

Prof Shahidul Islam  
Editor-in-Chief  
*World Journal of Diabetes*

Dear professor Islam,

We appreciate your kind suggestion about the number of type 1 diabetes mellitus. Unfortunately, we do not have additional glucose data of patients with T1DM. Thus, we shall be pleased to have this manuscript published as a preliminary report.

We have revised several parts of the article according to your comments (*i.e.*, title; Results and Conclusion of the Abstract; Core Tip; Introduction, Materials and Methods, Discussion, and Conclusion sections of the main text; and Research conclusions of the Article Highlights). Furthermore, we provided more detail on the inclusion and exclusion criteria of the study population.

Specific Comments To Authors:

I have gone through this manuscript and find one major problem and some minor but important issues as follows: Major issue: This study used the data from only 5 type 1 diabetes mellitus compared to data from 25 type 2 diabetes mellitus and compared the data. In any kind of clinical study sample size less than 20 is not recommended when the best is minimum 30. So the conclusion from the data obtained from only 5 subjects with type 1 diabetes mellitus cannot be used to make a conclusion, while authors focused their study on type 1 diabetes mellitus. They also highlighted type 1 diabetes mellitus on their title, conclusion, core tips and many other sections of the manuscript. While CWT can be used for any form of diabetes mellitus to examine the fluctuation of glucose level then only type 1 diabetes mellitus cannot be highlighted. I suggested the possible revisions for those sections including title.

**Reply:** We appreciate your kind suggestion about the number of type 1 diabetes mellitus. Unfortunately, we do not have additional glucose data of patients with T1DM. Thus, we shall be pleased to have this manuscript published as a preliminary report. We have revised several parts of the article according to your comments (*i.e.*, title; Results and Conclusion of the Abstract; Core Tip; Introduction, Materials and Methods, Discussion, and Conclusion sections of the

main text; and Research conclusions of the Article Highlights). Furthermore, we provided more detail on the inclusion and exclusion criteria of the study population.

Minor issues: Although authors wrote some limitations at the end of the manuscript, no inclusion or exclusion criteria of subjects have been provided which is a crucial requirement for any clinical study. Somewhere it is written that eight patients without diabetes and two healthy volunteers were recruited but what are the differences between them? It needs to be clarified.

**Reply:** We have described details of normal glucose subjects in a *study population*.

Suggestions: In this current situation, two options are available: 1) It can be suggested to authors to include the data from at least 20 subjects with type 1 diabetes mellitus after necessary analysis and submit the revised version of manuscript after thorough revisions. 2) Considering a new idea to measure the fluctuation of blood glucose, this article can be accepted for publications as a PRELIMINARY REPORT considering smaller sample size for type 1 diabetes mellitus when all other suggested corrections need to be done except sample size issue. Please feel free to contact me if you have any further query in this regard and enclosed please find the article with my track-changed comments. Regards, Prof. Islam

**Reply:** We appreciate your kind suggestion about the number of type 1 diabetes mellitus. Unfortunately, we do not have additional glucose data of patients with T1DM. Thus, we shall be pleased to have this manuscript published as a preliminary report.

Minor criticisms,

1: Title of this manuscript does not make sense since CWT was done for both T1DM and T2DM so it cannot focus only on T1DM. Rather it can be written as "Characteristics of glucose change in diabetes mellitus generalised through wavelet transform processing." Or "Comparative characteristics of glucose change in type 1 and type 2 diabetes mellitus generalised through wavelet transform processing."

**Reply:** We have exchanged the title to "Characteristics of glucose change in diabetes mellitus generalized through continuous wavelet transform processing:

A preliminary study” according to editor’s comment.

2. Conclusion of Abstract: This is a vague statement so cannot be used. If glucose fluctuation can be measured in T1DM then it can be measured in any other type of DM. This study used subjects with T1DM and T2DM so this statement to be corrected as suggested.

**Reply:** We have exchanged the Conclusion of Abstract according your comment.

3. Core Tip: Please see the comments above and revise accordingly.

**Reply:** We have arranged that the characteristics of each diabetes group described in this section.

4. Study population in Materials and Methods: “Eight outpatients without diabetes and two healthy volunteers”, What are the differences between outpatients without diabetes and healthy volunteers? Why they are presented differently? Are these mean that the outpatients without diabetes were sick? Needs clarifications.

**Reply:** We have described details of normal glucose subjects in a *study population*.

Reviewers #1

Dear Reviewer, I appreciate your comprehensive review of my article. Minor revisions of “T1DM and T2DM have different etiology, age, and course of disease, and should be corrected when comparing them.” in the manuscript are clearly indicated for easy tracking.

Reviewers #2

Dear Reviewer, I appreciate your comprehensive review of my article. Minor revisions in the manuscript are clearly indicated for easy tracking.

Reviewer #3

Dear Reviewer, I appreciate your kind suggestion. Accordingly, we added a sentence in the limitation section. Because of the small number of patients, the present study could not randomize the participants based on etiology, age, and course of disease. However, age, sex, body mass index and glycated hemoglobin were not significantly different between the type 1 diabetes mellitus group and the type 2 diabetes mellitus group with no selection bias. Notably, the value of standard deviation, %coefficient of variation, and log mean amplitude of glucose excursions were significantly higher in the type 1 diabetes mellitus group versus the type 2 diabetes mellitus group.