

## PEER-REVIEW REPORT 1

**Name of journal:** Neural Regeneration Research

**Manuscript NO:** NRR-D-18-00447

**Title:** Sarcopenia diagnosed using masseter muscle area predictive of early mortality following severe traumatic brain injury

**Reviewer's Name:** Renata Ciccarelli

**Reviewer's country:** Italy

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### COMMENTS TO AUTHORS

The article needs an improvement either for the Introduction or the criteria used for the selection of patients. The use of masseter sarcopenia, if confirmed, might be useful to treat patients at death risk with a greater care.

Indeed, the Authors have recruited the patients on the basis of entity of brain trauma, age and the possibility to perform a CT scan to assess sarcopenia. However, they did not refer or exclude other neurological data that could have concurred to the patients' mortality. My advice is that the characteristics of the selected population of patients should be better circumstantiated.

Also, I found some errors in writing and editing the manuscript:

1. page 1, lines 4-8: the first two sentences are repetitive
2. page 1, line 27: "Furthermore" seems to be not followed by a sentence, therefore, it should be eliminated
3. Page 1, line 29: "lack of physical and activity": probably "and" should be cancelled
4. page 1, lines 30-31: the sentence is without a sense: rephrase.
5. page 1, lines 32-35: in this sentence the word "increased" is repeated three times: this is excessive.
6. page 1, line 48: explain the meaning of DEXA
7. page 3, in the figure legend, it is reported: "Analysis by log rank revealed significantly decreased mortality among patients with sarcopenia ( $p=0.09$ )": this is surprising since the manuscript is aimed at demonstrating an opposite effect.