Thank you for the peer review.

The following is our answer to the reviewer's Comments for Re-review.

Reviewer (Number ID: 03270441), Reviewer (Number ID: 03093768))

## Reviewer (Number ID: 03270441)

1. In the first sentence of the last paragraph of the "Introduction", the author emphasized that the "male" patients with esophageal cancer were enrolled, while the actual enrollment was 121 males and 11 females. I prefer to know why such large percent male patients were recruited.

<u>Answer</u>: It was a simple mistake to describe it as "male". The reason for the male predominance is that esophageal squamous cell carcinoma occurs more frequently in males in Japan.

2. Since this study mainly focused on male patients, can it be extended to the whole esophageal cancer population?

<u>Answer</u>: As pointed out by the reviewer, the description esophageal cancer is inappropriate. Therefore, we have corrected the reference to esophageal cancer in the content of the text to esophageal squamous cell carcinoma.

3. Paragraph 5, 6, and 7 of the Discussion section has little to do with this clinical study, so it is recommended to delete or significantly reduce it.

<u>Answer</u>: As the reviewer pointed out, this is not directly related to the content of the paper. However, without this content, the study itself would only be a description of the results. Since this would not explain the phenomenon of the results, we consider it essential to describe it.

4. Through a retrospective study of a relatively small sample, the authors draw a conclusion that was too positive.

Answer: The description of esophageal cancer was changed to esophageal squamous cell carcinoma. In addition, the word "Japanese" was added to express the following conclusion.

"Changes in skeletal muscle mass and muscle quality before NAC in esophageal squamous cell carcinoma in Japanese is a prognostic factor of OS."

## Reviewer (Number ID: 03093768)

1. The title "Influence of skeletal muscle mass and quality on long-term outcomes following radical resection after preoperative chemotherapy in esophageal cancer patients" seems to mismatch the conclusion "Skeletal muscle mass and muscle quality before NAC in esophageal squamous cell carcinoma are significant prognostic factors of the OS." Does the title should be "Influence of skeletal muscle mass and quality on long-term outcomes following radical resection after preoperative chemotherapy in esophageal squamous cell cancer patients"? Should the conclusion be "Skeletal muscle mass and muscle quality before NAC in esophageal squamous cell carcinoma are significant prognostic factors of the OS in ESCC after surgery"?

<u>Answer</u>: As pointed out by the reviewer, the title has been revised as follows. "Influence of skeletal muscle mass and quality on long-term outcomes following radical resection after preoperative chemotherapy in esophageal squamous cell carcinoma patients"

As pointed out by the reviewer, the conclusion has been revised as follows. "Changes in skeletal muscle mass and muscle quality before NAC in esophageal squamous cell carcinoma in Japanese is a prognostic factor of OS."

2. This is a study that focuses on long-term follow-up results. The follow-up time and follow-up rate should be noted.

<u>Answer</u>: The follow-up period is described at the end of the first paragraph in the Patients' characteristics section of Results as follows. Unfortunately, we have not conducted a study on follow-up rates.

"The median duration of postoperative follow-up was 60.9 mo (range: 3.9-100.3 mo)."

3. It was told that "The present study included Japanese males with squamous cell carcinoma of the esophagus who underwent preoperative chemotherapy and subtotal esophagectomy with three-field lymph node dissection as the standard therapy." (Page 4) But the data showed in table 1, we could see

male/female:120/11. What is wrong?

<u>Answer</u>: It was a simple mistake to write "male." The word "male" has been changed to "patients".

4. Are there any cases of conversion to thoracotomy or laparotomy during operation?

<u>Answer</u>: At that time, esophageal cancer surgery in our hospital was performed only by thoracotomy and laparotomy, not by thoracoscopy and laparoscopy.

5. The relationship between immunological cytokines and sarcopenia was discussed, but these cytokines were not found to be tested in the manuscript. if the tests were not done, the discussion of this section could not be helpful for the conclusion.

<u>Answer</u>: As the reviewer pointed out, cytokine levels were not tested in this study. If there were no description of the mechanism regarding this cytokine, it would be just a description of the results. We hope you understand that we would like to describe this description for the reason of explaining the phenomenon.

6. The evaluation method of muscle quality has not been clearly quoted. The article has explained that there have been corresponding calculation and evaluation methods before.

<u>Answer</u>: In the Image analysis section, we have listed the references quoted as a method of assessing muscle quality. References 27 and 28.

7. How long will the patient obtain clinical data before neoadjuvant chemotherapy? It should be clarified.

<u>Answer</u>: Unfortunately, clinical data prior to preoperative chemotherapy are not obtained. For this reason, the analysis in this study is based on clinical data before surgery.

8. Because the surgical quality of esophageal cancer is related to the surgical volume of the main knife. Are all the surgeons in this study performed by the same senior surgeon?

<u>Answer</u>: At that time, the same senior surgeon was performing esophageal cancer surgery at our hospital.

9. IF the patient was post-gastrectomy, the method of digestive tract reconstruction should be explained.

<u>Answer</u>: In the case of postgastric surgery, jejunum is used to reconstruct the esophagus.

10. Whether there are other serious complications (combined with other malignant tumors, diabetes, COPD, etc.) in the patient's basic data should be clarified and compared.

<u>Answer</u>: As the reviewer pointed out, it is preferable to consider other complications separately. However, at the time of data collection, we did not collect data on other complications because survival, recurrence rate, and respiratory complications were the endpoints.