing and unstructured
2. Author use whole plant or part of plant mention it’s not mention anywhere
3. Author use 100 degree centigrade temperature for evaporating the water from the extract. Than author justify how phenol and flavones constituent are there in this extract because it’s decomposes after 55 degree temperature.
4. Which phyto-constituents are responsible for anti asthmatic activity?
5. In acute toxicity author follow which OECD guideline which one 420, 423 etc its must.
6. What sort of behavioral activity is indicative for toxicity.
7. Dose is not selected on the bases of GHS guideline.
8. Animal ethical clearance no is not mention by author.
9. Why author use montelukast its IL-4 Specific antagonist I don’t think its target IL-5 you have to give justification.
10. On what bases author selected dose of Montelukast 30 mg/kg.
11. Proper justification needed for antioxidant activity in anti asthmatic how author correlate this without phyto constituent isolation and which constitute are responsible.
12. Standardization of extract by which method at least formulation it should be must.
13. I think author deign that model so I request author please send the validated parameter because in whole animal model part author is not given any reference. So as per my thinking author deign that animal model. Highly questionable
14. Discussion is very weak regarded plant constitution
15. Author must needed to analyze plant properly or need justification how its work on inflammatory path way of asthma.
16. Author saying because of antioxidant property of plant its show inhibition of inflammatory pathway Via ROS and RNS pathway. But my Question is that how its possible without mention the major constituents.
17. As per me all plants having our own defense mechanism so obviously each plant show some antioxidant property.

18. Which type of structural cell arrangement observe by the author example in asthma histology Goblet cells were observe by PAS stain shows structural changes or arrangements like Mataplastic, hyperplastic etc. author is not clarify that point. Histology is not clear and well labeled. And H&E stain is specially use for normal architecture of tissue.

19. That much eosinophile infiltration shows that how much potent challenge done by author how animal survives?

Minor correction
1. Inappropriate referencing in introduction page no three paragraph 2 line no 7 author mention reference no 43 I think author start preparing paper from backside.
2. Improper alignment of manuscript.
3. Work is not up to the mark.
4. References are unstructured
5. Manuscript writing is not uniform.
6. Result writing are not uniform either use significant or write value any one only way follow.

Final Decision or verdict for paper
1. As a referee of that paper I am not find any novelty of work.
2. Lot of the things should be justified by author
3. Some models require specific animals along with specific references
4. No chemical constituents reported as well no effort made by author to isolate or even do finger printing by FIA-MS/MS or HPLC any.
5. So as per my side if author give all justification with strong ground in this condition this paper will be pass neither its rejected by me its not up to the mark

**Level of interest:** An article of insufficient interest to warrant publication in a scientific/medical journal

**Quality of written English:** Not suitable for publication unless extensively edited

**Statistical review:** Yes, and I have assessed the statistics in my report.