

Dated: Feb 12<sup>st</sup> 2018

Dear Editor

World Journal of Hepatology,

Please find our responses to the reviewer's comments of our invited manuscript titled "Paracentesis in Cirrhotics is Associated with Increased Risk of 30-day Readmission

**Reviewer ID Number 02438768:** This paper might be interesting. There are no major and few minor concerns. Regarding the latter, the authors should avoid spelling and grammatical mistakes in the paper. For example, page 5, third line of second paragraph of the Introduction. Change patient to patients; page 6, tenth line of third paragraph of the Introduction. Change were to was; page 6, fifth line of second paragraph of the Method. Change patient to patients. In addition, the format of this manuscript should be revised according to WJH's requirement.

**Answer:** Thanks for finding our paper interesting. Reviewer has suggested minor grammatical changes to specific places in the manuscript and these edits were completed. Per recommendations, we changed patient to patients on page 5, third line of the second paragraph of the Introduction. We changed were to was on page 6, tenth line of the third paragraph of the Introduction. We also changed were to was on page 6, fourth line, second paragraph of the Methods.

Reviewer also suggested to revise the manuscript according to World Journal of Hepatology guidelines. Please note the change in title to “Paracentesis in Cirrhotics is Associated with Increased Risk of 30-day Readmission” to meet the word requirements for the title of a manuscript. We also changed the format for the first and second page of the manuscript in order to comply with the requirements of the manuscript.

**Reviewer ID Number 02861252:** Good work...

**Answer:** We would like to thank reviewer for encouraging remarks.

**Reviewer ID Number 00503536:** The manuscript written by Sobotka et al. analyzed the rate of readmission after paracentesis for ascites in patients with decompensated cirrhosis. In addition, they also analyzed the independent predictors of 30-day readmission after paracentesis. The data are important for the strategy to reduce 30-day readmission rate. However, there are some serious concerns that need to be addressed. Major points 1. Ascites retention is mostly influenced by hypoalbuminemia and portal hypertension. However, laboratory data are not shown and how portal hypertension was diagnosed was not mentioned. Esophageal varices are a sign of portal hypertension, but the presence of splenomegaly or thrombocytopenia may precede the development of varices and those are not shown.

2. Child-Pugh score is mostly used for the assessment of severity of liver cirrhosis, thus should be assessed with other possible factors.

Minor point 1. Hepatocellular carcinoma causes the retention of ascites mostly due to portal invasion or compression by the tumor. Hepatocellular carcinoma should be separately analyzed according to the presence and absence of the factor.

**Answer:** Reviewer had multiple concerns. First, reviewer states that ascites retention is mostly influenced by hypoalbuminemia and portal hypertension however laboratory data is not shown and how portal hypertension was diagnosed was not mentioned. This manuscript utilized the Nationwide Readmission Database which is a publicly available database that utilized ICD-9 codes to obtain information. Laboratory data for each patient is not available; therefore we are unable to comment on each patient's serum albumin level. This limitation is mentioned in the limitation section of the discussion which can be found on page 12, paragraph 8, line 7. One of the major strengths of this study is the number of patients analyzed and due to limitation of database, laboratory values are unavailable.

The reviewer also requests clarification on how portal hypertension was defined. Portal hypertension is defined by ICD-9 codes which is outlined in the manuscript on page 6 and 7, 3<sup>rd</sup> paragraph. Appendix 1 lists all ICD-9 codes utilized in this manuscript and is listed on page 23.

The reviewer also comments that thrombocytopenia and splenomegaly may precede the development of varices as a sign of portal hypertension but these are not listed as

factors in the manuscript. Due to limitation of variables in NRD as pointed above, this cannot be explored. This is outlined in the limitations section on page 12, paragraph 8.

The reviewer suggested adding each patient's Child Pugh score to the analysis. While evaluating the Childs Pugh score or the MELD score would add valuable information to the manuscript, we are unable to obtain this laboratory results for patients included in this study. This is addressed in the limitations section of the discussion on page 12, paragraph 8, line 15.

The reviewer also adds a minor point about evaluating patients with hepatocellular carcinoma as these patients may develop ascites due to portal invasion or compression by tumor. The presence of hepatocellular carcinoma was specifically evaluated in this study and was determined to be associated with readmission. However, further details of HCC such as portal vein thrombosis is not available in NRD. This is outlined in the limitation section of the discussion on page 12, paragraph 8, line 8.

Thank you for the opportunity to publish this manuscript in your prestigious journal.

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**Lindsay Sobotka, DO**