

Reviewer #1:

Scientific Quality: Grade B (Very good)

Language Quality: Grade B (Minor language polishing)

Conclusion: Minor revision

Specific Comments to Authors: Criteria Checklist for New Manuscript Peer-Review 1

Title. Does the title reflect the main subject/hypothesis of the manuscript? YES 2

Abstract. Does the abstract summarize and reflect the work described in the

manuscript? YES 3 Key words. Do the key words reflect the focus of the manuscript?

YES 4 Background. Does the manuscript adequately describe the background, present

status and significance of the study? YES 5 Methods. Does the manuscript describe methods (e.g., experiments, data analysis, surveys, and clinical trials, etc.) in adequate detail? N/A 6 Results. Are the research objectives achieved by the experiments used in this study? What are the contributions that the study has made for research progress in this field? YES 7 Discussion. Does the manuscript interpret the findings adequately and appropriately, highlighting the key points concisely, clearly and logically? Are the findings and their applicability/relevance to the literature stated in a clear and definite manner? Is the discussion accurate and does it discuss the paper's scientific significance and/or relevance to clinical practice sufficiently? The manuscript interpret the findings adequately and appropriately, highlighting the key points concisely, clearly and logically. Also, the findings and their applicability/relevance to the literature stated in a clear and definite manner, the discussion is accurate and discuss the paper's scientific significance and/or relevance to clinical practice sufficiently. 8 Illustrations and tables. Are the figures, diagrams and tables sufficient, good quality and appropriately illustrative of the paper contents? Do figures require labeling with arrows, asterisks etc., better legends? The table is sufficient, has a good quality and is appropriately illustrative for the paper contents and does not require additional corrections. 9 Biostatistics. Does the manuscript meet the requirements of biostatistics? N/A 10 Units. Does the manuscript meet the requirements of use of SI units? YES 11 References. Does the manuscript cite appropriately the latest, important and authoritative references in the introduction and discussion sections? Does the author self-cite, omit, incorrectly cite and/or over-cite references? The manuscript cites appropriately the latest, important and authoritative references in the introduction and discussion sections without self-cite, omit, incorrectly cite and/or over-cite references. 12 Quality of manuscript organization and presentation. Is the manuscript well, concisely and coherently organized and presented? Is the style, language and grammar accurate and appropriate? The manuscript is well, concisely and coherently organized with accurate and appropriate language and grammar. 13 Research methods and reporting. Authors should have prepared their manuscripts

according to manuscript type and the appropriate categories, as follows: (1) CARE Checklist (2013) - Case report; (2) CONSORT 2010 Statement - Clinical Trials study, Prospective study, Randomized Controlled trial, Randomized Clinical trial; (3) PRISMA 2009 Checklist - Evidence-Based Medicine, Systematic review, Meta-Analysis; (4) STROBE Statement - Case Control study, Observational study, Retrospective Cohort study; and (5) The ARRIVE Guidelines - Basic study. Did the author prepare the manuscript according to the appropriate research methods and reporting? N/A 14 Ethics statements. For all manuscripts involving human studies and/or animal experiments, author(s) must submit the related formal ethics documents that were reviewed and approved by their local ethical review committee. Did the manuscript meet the requirements of ethics? N/A.

The manuscript, "Oral Glucose Tolerance Test in Diabetes, the old method revisiting," by Kuo et al. investigates contemporary and traditional use of OGTT in clinical practice and basic studies with its limitations and variations between bench and bedside application. The manuscript is well written and addresses important questions. However, this reviewer has some minor suggestions:

Introduction

1. Please, add also a few sentences about increased diabetes-related morbidity and mortality, especially in young patients, and economic burden of type 2 diabetes mellitus

Reply: We have improved this part. Thank you.

2. "Therefore, identification of IGT is important for T2DM prevention strategies on those who are at high risk". – "on" should be changed to "in"

Reply: It has been corrected. Thank you.

3. "Although animals may be useful to study the basis of human disease, clear differences do exist between species regarding to the metabolic regulation" – please, rephrase this sentence as follows "Although animals may be useful to study the basis of human disease, there are clear differences between species regarding the metabolic regulation"

Reply: It has been corrected. Thank you.

4. "Therefore, limitation(s) of OGTT in basic research has been conducted" – please, rephrase this sentence (e.g. "Therefore, results obtained in these studies are partially relevant in clinical practice and even six potential limitations of OGTT in basic research have been highlighted.")

Reply: It has been corrected. Thank you.

