Reviewer's report

Title: Spica Prunellae Promotes Cancer Cell Apoptosis, Inhibits Cell Proliferation and Tumor Angiogenesis in A Mouse Model of Colorectal Cancer via Suppression of STAT3 Pathway

Version: 1 Date: 7 February 2013

Reviewer: Yibin Feng

Reviewer's report:

Major concern:

It is suggested the author should commit the pure compound Rosmarinic acid to compare the effect of crude extract with pure compound. This will help audience identify the evidence base of using EESP to treat CRC.

The other concern is that the author used only one dose of EESP in animal study. This is not fine for any pharmacological study since we could not see the dose-dependent effect of this investigational drug. But things will be different if the author could conduct in vitro study using CRC cell lines (at least two doses should be given to the CRC cells in this part) to confirm his in vivo observation.

Minor concern,

Fig.2, the author should display the actual image of tumors which were dissected out from mice xenograft. H&E staining is required to view the structural changes of tumor.

Fig.3 TUNEL assay. I cannot see difference between the control and treatment group. PCNA assay, it will be better if the author use Ki67 as tumor proliferation marker.

Fig.4, immunobloting should be conducted to examine the p-STAT3 level. Total STAT3 expression should be used as control.

Fig.5&6 again, since the author did not have cell study, it is required that protein level determination should be conducted with immunoblotting. This help us to know the global level of protein changes.

In Fig.5-8, why the author marked A,B,C,D at the upper left of each figure?

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.