

Manuscript No. 79602

Title: Modulatory effect of caffeic acid in alleviating diabetes and associated complications

Response to Reviewers

The authors of this manuscript express their sincere thanks to the Editor-in-Chief /Science Editor and Reviewers for their critical assessment of our work. The authors have acted upon the comments of the reviewers which have resulted in a significant enhancement of the quality of this manuscript. **The modifications made in the manuscript are shown in red with track changes.**

Comments of Reviewer 1.

An interesting study revealing the effect of caffeic acid on diabetic complications.

Response: We are thankful to reviewer for the favourable comments.

Comments of Reviewer 2.

This review reports the chemical and pharmacological properties of caffeic acid. It also provides an overview of the key mechanisms of action and pharmacokinetic properties of CA in diabetes induced complications. This topic is interested. However, the proportion of references in the past five years is low, please update.

Response: We are thankful to the reviewer for suggesting inclusion of recent references. Accordingly, we have replaced 27 references with latest references. These include Reference Nos. 3, 4, 6, 8, 12, 13, 16, 21, 25, 28, 29, 39, 43, 44, 49, 54, 58, 60, 77, 78, 84, 85, 86, 87, 91, 99 and 100. These are shown in red track changes mode.

Comments of Reviewer 3.

General Comments: The authors summarized studies on modulatory effect of caffeic acid in alleviating diabetes and associated complications. They expounded the sources, chemistry, and pharmacological properties of caffeic acid. Following that, the authors highlighted the aspects of molecular mechanisms and pharmacokinetic profile of caffeic acid in mitigating the adverse effects of diabetes mellitus and associated complications. At the end of manuscript, the authors discussed the clinical trials and future prospects for the studies of caffeic acid in diabetes mellitus. The manuscript is well written and informative.

Specific Comment 1: Although the manuscript is a narrative review, the authors can provide a critical analysis of the literature findings.

Response: The critical analysis of the findings has been summarized under the heading ‘Clinical Trials and Future Prospects’, highlighted in red.

Specific Comment 2: Unnecessary words or sentences should be removed to make the manuscript more concise and logistic, so the reader can grasp the information more clearly.

Response: The desired changes have been incorporated throughout the manuscript. Manuscript has been made more concise by deleting unnecessary words or sentences. Language has been improved further wherever required.

Additional Response

1. Author sequence has been changed. Name of “Shiv Vardan Singh” has been shifted to author number 2 and “Kritika Jaiswal” has been shifted to author position 3 depending on their contribution.

2. In figures, Figure 1 was made in pptx and hence has been given in decomposable format (with all components movable and decomposable). The other figures (Fig. 2, 3, 4) have been made with drawing applications like ChemDraw and Biorender. Therefore, they can not be given in decomposable format.