Reviewer's report

Title: Relationship of the metabolic syndrome to carotid ultrasound traits

Version: 1 Date: 23 June 2006

Reviewer: John Hill

Reviewer's report:

General

Major Compulsory Revisions (that the author must respond to before a decision on publication can be reached)

1. The primary concern with this manuscript relates to the validity of the diagnosis of the metabolic syndrome seven years prior to the measurement of IMT. Do the authors have any additional data or information on treatment that would substantiate the apparent assumption that the status of metabolic syndrome would not change during the follow up period from that observed at baseline?

Minor Essential Revisions (such as missing labels on figures, or the wrong use of a term, which the author can be trusted to correct)

1. Regarding the measurement of IMT, can the authors comment on what effect the presence of a plaque in the designated area of measurement (10 mm span ending 5 mm proximal to the transition between the common carotid and bulb regions) had on the IMT measurement.

Discretionary Revisions (which the author can choose to ignore)

1. It would be informative if the authors could discuss the clinical utility of the metabolic syndrome diagnosis in light of the data presented showing that were not appreciable differences in IMT between groups with single or multiple risk factors.

2. How did the designation of metabolic syndrome compare with individual risk factors in regards to distinguishing elevated IMT measurements?

3. Adding P values to Table 3 may be more helpful than using footnotes to designate different P values. Figures 1 and 2 represent the same data presented in Table 3. It seemed redundant to present the data in two different forms.

What next?: Unable to decide on acceptance or rejection until the authors have responded to the major compulsory revisions

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.