

Dear editor,

Our manuscript number is 31690. Thank you very much for your consideration.

The following are our response to the questions:

1. Abstract: Introduction:to evaluate effect not the inhibitory effect, because in this phase of the study you did not know, what the results would be. Key words should be in accordance with Medical Subject Headings in PubMed (<http://www.ncbi.nlm.nih.gov/pubmed>), please verify them. Not all of the abbreviations used in the text are explained in this section (i.e. ALT, AST, TLR4 etc.), please go through the paper thoroughly. Generally you should avoid the abbreviations in the abstract section, where it is possible.

Introduction and key words in abstract have been amended as required. The abbreviations used in the text have been amended as required.

2. Introduction: To clarify the issue, it would be worth to include some short graph/figure presenting known pathomechanisms involved in ALF and potential points for new therapies, you want to investigate. Not all abbreviations used in this section or other parts of the manuscript are not fully explained in the text. Please go through the paper thoroughly.

Introduction: The graph presenting known pathomechanisms involved in ALF and potential points for new therapies was added to clarify the issue. The abbreviations used in the text have been amended as required.

3. Material and methods: Did you really use the twenty animals in each study group? What the laboratory conditions were kept for the animals through the whole experiment – you should include them in the Treatment of Animals section. What kind of microscopes (light and electron) did you use for the analysis?, what magnifications were used? What kind of methods and equipment were used for biochemical tests?

20 rats were used in each study group. Laboratory conditions were added in the Treatment of Animals section. Pathological change (HE staining $\times 200$) of the liver was observed by light microscope. Morphological changes of apoptosis were observed by Transmission electron microscope (TEM) . The magnifications were

added in the article. The levels of alanine aminotransferase (ALT) and aspartate aminotransferase (AST) in serum were determined by biochemical method using automatic biochemical analyzer (Olympus, Japan). The method and equipment used for biochemical tests were added in the article.

4. Results: There are not any captions/legends accompanying the graphs and the figures through the whole result section. Please complete them. Why on the same figures are used both asterisk and hashes above bars (* or ** and # or ##) ?, please explain what the difference they illustrate in the legend of figures.

The captions/legends accompanying the graphs and the figures were added in the article. Different signs (* or ** and # or ##) represent comparing to different groups, which were explained in the legends.

5. Discussion: You did not mention any other studies interested your topics (oxymatrine in ALF). You should compare with them. If there are not such studies, you should emphasize it, that you are the first in literature.....

We are the first to investigate the role of OMT in the inhibition of apoptosis in acute liver failure and its potential mechanisms. This has been added in the article.

6. Conclusion: The first two sentences are the results of the study. Generally you should avoid the repetitions of the issues. Besides, there is no answer for the second aim of the study – possible clinical use and treatment of OMT in ALF.

We conclude that OMT inhibits hepatocyte apoptosis through the TLR4/PI3K/Akt/GSK-3 β signaling pathway. Through this basic research, we estimated that OMT could be an effective candidate for ameliorating ALF.

7. Table and figure: see above (the result section) – lack of captions/legends of the graphs and figures

The captions/legends accompanying the graphs and the figures were added in the article.

8. There are several misspelling and grammar errors. Please go through the paper thoroughly.

This article has been polished by the teacher of native speaker. We have got the language certificate.