Reviewer A:

1. Title: Is it instructive and short? Does it summarize

the manuscript ?

It is suggested the non-redundancy and anticipation of the results in the

title: association of S100B serum levels protein and components of Metabolic

Syndrome or serum levels of S100B in patients with AND WITHOUT metabolic

syndrome (MetS)

The title of the manuscript was changed. Please refer to the revised manuscript.

2. Abstract:

The objective must be more clear since patients with and without the

metabolic syndrome (MetS) have been studied.

The objective of the study was modified according to the comment.

Results: Limit to the ATP III reference only

The results were indicated based on ATP III criteria.

Conclusion: The authors must detail their results in conclusion. The current

conclusion is too general.

Conclusion of the study was modified according to the results of the study.

3. Introduction:

As a suggestion, I recommend some points to improve the quality of the paper

as follows:

1) Limit to explain the adipose tissue as a major source of

serum S100B.

2) In the current study is excluded participants with history of psychiatric diseases so I suggest to emphasize studies specifically related to the components of MetS.

3) Explain as the adipose tissue can influence the synthesis of S100B and its relation with components of MetS.

To address the three points, an extensive revision is performed in the introduction section of the manuscript.

4. Methods:

Limit to the main objective and use the cut-off points of the reference used

for MetS. The third paragraph of Participants could be removed in my opinion.

Thanks for the comment. It is evident that BMI, total cholesterol and insulin are confounding variables to affect serum S100B levels. Thus, determination of these variables was necessary for the accurate interpretation of serum S100B levels in association with MetS. Collectively, the third paragraph was revised where appropriate. However, following the valuable suggestion, cut-off points of the reference was used according to ATP III criteria for diagnosis of MetS .

5. Some points in Results must be adressed as follows:

Maintain only the variables of the MetS components of ATP III.

Following the suggestion, figures of the MetS components were presented in Tables 2 and 3. As mentioned earlier (see the reply for comment 4) other factors were considered as confounding variables and presented in table 4.

Is Table 4 relevant for the current study?

The tables were revised and ordered to better interoperate the study outcomes. We sincerely hope that the tables in the revised manuscript are now more clear and relevant.

Observe the p-value defined in the methodology (0.05)

p-value less than 0.05 was considered as sig. and is followed through the paper.

6. Discussion:

How do the authors explain the absence of correlation with the other components of MetS?

Please see the first paragraph of page 10.

Why would S100B be elevated in patients with no history of psychiatric illness?

It is true that astrocytes were the first known source of S100B secretion but as stated in the revised manuscript adipocytes are now considered as one of the main sources of serum S100B. Points of discussions have been included in the revised manuscript. Please see first paragraph in introduction section and second paragraph of page 10, in discussion section.

What is the relation of MetS with astrocytes?

Please see the last three lines on page 8 and two first lines on the following page.

What is the metabolic suggestion of S100B levels with the abdominal obesity of triglycerides?

Please see second paragraph in page 10.

What are the limitations of the current study? Is the sample size a limiting factor?

Thanks for the point. Limitations of the current study (including sample size) have been discussed in the revised manuscript. Please kindly refer to the last paragraph of the discussion section.

7. Conclusions must be rewritten after the suggested changes.

According to the comment, conclusion was revised.

8. More recent references relevant to the study could be included in the manuscript.

Following the valuable comments by the respected reviewers, a re-visiting of the literature was performed and bibliography of the revised manuscript was updated.

9. Include the location and year of the study in the tables.

Location and year of the study was added to table 1.

Some figures/tables can be removed or improved.

As mentioned earlier, the tables were revised and re-ordered for clarity.

the language must be carefully reviewed since some typos and grammar errors are present throughout the whole manuscript.

We have carefully checked the manuscript for proper English. We sincerely hope that the revised manuscript is presented with little typos and grammar errors.

Reviewer B:

Can be published, I have only found an error in the conclusions in which the

F of Findings is missing, page 8

Many thanks. It was corrected.