Reviewer’s report

Title: Prehypertension increases risk for carotid atherosclerotic plaque formation in community population of Southern China

Version: 3 Date: 14 October 2012

Reviewer: Jiann-Shing Jeng

Reviewer’s report:

1. The measurement of carotid IMT needs to be more specified. Carotid IMT was not measured automatically. Carotid IMT was measured on the specific point on the CCA, carotid bulb and ICA. CCA was 20 mm proximal to the bifurcation, ICA was 10 mm distal to the carotid bifurcation. Carotid bulb or bifurcation is about 1-1.5 cm in length. Where is the carotid bifurcation to be measured?

2. Participants who had symptomatic cardiovascular diseases were excluded. But, the authors also stated “Previous histories of … heart disease or stroke were defined …”. The population should be defined clearly.

3. Some of the contents in table 1 and 2 are duplicated. It is suggested combined 2 tables, or only normal and high normal comparison is shown in Table 2.

4. If the medications information, particularly lipid-lowering and antihypertensive drugs, is available, this can be more informative.

5. The presentation of table 3 and 4 are not attractive for understanding. The authors may consider logistic regression analysis to find the determinants of carotid IMT and the presence of carotid plaque. The upper quintile value can be a cutoff point.

6. It is suggested to present the results in abstract as odds ratios (95% CI, p-value) of IMT and carotid plaque for prehypertension and hypertension.

Level of interest: An article of limited interest

Quality of written English: Not suitable for publication unless extensively edited

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