Reviewer’s report

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

Version: 1 Date: 30 June 2009

Reviewer: Dan Hackam

Reviewer’s report:

The Northern Manhattan Study (NOMAS) is a well-established population-based multi-ethnic cohort which has provided numerous insights into arterial plaque biology, cerebrovascular disease, and cardiovascular risk factors. This manuscript is yet another example of the excellent science resulting from NOMAS.

MAJOR COMPULSORY REVISIONS

I find that there are no major compulsory revisions to be made. All of the comments listed below can be considered "minor" suggestions to improve the clarity or quality of this work.

MINOR ESSENTIAL REVISIONS

1) Exclusion criteria for the NOMAS cohort, if any, might best be stated in the methods section following this sentence: "Eligible participants (1) had never been diagnosed with an ischemic stroke, (2) were ≥40 years old, and (3) resided for at least three months in a household with a telephone in northern Manhattan."

2) One of the secondary outcomes stated in the study was an MCPT >1.9 mm. The use of this threshold is probably because it is the sample median, but the specific reason might ideally be stated in the methods.

DISCRETIONARY REVISIONS

1) The authors make reference to the Hispanic paradox beginning in the last paragraph of the INTRODUCTION section. It might be helpful to provide at least one key reference here, for the following phrase: "....the perception of evidence for a Hispanic paradox, which suggests that Hispanics have better cardiovascular health than what would be predicted based on their vascular risk factor profile."

2) Covariates are listed in the methods on page 8. An overall sense of the "percent missing data (%)" in this high quality cohort might ideally be stated here as well.

3) In the logistic regression analyses, was collinearity and overfitting assessed? If so, how was it handled?

4) I was surprised that Total Cholesterol-to-HDL ratio was not a significant predictor, since previous work suggests that this is one of the best predictors of

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

**Quality of written English:** Acceptable

**Statistical review:** Yes, and I have assessed the statistics in my report.

**Declaration of competing interests:**

I declare that I have no competing interests.