Peer Review File

Comment 1: In their paper, Fahlbusch et al. provide data from over 5,000 pancreaticoduodenectomy from a national German database. The manuscript boasts an impressive number of patients, and thus, despite being a retrospective database review, offers some high level evidence. The manuscript is overall well prepared and of use to the pancreatic surgeon seeking to further clarify if pylorus preservation or a traditional Whipple procedure is superior in terms of DGE

My main comment is in regard to a coherent theme of the illustrated data. The crux of the paper seems to be the comparison of PP versus PR, which is done on a univariate level, but at some point the story seems to shift towards a comparison of patient cohorts with/without DGE for which multivariate analysis is performed. Additionally, tables and figure 1 are not clearly labeled and easily interpretable to the reader. This manuscript could be a valuable addition to the literature if a coherent thread among results, discussion and tables could be established.

Reply 1: Dear Reviewer, thank you very much for the positive evaluation and the constructive criticism. We changed the text according to your suggestions. The primary aim of our study was the evaluation of the DGE, for which the multivariate analysis was performed. By adjusting the text, integrating further sources of literature to the discussion and reworking the tables and the figure we believe to have improved the script and complied to all requests. In the following you will find point-by-point answers to all suggestions.

In addition I have the following comments:

Abstract:
Comment 2: Line 64: The results section mentions "gastrojejunostomy", this should be corrected to "pancreaticogastrostomy"
Reply 2: The correction has been made.
Changes in the text: see line 63.

Methods:
Comment 3: Did the authors apply any exclusion criteria to their data set? If not, this should be explicitly stated in this section and the thought process behind this decision explained.
Reply 3: Exclusion criteria have been integrated in this section.
Changes in the text: see line 102.

Comment 4: Line 110: apostrophe at end of sentence, needs to be deleted
Reply 4: The apostrophe has been deleted.
Changes in the text: see line 110.

Results:

Comment 5: Was a multivariate analysis performed comparing pylorus preservation versus resection? This is the main crux of the paper, particularly in the context of several notable differences on a univariate level

Reply 5: The primary aim of the paper was to evaluate risk factors for DGE. Therefore, we analyzed DGE in an uni- and multivariate manner. The univariate comparison of the PPPD and PRPD groups is supposed to provide additional information about these groups and increase transparency. A multivariate analysis comparing pylorus preservation versus resection was not performed.

Comment 6: Line 126: "the mean length of stay on ICU" should be corrected to "mean length of stay in ICU"

Reply 6: The correction has been made.

Changes in the text: see line 127.

Comment 7: Do the authors have data available whether a duct to mucosa or invagination PJ was performed?

Reply 7: The technique of the pancreatic anastomosis is undoubtedly one of the most important aspects in pancreatic surgery. Therefore, the reviewer's comment and the proposed addition of this topic could improve the findings. Unfortunately, this data is not included in the registry. Therefore, no analysis could be performed. Generally, in Germany the duct-to-mucosa-pancreaticojejunostomy is widely spread, although various variations are used (Blumgart, Heidelberg technique) A corresponding statement has been added.

Changes in the text: see line 202.

Discussion:

Comment 8: The authors should discuss how their findings could potentially impact practice.

Reply 8: A practical outlook has been added to the script.

Changes in the text: see line 182.

Comment 9: Several differences are illustrated between the two cohorts on a univariate level, the discussion should further elaborate on the most pertinent findings and put them in the context of the current literature

Reply 9: According to the reviewer's request additional citations have been added and evaluated in order to elaborate the discussion.

Changes in the text: see lines 242, 252, 255.

Comment 10: Line 175: Emphasizing not just the sheer number of patients Fahlbusch et al. present, but also the number of centers StuDoQ draws from would

Reply 10: The number of participating centers has been added to the script.

Changes in the text: see line 97.

Comment 11: A very similar paper using North American data from the NSQIP collaborative (PMID: 34274231) was recently published. Some interesting differences in rate of pylorus preservation and subsequent DGE between the papers/countries would be interesting to briefly discuss. It would also underline the utility of nationwide registries and thus strengthen the paper.

Reply 11: A discussion of the paper has been added to the script, highlighting differences and commonalities.

Changes in the text: see line 193 and following.

Tables and Figures:

Comment 12: Table and figure headers should be more descriptive and include what analysis (univariate/multivariate) is performed

Reply 12: The headers have been updated, providing the requested information.

Changes in the text: see line 356 for example and following.

Comment 13: This is a stylistic point, but I would recommend capitalizing the first letter in figures, tables and legends.

Reply 13: All first letters have been capitalized.

Changes in the text: see all tables.

Comment 14: Row headers are unnecessarily abbreviated, spelling them out would improve readability

Reply 14: All row headers have been spelled out in order to increase readability.

Changes in the text: see all tables.

Comment 15: Figure 1 needs to be revised. Presenting absolute numbers makes the relatively small difference between none/grade A/B/C columns hard to interpret (e.g. for POPF). Maybe a stacked bar graph with percentages could illustrate the data better. Alternatively, a table may be best suited to lay out the data. The font is too small.

Reply 15: The figure has been revised, according to the comment stacked bars have been used. Groups have been united in order to improve the clarity of the figure. Additionally, percentages were integrated in the legend according to the reviewers request to increase the understandability of the data.

Changes in the text: line 465.

Comment 1: Fahlbusch T et al reported the risk factors for DGE after pancreaticoduodenectomy. Type of pancreatic anastomosis (PG), longer duration of surgery, higher age, POPF, biliary leakage, and other surgical complications are associated with the incidence rate of DGE. Risk factors are well known and no novel findings are shown. However, large sample data from over 5000 patients is reliable.

Comment: Figure1 show the number of DGE cases stratified by various risk factors. Ratio is easier to understand than absolute number.

Reply 1: Dear Reviewer, thank you very much for your constructive criticism and the

opportunity to improve our manuscript. We fully agree with your suggestion and believe to have improved the understandibility of Figure 1.

The figure has been revised, according to the comment stacked bars have been used. Groups have been united in order to improve the clarity of the figure. Additionally, percentages were integrated in the legend according to request to increase the understandability of the data.

Changes in the text: line 465.