## Peer Review File

Article information: https://dx.doi.org/10.21037/jgo-23-45

## **Review Comments**

- First, although the database of the study sample is retrospective and prospective, the current study is only a cross-sectional analysis of the imaging characteristics of HCC patients with PVTT. The title needs to correctly indicate the clinical research design of this study, not a cohort study.
- 2) Second, the abstract needs some revisions. The background did not clearly indicate the clinical significance of the research focus and what the knowledge gap is on this research focus. The methods need to describe the inclusion criteria of subjects, the assessment of imaging indicators, and how the data were analyzed. The results need to first briefly summarize the clinical characteristics of the study sample. The conclusion is unclear and vague and needs detailed comments for the clinical implications of the findings.
- 3) Third, in the introduction of the main text, the authors need to have detailed comments on the clinical significance of having data on imaging findings of hepatocellular carcinoma with portal vein tumor thrombosis secondary to hepatic portal vein collateral circulation and I suggest the authors to have one or two examples, not to overall describe "provide strong support for interventional therapy". The review on what has been known on the imaging characteristics of HCC patients with PVTT is not adequate and comments on the limitations and knowledge gaps are also needed.
- 4) Fourth, in the methodology of the main text, please correctly describe the clinical research design, the profile of the cohort database, assessment of clinical characteristics such as age, gender, and cancer stage, and sample size estimation. The authors' explanation on no sample estimation is not convincing, which should be scientifically estimated. In statistics, please describe the test of normality of continuous variables, how the descriptive statistics were made, the groups to be compared by using Chi-square test, and ensure P<0.05 is two-sided.</p>
- 5) Finally, please consider to cite the below related paper: Yu Z, Zhou Y, Li Y, Xu L. Risk factors for postoperative portal vein thrombosis in patients with hepatitis B liver cancer and its impact on mortality—a retrospective study. Transl Cancer Res 2022;11(8):2858-2865. doi: 10.21037/tcr-22-1837.

## Reply1):Thanks for correction, we have modified our title a cohort study to cross-sectional study as advised

Changes in the text:Page 1,line3.

Reply2):Thanks for correction, We have modified the abstract according to your requirements.

Changes in the text:Page 1,line28-34,Page 1,line1-4,8-9,12-16,18-19.

Reply3):Thanks for correction, We have modified the abstract according to your requirements.

Changes in the text:Page 4,line11-14.

Reply4):Thanks for correction, We have modified the abstract according to your requirements.

Changes in the text:Page 1,line28-34,Page 1,line1-4,8-9,12-16,18-19.

Reply5):Thank you for providing references, which we have quoted in this article. Changes in the text:Page 7,line5-7,12-18.