Reviewer's report

Title: Association of Inflammation and Endothelial Dysfunction with Metabolic Disorder in Adults from Inner Mongolia, China

Version: 1 Date: 8 April 2011

Reviewer: Yanping Li

Reviewer's report:

MANUSCRIPT:
Association of Inflammation and Endothelial Dysfunction with Metabolic Disorder in Adults from Inner Mongolia, China

Comments for Authors

The present manuscript is clearly written and provides some interesting data; however, I highlight a few general and specific points that the authors need to consider.

General comments:

1) Introduction: please clarify the motivation to choose this population?

2) Method: References need to be provided for the elevated level of the biomarkers. Is there any evidence that concentrations above the tertile level for these measures are associated with adverse outcomes?

3) Results: please keep consistent that which one was treated as exposure and which one was outcome measurement in the Tables and Figures.

4) Discussion: how to explain the significant negative association between Angiotensin II and high glucose level? Though the P value did not presented, from the 95%CI in Table 3, it should be significant.

Specific comments:

1) please reword "...risk of..." to "... odds ratio of ..." through the manuscript because it is a cross-sectional observation. The authors also realized that “it is not possible to establish temporality or determine if elevated biomarkers leads to development of the prediabetes, diabetes or MetS or if development of the individual components of the MetS lead to inflammation and endothelial dysfunction.”

2) Why only adjust family history of hypertension, but not diabetes and other cardiovascular diseases?

3) The prediabetes and diabetes were NOT presented separately anywhere in the manuscript, so why not just in one group and simply in one name? Did the
authors consider the limitation of define diabetes only based on fasting glucose?

4) Why not adjusted the dietary factors? As the author mentioned that this population’s diet was typically high fat and salt.

5) How did other lifestyle factors that maybe confounded the association, such as socioeconomic status or physical activity?

**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.

**Declaration of competing interests:**

I declare that I have no competing interests