Response to the Reviewers

Manuscript title: Co-existent Kaposi sarcoma and post-transplant lymphoproliferative disorder in the same lymph nodes after pediatric liver transplantation: A rare case report.

Manuscript NO: 76343

Dear Reviewers:

We thank you for your positive and constructive comments and suggestions. We have revised the manuscript according to your comments and suggestions and have provided a point-by-point response to the comments below. Please find the comments in black, followed by our responses in red.

Response to Reviewer #00928913

#00928913: Authors reported a rare case report of co-existent Kaposi sarcoma and post-transplant lymphoproliferative disorder in same lymph nodes post-pediatric liver transplant in six cervical lymph nodes biopsy of a 19-m-old child. By IHC analyses revealing positive expressions of CD34, CD31, ETS-related gene (ERG), friend leukemia integration 1, and human herpesvirus-8 (HHV8). Furthermore, the lymphoproliferative lesions expressed CD38, CD138, and multiple myeloma 1. Epstein-Barr encoded RNA in situ hybridization demonstrated EBV-positive lymphoid cells. His treatment included anti-CD20 mAb (Rituximab) and discontinuation of the immunosuppressant. Subsequent lymph node biopsies during follow-up examinations revealed lymphoid hyperplasia. This rare case report seems informative and appealing; however, there are a lot of criticisms and have several issues that the authors need to address before the manuscript is suitable for publication.

Major Compulsory Revisions:

1. In fact, to date, there are only a few case reports, particularly of AIDS, non-AIDS, and kidney transplantation patients, describing the co-occurrence of KS and lymphoid tissue lesions in the same lymph node. Authors were suggested to make a Table to

summarize all patients' demographic data and treatment strategies/outcomes for readers.

Response: We have created a table summarizing all patients' demographic data and treatment strategies/outcomes, as requested.

2. As the rarity, what is the percentage of Kaposi sarcoma and post-transplant lymphoproliferative disorder in post-pediatric liver transplant respectively in authors' institution?

Response: We have added the incidence of Kaposi sarcoma and post-transplant lymphoproliferative disorder in post-pediatric liver transplant patients in our institution to the revised manuscript.

3. Case presentation section: the further classified subtitle paragraphs could be merged into one section.

Response: We merged the subtitled paragraphs into one section, but the manuscript format cannot be changed when the manuscript is uploaded. We will draw this to the editor's attention.

4. Figure 1 could be condensed into two panels and for all descriptions for the disease entity.

Response: We have condensed Figure 1 into two panels, as you suggested.

5. Regarding Treatment paragraph: The patient received anti-CD20 monoclonal antibody (Rituximab) therapy (1 cycle), and his immunosuppression therapy was discontinued. Could authors describe it in more details: how many cycles of anti-CD 20 mAb was administrated and how long his immunosuppression therapy was discontinued? How is followed up for this patient?

Response: We have added the treatment details to the manuscript.

6. In Conclusion section: In conclusion, the patient's immunodeficient status combined with EBV and HHV8 co-infection is associated with the concurrent occurrence of these two diseases in the same lymph nodes. Authors were suggested to modify it to be more conservative as that the exact reason for the co-existence of these two diseases in the same lymph nodes remains to undetermined.

Response: We have provided a more conservative conclusion, as you suggested.

Minor Essential Revisions:

1. Please correct the typo and grammatical error by an expert good at English-editing with a certificate enclosed.

Response: The revised manuscript has been edited for English language and proofread by Editage (www.editage.cn). A copy of the editing certificate is attached.

2. Please add the arrowheads in Figures to show the exact findings for easy access of readers.

Response: We have added arrowheads to the figures, as requested.

Response to Reviewer #05089997

#05089997: The authors present the rare occurrence of Kaposi sarcoma (KS) and post-transplant lymphoproliferative disorder (PTLD) in the same lymph nodes of a 19-year-old with liver transplantation. The presentation of rare cases is interesting and relevant to both clinicians and researchers, as it may provide valuable details regarding diagnosis and treatment. The article is well structured and the authors provide evidence (including relevant mages) supporting their diagnoses. Please find below some remarks regarding the article:

• The introduction is rather short, please provide more details (including clinical presentation) regarding KS and PTLD in adult and pediatric patients who underwent

liver transplantation. Moreover, please add the diagnostic steps (ex: histopathological findings).

