

## OPEN PEER REVIEW REPORT 1

**Name of journal:** Neural Regeneration Research

**Manuscript NO:** NRR-D-18-00857

**Title:** RNA-Seq screening of differentially expressed genes after spinal cord injury and verification of some genes

**Reviewer's Name:** Li Yao

**Reviewer's country:** USA

**Date sent for review:** 2018-12-10

**Date reviewed:** 2019-01-01

**Review time:** 22 days

### COMMENTS TO AUTHORS

The article entitled "RNA-Seq screening of differentially expressed genes after spinal cord injury and verification of some genes" demonstrated a study to perform a transcriptome analysis for the spinal cord post-injury. A number of genes were additionally analyzed by qPCR and western blotting. In general the study is interesting and the authors tried to report a new insight into the spinal cord injury. The article can be considered for publication after addressing the following comments.

1. The RNA-seq result should be verified.
2. The fold change for genes C5ar1, Socs3 and Ccl6 should be standardized in qPCR and RNA-seq study. So the fold change in both study can be better compared.
3. No scale bars are provided in the histological images. The scale bar should be included.
4. The authors are suggested to improve the impact of the study by including some kind of quantitative analysis for the histological data.