Author’s response to reviews

Title: In vitro evaluation of the α-glucosidase inhibitory potential of methanolic extracts of traditionally used antidiabetic plants

Authors:

Asthha Bhatia (asthabhatia66@gmail.com)
Balbir Singh (balbir_gndu@yahoo.com)
Rohit Arora (rtarora23@gmail.com)
Saroj Arora (dr.sarojarora@gmail.com)

Version: 1 Date: 25 Jan 2019

Author’s response to reviews:

To,
Dr. FideleNtie-Kang

Editor,
BMC Complementary and Alternative Medicine

Subject: Resubmission of manuscript with Ref # BCAM-D-18-01651.

Respected Sir

Please find attached here with a revised manuscript titled "In vitro evaluation of α-glucosidase inhibitory potential of methanolic extracts of traditionally used antidiabetic plants" with Reference no# BCAM-D-18-01651 for publication in your esteemed journal. We are submitting this revised manuscript with changes done as per reviewer’s suggestions. We have worked upon all the points raised by reviewers and rewritten major portions of the manuscript as suggested by worthy reviewers. Below are the point by point response to the reviewer’s comments. We have added new tables and figures and all the changes made in manuscript are highlighted using track changes. We thank the reviewers for raising several significant issues related to the manuscript and the changes made in manuscript as suggested by reviewers have significantly improved the manuscript. Hopefully the rewritten manuscript would be suitable for publication in your esteemed journal.

Thanking you

Dr. Saroj Arora
Point by point response to Reviewer’s comments:

Reviewer: 1

(General comments)

• The title seems as if the authors have conducted an ethnobotanical survey of plants used in the treatment of diabetes of which there are just three plants in the study.

Response: In the present study, the plants were selected on the basis of their traditional use mentioned in the literature used in the management of Diabetes.

• The 2D structures of the compounds have to be generated using Chemdraw software so that the structures can be visible.

Response: Structures have been generated using chemdraw software and previous table has been improved. (Supplementary table 2).

• The pictures from docking they are not very clear, can the authors get better pictures?

Response: As per reviewer’s suggestion, pictures with better resolution are incorporated for docking studies.

• The docking was performed on compounds from literature and not those isolated by the authors.

Response: Docking studies were performed on already reported constituent to support in vitro evaluation of methanolic crude extract for its α-glucosidase enzyme inhibition activity. The individual products would be isolated during future studies.

• Why was fractionation being carried out of which the fractions were not further purified?

Response: The fractionation procedures were followed according to the literature available. The fractionation was carried out to shortlist compounds from the crude extract. However, this study was conducted on pilot scale and isolation of compounds will be done for future studies.

• The reference has to follow the BMC style of referencing. The methodology has to be described in a consistent manner.

Response: References have been set according to journal style. Methodology part is revised.
• Abstract

Method:

Line 37: On the basis of results obtained, methanolic crude of extract of Cornus capitata Wall. was further sequentially fractionated in hexane, diethyl ether, ethyl acetate, n-butanol. This is not possible, except partitioning not maceration since ethanol is more polar than hexane.

Response: Extraction protocol was designed according to literature available. Several studies supports the fractionation/partitioning of compounds in different solvents from crude methanolic extracts.

References:


Reviewer: 2

General comments:

- To have a look at the write-up to improve the English. For instance: conclusion is written in present tense.

Response: The language of the manuscript has been evaluated extensively and corrected by an expert in the English language.

Specific comments:

- Are described in the attached annotated manuscript.
Response: Changes have been made as suggested by the reviewer.

- such as

Response: Added. (Line 68)

- Add is the voucher number here in the paragraph.

Response: Voucher no. (Accession no) have been incorporated in the manuscript. (Line 111-112)

- What was the final concentration of extracts and acarbose in the experiment?

Response: Concentrations used in the study both for extracts and acarbose was 12.5-400 μg/mL (final concentration) and complete reaction volume was 280 μL for final reading. (Line 126, 133).

- Please write the equation correctly.

Response: Equations are rewritten as per reviewer’s suggestion. (Line 149, 152)

- Where is Evolvulus nummularis (L.) L. (Whole plant)?

Response: Information regarding the plant Evolvulus nummularis (L.) L. (whole plant) had been removed from the revised manuscript with the consent of all authors because significant data regarding traditional use was not obtained about this plant. (Line 184).

- Authors are recommended to add evidence on the dominant secondary metabolites and link this information with the docking study.

Response: Suggested changes have been done in manuscript. (Line )

- The recommendation is immature. How authors recommend people to administer extract before in vivo studies and clinical trial?

Response: Conclusion part is rewritten. (Line 304-307)

- It is unusual to to say so. Is there no any person and institute that cannot be acknowledged? If there is no funding for the study, one can understand contributions made by the research host institution.
Response: Acknowledgement have been added. (Line 325-327).