Reviewer's report

Title: San Huang Shel Shin Tang beta-cyclodextrin complex augmented the hepatoprotective effects against carbon tetrachloride-induced acute hepatotoxicity in rats

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Reviewer: Shanthi Palanivelu

Reviewer's report:

Minor essential revisions
Line 46: the hepatoprotection effects of unmodified SHSST: “hepatoprotection may be replaced by hepatoprotective”
Line 129 pretreated with the test material –pretreated should be replaced by pretreatment.
Line: 131 scarification: the meaning is not clear.
143 sections were cut into slices from these paraffin-embedded tissue blocks. The words “into slices” may be deleted.
Lines 144 145 146 All slices were
dyed with hematoxylin and eosin (H&E) and then rinsed with water. Each slide was
146 dehydrated through graded alcohols. Samples were soaked in xylene twice:
should be written as: Sections were stained with hematoxylin and eosin (H&E), immersed in graded alcohols followed by xylene and mounted in ---------.
Line 153: were cut into slices from these paraffin-embedded tissue blocks: The words into slices should be deleted.
Line 157: MT satin was used to investigate liver histological and fibrotic: please correct the spelling mistake in the underlined portions.

Lines 226 227 However, the products after CCl4 oxidation also include radicals. The authors should mention what radicals they are referring to.

MAJOR COMPULSORY REVISIONS

1. Lines 186 187 After 24h CCl4 intraperitoneal injection treatment, the AST, ALT, TC and cholesterol parameters did not show statistical change- the results stated here do not match with those in the relevant table-table 1, which indicates a change in the parameters. This has been pointed out by one of the reviewers (Dr. Bishayee) in his previous comments.
2. Lines 189, 190, 191, 192 Further, HE staining showed abnormal morphology adipocyte around the small vascular in the liver 24h after CCl4 treatment. The SHSSTc and silymarin efficiently protected the hepatocytes and decreased the cell death number around the small vascular. (Figure 1): Abnormal morphology adipocyte imply the presence of fat cells—the cells with vacuolated cytoplasm may be hepatocytes with steatosis—the authors should re-examine the slides and confirm.

3. Lines 190, 191, 192 The SHSSTc and silymarin efficiently protected the hepatocytes and decreased the cell death number around the small vascular. (Figure 1): Cell death could mean necrosis or apoptosis—this should be specified. Furthermore, cell death in the group with ccl4 injection (Group2) is not mentioned in the results, nor in the figure legend. The area of cell death in group 2 should be indicated directly on the figure with the help of arrows etc.

4. Line p- 419 and 420 IGF1R/p-PI3K/p-Akt/p-Bad protein expressions decreased in CCl4-induced acute hepatotoxicity group and reduced in SHSSTc treatment: This sentence should be rewritten after correct interpretation.

5. Fig.1. As pointed out by Dr. Bishayee in his earlier comments, subpanels of the Figure may be labeled as A, B, C etc. and these be referred to in the results. Also, fibrosis is mild in group 2—this may be mentioned in the results and discussion. A review of relevant literature shows that fibrosis is not a prominent finding in acute ccl4 toxicity. The authors should review relevant articles again and accordingly modify their discussion.

Level of interest: An article of importance in its field

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

Statistical review: Yes, but I do not feel adequately qualified to assess the statistics.

Declaration of competing interests:

I declare that I have no competing interests