Reviewer's report

Title: Urine metabolic profiles changes of liver fibrosis induced by CCl4 in rats and intervention effects of Yi Guan Jian Decoction

Version: 1 Date: 13 September 2012

Reviewer: Xianzhong Yan

Reviewer's report:

- Major Compulsory Revisions

1. In “Animal treatment groups” part, please indicate how the YGJD was administrated, in powder or in some kind of solution form?

2. In Methods section, the whole paragraph of Urine sample preparation, most part of GC/MS Analysis and some of Data Analysis were copied from Ref. 26. Although the methods in Ref. 26 were used in this manuscript and were indicated, you also should not copy the whole paragraph.

3. There is no need to show the loadings plot. The sentence “based on the PLS-DA analysis, we screened important variables accountable for discriminating between the model group and control group and constructed loading plot,” is difficult to be understood.

4. “To refine this analysis, we calculated the VIP values [29]”. VIP is not calculated by authors, but the result of PLS-DA model.

5. “The potential biomarkers identified by the VIP values were in agreement with those found in the loadings plot.” What dose it mean?

6. “Table 2 gives the change trends of significantly changed metabolites identified. The results effectively indicated that these metabolites may be related to the action mechanism of YGJD.” How did the authors deduced the correlation between the data in Table 2 and the action mechanism of YGJD.

7. The description in the paragraph of Time-dependent changes of metabolic profile in YGJD group is not in agreement with what has been shown in Fig. 10, and thus not correct.

8. In most part of Discussion, the authors were discussing the mechanism of YGJD based on the so called “significantly changed metabolites”. However, these metabolites listed in Table 2 are significantly different between the control and model groups, not between the YGJD and the model groups, nor between the YGJD and control groups (no comparison was done in the manuscript). Therefore, it’s not reasonable to discuss the correlation between these metabolites and the mechanism of YGJD. Furthermore, the authors even did not tell us how they deduced the pathway that the metabolite belongs to, which is important for the followed discussion.

9. Based on the above discussion, the Conclusions part should be reconstructed.
**Level of interest:** An article whose findings are important to those with closely related research interests

**Quality of written English:** Not suitable for publication unless extensively edited

**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