Reviewer's report

Title: Comparison of ankle-brachial pressure index and pulse wave velocity as markers of cognitive function in a community-dwelling population.

Version: 1 Date: 16 February 2010

Reviewer: Alfredo Colosimo

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DISCRETIONARY REVISIONS

- Pag 4, line 2: "... lower ABI caused ... ". It its difficult to accept that a functional test is causing a cognitive impairment, while the opposite may be possibly true.

- The referenced literature, although well tuned to the problem at hand, includes relatively few papers published in the last three years. The following couple of updates could be useful in such a context:

- The Methods section looks somehow inadequately weighted in the general economy of the paper, in spite of its major importance. In order to provide a clear and not-only-statistical-software-oriented reference to the adopted analytical strategy, I would recommend to mention at least: Mickey, Ruth M.(1987) 'The magnitude of the difference of crude and adjusted log odds ratios', Communications in Statistics - Theory and Methods, 16: 11.

MINOR ESSENTIAL REVISIONS

- Abstract, line 7: " ... determined by ... ", not "... determined be ... ";
- Pag 3, line 4 from bottom: please, rephrase "... based on population-based ... ";
- Pag 4, line 7 from bottom: much clearer " ... evidente on correlation between arterial stiffness and cognitive decline ... " than just "... evidente on arterial stiffness and cognitive decline ... ";
- Pag 6, line 6 from bottom: 'also' looks really superfluous in "... was also given ...";
- Pag 8, line 6 from bottom: ".. was shown to be an independent... ", not ".. was shown to independent .."
MAJOR COMPULSORY REVISIONS

The results of the analysis as described in the text and summarized in Tables 1 and 2, would be much more convincing and appreciated if illustrated by one or more figures reporting at least some of the primary data in a compact form (e.g. of the box-plot type).

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:

I declare that I have no competing interests.