Reviewer’s report

Title: Application of Network Pharmacology and Molecular Docking to Elucidate the Potential Mechanism of Eucommia ulmoides-Radix Achyranthis Bidentatae against Osteoarthritis

Version: 0 Date: 15 Jun 2020

Reviewer: Xinqiang Song

Reviewer's report:

The authors used public databases to predict bioactive ingredients and putative targets of EU-RAB against osteoarthritis. Analyzed the expound biological function, pathways of hub targets and constructed "compounds-targets-pathways" network and verified the correlation between the main active ingredients and hub targets.

They identified 50 active ingredients including quercetin, kaempferol, wogonin, and baicalein that played crucial biological effect. A total of 68 key targets were screened, such as IL-6, EGFR, MAPK8, etc., which provided theoretical basis for further pharmacological research.

1 Table 3 Virtual docking of nine bioactive ingredients from Eucommia ulmoides(EU)-Radix Achyranthis(RAB) for Osteoarthritis(OA) targets. Is it nine? four?

2 For example, what is the results if quercetin really binding to EGFR, or other proteins showed in figure 8? how could it stabilize or change them?

3 There are some unusual language choices and punctuations throughout the paper. I recommend having the paper edited by a native English speaker.

Level of interest
Please indicate how interesting you found the manuscript:

An article of importance in its field

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

Needs some language corrections before being published
Declaration of competing interests
Please complete a declaration of competing interests, considering the following questions:

1. Have you in the past five years received reimbursements, fees, funding, or salary from an organisation that may in any way gain or lose financially from the publication of this manuscript, either now or in the future?

2. Do you hold any stocks or shares in an organisation that may in any way gain or lose financially from the publication of this manuscript, either now or in the future?

3. Do you hold or are you currently applying for any patents relating to the content of the manuscript?

4. Have you received reimbursements, fees, funding, or salary from an organization that holds or has applied for patents relating to the content of the manuscript?

5. Do you have any other financial competing interests?

6. Do you have any non-financial competing interests in relation to this paper?

If you can answer no to all of the above, write 'I declare that I have no competing interests' below. If your reply is yes to any, please give details below.

I declare that I have no competing interests

I agree to the open peer review policy of the journal. I understand that my name will be included on my report to the authors and, if the manuscript is accepted for publication, my named report including any attachments I upload will be posted on the website along with the authors' responses. I agree for my report to be made available under an Open Access Creative Commons CC-BY license (http://creativecommons.org/licenses/by/4.0/). I understand that any comments which I do not wish to be included in my named report can be included as confidential comments to the editors, which will not be published.

I agree to the open peer review policy of the journal

Publons Reviewer Recognition. Springer Nature can send verification of this review directly to Publons (a subsidiary of Clarivate Analytics). If you would like to take advantage of this service, please click on the “Yes” option below. Your name, email address, title of the reviewed manuscript, name of the journal, and date of your review submission (the “Review Data”) will then be transmitted to Publons upon publication of the manuscript. If you have already registered at Publons, they will notify you of the receipt of this review and update your profile as per your settings and their policy. If you are not registered with Publons, you will receive an email from them asking you to register in order for them to be able to recognize your review on your new profile page. Publons may use the Review Data to generate derivative metadata for the benefit of Publons and you as a reviewer, carefully considering the sensitivity of such information. For
example, Publons may verify your record as a reviewer by updating your profile published on its webservice if you have registered for such service or help editors to identify candidate reviewers. Please find the details of processing in Publons’ privacy policy https://publons.com/about/terms

Yes