Reviewer #1:
This study addresses a critical issue in liver surgery by investigating the potential benefits of heparin in preventing posthepatectomy liver failure (PHLF). The results presented are robust, with a large sample size and rigorous statistical analysis methods. The findings suggest that heparin therapy is associated with a significantly lower risk of PHLF and improved short-term clinical outcomes. Overall, this study provides valuable insights into the potential role of heparin in improving outcomes following hepatectomy for liver cancer. However, parts of their manuscript need improvement, and data should be better presented.

1. In the last paragraph of this study, the conclusion “heparin therapy may associate with positive outcomes in more clinical outcomes, especially for posthepatectomy liver failure” undermines the importance of this study. I suggest modifying this conclusion.

Response: Thank you for your interest in our study and for your suggestions. We value the points you have raised and are willing to revise the conclusions to more accurately reflect the findings and significance of our study. After considering your feedback, we recognize that the original conclusions may have been misleading. We will revisit our data and analyses and revise the conclusions to more accurately represent the findings of the study. We will emphasize the limitations of the study and express more clearly in our conclusions the exploratory nature of the treatment options for hepatic failure after hepatic resection, as well as the implications for future research. Thank you again for your valuable comments and patient guidance.

2. In Figure 1, please use a unified font. In Figure 1A, serif font were used; while in Figure 1B and 1C, non serif fonts were used.

Response: Thank you very much for your review and valuable comments. In response to your suggestion regarding font uniformity in Figure 1, we have immediately made the appropriate changes to ensure consistency in the fonts used in the figures. We would use the same fonts for consistency and make changes to the fonts in Figure 1A. Thank you again for your guidance and support.

3. In Figure 2, what group does the blue or pink color represent respectively? Others, in Figure 2G-L, is the data presented as mean ± SD? Please provide additional clarification on this point.

Response: Thank you for your review comments. In Figure 2, the blue and pink colors represent different experimental groups. Specifically, the blue color represents non-heparin, while the pink color represents heparin. As for the data presentation in Figures 2G-L, it is presented in the form of mean plus minus standard deviation (mean ± SD). This way of presenting the data is intended to provide a clear understanding of the central tendency of the experimental
results and the degree of dispersion of the data. We hope this provides additional clarification for you. Thank you again for your review and suggestion.

4. In Table 1-3, please indicate the statistical methods used respectively.
Response: Thank you for your review and valuable comments. In Tables 1-3, we have clearly indicated the statistical methods used next to each relevant data analysis result. This helps readers to better understand our analysis process and interpretation of results. We have made corresponding changes in the revised draft and ensured that the presentation is clearer and more accurate. Thank you again for your guidance and suggestion.

5. Please review the entire text and unify the font of “P”. I recommend to use italics for “P” in all statistical analysis.
Response: Thank you for your feedback. I have standardized all "P" fonts in the text and used italics in all statistical analyses. This will ensure more visual consistency throughout the paper and will enhance the reading experience for the reader. Thank you again for your guidance and patience.