

Reply to Reviewers,

June 23rd, 2021

We thank the editors and reviewers of *Artificial Intelligence in Gastrointestinal Endoscopy* for their decision to conditionally accept and allow us to revise the manuscript. We are thankful to the opportunity of becoming members of the journal's family of authors. Indeed, the reviewer's comments helped in increasing the quality of the paper and enhancing the message we want to convey.

In what follows, we respond to the all the reviewer's comments in **red**.

Thank you again for your consideration!

Reviewer 1:

Scientific Quality: Grade B (Very good)

Language Quality: Grade A (Priority publishing)

Conclusion: Accept (General priority)

Specific Comments to Authors: I have read with great interest the manuscript by Hussein H. Khachfe and coll. entitled "Robotic Pancreaticoduodenectomy: Where Do We Stand?". The manuscript is very well written, it deals with the subject in a satisfactory way. I suggest adding a small paragraph on the future prospects of robotic duodenopancreatectomy. Table 1 and Figure 1 help comprehensively to understand the state of the art on the subject.

We would like to thank the honorable reviewer for their encouraging comments. We have added a paragraph on the future prospects of RPD as follows

“The future directions of RPD will likely involve the use of robotics in borderline resectable or locally advanced pancreatic lesion cases i.e. more surgically complex cases. This also includes performing complex vasculature reconstructions using the robotic approach. However, in order to develop these surgical techniques, better infrastructure, increased training, and more prospective randomized clinical trials are required. The first step needed is to prove that RPD is noninferior to the open technique in PD with level 1 evidence. This entails increasing the number of prospective trials in order to perform meta-analyses and systematic reviews. Afterwards, increased funding and training can follow, which will allow for further developments of the RPD technique discussed. Additionally, robotic training will need to be introduced and integrated early into residency programs (possibly using simulation labs) to help with the learning curve of future robotic surgeons”

Reviewer 2:

Scientific Quality: Grade D (Fair)

Language Quality: Grade B (Minor language polishing)

Conclusion: Major revision

Specific Comments to Authors: Comments to the author This is a short review article on the introduction and development of robotic PD. The readers could know that robotic PD has a history of 20 years, while Lap-PD was 30 years, and the morbidity and mortality of RPD is

decreasing. Considering learning curve of RPD, at least 40 cases will be necessary to acquire a standard technique for RPD. Comments 1. Brief history and development of RPD is described. However, the difficulty of introducing RPD, technical points unique to RPD, and other negative aspects of RPD are not described. The authors should focus not only the development but also the negative aspects of introducing RPD. 2. The readers might be unsatisfied after reading this article, partly because this article lacks this author's real impression and experience of RPD.

We would like to thank the reviewer for their comments. We have amended our manuscript to account for the difficulty of introducing RPD and other negative aspects as such

“The challenges facing the introduction of RPD are numerous. First, robotic operations are known to still have long operating time as compared to open ones. Second, due to the complexity of the robotic approach, there is an increased need of training (higher learning curve) than the open and other minimally invasive techniques (laparoscopic). Third, robotic surgeries carry a high financial burden to patients, covering bodies and hospitals. This helps favor the open or laparoscopic approach for PD by insuring bodies and patients paying out-of-pocket. Fourth, RPDs require high-end infrastructure, which includes larger operating rooms, more technical staff present (in case any issues arise), and robotic certification by faculty and trainees. Finally, there is an increased difficulty in making prospective randomized trials in robotic operations. This issue arises with the decreased appeal/enrollment into robotic trials due to patient preference of open or laparoscopic approaches.”