Reviewer's report

Title: Anticancer activity of a dichloromethane fraction of Strobilanthes crispus on human breast and prostate cancer cells in vitro

Version: 2 Date: 17 May 2010

Reviewer: Robert Peng

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1. Fig.6: The cytotoxicity of T15, P100, Dc10 and Dc100 on MCF10A cell line, all showed increased at 48 h and then decreased at 72 h. The reason must be provided in the section “Results and Discussion” in text.

2. Page 10/24: The authors indicated that “Work is currently underway to determine the mechanism of apoptosis induced by the S. crispus fraction and to identify the specific signal transduction pathway(s) involved, as well as to identify the bioactive component(s) in SC/D-F9.”.

Reviewer’s comment: However, the true pharmacological action mechanism can only be achieved by using a purified compound rather than by the crude extract or fractionate like SC/D-F or any other crude preparations.

3. Please show the proximate composition of fraction SC/D-F9, indicating the total phenolic, total isoflavonoid, total organic nitrogen (or alkaloids), and total phytosteroidal content.

4. The specific activity relevant to fraction SC/D-F9 should be correlated with Comment 3.

5. A flowchart must be attached to show the whole extraction and fractionation process.

6. You used “Gradient step elution” and stated that “Gradient step elution was carried out using a combination of hexane, DCM and MeOH with an initial ratio of hexane-DCM-MeOH, 9:1:0 (v/v/v), followed by 4:1:0, 3:2:0, 2:3:0, 1:4:0, 0:1:0, 0:95:5, 0:9:1, 0:4:1, 0:3:2 and 0:2:3 (v/v/v)”. I really don’t understand why used so many combined solvent to elute, especially the intervention of DCM, in which only the combined solvent 0:1:0 was proceeded with pure DMC, if this is right, then the title should be changed according to the true flowchart. Be aware of the fact that your title was “Anticancer activity of a dichloromethane fraction of Strobilanthes crispus on human breast and prostate cancer cells in vitro”.

Level of interest: An article of importance in its field

Quality of written English: Acceptable

Statistical review: No, the manuscript does not need to be seen by a
statistician.