Reviewer’s report

Title: ApoE4: an emerging therapeutic target for Alzheimer's disease

Version: 0 Date: 07 Dec 2018

Reviewer: Huaxi Xu

Reviewer’s report:

Overall, this review outlines clearly the main effects and current methods of manipulation of ApoE4 in Alzheimer's Disease. The background provided in the review is sufficient to give the lay reader a general understanding of Alzheimer's Disease (AD), β amyloid, and tau, and a brief history of AD research. The author's rationale provides an effective justification for studying ApoE4 over its other isoforms, through careful description of the effects of each isoform in terms of their potential protective or detrimental effects. In addition, the article does provide links to reviews with more in-depth analysis of the mechanisms behind ApoE4-linked pathology in the main text.

Suggestions:

The conclusion focuses on the second part of the review, regarding experimental approaches for targeting ApoE4, but does not summarize the pathological effects discussed in the first section of the review. A more effective conclusion would address or summarize the most relevant effects of ApoE4 as discussed in sections 1.1 through 2.8.

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