Dear editor:

Thank you for your letter and for the reviewers' comments on our manuscript titled "Predictors of portal vein thrombosis after splenectomy in patients with cirrhosis." These comments have proven to be immensely valuable and have greatly assisted in revising and enhancing our paper. They hold significant importance in guiding our research.

We have carefully reviewed the comments and made the necessary corrections, which are highlighted the revised/added contents with yellow color in the revised manuscript. The primary revisions and responses to the reviewers' comments are provided in the sections below this letter.

We deeply appreciate your consideration of our manuscript, and should you have any inquiries, please do not hesitate to contact me at the address provided below.

Thank you and best regards.

Yours sincerely,

Li Junfeng, Email: junfenglee@126.com

Point-to-point responses to the reviewers' comments:

I would like to thank the reviewers for their appreciation and contribution to this analysis.

Reviewer 1

1- The role of splenectomy in cirrhotic liver is doubtful

2- **Response:** First and foremost, I would like to express my sincere gratitude for your valuable suggestions. Splenectomy plays an important role in the treatment of cirrhosis. Splenectomy is widely used for the treatment of esophagogastric variceal haemorrhage and hypersplenism owing to cirrhotic portal hypertension. Study showed (reference 5, reference 6, and reference 7) splenectomy not only decreases portal hypertension and improves liver function, it also enhances liver synthesis function and

reduces liver fbrosis. Splenectomy has been considered an efective option to reverse thrombocytopenia in cirrhosis patients with splenomegaly. It also improves liver regeneration. A 10-year retrospective follow-up study based on the inverse probability of treatment weighting method found splenectomy decreases the risk of hepatocellular carcinoma for cirrhosis patients with portal hypertension bleeding (reference 8). Thus, splenectomy may be a benefcial option for treatment of liver cirrhosis with hypersplenism. Splenectomy have been widely used in Asia for the treatment of esophagogastric variceal haemorrhage and hypersplenism owing to cirrhotic portal hypertension（page 3, line 10 to 19）. However, splenectomy can increase the risk of PVT at least 10 times. Our study aims to seek the risk factors of PVT after splenectomy and early sensitive indicators, to provide a predictive basis for early PVT and reduce the incidence of portal vein thrombosis

2- what are the indications of splenectomy in those patients

Response: Thank you for your valuable advice. The indications of splenectomy in those patients included endoscopic treatment-resistant esophagogastric varices with or without variceal hemorrhage, history of esophageal variceal bleeding or potential bleeding or infection due to hypersplenism andthrom bocytopenia (platelet count <50 $\times 10^9$/L), and upperabdominal discomfort owing to an enlarged spleen（page 4, line 48 to 52）.

3- About 42% of patients were ascitic although the albumin level was 3,8 ?further 19% of patients were child B and the mean level of bilirubin is 26.89 micromole /liter which are manifestation of liver decompensation and so contraindication for this major operation.

Response: First and foremost, I would like to express my gratitude for bringing this important issue to my attention. About 42% of hospitalized patients were ascitic, which was from pre-admission to pre-surgery. The albumin level was 38 in three days before surgery, which had corrected by us. Therefore, they were not match. The patients were Child-Pugh class B and the mean level of bilirubin is 26.89 micromole

/liter which are manifestation of liver decompensation, which did not contraindication for splenectomy. The contraindication for splenectomy was hepatic encephalopathy, Child-Pugh class C, severe infection, hepatorenal syndrome and so on （page 4, line 54 to 56）.

4- what are the number of decompensated patients after the operation

Response: Thank you for your valuable advice. There were 18/45 (40.0%) patients with ascitic at 1 week after splenectomy; 6/45 (13.3%) patients with ascitic at 1 month after splenectomy; 1/45 (2.2%) patients with hepatic encephalopathy, 4/45 (8.9%) patients with ascitic, and 1/45 (2.2%) patients with upper gastrointestinal hemorrhage at 3 months after splenectomy; 1/45 (2.2%) patients with upper gastrointestinal hemorrhage at 6 months after splenectomy; no decompensation occurred one year after the operation（page 6, line 104 to 110）.

5- what the mortality after operation

Response: Thank you for the correction. During our one-year follow-up, no mortality after operation

Special comments from the editor

1. core tip 应使用英文录制

Response: Thank you for your valuable advice. We have revised it.

2. 由于未提供临床注册声明，建议修改稿件类型为观察性研究，并填写 STROBE statement

Response: Thank you for your valuable suggestions. Our study is a observational study, not a clinical trial registry study. We cannot modify the manuscript type through the F6Publishing system, we need your help to modify it. Thank you very much. And

we have filled out STROBE statement.

3. 请提供可分解图片

Response: Thank you for your valuable advice. Our Figures came from statistical software.We can not provide decomposable Figures (in which all components are movable and editable).

4. 请提供基金文件

Response: Thank you for the correction. We have supplyed Approved Grant Application Form(s) or Funding Agency Copy of any Approval Document(s).

5. 请在 ARTICLE HIGHLIGHTS 中补充 Research methods 部分（在 89170_Auto_Edited 中修改）

Response: Thank you for your valuable advice. We have revised Research methods in ARTICLE HIGHLIGHTS (page 13, line 268-274)

6. 请上传 table 文件

Response: Thank you for your valuable advice. We have provided table file (Table 1 and Table 2).