

PEER-REVIEW REPORT 1

Name of journal: Neural Regeneration Research

Manuscript NO: NRR-D-18-00574

Title: The role of Epstein-Barr virus in multiple sclerosis: from molecular pathophysiology to in vivo imaging

Reviewer's Name: Tetsuya Akaishi

Reviewer's country: Japan

Date sent for review: 2018-08-17

Date reviewed: 2018-08-17

Review time: 1 Day

1. Do you consider this paper is hotspots or important areas in the research field related to neural regeneration?

Yes

2. Which area do you think this paper falls into? Neurorepair, neuroprotection, neuroregeneration or neuroplasticity.
neuroprotection

3. Is the manuscript technically sound, and do the data support the conclusions?

Yes

4. Has the statistical analysis been performed appropriately and rigorously?

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5. Is the manuscript presented in an intelligible fashion and written in Standard English?

Yes

6. Your peer review comments will be published as an open peer review report. Do you agree to have your name included with the published article?

Yes

Manuscript Rating Question(s):	Scale	Rating
The subject addressed in this article is worthy of investigation. (3 as the best score)	[1-3]	3
The information presented was new. (5 as the best score)	[1-5]	4

COMMENTS TO AUTHORS

In this review, the authors outlined the promising association of MS-pathogenesis and late primary EBV infection. They finely delineated the development of that research field based on a plenty amount of reported evidences. This review also well includes the hot topic of possible correlations among HERV-W, EBV, and MS-pathogenesis. Whether such correlations would be the primary MS-pathogenesis or not is still inconclusive, but at least they would certainly be one of the most important affectors in MS-pathogenesis. Some minor comments are listed below.

1. Page 7. Most readers, including me, would not be familiar with the term of "latency-specific CD8+ T-cells". What is "latency-specific"? Brief explanation would be helpful.



2. Page 13. The description of the cited report by Levin et al. (PMID: 20517945) is a little bit misleading. The description in your manuscript could make readers to feel that "all US military personnel who developed MS during their service" was firstly negative for EBV at their initial checkups. The report enrolled a total of 305 military personnel who later developed MS, but only 10 of them were negative at their initial checkup. Thus, this part could be better to be re-written.

Other parts seem to be wonderfully written.