Reviewer’s report

Title: Bu-Zhong-Yi-Qi Pill Alleviate the Chemotherapy-Related Fatigue in 4T1 Murine Breast Cancer Model.

Version: 2 Date: 8 June 2013

Reviewer: Sien-Hung Yang

Reviewer’s report:

This is an animal model study to prove the alleviative side effects of chemotherapy of Bu-Zhong-Yi-Qi Pill on the treatment of murine breast cancer model. Nevertheless, there are some points that authors should clarify as below:

Major compulsory revisions:

1. In the background paragraph, author mentioned fatigue is a key reason of patient discontinuation of paclitaxel treated, but the reference 3 seems not related to this statement.

2. In this study, authors tried to use the evaluated of swimming; cytokines changes and production of MDA to prove that the herb of study is beneficial to the chemotherapy-related fatigue; however, weather the change of these parameters is equal to the changes of fatigue, authors should offer more evidences to prove it.

3. The manufacture process of the herbs used in this study should be written in the manuscript.

4. Is the dosage of herbs that animal taken is equal to the dosage of patient took in clinical treatment? Author should tell us the calculated method of the experimental dosage.

5. In the results of body weight change of mice (Fig 1.), there are some questions should be further discussed:
   A. Why the body weight of group PTX did not increase after the treatment?
   B. Author should compare the differences between PTX+BZYQ group and PTX group.
   C. Authors should discuss the reasons why the treatment of BZYQ was able to increase the body weight of mice.

6. In figure 2, author should compare the differences between BZYQ group and TC group in day 12 to day 15. The risk of tumor growth enhanced by the treatment of BZYQ should be discussed from the data of this figure.

7. In figure 3, why the result of tumor growth in BZYQ group is different from the result in figure 2?

8. In the results of figure 4, there are some questions to be answered:
   A. The survival rate of those treated only by BZYQ is higher than TC group;
however, this result seems not compatible with the data of tumor growth, the reason should be discussed.

B. From the data of this figure, we can find that BZYQ plus PTX can prolong the survival rate of mice compared with the use of PTX only, this finding should be an important key of this study and should be put into the conclusion.

9. In the results of table 3, the reasons why BZYQ treated along enhanced the production of MDA compared with NC group should be discussed.

Minor essential revisions:

1. From the statement of paragraph of discussion, authors cited the references 26~31 and mentioned that cytokines, TNF-alpha, IL-beta and IL-6, play important roles in the development of fatigue; however, some of these references mentioned the cytokines were related to behavior change instead of fatigue.

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

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

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' below.