5. “The OGTT has applied over the last century using the plasma glucose concentrations, measured either after an overnight fast or glucose loading, have been the useful tool for diagnosing IGT.” – please, rephrase this sentence as follows “The OGTT has been applied over the last century using the plasma glucose concentrations, measured either after an overnight fast or glucose loading, as a useful tool for diagnosing IGT.”

Reply: It has been corrected. Thank you.

6. Please, rephrase the aim of the study. OGTT in clinical practice

Reply: We have improved this part. Thank you.

7. Another review article summarized the clinical reports to suggest that a 1-h PG level ≥ 8.6 mmol/L (or 155 mg/dL) individuals with reduced β -cell function which should be considered for adoption into clinical practice [17]. - Please, clarify this sentence better.

Reply: We have improved this part. Thank you.

8. “–monophasic” – please, add a space between “–” and “monophasic”

Reply: It has been corrected. Thank you.

9. Page 4 – “On the other word” should be changed to “In other words”

Reply: It has been corrected. Thank you.

10. Page 4 – “pharamcokinetical field” should be changed to “pharmacokinetic field”

Reply: It has been revised. Thank you.

11. “The application of sophisticated mathematical and statistical methods such as machine learning algorithms has been developed to extract the features from OGTT glucose curves in predicting diabetes.” The application of” is superfluous in the sentence. Please, delete and rephrase the sentence as follows: “Sophisticated mathematical and statistical methods such as machine learning algorithms have been developed to extract the features from OGTT glucose curves in predicting diabetes”
OGTT in basic research

Reply: We have improved this part. Thank you.

12. “focusing” should be changed to “focused”

Reply: It has been improved. Thank you.

13. “OGTT did not use for diagnosis in basic research” should be changed to “OGTT was not used for diagnosis in basic research”

Reply: It has been corrected. Thank you.

14. “.....of glucose-insulin index obtaining from...” should be changed to “of glucose-insulin index obtained from...”

Reply: It has been corrected. Thank you.

15. “Results in OGTT shown...” should be changed to “Results in OGTT showed...”

Reply: It has been corrected. Thank you.

16. “may influence by agent” should be change to “can be affected by”

Reply: It has been corrected. Thank you.

17. “...reports including the samples show a critical reduction...” should be changed to “...reports including the samples that show a critical reduction...”

Reply: It has been corrected. Thank you.

18. “However, quantification of insulin change is less to conduct probably it is not applied in clinical practice” – please, rewrite this sentence, it is not clear.

Reply: It has been corrected. Thank you.

19. “Before now, a 2-h 75 g OGTT is widely applied in clinical practice and it has also been followed to apply in basic research except the loaded glucose amount was modified. However, what is the next in basic research once the OGTT is revised to 30-min or 1-hPG in clinical practice which is an important subject for basic research in the future.” - Please, clarify these sentences better. OGTT in perspectives

Reply: We have improved this part. Thank you.

20. “....as criteria clinical practice” should be changed to ““....as criteria in clinical practice”

Reply: It has been corrected. Thank you.

21. “remained to find” should be changed to “remain to be found”

Reply: It has been corrected. Thank you.

22. "... (GIP)," – please, delete the comma

Reply: It has been corrected. Thank you.

23. "However, the peak and decay in..." – please change "decay" to "decline"

Reply: It has been corrected. Thank you.

24. "The support vector machine (SVM) along with a rule-based explanation has been documented [40] to consistent with the machine learning algorithms to extract features from OGTT in predicting diabetes" please, rewrite this sentence, it is not clear.

Reply: We have improved this part. Thank you.

Conclusion

1. "widely suggested to be shorten as" – "as" should be changed to "to"

Reply: It has been corrected. Thank you.

2. "...in recent" – The sentence is not complete. Did you mean "in recent years"?

Reply: It has been corrected. Thank you.

3. "this tool at different aims" – please, change "at" to "with"

Reply: It has been corrected. Thank you.

4. Please, add in "Conclusion" some specific messages to clinicians.

Reply: We have improved this part. Thank you.

5. "Shorten of the duration in OGTT is suitable for animals or not that remained unknown" - please, rewrite this sentence, it is not clear.

Reply: We have improved this part. Thank you.

6. "Collectively" should be changed to "Altogether" or "Finally"

Reply: It has been corrected. Thank you.

Reviewer #2:

Scientific Quality: Grade E (Do not publish)

Language Quality: Grade C (A great deal of language polishing)

Conclusion: Rejection

Specific Comments to Authors: 1. This manuscript's type was unclear between review or perspective. 2. No Data supported the conclusion

Reviewer #3:

Scientific Quality: Grade C (Good)

Language Quality: Grade B (Minor language polishing)

Conclusion: Major revision

Specific Comments to Authors: Authors reported the role and perspectives of OGTT in clinical practice and basic research.

