

Answers to Reviewer comments:

Editorial comments:

First we changed the manuscript regarding the editorial comments as indicated, including the title page, key words and core tips.

Reviewer 1:

- The authors wrote: "AFP levels are not increased in case of HCC" I suggest they write: "AFP levels are not always increased in case of HCC"

We changed the text as proposed.

- Again the authors wrote: "In our own practice, we apply the 18F-FDG-PET in every HCC patient who is considered for liver transplantation. This implies (1) we cannot use PET scan for metastases confirmation if the tumor is well-differentiated and therefore shows no enhanced tracer uptake compared to the surrounding liver tissue and (2) we cannot use PET scan for diagnosis of tumor recurrence after liver transplantation in tumors with no pretransplant tracer uptake." I think it is only their own practice, not supported from literature: any conclusion should be omitted

Thank you for this comment. We deleted this part in the text.

- Paragraph "Metabolomics, Proteomics, Transcriptomics" appears to be too long; many general details on HCC are not useful to talk about post-transplant relapse, so they should explain more concisely their conclusions (i.e. last line of paragraph 9)

Thank you for this comment. We rearranged and shortened this section as proposed.

- They write: " the study arm receiving sorafenib only eleven patients in two different groups subdivided in a curative and palliative regimen " p.15 It's not clear what it means, please reformulate

We rearranged the sentence.