

Dear Editors,

We thank you for inviting us to contribute free of charge to the special issue on Liver dysfunction of the *World Journal of Gastroenterology*.

Please find here enclosed the revised version of our manuscript entitled "Hemostasis testing in patients with liver dysfunction: advantages and caveats." (Manuscript NO.: 65928, Minireviews) and detailed responses to the reviewers. We do thank you and the reviewers for all insightful comments on the paper, as these comments led us to improve the original manuscript.

We have now addressed all concerns accordingly in this revised version of the manuscript.

Detailed responses are given below. The original figure 1 is now provided separately as well as the tables, the signed Conflict-of-Interest Disclosure Form and the Copyright License Agreement.

We hope that the present revised version will now be acceptable for publication in *World Journal of Gastroenterology*. Indeed, we strongly believe that *World Journal of Gastroenterology* will provide the best platform for successful dissemination of these data and we hope that this minireview will help clinicians in the management of hemostasis in patients with liver dysfunction.

With our best and sincere regards,

Dr Corinne Frere, corresponding author on behalf of all authors.

**A. Answer to the Editors:**

*In addition to addressing the concerns of the reviewers the editors request to provide the signed Conflict-of-Interest Disclosure Form, the Copyright License Agreement, the original figure document in PowerPoint format and the table separately.*

We thank the editors for their comments.

The signed Conflict-of-Interest Disclosure Form, the Copyright License Agreement, the original figure 1 in PowerPoint format and the table have been now enclosed in the revision.

**B. Answer to Reviewer 1:**

*Scientific Quality: Grade B (Very good)*

*Language Quality: Grade B (Minor language polishing)*

*Conclusion: Accept (General priority)*

*Specific Comments to Authors: Well written and useful review. It would be helpful if the authors include current clinical practice at the end of each test/therapy based on available guidelines/clinical practice (understanding that guidelines recommendations are not available for all)*

We thank reviewer 1 for his comment and we share his concern.

This point is now addressed in the revised version of the manuscript and current clinical practice guidelines have been added at the end of each test/therapy when available as follows:

“According to the 7th International Coagulation in Liver Disease Conference[13], platelet count alone is not sufficient to assess the risk of bleeding in patients with CLD. However, a platelet count  $<50 \times 10^9/L$  may be associated with a high risk of bleeding.

(...)

The use of global platelet functional tests to assess the risk of bleeding in patients with CLD is not recommended by current guidelines..

(...)

According to the 7th International Coagulation in Liver Disease Conference[13], the American Association for the study of liver diseases (AASLD)[26], and the American Gastroenterology Association (AGA)[27], the PT/INR and the aPTT should not be used for assessing the risk of bleeding or for guiding blood products transfusion in patients with CLD.

(...)

According to the 7th International Coagulation in Liver Disease Conference<sup>[13]</sup>, the use of TGA in patients with CLD should be restricted to clinical research studies.”

Etc...

In addition, language corrections have been performed.

**C. Answer to Reviewer 2:**

*Scientific Quality: Grade B (Very good)*

*Language Quality: Grade B (Minor language polishing)*

*Conclusion: Accept (General priority)*

*Specific Comments to Authors: Title: accurately reflects the topic and content of the paper. Abstract: is appropriate, not structured, 194 words. Key words: 6 key words, define the content of*

*the paper. Core tip: is appropriate, 138 words. Introduction: is informative, 319 words, the reader is acquainted with known facts about liver functions in synthesizing numerous plasma proteins, including most of the clotting factors. The purpose of the mini-review is clearly stated. Review: informative, 4122 words, the authors present different factors and their influence on blood clotting in individual chapters: evaluation of the hemostasis profile of patients with liver dysfunction – platelet count, global platelet functional tests, conventional coagulation tests, global coagulation assay, thrombin generation assays, viscoelastic tests – in different conditions: in liver transplantation, invasive procedures, in active bleeding. Presented and discussed are also hemostatic agents in patients with liver dysfunction, use and significance of platelet transfusion and thrombopoietin agonists, application of fresh frozen plasma, fibrinogen, recombinant activated factor VII, prothrombin complex concentrates, desmopressin and antifibrinolytic agents. The review is carefully written, supported by numerous references. Of course, the accurate reader should be aware that some options are available only in economically highly developed countries, with affordable and excellent health care. Conclusion: short, 115 words, the authors summarize the key findings of the presented topic and emphasize the importance of viscoelastic tests. References: 77, time period 1982 (J Clin Pathol) - 2021 (Annals of Emergency Medicine), references are appropriate, influential magazines in this field. Conflict of interest: the authors declared no conflict of interest. Opinion of the reviewer The content of the article is interesting, carefully written, this topic in the field of hepatology is often neglected. I suggest to accept the manuscript after language corrections.*

We thank reviewer 2 for his constructive evaluation of this work. Language corrections have been performed.