

OPEN PEER REVIEW REPORT 1

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Title: Dynamic glial response and crosstalk in demyelination/reme myelination and neurodegeneration processes

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COMMENTS TO AUTHORS

In this article, cellular and molecular interaction between glial cells during the demyelination-remyelination process in MS lesions, centering OPCs/OLs evolution, is reviewed.

The manuscript is well written and well organized with profitable figures and tables.

I have only several minor comments.

1. Page 4: "Astrocytes compromise 80% of the total glial cell population in adult CNS (Verkhratsky and Butt, 2007)."

The term "compromise" seems not to be appropriate. "Comprise" might be better.

2. Page 7: "... , suggesting that individual variability and extent of remyelination must be considered in developing therapeutic strategies for MS (Patrikios et al., 2006).

The term "must" may be better to be weakened to "should".

3. Page 9: The sentence "M/M are highly responsive active sensors that damage or insult by antigen presentation and phagocytosis." is hard to understand. Could this part be rephrased?

4. Page 13: "Patterns of astrocyte-derived factors and the switch of astrocytic phenotypes from A1 to A2 during lesion development indicate that finely regulated and balanced astrogliosis may benefit remyelination (Haindl et al., 2019)"

Please specify or define the "A1" and "A2" in their first appearance. Maybe, toxic reactive astrocyte (A1) and neuroprotective reactive astrocyte (A2)?