Reviewer's report

Title: Investigation of the mechanisms of Angelica dahurica root extract-induced vasorelaxation in isolated rat aortic rings

Version: 3 Date: 4 August 2015

Reviewer: swati Omanwar

Reviewer's report:

Major Compulsory Revisions
Previous questions:
Q1 The authors say in material and methods that ACh was added, when tension reached peak, this is not indicated in figures 2 A and 2 B.
Though the authors have revised the figure, How did the authors know it is the peak, they should have waited for plateau in the curve and then added ACh. Fig. 2?
Q2 The answer is satisfactory
Q3. The answer should be included in the manuscript
Q4. The answer is satisfactory
Q5 The authors have not mentioned what they used for control.
The authors say they used Krebs for control.. The authors should mention the solvent in which the lyophilised ADE extract was reconstituted. Was the solvent used Krebs, if not your control must be the solvent.
Q6 The authors say that , we collected 4 aortic rings from a single rat and used about 2-4 rats for a single set of experiment so if they even use 2 rats for a set of experiment number of aortic rings used must have been 8.
The answer is not satisfactory.

In the whole study the authors have established that ADE produces vasorelaxation which is independent of the endothelium. In line 191 the vasorelaxant effect is attributed to imperatorin.
The authors should discuss the disparity in the result, it might be that the the ADE extract in the present study was methanol extract whereas in the above reference the extract were cyclohexane and ethyl acetate extracts and in methanolic extract the imperatorin conc. was low and therefore did not produce endothelium dependent relaxation.
Minor Essential Revisions
1. In line 54 define qi.
2. Line 60 it should be probable instead of probably
3. Line 76, The solvent in which crude extract was dissolved must be mentioned
4. In section Animal (line 81, total number of rats used must be specified.
5. In line 95, 96, the isometric force transducer must be used uniformly
6.

Level of interest: An article of importance in its field

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

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

Declaration of competing interests:
'I declare that I have no competing interests'