Response: We have expanded the Introduction to provide the details that you requested.

• Please provide more details on the patient: clinical changes, biochemical markers, immunological changes pre- and post-transplant – during the follow-up period (add graphs of the patient's evolution when possible).

Response: We have provided additional details to the revised manuscript, as requested.

• The "m" in "19 m" (and other similar cases throughout the article) probably stands for "months": please replace "m" with "months".

Response: We have changed "m" to "months" throughout the manuscript.

• The child's mother had viral hepatitis (hepatitis B): please elucidate whether or not the virus was transmitted to the child.

Response: The virus was not transmitted to the child. We have specified this in the revised manuscript.

• For every new relevant detail added to the presentation of the case, please add the appropriate discussions.

Response: We have added the appropriate discussions for the newly added details, as you suggested.

• Please present the similarities and differences between your case and other cases in the literature.

Response: We have added a discussion of the similarities and differences between our

case and other cases reported in the literature.

• Please describe all acronyms at their first use in the text (ex: WHO).

Response: We have described all acronyms at their first use in the revised text.

• In the title, please consider changing "in same lymph nodes" to "in the same lymph nodes".

Response: We have changed the wording "in same lymph nodes" to "in the same lymph nodes" in the title, as you suggested.

After analyzing the work, my recommendation is to accept with minor revisions.

Response: Thank you for reviewing our manuscript and thank you for recommending that it be accepted.

Response to Reviewer # 05374753

05374753: I congratulate the researchers for their efforts. They have done a good job. It is considered an important contribution to the literature. However, it can be useful to consider a few points:

The title is a bit vague and does not clearly convey the article's content. What do you think about the following suggestion? "Co-existent Kaposi sarcoma and post-transplant lymphoproliferative disorder in the same lymph nodes after pediatric liver transplantation: A rare case report"

Response: The title has been modified as suggested to: "Co-existent Kaposi sarcoma and post-transplant lymphoproliferative disorder in the same lymph nodes after pediatric liver transplantation: A rare case report."

Please replace "19-m-old" with "19-month-old" in all parts of the article.

Response: We have replaced "19-m-old" with "19-month-old" in throughout the manuscript, as you suggested.

It is also necessary to mention the patient's race.

Response: We have mentioned the patient's race in the revised manuscript.

Your background section is extremely abrupt. It introduces the field, briefly touches upon the prior literature in the field and then just ends. You need to expand this section.

Response: We have expanded the introduction, as you suggested.

In the abstract section and the main text, the overall conclusions do not rise to the level of conceptual advance. This section should be briefly described the implications of the study, followed by recommendations for future studies.

Response: We have added related text, as you suggested.

In case presentation section, the main elements are there, but it's not very reader-friendly. I suggest that this section be written seamlessly.

Response: We merged the subtitled paragraphs into one section, but the manuscript format cannot be changed when the manuscript is uploaded. We will draw this to the editor's attention.

Finally, I suggest that the manuscript is proofread by a native English speaker or Editing service. So please make sure there are no English errors.

Response: The revised manuscript has been edited for English language and proofread by Editage (www.editage.cn). An English language editing certificate is attached.

Response to Reviewer # 06108740

06108740: The author reported a rare case of coexistence of KS and PTLD in same lymph nodes of a pediatric post-liver transplant patient. This paper has a complete structure, clear pictures and in-depth discussion, it's a high quality case report.

Response: Thank you for reviewing our manuscript and for your positive comments.

We look forward to hearing from you regarding our submission. We would be glad to respond to any further questions and comments that you may have.

Yours sincerely,

Shu-Hong Zhang, MD, Department of Pathology Beijing Friendship Hospital Capital Medical University No. 95, Yong,an Road Xicheng District Beijing 100050, China Email: 13552880233@163.com