

Dear Editor:

Thank you for your decision letter and the opportunity to revise our manuscript. We wish to re-submit the manuscript titled “**Incidence of surgical site infection in minimally invasive colorectal surgery.**” The manuscript ID is 92215.

We thank you and the reviewers for your thoughtful suggestions and insights. The manuscript has benefited from these insightful suggestions. I look forward to working with you and the reviewers to move this manuscript closer to publication in the *World Journal of Gastrointestinal Surgery*.

The manuscript has been rechecked and the necessary changes have been made in accordance with the reviewers’ suggestions. The responses to all comments have been prepared and attached herewith/given below. The revised text has been indicated in yellow highlights in the manuscript.

Reviewer #1:

no difference in SSI incidence between RACS and LACS. RACS involves less bleeding but requires more operation time. Logistic regression analysis revealed that diabetes mellitus, intraoperative blood loss, and incision length were independent risk factors for SSI. Include more parameters like: time of postoperative intake, conversion rate, costs incurred and also survival time. This will certainly enhance the quality of the research paper. Thus revise the paper accordingly.

Reply: Thank you so much for your valuable comments. The time of postoperative intake may be important for the incidence of SSI, so we have added this it to the results. The purpose of this study was to compare the incidence of SSI between robot-assisted colorectal surgery (RACS) and laparoscopic-assisted colorectal surgery (LACS), the conversion rate, costs incurred and also survival time may not be related to the incidence of SSI, but rather to the choice of surgical methods or the long-term prognosis.

Reviewer #2:

What is the point of this sentence. The same is said in the sentence before. If there are differences between RACS and LACS put it here. If not put statistics. The measure should be here.

In the further part of the method, some surgical steps should be described, which are important for SSI. Did the authors use a retrieval bag for the extraction after intracorporeal anastomosis? Also, did they use wound protection (for example, Alexis retractor) when performing the extracorporeal anastomosis?

Can the authors show recommendations for prophylaxis that last 48 hours.

Also, I do not understand what the values in brackets refer to. Other parameters have only one value.

One additional parameter could be interesting. Can the author make a subgroup analysis based on age. The first group 18-55 years, and the second group 56-90 years. It would show us whether biology itself increases SSI.

Reply: Thanks for your careful review and positive suggestion.

1. In results “Diabetes mellitus, incision length, intraoperative blood loss  $\geq 100$  ml, neoadjuvant therapy, lesion site and operation time were possible risk factors for SSI. Moreover, Diabetes mellitus, intraoperative blood loss  $\geq 100$  ml, and incision length were independent risk factors for predicting SSI.” The sentence before is using univariate logistic analysis, which refers to possible risk factors, while the latter sentence is based on multivariable logistic analysis, which refers to independent risk factors.

2. Different anastomosis methods may lead to different incision lengths. Intracorporeal anastomosis, the specimen will be moved to the specimen bag first, and then taking out the specimen through incision. Extracorporeal anastomosis usually requires a slightly larger incision to facilitate the reconstruction of the digestive tract, but regardless of the method, wound protection devices are used, not only to prevent SSI, but also to prevent the occurrence of tumor implantation metastasis in the abdomen.

3. According to the CSCO guidelines in China, prophylactic use of antibiotics is recommended for gastrointestinal surgery, with a maximum of 48 hours after surgery.

4. Regarding the description of Incision length, as the data were non-normally distributed, the median (25%-75%) is used to describe it.

5. Age is an important factor, and young patients may have better physical fitness and a lower probability of developing SSI. However, young patients may also have fewer comorbidities, which may have a significant bias. The purpose of this study was to compare the incidence of SSI between RACS and LACS, and there is no statistical difference in age between them.

We hope that the revised manuscript is now acceptable for publication. Thank you for your consideration. I look forward to hearing from you.

Sincerely,

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