Responses to the Reviewers' Comments

Ref: Manuscript NO: 72264,

Title: Hepatic perivascular epithelioid cell tumor: A case report

The authors would like to appreciate the reviewers' comments and editor's suggestions which are all valuable and very helpful for revising and improving our paper.
According to those comments, we give a substantial revision and clear descriptions to the manuscript (please see the color marked texts in the revised manuscript), which we hope meet with approval. The responses to reviewers' comments and main modifications are shown as below.

REQUIREMENTS FROM THE EDITORIAL DEPARTMENT OF WJCC

(1) Science editor:

The manuscript elaborated a case of a hepatic perivascular epithelioid cell tumor. The manuscript is well written and can be helpful for the readers to ameliorate the diagnostic and therapeutic approach for this scenario. In the figure, the author can point out the tumor with an arrow. What are the reasons for choosing sorafenib? Is there any other clinical research support?

Response Science editor: Thanks for reviewer's valuable comments! We have pointed out the tumor with an arrow in the figures in the revision.
Based on [12], adjuvant combination treatment with TAE and sorafenib can complement each other. Many researches showed that the hypoxia caused by TAE could potentially upregulate angiogenic factors and stimulate the proliferation of residual tumor cells. Sorafenib has dual activities of anti-angiogenesis and anti-proliferation. It can inhibit PEComa angiogenesis and growth. [Simpson D, Keating GM. Sorafenib: in hepatocellular carcinoma. Drugs. 2008;68(2):251-258.]

In addition, PEComas are rare mesenchymal neoplasms.Only a few cases have reported [1.Role of Chemotherapy, VEGFR Inhibitors, and mTOR Inhibitors in Advanced

Perivascular Epithelioid Cell Tumors (PEComas).2. Combination targeted therapy of VEGFR inhibitor, sorafenib, with an mTOR inhibitor, sirolimus induced a remakable response of rapid progressive Uterine PEComa.]that Sorafenib had some therapeutic value,only one case was hepatic PEComa [13].

For these reasons, we chose this treatment.

(2) Company editor-in-chief:

Response: Thanks for editor's kindly help and valuable comments! We have submitted revision files and a single PowerPoint file with all figures and symbols can be edited.

Reviewer #1: Perivascular epithelioid cell tumor (PEComa) is an uncommon tumor of mesenchymal origin. Cases of PEComa in the liver are extremely rare. This article shows an interesting case. Because of the large tumor size, TAE combined with sorafenib is a safe and feasible adjuvant treatment method when surgery cannot be performed. Overall, this manuscript is suitable for publishing in this journal after some necessary revision to improve the quality.

(1) Sharper, larger resolution, and higher quality images should be given in Figure 2.

Response: Thanks for reviewer's valuable comments! we have added the sharper, larger resolution, and higher quality pathology images of Figure 2. Please refer to Figure 2 of the revision.

(2) On page 5, line 119. "Based on the characteristics of the tumor and a lack of sensitive chemotherapeutic drugs, the treatment modality of TAE was chosen instead of transcatheter arterial chemoembolization (TACE) as the hypoxia caused by TAE could potentially upregulate angiogenic factors and stimulate the proliferation of residual tumor cells, leading to tumor survival and recurrence." There is confusion in the logic of this sentence, and please revise it to make it more straightforward.

Response: We have changed this sentence as "Interventional embolization should be the first choice in patients with a rich blood supply tumor. Based on the characteristics of the tumor and lack of sensitive chemotherapeutic drugs, the

treatment modality of TAE was chosen instead of transcatheter arterial chemoembolization (TACE). The hypoxia caused by TAE could potentially upregulate angiogenic factors and stimulate the proliferation of residual tumor cells, leading to tumor survival and recurrence [12]. Thus," .Please refer to lines 128-134 of the revision.

Reviewer #2: This case reported a mesenchymal tumor, perivascular epithelioid cell tumor (PEComa), which is a rare tumor in the liver, specifically for the malignant case. In addition, the authors also found that transarterial embolization (TAE) in combination with sorafenib treatment is a safe and feasible strategy to shrink the tumor and make it applicable to surgical removal. Overall, the results and report are suitable to publish in this journal. However, some revision is necessary to enhance the quality of this article. Please check the formats of author names and Departments. Figure 1, use a circle or arrow to point the tumor out; Figure 2, the images are too dim, clear pictures are needed, especially for Figure 2 A; Figure 4, similar to Figure 1, pointing out the tumor to clearly show their difference. The time point of when four TAEs were performed. Figure 5, labeling the difference between two images. Grammar errors: The patient was followed up with for > The patient was followed up for; tumor. Based > tumor. Based; The appearance of symptoms may be related to increase in tumor size > The appearance of symptoms may be related to an increase in tumor size; which have different degree of differentiation > which have different degrees of differentiation; A: Positive staining of giant tumor in right lobe of liver before treatment > A: Positive staining of giant tumor in right lobe of the liver before treatment.The full name of TAE should be mentioned in the abstract. Primary hepatic PEComa is rare [2], > [2],

(1) Please check the formats of author names and Departments.

Response: Thanks for reviewer's valuable comments! Typo in author name "fang yong li" has been modified as "Yong-fang Li" in the submission system.

(2) Figure quality:

Response: Thanks for reviewer's valuable comments! We have carefully modified.

Its content includes adding the sharper, higher quality images, marking the tumor sizes, changing with arrow and gauge, labelling the difference between images and reorganizing some description in the revision. (Please refer Figures 1-5)

In FIG. 4, the image was modified to enhanced CT(sagittal view) in order to better display the changes of the tumor during treatment.

(3) Grammar errors:

Response: Grammar errors has been corrected in the revision (Please refer lines 50-51,129 , 162, 169-171, 185, 347-348)

(4) The abbreviated TAE should have a full name

Response: We have added the full name of TAE in abstract. (Please refer lines 48.)