

## OPEN PEER REVIEW REPORT 2

**Name of journal:** Neural Regeneration Research

**Manuscript NO:** NRR-D-20-00471

**Title:** Dental pulp stem cells: therapeutic effects in a rat model of vascular dementia

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**Reviewer's country:** Italy

### COMMENTS TO AUTHORS

There are some problems with the quantification of the effects observed and reported, mainly in the description of the phenotypes of DPSC (two markers, maybe some molecular check for specific transcription factors, e.g. RUNX might have been more convincing); double or triple staining in Fig. 3 are partially informative, since they focus on a small area when there is plenty of other cells and aggregates which do not coexpress the markers; in Fig. 4 only data for NeuN can be really observed in the micrographs, no clear evidence is offered by representative images of the other markers, so the histograms are really not supported; moreover no explanation for differences between Operatio vs Operation+PBS is offered (the same applies to the following figs.5 and 6); this is particularly important for Fig.6 data which are the really key data for the whole paper. In these figures DPAC is shown instead of DPSC. I would recommend inserting more clear and self-evident images and more discussion of the relevance of the neuromarkers used.