Reviewer's report

Title: Up-regulation on Cytochromes P450 in Rat Mediated by Total Alkaloid Extract from Corydalis yanhusuo

Version: 3 Date: 12 June 2014

Reviewer: Shingen Misaka

Reviewer's report:

The authors are commended for their careful attention to the reviewers' comments.

I have some minor comments that need to be addressed.

1. Pg 5, ln 25 and 27: Please remove “berberine” and “5.80%”.

2. Pg 7, ln 14, and Table 1: The internal standard “Kamaxiping” may be Carbamazepine? as stated in pg 7, ln 24.

3. Pg 7, ln 24. (change to): The extraction recoveries of PAR, OHTOL, DEXP, OHCHL and OHMDZ were 86.3±2.0%, ... and 90.8±1.9%, respectively.

4. Statistical analysis – Considering that this study was originally designed for the multiple comparison (5 groups), a repeat of unpaired t-test is inappropriate. The obtained data should be analyzed by one-way ANOVA and a post-hoc test such as Dunnet’s or Tukey’s test.

5. Pg 12, ln 2. pg 13, ln 21, and pg 13, ln 28: “…substrate(s), inhibitor(s), and(or) inducer(s).” The words “inhibitors, and inducers” should be deleted, because this study was designed to investigate the possible interactions of YHS with metabolisms of substrates by CYPs, not the interactions between YHS and CYP inhibitors or inducers.

6. Conclusion – The third sentence “The results of the present dose-response study …” is hard to understand, and thus should be divided into two separate sentences.

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.