Reviewer's report

Title: Association between Erythrocyte parameters and Metabolic Syndrome in Urban Han Chinese: A Longitudinal Cohort Study

Version: 2 Date: 8 August 2013

Reviewer: Prajwal Gyawali

Reviewer's report:

1) The standard of english in this article is very poor. I being a non-native English speaker could point out lot of mistakes. I strongly suggest authors to have a English proof reading from native english speaker for this manuscript.

2) The very first sentence of the introduction contains the word "hypoglycemia" rather than "hyperglycemia"

3) Please clarify in the introduction section weather low or high red cell indices are associated with MetS and its components. Though the word "enhanced" (second last sentence of the first introduction page) provides some idea, readers still needs clear sentence.

4) Authors have used Chinese Medical Association definition of MetS. The cut-off Value of HDL-C for both sex is similar as per that definition unlike many other definitions provided. I strongly suggest authors to use IDF definition with waist circumference specific to your population for the standard comparison of your findings with other international findings. The first reference cited could also be used.

5) The heart and soul of the results lie on GGE model. Therefore I strongly suggest authors to clarify the significance and theoretical concept behind this model in few lines in statistical analysis paragraph. As far as I know, many other manuscript uses multivariate linear regression analysis to study the independent relationship between two parameters. This test along with logistic regression analysis could be used to associate Mets and its components with increases red cell indices.

6) Do all the supplementary table going to be published along with the manuscript. Authors have referred to s1 to s4 in the manuscript. Make sure this tables are published along with this manuscript or this may create confusion.

7) In the second last sentence of the result, authors have used the term "dose-response existed". Please clarify this.

8) In the discussion section, authors has discussed three concepts
   a) IR and erythropoiesis
   b) Hct and Whole blood viscosity and
c) Hb and Nitric oxide.

Authors are requested to further clarify the concept of NO and Hb in the discussion. Authors has used the word "coincidentally" in this paragraph. Please put this paragraph in a clear way in context of your findings.

9) Too strong argument has been presented in the conclusion (red blood cell indices as marker for MetS risk appraisal). I strongly suggest authors to discuss how this red cell markers be better or could be used along with others various classic and new inflammatory MetS markers.

10) I again request to improve the standard of english and re-write the first two paragraph of results in a simple way.