Reviewer’s report

Title: Atherosclerosis and Alzheimer - diseases with a common cause? Inflammation, oxysterols, vasculature

Version: 1 Date: 9 December 2013

Reviewer: Davide Seripa

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Major Compulsory Revisions:
1) It is not clear why the authors use the definition of atherosclerotic vascular disease (summarized in the acronym ATH). This term is quite synonym of the most simple and well-known term atherosclerosis. They intend something of different from atherosclerosis?

2) Accordingly, to avoid confusion, some words detailing the differences between atherosclerosis and vascular disease (VaD or VD, cited only one time at page 6, line 2), a common pathology frequently overlapping AD but showing common features with AD, is missing.

Minor Essential Revisions:
1) Please report through the text the full gene names followed by the acronyms and the genetic locus (this last between round brackets) according to the Human Gene Nomenclature Committee.

2) I’ve noted only 23% of references that were published in the last three years (2011/2012/2013). Please refresh!

3) At page 7, line 10, a reference for the polymorphisms associated with disordered lipid metabolism is missing.

4) First three lines of the second paragraph at page 9. A reference for the genetics of the common APOE polymorphism is missing.

5) At line 13, page 10, reference 50 is repeated.

Discretionary Revisions
1) In this review the authors reported a detailed description of the possible pathogenetic mechanisms underlying both Alzheimer’s diseases and atherosclerosis. The review is well written, with several interesting points (e.g. AD transmissibility), but although frequently verbose (e.g. AD infectious component). I think may a reduction of text length may improve the clarity of the concepts that authors wants review.

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

Statistical review: No, the manuscript does not need to be seen by a statistician.

Declaration of competing interests:
No financial interest to disclose