

## OPEN PEER REVIEW REPORT 1

**Name of journal:** Neural Regeneration Research

**Manuscript NO:** NRR-D-22-01302

**Title:** Thinking outside the black box: are the brain endothelial cells the new main target in Alzheimer's disease?

**Reviewer's Name:** Erik J. Behringer

**Reviewer's country:** USA

### COMMENTS TO AUTHORS

This submission is a useful overview of how the blood brain barrier composed of endothelial cells is central to Alzheimer's disease pathology. It covers some basic textbook information while proceeding to a discussion of targets within the neurovascular unit & some novel pharmacological agents. See comments below.

(1) General: The role of the brain vasculature in cognitive function/health has been an extremely hot research topic for probably about 10 years now. So, at the very least, I would diminish the present tense ("BEC function...is not considered with the same importance...") to that emphasizing one of the past overall (e.g. "...has historically not been considered with the same importance...") for wherever such a statement has been made throughout the manuscript.

(2) Finally, the manuscript & Figures should receive another thorough editing for typos ("caffein") and wrong use of certain words (e.g., "underscored" in reference to diminished appreciation of the BBB; mean "undervalued"?)