Reviewer's report

Title: Anti-tumor effect of Liqi, a Traditional Chinese Medicine prescription, in tumor bearing mice

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Reviewer: Jong-Hwei Pang

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Additional comments and questions remained unanswered were in red color:

2. The inhibition of tumor growth in nude mice with destructed immune functions by Liqi could reach 38.69% that was similar to two other animal models with normal immune functions (34.54% and 42.54%). Does it mean that the anti-tumor effect of Liqi is not involved very much with the immune responses? The result in Fig. 1 might be simply against what the author claimed in this manuscript.

Response: for Sarcoma 180 tumor and Lewis lung carcinoma implanted mice, the inhibition 34.54% and 42.54% represented the inhibition of tumor weight. For SGC-7901 implanted nude mice, the inhibition of tumor weight was 27.42% which is lower than the other animal models. The inhibition 38.69% represented the inhibition of tumor volume.

Figure 1B is suggested to be removed from the manuscript in order not to confuse readers.

3. As we know that Immune-related anti-tumor reaction involves the induction of apoptosis, however, in Table 3, data showed no subG1 (apoptotic cells). Why? By the way, the data in Table 3 was indeed the opposite to what author discussed in the manuscript.

Response: in this experiment, we did not investigate the effect of Liqi on cell apoptosis. In addition, subG1 phrase commonly appears when apoptotic cells exist, but it dose not appear inevitably. In Table 3, we typed the results inversely. We have corrected the error.

The authors did not answer the question why cell apoptosis was not observed in this experiment. Is it because that SGC-7901 cells were isolated from nude mice? The authors can discuss more about this point.

4. It is better and more meaningful to measure the IL-2 and TNF-alpha activities directly from tissues, not after the simulation by Con A or LPS.

Response: It’s good idea. However, in tumor bearing mice, the time point of IL-2 and TNF- alpha releasing peak was difficult to be determined. After stimulated by ConA and LPS, it was stable and easy to be determined.

The data obtained by stimulating with ConA and LPS can not be used to explain
what really happened in the animal models.

5. It is better that data from normal control should be added to Figure 4, 5 and 6.
Response: According to your comments, normal control was added to figure 4 and 6, figure 6 shows that effect of Liqi on lung metastasis of tumor cells, no tumor colony was found in the lungs of normal control. In our experiment, we measured TNF-alpha activities after the stimulation by LPS. The healthy animal without tumor xenograft which was stimulated by LPS could not be taken as normal control. It is no meaning to compare the model group/ the treated group with the healthy animal without tumor xenograft and LPS stimulation.

The data obtained by stimulating with ConA and LPS can not be used to explain what really happened in the animal models.