

Reply to Reviewers comments:

Dear Dr. Fang-Fang Ji,

Thank you for sharing the reviewer's comments. We have made changes in light of the reviewer's comments and believe that our manuscript has improved substantiality by incorporating the suggestions.

Below are the comments along with their author reply for your perusal. All changes are highlighted yellow in the manuscript.

1. Reviewed by 02573214

- Preliminary Results of this work are very interesting.

Reply: Thank you for appreciating our work.

2. Reviewed by 00058872

- Authors should emphasize that also IL-17 has been studied as link between obesity and CV risk, evaluated as IMT.
- A limitation is not having studied NAFLD also with a simple and largely available method, i.e., US.
- References 7 and 21 are the same.

Reply:

Thank you we have added the role of IL-17 in the introduction. Furthermore, the limitation is also added, reference error is corrected.

3. Reviewed by 02946445

- Such cytokines (particularly IL-1beta and IL-18) are the caspase-1 dependent cytokines possibly play a causal role in inflammation-induced obesity and insulin resistance. This inflammation-based pathway is established on the inflammasome. In here, I mean that there are lots of molecular evidence in the relation between IL-18 and obesity (and other cardiometabolic conditions). The findings of the present study except polymorphism are already known, as I mentioned above there are many stronger evidence about the pathogenesis. I think polymorphism is the promising novelty and it needs to focus on.
- There is a need for more data for polymorphism. In this regard, polymorphism is what makes this work worthy for publication. But there is no polymorphism at title of the article. This is the big failure. After all, I strongly recommend to highlight the polymorphism both in the introduction and discussion section and to redesign the main title. The present literature data about the polymorphism must be informed in more detail

in the introduction section, and study findings must be discussed more in the discussion section.

Reply:

Thank you for the suggestions. We have added the word 'polymorphism' at title of the article. We have also work on the polymorphism both in the introduction and discussion section, as suggested.

4. Reviewed by 00233953

- There are no specific comments

Reply: None

5. Reviewed by 02625944

- This study examined the association between IL-18 polymorphisms, serum IL-18 levels and metabolic syndrome. There are several critiques to be addressed.
- Estimates of sample size is not clear. This should be clearly described.
- The word "polymorphisms" should be included in the title as well as the short title.
- If this is a preliminary study, the word "a preliminary study" should be added to the title.
- In terms of metabolic syndrome, the waist circumference is more important than BMI. The waist circumference or waist to hip ratio should be assessed in the study. The word "WHR" in the manuscript means waist to hip ratio?
- I could not find Discussion section. Discussion is needed as the style of article.
- Having the strong correlation between IL-18 levels and BMI, the association between IL-18 polymorphisms and IL-18 levels should be assessed after adjustment for BMI.
- References regarding IL-18 -607 C/A polymorphisms should be cited in Introduction.
- Type-II diabetes should be corrected to type 2 diabetes.

Reply:

- The details of sample size calculations are now included in the methods section.
- The word "polymorphisms" and "a preliminary study" are added in the title.
- Thank you for the suggestion, we have added the waist circumference and hip circumference data in the manuscript.
- The levels of IL-18 are already assessed after adjustment for BMI, age and BF as shown by the adjusted correlation values.
- IL-18 -607 C/A polymorphisms are now cited in Introduction
- Type-II diabetes is now corrected to type 2 diabetes

Regards

Dr Syeda Sadia Fatima