Reviewer's report

Title: The Prevalence and Correlates of High Aortic Stiffness in North China: a Community-based Study

Version: 2 Date: 9 July 2012

Reviewer: Szu-Chia Chen

Reviewer's report:

Wang JW et al. evaluated the prevalence and correlates of high baPWV in a community-based study of North China. The strength of this study is the large sample size. However, previous studies have clearly shown the determinants of increase baPWV in various populations, such as old age, SBP, diabetes.... Hence, although this study provides the cutoff values of baPWV in identifying patients with high baPWV in different age groups in North China, the clinical novelty in this study may be limited.

1. Is the question posed by the authors well defined?
Although baPWV is highly associated with aortic PWV, baPWV is not a substitute for aortic PWV, especially no comparison of baPWV and aortic PWV in this study. The authors should avoid the word of “aortic stiffness”. Direct use the terms of “baPWV” or “arterial stiffness” is more appropriate.

2. Are the methods appropriate and well described?
It is OK.

3. Are the data sound?
It is well known that renal function, nutrition and inflammation are the determinants of arterial stiffness. There are no eGFR, creatinine, hsCRP, and albumin data in this study.

4. Does the manuscript adhere to the relevant standards for reporting and data deposition?
It is OK.

5. Are the discussion and conclusions well balanced and adequately supported by the data?
It is OK.

6. Are limitations of the work clearly stated?
It is clearly stated.

7. Do the authors clearly acknowledge any work upon which they are building, both published and unpublished?
It is clearly stated

8. Do the title and abstract accurately convey what has been found?
Although baPWV is highly associated with aortic PWV, baPWV is not a substitute
for aortic PWV, especially no comparison of baPWV and aortic PWV in this study. The authors should avoid the word of “aortic stiffness”. Direct use the terms of “baPWV” or “arterial stiffness” is more appropriate.

9. Is the writing acceptable?
The major problem in this study is that the clinical novelty is not good enough. No surprised finding was noted.

**Level of interest:** An article of limited interest

**Quality of written English:** Acceptable

**Statistical review:** No, the manuscript does not need to be seen by a statistician.