Reviewer’s report

Title: Castanea Sativa Mill. bark extract exhibits chemopreventive properties triggering extrinsic apoptotic pathway in Jurkat cells

Version: 0 Date: 06 Feb 2017

Reviewer: Yogendra Nayak

Reviewer’s report:

Dear Editor,

The manuscript No. BCAM-D-16-01323, entitled 'Castanea Sativa Mill. bark extract exhibits chemopreventive properties triggering extrinsic apoptotic pathway in Jurkat cells' can be accepted after modification. This manuscript explains the chemopreventive properties of bark of a herb Castanea Sativa Mill. Authors have demonstrated its effect basically using Jurkat cells as these cells are suitable chemopreventive studies. However, the following points to be answered or taken care of in the revised manuscript.

1. I felt it is too much of exagenation of the activity and I am first time seeing someone is thanking the extract for it chemopreventive properties. It was mentioned in the conclusion para of the abstract (Conclusions: Our data suggest that CSM bark extract might be considered an interesting and partially selective cytotoxic agent thanks to its ability to induce apoptosis in transformed cells at concentrations significantly lower than in nontransformed ones.) Authors should explain this if they are correct. Similarly, prevention and counteraction are two different contradictory words. How these works can be correlated to chemopreventive action? Chemoprevention, generally means preventing the cancer growth. The Aspirin, is a chemopreventive agent in colorectal cancer, Tamoxifen is in breast cancer, etc. In this manuscript how and in what contest the term 'chemoprevention' is used? This factor they can explain in introduction so as to increase the flavour of the article.

2. Under the subheading, Background, the sentence 'Numerous studies, in fact, demonstrated that alterations in cell death induction pathways are important for cancer development and are influencing the response to chemotherapy.' have to be modified (remove 'in fact'. For the facts you are citing the references.)

3. Under the same subheading, there are few sentences overlooked. What is the meaning of 'CSM wood extract containing 73% tannic agents'? What are tannic agents? Is it tannic acid? or tannins?

4. Kindly explain how p53 and Bax protein levels are correlating the chemopreventive activity of the extract or for any given substance? This can be explained in introduction or in the discussion of the manuscript.
5. There are many spelling and grammatical corrections, should be done by consulting the language specialists.

6. Authors should cross check the references and the eustis used in the manuscript.

**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.

Yes

**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:

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.