## LETTER TO THE EDITOR

## Antecolic versus retrocolic duodenoenteric reconstruction after pancreatoduodenectomy

We read with great interest the recent publication entitled 'Meta-analysis of antecolic versus retrocolic gastric reconstruction after a pylorus-preserving pancreatoduodenectomy' by Bell *et al.*<sup>1</sup> This study evaluated whether the type of duodenoenteric anastomosis (antecolic versus retrocolic) after a pylorus-preserving pancreatoduodenectomy had an impact on the incidence of delayed gastric emptying (DGE). Although the authors concluded that the antecolic reconstruction was associated significantly with a lower DGE incidence, this main finding must be challenged since two methodological biases have not been considered.

Firstly, two of the included randomized controlled trials (RCTs) derived from the same study population (Chijiiwa *et al.*<sup>2</sup> and Imamura *et al.*<sup>3</sup>). Both studies originate from the same Japanese hospital and by the same group of authors. The first study<sup>2</sup> was a preliminary report, and the latter<sup>3</sup> which was published in 2014, included more patients and had longer follow-up. The preliminary report<sup>2</sup> is even cited in the introduction of the 2014 paper<sup>3</sup> as having fewer patients, with a shorter follow-up and should therefore not be taken into account in the meta-analysis. In fact, inclusion of this study induces a bias in favour of the antecolic reconstruction (DGE incidence after antecolic 6% and 22% after retrocolic).<sup>2</sup>

Secondly, RCTs and non-RCTs (three retrospective studies) were included and this can also be an important source of analysis bias. The identified statistically significant superiority of the antecolic versus retrocolic reconstruction is no longer present when analysing only RCTs. In conclusion, these limitations massively weaken the findings of this metaanalysis.

## **Conflicts of interest**

None declared.

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## References

- Bell R, Pandanaboyana S, Shah N, Bartlett A, Windsor JA, Smith AM. (2015) Meta-analysis of antecolic versus retrocolic gastric reconstruction after a pylorus-preserving pancreatoduodenectomy. *HPB* 17:202– 208.
- Chijiiwa K, Imamura N, Ohuchida J, Hiyoshi M, Nagano M, Otani K et al. (2009) Prospective randomized controlled study of gastric emptying assessed by (13)C-acetate breath test after pylorus-preserving pancreaticoduodenectomy: comparison between antecolic and vertical retrocolic duodenojejunostomy. J Hepatobiliary Pancreat Surg 16:49–55.
- Imamura N, Chijiiwa K, Ohuchida J, Hiyoshi M, Nagano M, Otani K et al. (2014) Prospective randomized clinical trial of a change in gastric emptying and nutritional status after a pylorus-preserving pancreaticoduodenectomy: comparison between an antecolic and a vertical retrocolic duodenojejunostomy. *HPB* 16:384–394.