Reviewer’s report

Title: The presence of cerebral and/or systemic endothelial dysfunction in patients with leukoaraiosis - a case control study

Version: 2 Date: 8 May 2015

Reviewer: Rocco S Calabrò

Reviewer’s report:

This interesting work is aimed at better elucidating the pathogenesis of LA, by using the vascular reactivity to L-arginine, namely flow-mediated dilatation. Generally speaking, the work is well written, the methods are appropriate and well described, and discussion and conclusions well balanced and adequately supported by the authors data.

MAJOR COMPULSORY REVISIONS

The main limitation of the study is the small sample size, that is not “relatively” small (as stated by the authors), since the high LA prevalence. Thus, the term relatively should be deleted beside the sentence “With a bigger number of participants, it could be expected that this correlation would become marked”, as we don’t really know how statistics could change with larger samples. This is the reason why I suggest to consider/rebuilt the work as a pilot/exploratory study, showing such change also in the title.

Level of interest: An article of outstanding merit and interest in its field

Quality of written English: Acceptable

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

Declaration of competing interests:

I declare that I have no competing interests