

Dear Word Journal of Gastroenterology Editorial Office,

We greatly appreciate the comments that you sent us. Please find our detailed answers in the attached files. We also made English editing on our manuscript.

Would you please let us know if any further changes are required?

Again, thank you for your very valuable time and expertise invested in our manuscript.

Best regards,

Bálint Erőss, Eszter Boros

**Question 1:** Is this meta-analysis registered in PROSPERO database? If yes, the authors are welcome to add this information in the text.

**Answer 1:** Thank you for the question. Our meta-analysis was registered in PROSPERO database, and we mentioned that information in the first paragraph of Materials and Methods. We added that information to the Methods section.

**Action 1:** Please see the following change in the manuscript methods. "Methods of the analysis and inclusion criteria were established in advance and the protocol was documented on the International Prospective Register of Systematic Reviews (PROSPERO, registration number CRD42021223726)."

**Question 2:** Authors are kindly requested to further clarify the sentence "Two studies[23, 24] were excluded from the quantitative synthesis due to major differences in intervention or outcome compared to other included articles." included in the first paragraph of the "Results" section.

**Answer 2:** In the study of Ying et al. [23], the intervention group got PTAE and superior mesenteric arterial hypophysin infusion, which significantly differed from the intervention defined by our PICO framework. In the publication of Yonemoto et al. [24], different outcomes (statistical analysis for laboratory data, number of endoscopic treatments) were presented, which significantly differed from the outcomes defined by our PICO framework.

**Action 2:** We included a more detailed explanation in our revised manuscript.

**Question 3:** In the case of work of Sildiroglu et al. [31], did the authors attempt to have a personal communication in order to further investigate the seemingly contradictory result? If yes, this should be stated at the "Methods" section. If no, the authors could comment on their decision to avoid this useful practice.

**Answer 3:** The reviewer has a fair point in the case of the work of Sildiroglu et al. [31]. We decided not to contact the authors because the impact of this study on the total OR results of rebleeding was marginal according to the sensitivity analysis (Supplementary Figure 2). Moreover, the study of Sildiroglu et al. [31] was based on retrospective data from 2001 to 2011 with small sample size. Since then, there has been a technical improvement of PTAE. We included the study from Sildiroglu et al. because it met our inclusion criteria.

**Question 4:** Given that over 10 studies were included in quantitative analysis, the authors could have performed a meta-regression using e.g. age, gender (especially by the means of percentage of male/female patients), and sample size as independent variables. In case that a revised version of the manuscript will be available in the future, I would be highly interested to re-review it.

**Answer 4:** Thank you for your valuable comment. To carry out a meta-regression was not part of our study protocol, which we registered on PROSPERO in advance. Moreover, only nine studies in the quantitative analysis had information about the gender ratio of the population. We had several forest plots and carried out even sensitivity analyses, which we had to place in the Supplementary material. We kindly ask the reviewer to set aside the request for meta-regression analysis because we firmly believe that our meta-analysis's main conclusion would not change with this additional statistical methodology.

**Question 5:** The authors have followed the PRISMA 2009 statement. However, since last year the guidelines were updated, I think it is crucial that they use the PRISMA 2020 statement and update their checklist and flow diagram.

**Answer 5:** Thank you for your suggestion; we agree with you that the updated PRISMA 2020 statement should be followed in the future.

**Action 5:** In the revised version of our manuscript and supplementary material, we uploaded the PRISMA 2020 checklist, and we updated our PRISMA flow diagram too.

**Question 6:** Regarding reference 18, they should better cite the updated Cochrane Handbook: "Higgins JPT, Thomas J, Chandler J, Cumpston M, Li T, Page MJ, Welch VA (editors). Cochrane Handbook for Systematic Reviews of Interventions version 6.2 (updated February 2021). Cochrane, 2021. Available from [www.training.cochrane.org/handbook](http://www.training.cochrane.org/handbook)."

**Answer 6:** Thank you for your suggestion; we changed reference 18 to the updated Cochrane Handbook according to your recommendation.

**Question 7:** I appreciate the fact that the authors report the OR and 95%CI along with I<sup>2</sup> and its p-value for each meta-analysis. However, they could consider to report the p-value for the OR as well, just to avoid readers with minimal experience in meta-analysis confusion the p-value of I<sup>2</sup> with the p-value of the OR.

**Answer 7:** Thank you for your suggestion. In the revised version of our manuscript, we report the p-value for the ORs as well.

**Action 7:** See changes in the required part of the manuscript.

**Question 8:** The following statement is inaccurate: "For this comparison, publication bias assessment by visual inspection of a Funnel-plot did not detect a small-study effect (Supplementary Figure 1)." The Egger test in Supplementary Figure 1 is <0.1, and therefore there is indeed a likelihood for publication bias. The authors should rephrase their sentence to reflect that. Please use funnel plots and Egger test throughout when n>10 studies.

**Answer 8:** The reviewer is right, the Egger's test in Supplementary Figure 1 is P=0.097, and therefore there is indeed a likelihood for publication bias. Thank you for pointing this out.

Despite our intent, there are no outcomes other than rebleeding with more than ten studies. So we could use funnel plot and Egger's test only in the case of rebleeding.

**Action 8:** We corrected the interpretation of the funnel plot and Egger's test in the manuscript.

**Question 9:** Avoid use of language pertaining to "tendency", for example: "In parallel, three publications [10-12] reported the length of ICU stay, and we found a tendency for shorter ICU stay favouring PTAE, however the difference was non-significant [WMD = -1.33 days, CI: (-2.84)–0.18; I<sup>2</sup> = 84.8%, p = 0.001] (Supplementary Figure 8)."

**Answer 9:** Thank you for your valuable comment. Given your suggestion, we rephrased our statement about ICU stay.

**Question 10:** Is there any chance of population overlap between refs 23 and 26?

**Answer 10:** Regarding these studies (23,26), we carefully checked the study period, and there is no overlap between the populations.

**Question 11:** Have the authors considered performing meta-regression according to potential confounders? (ie, receipt of other concurrent treatments?).

**Answer 11:** Thank you for your valuable comment. Please see Answer 4.

**Question 12:** All parts are almost rigorous, and the conclusion are sound. With respect. Maybe the only concern, not affecting reviewer's evaluation on this manuscript yet, is the indexes for clinical outcomes. Giving a subgroup analysis for rebleeding, mortality, reintervention, need for surgery and transfusion, length of hospital (LOH) and intensive care unit (ICU) stay one by one will be more helpful for decision of bleeding intervening timely.

**Answer 12:** Thank you for your valuable comment. Due to the low number of studies reporting the outcomes of mortality, reintervention, need for surgery, transfusion, length of hospitalization (LOH), and intensive care unit (ICU) stay, we could not perform subgroup analyses. We had enough studies to perform a subgroup analysis only in the case of the rebleeding outcome.