Reviewer's report

Title: Antibodies against phosphorylcholine are not altered in plasma of patients with Alzheimer's disease

Version: 1 Date: 5 July 2014

Reviewer: Jianping Jia

Reviewer's report:

I suggest a major revision. The author should answer below questions.

Major concerns:
Authors present a study on levels of plasma antibodies against phosphorylcholine, an epitope on OxLDL, in 125 AD patients, 19 VaD patients, 63 other dementia patients and 176 controls. They observed similar plasma antibodies (anti-PC) levels in controls, patients with AD, and other dementias, suggesting that anti-PC is not a useful biomarker for AD. The result of the present paper is different from the observation of Eriksson et al (Low levels of antibodies against phosphorylcholine in Alzheimer's disease. Journal of Alzheimer's Disease, Volume 21, Number 2 / 2010: 577-84), using the same ELISA assay for quantitating the levels of anti-PC. This paper cited the reports, however, it did not discuss thoroughly the discrepancies in the two results and analyze factors causing the difference. Authors should add positive controls to demonstrate that the observation is reliable and credible, or enlarge the sample size and conduct stratified analysis.

In addition, the criteria of inclusion and exclusion in this work is not clear and rigid.

Minor concern:
I suggest that authors revise the use of abbreviations.

Level of interest: An article whose findings are important to those with closely related research interests

Quality of written English: Needs some language corrections before being published

Statistical review: Yes, and I have assessed the statistics in my report.

Declaration of competing interests:
I declare that I have no competing interests.