Reviewer’s report

Title: Lipids and carotid plaque in the Northern Manhattan Study (NOMAS)

Version: 1 Date: 14 July 2009

Reviewer: Lucia Terzuoli

Reviewer’s report:

The work is well described and response to the points considered by journal.

The atherosclerosis is a multifactorial disease, and it is difficult to associate a single predictor factor.

In fact, the Hispanic partecipants show the major prevalence of carotid artery plaque, but the effect of lipid levels on plaque risk is similar to the other ethnic groups. Further research need to find another independent risk factors, for example homocysteine.

The results suggest that only LDL and Apo B may be predictors of atherosclerosis or, better, they correlate with presence of plaque. This is a good result. Moreover, the strength of this study is considerable number of cases, in particular Hispanic.

The work need the minor essential revisions.

In Background page 4, line 9, eliminate ) before total; and line 11, eliminate ) after A-I.

In Methods, page 5, line 13-14, the percentage is not the same of Abstract and Table 1. In fact, in the Abstract and Table 1 we have: 51% Hispanic, 26% black, 23% white, whereas in Methods: 63% Hispanic, 20% black, 15% white.

Page 7, line 17, it is not or laboratory, but our laboratory, presumibly.

Page 8, line 4, add mm/Hg, after blood pressure ³ 90.

Page 9, line 6, the Non-HDL must correct in non-HDL.

In many references there are imperfections. Any references need to correct:

Number 2. Author: Lin I-F eliminate –; and added, after “in the elderly”, the Northern Manhattan Stroke Study.

Number 4. Transcient eliminate c: transient.

Number 9. The last page is 2392, not 2389.

Number 11, 14,16, 19, 20, 21, 22. The author Boden-Abala correct Boden-Albala.

Number 15. eliminate s by ultracentrifuges.
Number 17. Add s to effects.
Number 18. The author Arthus is really Arthuis.
Number 22. For the author Hank Juo S-H eliminate -; stromelysin-I substitute con strmelysin-1; the volume is 33, not 333.
Number 44. The last page is 1875, not 1876.
Number 47. Eliminate , and add : after the last author; the volume is 1, not 10.

In Table 1 the authors consider significative difference of BMI in the subjects with plaque (27.7 ± 5.6) and no significative difference of BMI in the subjects without plaque (28.3 ± 5.6); is it corrected?

In Table 2 the authors subdivide the values on the basis of multiple plaques, thickness > 1.9 mm, irregular plaque for a total of 1452. Perhaps are any plaques considered multiple and irregular?
The values of LDL differ only in multiple plaques and not in thickness > 1.9 mm and irregular plaque, because they are similar.

**Level of interest:** An article of importance 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.