Reviewer’s report

Title: Anti-cancer effects of Ajwa dates (Phoenix dactylifera L) in diethylnitrosamine induced hepatocellular carcinoma in Wistar rats

Version: 0 Date: 28 Apr 2017

Reviewer: Sreemoyee Chaterjee

Reviewer's report:

1) In the abstract and main text, the background part carries some repeated information about HCC. 'A global estimation of 40,710 new cases and 28,920 deaths due to liver and intrahepatic bile duct cancers in 2017 highlights the need for improvement in current management strategies' moreover, it is not ideal to give such data for 2017 as it does not cover the complete year.

2) In methodology section of preparation of aqueous extract of ajwa date, some basic grammatical errors exists...viz. 'date suspension was continuously agitated incubated at 25°C on a shaker'...there should be an and between agitated incubated.

3) In Experimental design part there are few more observations:
   a) Is there any positive control, like a already existing drug(anti HCC) treated group?
   b) What is the rationale behind keeping groups with ADE 0.5 g/kg bw and 1.0 g/kg bw?
   c) In this section only what is RNA?

4) In Quantitative Real Time-PCR (qRT-PCR): Please explain the significance of the experiment (comparative 2 -ΔΔCt method)

5) Asterisk (*) and hash (#) indicates statistical significance, with the level 201 significance for comparisons set at P < 0.05. How it is possible to indicate same level of significance (P < 0.05) with two different signs?
6) Discussion: Incidence of HCC is reported to be higher in the Eastern than Western population. What may be the reason?

7) What exact amount of bioactive compounds are present in the sample studied (ADE) should be there as a supportive evidence.

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 recommend additional statistical review

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