

## Response to Reviewers comments

I have reviewed with great interest this retrospective study focused on risk factors of recurrence after endoscopic resection of 1,412 lesions in 360 patients. The authors have found that 8.6% of patients present recurrence, with a increased risk in piecemeal resection with equal of more than 5 pieces. The authors suggest a protocol of follow-up based on more pieces mean shorter follow-up. This type of studies in crucial for endoscopists, so I would like the authors give more information in:

**Reply:** We appreciate the positive general comments from this reviewer.

1) Why do you talk of recurrence in patients (8.6%)? I think is more important recurrence in lesions (?? in 1412 lesions).

**Reply:** We agree that recurrence rates of colonic polyps need to be evaluated in terms of lesional factors, such as sizes and endoscopic findings. Indeed, most previous studies have tried to identify lesional factors associated with the recurrence of colonic tumors after the endoscopic treatments. Thus, patient factors such as age, sex, history of colorectal tumors, and diabetes have not been regarded as critical factors related to the local recurrence. To identify patient factors associated with the local recurrence of colonic tumors, we performed univariate and multivariate analyses with special emphasis on factors related to patients (age, sex, history of CRC, diabetes) in this study. To clarify this point, we added several sentences in the Methods section in the revised manuscript as follows:

Although most previous reports [14-17] successfully identified lesional factors associated with the local recurrence of colonic tumors after endoscopic treatments, such as tumor sizes, endoscopic findings, and tumor locations, few reports have tried to identify patient factors, such as age, sex, history of colonic tumors, and diabetes. In this study, we performed

univariate and multivariate analysis to identify patient factors associated with local recurrence. To this end, the largest tumor in size was selected in each patient for the analysis when more than two polyps are detected. Moreover, the most advanced type of histology was selected in each patient when more than two polyps were removed.

We also added information regarding the local recurrence rate of colonic tumors per lesion. As shown in the Results section of the revised manuscript, we added the data showing that recurrence was seen in 31 of 1,412 (2.2%) lesions.

2) I need a table / figure with the different types of techniques (Polypectomy, En-bloc EMR, Piecemeal EMR, En-bloc ESD and Piecemeal ESD)

Reply: Thank you for your invaluable comment. We created a new table (Table 3) with the different types of techniques (polypectomy, en-bloc EMR, piecemeal EMR, en-bloc ESD and piecemeal ESD); this table shows evidence that endoscopic procedures are associated with local recurrence; specifically, piecemeal resection (piecemeal EMR, piecemeal ESD) was highly related to local recurrence compared to en-block resection. In response to your comment, we tried to confirm these results by another approach. As shown in a new figure (Figure 4), we performed a sub-analysis to identify the types of techniques (polypectomy, en-bloc EMR, piecemeal EMR, en-bloc ESD, and piecemeal ESD) associated with local recurrence. The new Figure 3 also clearly showed that piecemeal resection (piecemeal EMR, piecemeal ESD) was highly related to local recurrence compared to en-block resection.