

## OPEN PEER REVIEW REPORT 1

**Name of journal:** Neural Regeneration Research

**Manuscript NO:** NRR-D-22-00535

**Title:** Photobiomodulation Provides Neuroprotection via Alleviating Mitochondrial Dynamics Defects after Spinal Cord Injury

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**Reviewer's country:** Italy

### COMMENTS TO AUTHORS

Interesting effect of photobiomodulation against nerve damage. Strengthness is represented by mitochondrial defects analysis. Some points should be improved:

- Behavioral response are limited to motor functionality, since pain is a major problem of neuropathy the pain relieving properties of these treatments should be addressed.
- Other papers already reported effects of laser treatment against neuropathy in a preclinical settings, these already published results should be commented (please see doi: 10.1038/s41598-019-45469-5 and doi: 10.1007/s10103-017-2284-9).
- Laser characteristics and info about treatment should emerge also in the abstract to facilitate readability and translatability.
- The authors stated that laser treatment was performed once a day, analysis were done on days 7 and 14. How many hours before sacrifice the treatment was done?