Reviewer's report

Title: Response of lymphocyte subsets and cytokines to Shenyang prescription in Sprague-Dawley rats with tongue squamous cell carcinomas induced by 4NQO

Version: 3 Date: 27 December 2006

Reviewer: Lora Arnold

Reviewer's report:

General

--------------------------------------------------------------------------------------------------------------------------

Major Compulsory Revisions (that the author must respond to before a decision on publication can be reached)

The data showing the changes in lymphocyte subsets and production of TH1 and TH2 cytokines was nicely presented. I found the experimental design and data concerning the "medicated groups" to be less convincing. More description of "Shenyang" should be included. What types of controls on cultivation are used to ensure that the composition (level of active ingredient) is the same for each of the 4 components? Are the percentages of the 4 components consistent from batch to batch? If known, what are the active ingredients? Why was acanthopanax senticoside used as a positive control? If the higher dose of "Shenyang" (1026 mg/100 g BW group I) was equivalent to human dosages why was a lower dose (256.5 mg/100 g BW) used in group II? How was the 15 day treatment regimen for "Shenyang" decided upon. What was the tumor composition of the medicated groups? Did each group have a comparable number of animals with each of the 3 lesions described in the "Determination of immune function in the rat groups" section of Materials and Methods? The scale for the figures should be revised. In each of Figures 2-5, the scale used made it difficult to examine the changes in data that had lower percentages. I also found the data presentation for the medicated groups to be confusing. For example, the text states that "percentages of CD3+CD4+ T lymphocytes were significantly higher after medication than before in "Shenyang" prescription group I ..." but Figure 3 seems to indicate that CD3+CD4+ T lymphocytes were significantly higher in the Shenyang prescription group II not I.

--------------------------------------------------------------------------------------------------------------------------

Minor Essential Revisions (such as missing labels on figures, or the wrong use of a term, which the author can be trusted to correct)

--------------------------------------------------------------------------------------------------------------------------

Discretionary Revisions (which the author can choose to ignore)

--------------------------------------------------------------------------------------------------------------------------

What next?: Unable to decide on acceptance or rejection until the authors have responded to the major compulsory revisions

Level of interest: An article whose findings are important to those with closely related research interests

Quality of written English: Acceptable

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

Declaration of competing interests:

I declare that I have no competing interests