

Reviewer 1:

PVE is an important interventional procedure to induce hypertrophy of the FRL. However, not all patients can get sufficient FRL growth. This review summarized the strategies and future perspectives on the management of PVE failure. This is very valuable in clinical practice.

-We thank the reviewer for his comments.

Reviewer 2

This article is a review of techniques used to rescue patients after a failed portal vein embolization. Its utility is very specific and is meant for a target audience of specialist oncologists and hepatobiliary surgeons however it is a matter of utmost importance. While the article does not present any data of its own, it has summarized very clearly existing data on the use of various rescue techniques and some very recent innovations. The language and presentation is clear and without errors. For the above reasons I am happy to accept the article as is for publication.

-We thank the reviewer for his comments.

Reviewer 3

This review showed strategies for PVE failure. This manuscript seems to be done properly, but I have major comments as follows.

- The authors described the technique and limitation in the “Portal vein embolization”. But I feel the paragraph is not enough structured. We recommend to provide the additional session about risk factors for PVE failure.

-We thank the reviewer for his comments. We added a paragraph about risk factors for PVE failure

- We believe that S4 embolization should be considered only if the right trisectionectomy is planned. PVE is usually performed for right hepatectomy. So, in the figure 1, “segment 4 embolization” in case of risk factors for PVE failure may lead to misunderstanding. We recommend to change the figure or delete S4 embolization from the figure.

-We thanks the reviewer for highlighting such an error, we definitely agree with the reviewer. Indeed, within the text we reported this one as the main limitation of segm 4 embolization, that is useful only in case of right trisectionectomy. Thus, we specified it in the figure 1.

- There was no information about trans-splenic approach in the reference # 16.

-We thank the reviewer for underlining this error. The correct reference was added (Zurcher KS, et al.

Transsplenic Portal System Catheterization: Review of Current Indications and Techniques. Radiographics. 2022 Sep-Oct;42(5):1562-1576. doi: 10.1148/rg.220042.)

- The round ligament approach is also one of new techniques. We recommend to describe this technique (ex, World J Surg. 2021 Sep;45(9):2878-2885.).

-We thank the reviewer for helping us to add this interesting innovative approach. We added it in the PVE paragraph.

- The authors should describe about the primary disease in the data of ref. # 26.

-We described the primary disease involved in the article by Giglio et al.

Furthermore, we corrected the format of the reference, since there was a formal mistake.

- There was no abbreviation of HVE in the figure 1.

We added the abbreviation.