Reviewer’s report

Title: Survival benefit of transarterial chemoembolization in patients with metastatic hepatocellular carcinoma: a single center experience

Version: 0 Date: 05 Jun 2017

Reviewer: Quirino Lai

Reviewer’s report:

Article number: BMGE-D-17-00240

Article title: Survival benefit of transarterial chemoembolization in patients with metastatic hepatocellular carcinoma: a single center experience

This is a retrospective analysis based on 215 HCC patients from Germany investigating the role of TACE alone or TACE combined with sorafenib as therapeutic strategies to adopt in case of metastatic disease.

The paper is really interesting and investigates a poorly explored field of liver oncology. However, some corrections should be taken into account before accepting the article.

Major comment:

1) I think the main problem is to perform a multivariable model aimed at verifying the additive role of combined TACE-sorafenib constructing it only using 65 cases. As a consequence, it is very hard to say that the biological effect of this additive combination is minimal. I think it is somewhat hard to obtain definitive conclusions on this argument. I suggest to report the observed results, however clearly underlying during the discussion the potential biases connected with the small sample size investigated.

Minor comments

1) Page 9, lines 4,5: It is not fully clear how exactly the percentages have been calculated. I suppose the percentages have been calculated on the total number of 65 cases treated with TACE, however, at this moment of the article, the different types of patients have not been already clarified, so it is better to change the following sentence:

"11 patients received drug-eluting beads TACE (DEB-TACE; 16.9%) and 54 patients were treated with conventional TACE (cTACE; 83.1%)."
"On the total number of 65 patients treated with any type of TACE, 11 cases received drug-eluting beads TACE (DEB-TACE; 16.9%) and 54 patients were treated with conventional TACE (cTACE; 83.1%)."

2) Page 9, lines 8-13: similarly, the percentages here reported should be clarified, reporting at this point of the article how many cases treated with sorafenib were present in the analysis.

3) Page 11, line 6: the sum of the percentages of viral cases is not 100%. HBV cases percentage should be corrected in 60.3% in the text and in Table 1.

4) Page 11, lines 11,12: the sum of the percentages of Child-Pugh score is not 100%. Child C is 5.6% as reported also in Table 1: please correct it in the text accordingly.

5) Page 11, line 17: The following sentence presents a typo. "None of the patients extrahepatic portal vein thrombosis."

6) Page 12, line 10: I think it is better to write "less commonly".

7) Table 1: please check all the percentages. The sum must be always 100.0%, but in some cases it is not. Please amend.

8) In discussion, I think that TARE should be also reported with SBRT as an innovative treatment useful for treating locally advanced HCC.

9) Figure 2: the sub-group treated with TACE + sorafenib looks to be "zeroed" after 30 months, as the curve intercepts the absciss line. However, 1 case remains at risk. Please amend.

**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/](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