1) Line 105-107: recent articles were suggested using the 1hPG for identification of high-risk individual before β cell function was impaired. Thus, the sentence of “individual with reduced β cell function should be considered for adoption into clinical practice” was not agree with recent suggestions. Thus, it would be nice to mention in detail the advantages and purpose of 1hPG and 30min PG.

Reply: Thank you for your insightful comments. We explained the advantages and purpose of 1hPG and 30min PG in this section. Thank you.

2) Line 142-143: the 3rd paragraph of the “OGTT through quantitative analysis” was taken from author’s previous report. The line 142-143 did not contain the content of “due to the formation of negative value(s)”, so the meaning of the sentence cannot be understood.

Reply: Thank you for your valuable comments. Following your instructions, we have revised the sentence in the manuscript. Thank you.

3) In the “OGTT In Basic Research” section, the same abbreviations were mentioned again (IR, IGT, and AUC), and the same reference was mentioned another number (The reference 8th was same to the 29th reference)

Reply: Thank you for this helpful comment. As suggested, we have improved this section. Thank you very much.

4) The overall contents are less different from the previously reported review articles, but "OGTT in perspectives" is interesting topic. Recently, diabetes prediction model using OGTT with or without other metabolic risk factors have been reported in many journals. So, it would be interesting to summarize these papers.

Reply: Thank you for the helpful comment. As suggested, we have included the current findings of diabetes prediction models in "The OGTT in Perspective" section. Thank you very much.

4 LANGUAGE QUALITY

Please resolve all language issues in the manuscript based on the peer review report. Please be sure to have a native-English speaker edit the manuscript for grammar, sentence structure, word usage, spelling, capitalization, punctuation, format, and general readability, so that the manuscript's language will meet our direct publishing needs.

Reply: Thank you for your valuable comments. A professional company, American Journal Experts, has further edited the revised version. Please find the certificate at the end of this reply.

5 EDITORIAL OFFICE'S COMMENTS

Authors must revise the manuscript according to the Editorial Office's comments and suggestions, which are listed below:

(1) Science editor:

1 Scientific quality: The manuscript describes a minireview of the oral glucose tolerance test in diabetes, the old method revisiting. The topic is within the scope of the WJD. (1) Classification: Grade B, Grade C, and Grade E; (2) Summary of the Peer-Review Report: Authors reported the role and perspectives of OGTT in clinical practice and basic research. The overall contents are less different from the previously reported review articles, but "OGTT in perspectives" is interesting topic. The questions raised by the reviewers should be answered; and (3) Format: There is 1 table. A total of 40 references are cited, including 16 references published in the last 3 years. There are 4 self-citations (Ref. 8, 10, 25, 29). The topics of the self-citations are related to this study.

2 Language evaluation: Classification: Two Grades B and Grade C. A language editing certificate issued by AJE was provided.

Reply: Thank you for your valuable comments. A professional company, American Journal Experts, has further edited the revised version. Please find the certificate at the end of this reply.

3 Academic norms and rules: No academic misconduct was found in the Bing search.

4 Supplementary comments: This is an invited manuscript. No financial support was obtained for the study. The topic has not previously been published in the WJD.

5 Issues raised: (1) The “Author Contributions” section is missing. Please provide the author contributions; (2) PMID and DOI numbers are missing in the reference list. Please provide the PubMed numbers and DOI citation numbers to the reference list and list all authors of the references. Please revise throughout; and (3) Authors should always cite references that are relevant to their study. Please check and remove any references that not relevant to this study.

Reply: According to the suggestions, we have included information on the “Author Contributions”, and the PMID and DOI numbers in the reference list. The references have also been checked. Thank you very much.

6 Recommendation: Conditional acceptance.

(2) Editorial office director:

(2) Company editor-in-chief: I have reviewed the Peer-Review Report, full text of the manuscript, and the relevant ethics documents, all of which have met the basic publishing requirements of the World Journal of Diabetes, and the manuscript is conditionally accepted. I have sent the manuscript to the author(s) for its revision according to the Peer-Review Report, Editorial Office’s comments and the Criteria for Manuscript Revision by Authors.



We certify that the following article

Oral Glucose Tolerance Test in Diabetes, the old method revisiting

Juei-Tang Cheng

has undergone English language editing by MDPI. The text has been checked for correct use of grammar and common technical terms, and edited to a level suitable for reporting research in a scholarly journal.

MDPI uses experienced, native English speaking editors. Full details of the editing service can be found at

► <https://www.mdpi.com/authors/english>.