

OPEN PEER REVIEW REPORT 2

Name of journal: Neural Regeneration Research

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Title: Olfactory dysfunction as a common biomarker for neurodegenerative and neuropsychiatric disorders

Reviewer's Name: C. Vicario-Abejón

Reviewer's country: Spain

COMMENTS TO AUTHORS

The article entitled "Olfactory dysfunction in neurodegenerative and neuropsychiatric disorders" is an updated minireview, well written for the most part of it. However, I have minor comments and requests, as follows:

Page 2: It is not clear how important to olfactory dysfunction is "the age-dependent reduction in the number of stem cells in the subventricular zone and their proliferation rate found in animal studies". As the authors know, these stem cells are not the basal stem cells of the olfactory epithelium. Please, explain.

Page 2: The authors should provide additional evidence that "In AD and PD olfactory dysfunction represents a clinical marker of early disease". How does this statement fit with the 67% cases of predicted conversion from prodromal to full blown PD (page 5) using odor identification and DAT imaging? Is 67% sufficient to use olfactory dysfunction as a general and standard clinical marker of early disease?

Page 4: Please, define "odor identification" and "odor discrimination"

Page 4: The relationship between CSF biomarkers (which ones?) and odor identification ability should be elaborated a bit more.

Page 6: The paragraph starting by "Mechanistically, olfactory dysfunction might be caused by..." needs a subheading.