**Author's response to reviews**

**Title:** Can Body Mass Index, Waist Circumference, Waist-hip ratio and Waist-Height Ratio Predict the Presence of Multiple Metabolic Risk Factors in Chinese Subjects?

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**Author's response to reviews:** see over
Dear editors and reviewers:

Thank you so much for consideration of our manuscript entitled *Body Mass Index, Waist Circumference and Waist to Height Ratio can Predict the Presence of Multiple Metabolic Risk Factors in Chinese Subjects*. The manuscript has been revised and the next is a point-by-point response to the concerns of reviewers.

Response to review 1:

1. The word “sex” has been used instead of ”gender”.
2. The use of the terminology when referring to the BMI, WC and WHR and WHtR has been consistent.
3. In the result section, “cut-off values” has been used instead of “maximal values”.
4. “WC” throughout the manuscript has been changed to “waist circumference”.
5. Introduction: 4th line – “…widely used indicator of obesity and…” has been changed as: “…widely used indicator of weight status and…”
6. Introduction: 12th to 16th lines – has deleted the word “Otherwise” and Rephrase the next two sentences to: “The American Diabetes Association has stated that it’s not clear whether WC can predict cardiovascular risk factor better that BMI [12]. Suggesting that there are some controversial issues around the adiposity marker that better predicts cardiovascular risk factors.” Then making a paragraph after this sentence.
7. Introduction: 16th line beginning “ The relation between BMI….!” has been changed as : “It is also known that the relation between BMI and…..”
8. Introduction: 20th line – deleted the words “et al” after “waist circumference…”.
9. Results: 1st line – “Characteristics of the study population were shown in table 1.” has changed as: “Characteristics of the study sample are shown in table 1.”
10. 2nd paragraph beginning “Table 2 showed the relationship…” has changed as “Table 2 shows the relationship…”
11. In the methods, we have stated how the sample was recruited more clearly.
12. The manuscript has clarified that informed consent given by the participants of this study was a written one.
13. The standard protocols applied to the measures of waist circumference and hip
The standard techniques used for the blood analysis also have been described.

Results: 1st paragraph corrected the 3rd sentence.

Results: 1st paragraph 4th sentence of the results section has been corrected.

Results: 3rd paragraph deleted the last two sentences of this paragraph.

Discussion: The issue the reviewer suggested has been addressed in the manuscript, namely: the last sentence of the 3rd paragraph of the discussion section; the last sentence of the 4th paragraph of the discussion section; and the statement in conclusion section have been changed.

The important finding the reviewer suggested about WHR has been discussed in the 5th paragraph of the discussion.

Conclusions: Avoided generalizations of the results as suggests and acknowledged the study’s limitations.

Response to review 2:

1. Title has been changed as the reviewer suggested.

2. The statement in title, abstract, introduction and whole manuscript has been consistent as four markers.

3. Abstract: 1st paragraph, 5th line has been changed to four indicators.

4. The word “Obesity” has been added to be keyword.

5. Introduction: 1st paragraph, 10th line: The word “in contrast” has been deleted.

6. Introduction: 1st paragraph, 21st line: As suggested by reviewer 1, all WCs in the manuscript have been changed as “waist circumference”.

7. Introduction: 2nd paragraph, 1st line: The sentence has been rewritten.

8. Methods: The details about selection of subjects and the measurement of waist circumference and hip circumference have been added. The word “after 5 min of rest” means that before measurement of blood pressure, subjects are required to be seated for about 5 minutes in order to obtain the accurate blood pressure.

9. Methods: The standard protocols applied to the measures has been described and supported by a reference.
10. Methods: Statistics: t-test was used for comparing two means, most of the 
statistics in the manuscript used t-test; ANOVA and x2-test were used in the 
initial analyses (not stated in the manuscript). So ANOVA and x2-test could be 
deleted from the methods.

11. Results: To avoid redundancy the information given in the tables or figures have 
been deleted from the results of the manuscript.

12. Results: Table 1 not only presents results but also compares them showing as P 
values (t values were not stated).

13. Results: Table 1 and figures also shows the relationship between variables by P 
values (t values were not stated because of limited space in the tables and P values 
can be used to suggest the relationship).

14. Results: 3rd paragraph: The word “Figure 1” has changed to “Figure 1 and 2”.

15. In the figures, P values suggested the differences between all groups.

16. Results: 4th paragraph: From the line 4 to 36, the numbers have not been shown in 
figures. The results provide the new information and explain the ROC curves.

17. Discussion: Begins have been changed.

18. Discussion: 3rd paragraph, 7th line: When one writes the author's name in the text 
it should be numbered right away (Nguyen [23] found ...). Lots of them have been 
corrected.

19. Discussion: 3rd paragraph, last line “The present study has proved” changed to 
“The present study has suggested ”

20. Discussion: 5th paragraph, 9th line: WSR was the abbreviation of “waist to stature 
ratio” and has been added at its first time appearance.

21. Conclusions: “Concluded” has been changed as “suggested”.

22. Conclusions: The word “Weight-height ratio” has been changed to its abbreviation 
“WHtR”.

23. Conclusions: 3rd line: The statement has been rewritten.

24. References have been standardized as the same formatting style.

25. The 22nd reference has been corrected in a same font.

26. P values in table 2 shows the relationship between variables. P value <0.05
suggested a significant relationship, otherwise a nonsignificant relationship.

Response to review 3:
1. The statement in abstract, introduction and whole manuscript has been consistent as four markers.
2. We have discussed the accuracy of anthropometric variables as indicators of Multiple Metabolic Risk and added the references in the revised manuscript.

Thank you for your suggestions!

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Thank you very much.

Sincerely yours,

All authors
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