Reviewer's report

Title: Aspirin and Multiple Sclerosis

Version: 1 Date: 10 April 2015

Reviewer: Robert Zivadinov

Reviewer's report:

- The paper is completely neglecting an important aspect of MS disease process, which is development of anti-phospholipid antibodies (APLA). It has been shown in numerous papers that prevalence of APLA is increasing with severity of the diseases course (see Garg, Mult Scler, 2007 and J Neuroimmunol, 2007; Bidot, BMC Neurol, 2007; Stosic, J Neurol, 2010, Horstman, J Neuroinflamm, 2009). Please provide another section linking APLA with MS, which is more relevant for ASA argument then most of the mechanisms the authors focused on.

- APLA can be altered by ASA; many MS pts are receiving ASA for secondary APLA syndrome, and as far can be judged from the paper, this argument was not discussed. Provide section on APLA and ASA.

- APLA can be altered by DMTs (for example see Zivadinov et al, Neurol Res, 2012). Please comment on use of ASA for APLA in MS.

- There are number of sections which are not well connected. The authors should divide mechanism of action of ASA, to cardiovascular risk factors in MS to treatment related potential of ASA. As it now stands, basically the paper is mini review of everything: cardiovascular risk factors, mechanisms involved of MS damage, experimental models and treatments trials and the reader is lost with the overall message about what this paper is about. Sections are not very well flowing each after another.

- Studies on ASA in MS should be better organized. A Table of all trials of ASA in MS would be very helpful.

Minor essential revisions:

- Some sections of the paper are misleading. For instance providing subtitles like ASA and cardiovascular risk factors in MS indicates that this is the argument what authors are focusing on, when in fact is just cardiovascular risk factors and MS.

- Please add recently published study on Cardiovascular risk factors and MRI outcomes in MS (Kappus et al, JNNP, 2015).

Quality of written English: Acceptable

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

Declaration of competing interests:
No competing interest.