## **Peer Review File**

## Article information: http://dx.doi.org/10.21037/ls-20-121.

## **Reviewer** A

**Comment 1**: Author states that 25% of the stromal esophageal tumors are GIST. The reference shows that in a cohort of mesenchymal tumors that was studies in that study, they found 25% or 17 tumors. This is a misleading statement. Recommend revise the statement to show that in the cohort that was studies that they found 25% instead of all mesenchymal tumors. **Party 1**: We would like to thank the reviewer for identifying this misleading statement. We

**Reply 1**: We would like to thank the reviewer for identifying this misleading statement. We have revised the manuscript as suggested (pg 5, lines 109-111).

**Comment 2**: Unclear if the authors are suggesting that patient needs CT, MRI, PET/CT, EUS-FNA and contrast-enhanced EUS.

**Reply 2**: Thank you for pointing out this ambiguity. We have revised this sentence to clarify that these are imaging options to avoid possible interpretation by the reader that all of these imaging modalities are needed (pg. 6, line 129).

**Comment 3**: Many of the conclusions are extrapolated from GIST in other organs instead of esophageal GIST.

a. Neoadjuvant therapy - there is no specific information in regards to esophageal GIST

**Reply 3**: We appreciate the reviewer's comment regarding conclusions about the efficacy of neoadjuvant therapy being extrapolated from GIST in other organs. Unfortunately, this extrapolation is unavoidable as esophageal GIST is a very rare tumor resulting in a lack of inclusion of patients with esophageal GIST in randomized trials. A statement has been added to this section to be more direct about this extrapolation (pg. 9, lines 219-221).

**Comment 4**: Surgery comparison is outcomes of open and minimally invasive surgery for other indication not esophageal GIST

**Reply 4**: Again, we appreciate the reviewer's comment that the operative approach outcome data are largely extrapolated from operations for indications other than esophageal GIST. We have further highlighted this issue in the section on operative approach (pg. 11, lines 261-262).

Comment 5: STER data is not for GIST instead mostly leiomyoma

**Reply 5**: Again, we appreciate the reviewer's comment regarding that STER outcome data are largely extrapolated from leiomyomas. We have more directly highlighted this issue in the section on STER (pg. 17, lines 405-406; pg. 18, lines 412-413).

## **Reviewer B**

**Comment 1**: This review is quite complete but of course its value is limited by the lack of adequate studies on GIST, as most data are based on leiomyoma. The Authors should better highlight this "bias" in particular when reporting about the choice of procedure for enucleation. Actually, enucleation of GIST should be not recommended considering the risk of tumor rupture. One can hypothesize a marginal resection with a planned R1 margin for an imatinib-sensitive GIST (as proposed for rectal GIST in Literature) but tumor rupture must be avoided as it strongly increases the risk of recurrence (see Joensuu classification). The Authors should better emphasize this concept when discuss about enucleation.

**Reply 1**: We appreciate the reviewer's concern regarding this "bias" and have further highlighted this issue throughout the manuscript (pg 9, lines 219-221; pg 11, lines 261-262; pg 16, lines 366-368; pg. 17, lines 405-406; pg 18, lines 412-413).

**Comment 2**: Please do not start the "Clinical Work-up" with the word <u>Leiomyomas</u> as the paper is focused on GIS.

Reply 2: We have revised this statement as requested (pg. 5, lines 110-111).

**Comment 3**: EUS-FNA may be used for mutational analysis in some case if material is adequate. **Reply 3**: We have added this statement to the EUS-FNA section as requested (pg. 8, line 177).

**Comment 4**: Please use the term "pseudocapsule" instead of "capsule" when referring to GIST. **Reply 4**: We have replaced the term "capsule" with "pseudocapsule" throughout the manuscript as requested.

**Comment 5**: The conclusion that "... enucleation ... appear safe with adequate oncologic outcomes..." is too strong to be reported, considering the present data in Literature.

**Reply 5**: We appreciate the reviewer's concern regarding this conclusion. We have revised this statement to read, "...VATS or robotic enucleation or submucosal tunneling endoscopic resection are feasible minimally invasive options based on current case series in the literature" (pg. 18-19, lines 430-433).