

Section 3.4: concluding statements as in 3.2 would make it better.

OPEN PEER REVIEW REPORT 2

Name of journal: Neural Regeneration Research

Manuscript NO: NRR-D-23-00118

Title: Lactate metabolism in neurodegenerative diseases

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Reviewer's country: USA

COMMENTS TO AUTHORS

In this review, authors discussing the recent advances in lactate metabolism and its importance lactate metabolism in neurodegenerative diseases. This is an interesting review, which is overall very well written, and this manuscript may give an insight into the importance of lactate metabolism in neurodegenerative diseases (AD and PD only).

Major Comments

1. One of the major drawbacks of this manuscript is, authors doesn't provide much details of importance of lactate metabolism in neurodegenerative diseases/disorders, other than Alzheimer's and Parkinson's disease. I would recommend adding details about lactate metabolism in neurodegenerative disorders, various neuroinflammatory diseases (example-chronic neuroinflammatory disease tuberculous meningitis (TBM), age dependent neurodegeneration etc.
2. Please add a detail of recent reference of <https://doi.org/10.1186/s13024-022-00541-z> in the Alzheimer's diseases section.
3. Introduction is scanty and vague, needed rewriting.
4. Please check sections (1) and (2) coming under section 2.2 Protein lactylation.
5. Sections 3.3 is missing, and authors are not mentioning impact of histone/non histone lysine lactation in the sections 3.2 and 3.4.
6. Since this review summarizes the importance of lactate metabolism in neurodegenerative diseases, I would strongly recommend reviewing add more details about lactate metabolism in various other neurodegenerative diseases/disorders in all aspects.