Reviewer’s report

Title: Mechanism of tanshinones and phenolic acids from Danshen in the Treatment of Coronary heart disease based on Co-expression Network

Version: 0 Date: 20 Aug 2019

Reviewer: Reviewer 2

Reviewer's report:

PEER REVIEWER ASSESSMENTS:

OBJECTIVE - Full research articles: is there a clear objective that addresses a testable research question(s) (brief or other article types: is there a clear objective)?

Yes - there is a clear objective

DESIGN - Is the current approach (including controls and analysis protocols) appropriate for the objective?

Yes - the approach is appropriate

EXECUTION - Are the experiments and analyses performed with technical rigor to allow confidence in the results?

Yes - experiments and analyses were performed appropriately

STATISTICS - Is the use of statistics in the manuscript appropriate?

Yes - appropriate statistical analyses have been used in the study

INTERPRETATION - Is the current interpretation/discussion of the results reasonable and not overstated?

No - there are minor issues

OVERALL MANUSCRIPT POTENTIAL - Is the current version of this work technically sound? If not, can revisions be made to make the work technically sound?

Probably - with minor revisions
PEER REVIEWER COMMENTS:

GENERAL COMMENTS:

My overall impression of the study is good.

The authors write this manuscript clearly and easy to follow. The work performed is useful to better understand the mechanism of two useful compounds in the treatment of coronary heart disease. And the results provide some useful information on how those compounds work for the treatment of coronary heart disease and several possible key targets revealed. The authors should be more careful about the statements for results and conclusions. Also, more references need to be cited to support some previous studies.

REQUESTED REVISIONS:

Some sentences for results or conclusion should be revised as no experiments have been done to demonstrate those results or conclusion.

ADDITIONAL REQUESTS/SUGGESTIONS:

This manuscript explored the molecular mechanism of tanshinones and phenolic acids in the treatment of Coronary heart disease through gene-protein co-expression network, some possible targets have been obtained for followup functional identification and treatment of coronary heart disease. Below are some specific comments to further improve this manuscript.

1. Page 2, line 16, should the full name of Ce-PIN be co-expression protein interaction network?

2. Page 2, lines 26-29, full names of all proteins should be provided.

3. Page 2, line 38, "disease" should be revised to "diseases".

4. Page 2, lines 43-44, reference/s needed to support this statement.

5. Page 2, line 51, "for hundreds year" need to be revised.

6. Page 3, lines 3-4, this sentence is not clear. The difference between these two compounds on the treatment of coronary heart disease was not elucidated completely?

7. Page 3, lines 5-6, it would be better to revise to "In this study, we will illustrate the difference between tanshinones and phenolic acids for the treatment of coronary heart disease at the molecular level.".
8. Page 3, line 19, whether there are any similar studies reported on tanshinones and phenolic acids for the treatment of other diseases using Ce-PIN? Related information would be helpful if any. If not, this would be the research gap that authors can claim here.

9. Page 3, line 26, it should be either "in treating CHD" or "in treatment for CHD".

10. Page 4, line 19, extra space should be deleted.

11. Page 4, line 19, revise "which" to "whose".

12. Page 4, line 27-29, full names of all proteins should be provided in Tables S1 and S2.

13. Page 4, line 36, revise "the next study" to "subsequently".

14. Page 7, lines 4-7, reference/s needed to support these two sentences.

15. Page 7, lines 44-45, this sentence needs to be revised because no experiments have been performed to demonstrate it. Suggest revising to "So, water-soluble compounds of Danshen may play a role in blood circulation by ……".

16. Page 7, lines 53-54, reference/s needed to support these two sentences.

17. Page 11, lines 10-13, this sentence needs to be revised.

18. Page 11, lines 15-20, reference/s needed to support these two sentences.

19. Page 11, lines 54-57, reference/s needed to support this sentence.

20. Page 12, lines 37-39, this sentence needs to be revised.

21. Page 13, lines 2-3, this sentence is good.

22. Page 14, line 0, 29-+?

23. Page 16, line 4, + should be superscripted.


25. Page 17, line 3, journal title should be abbreviated?

26. Page 17, line 5, + should be superscripted.

27. Page 17, line 18, journal title should be abbreviated?

28. Page 17, line 22, journal title should be abbreviated?
29. Page 17, lines 39, 42-43, 50-51, journal title should be abbreviated?

Are the methods appropriate and well described?
If not, please specify what is required in your comments to the authors.

Yes

Does the work include the necessary controls?
If not, please specify which controls are required in your comments to the authors.

Yes

Are the conclusions drawn adequately supported by the data shown?
If not, please explain in your comments to the authors.

No

Are you able to assess any statistics in the manuscript or would you recommend an additional statistical review?
If an additional statistical review is recommended, please specify what aspects require further assessment in your comments to the editors.

I am able to assess the statistics

Quality of written English
Please indicate the quality of language in the manuscript:

Acceptable

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