

Reviewer# 1:

Re: Thank you for your comment! "The pathogenesis of postoperative TIPS - related HE" has been supplemented and modified, and more has been added in "prior HE not a contraindication for pre-emptive TIPS". The latest researches has been added and discussed in the chapter "EFFECTS OF PORTAL VEIN BRANCHES ON HE ". The forms have been completed according to expert advice: Relative contraindications for nonemergency TIPS (based on the risk of postoperative TIPS - related HE) , Modalities for preventing and treating postoperative TIPS - related HE. This review mainly summarizes the content of prevention and treatment of HE during the perioperative period of TIPS. The rest of the review has been supplemented and modified in accordance with expert recommendations.

Reviewer# 2:

Re: Thank you for your comment! The correlation and effects of zinc and frailty in HE have been supplemented and discussed.

Reviewer#3:

Re: Thank you for your comment! 1) "surgical approaches" has been Changed to "procedure". 2) "The pathogenesis of postoperative TIPS - related HE" has been supplemented and modified. 3) "EFFECTS OF PORTAL VEIN BRANCHES ON HE" has been modified, and "left and right blood" has been elaborated in detail. We need more multicenter prospective randomized controlled studies in order to reach a clear conclusion. 4) Defects of statistics and references have been corrected. 5) The subjective beliefs and opinions have been avoided. 6) Ambiguity has been modified. 7) The content of " interventional stent restriction " has been described in detail. 8) We have reached a relatively clear conclusion and provide detailed recommendations for current clinical practice