

PEER-REVIEW REPORT

Name of journal: World Journal of Diabetes

Manuscript NO: 57734

Title: Factors Associated with Improvement in the Waist-to-height Ratio Among Newly Diagnosed Type 2 Diabetes Patients Treated with Acarbose or Metformin : A Randomized Clinical Trial Study

Reviewer's code: 00506397

Position: Peer Reviewer

Academic degree: PhD

Professional title: Professor

Reviewer's Country/Territory: United States

Author's Country/Territory: China

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Reviewer chosen by: AI Technique

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Scientific quality	<input type="checkbox"/> Grade A: Excellent <input checked="" type="checkbox"/> Grade B: Very good <input type="checkbox"/> Grade C: Good <input type="checkbox"/> Grade D: Fair <input type="checkbox"/> Grade E: Do not publish
Language quality	<input type="checkbox"/> Grade A: Priority publishing <input checked="" type="checkbox"/> Grade B: Minor language polishing <input type="checkbox"/> Grade C: A great deal of language polishing <input type="checkbox"/> Grade D: Rejection
Conclusion	<input type="checkbox"/> Accept (High priority) <input type="checkbox"/> Accept (General priority) <input checked="" type="checkbox"/> Minor revision <input type="checkbox"/> Major revision <input type="checkbox"/> Rejection
Re-review	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Peer-reviewer	Peer-Review: <input checked="" type="checkbox"/> Anonymous <input type="checkbox"/> Onymous

SPECIFIC COMMENTS TO AUTHORS

In this manuscript, authors report the analysis of a number of metabolic and anthropomorphic parameters associated with a decrease in waist to hip ratio (WHtR) in newly diagnosed diabetes Chinese patients, that received 24 weeks of acarbose (343 patients) or metformin (333) monotherapy (the MARCH study). It was noted that although a significant decrease in WHtR was observed in both treatment groups, both anti-diabetic drugs apparently more significantly affected the WHtR of women than men. Furthermore, the abdominal obesity was negatively associated with circulating GLP-1 levels, in patients treated with either acarbose or metformin. Based on this association, the authors concluded that patients with lower GLP-1 level might benefit more from acarbose in reducing WHtR. In my opinion, although the results of this post hoc study are interesting and worthy of publication in WJD, the manuscript needs to be more rigorously edited. A number of suggestions are offered below: 1. The manuscript must be redacted to express these data in clear English. For example, authors expression "Acarbose and metformin are the most classic first-line oral antidiabetic drugs." may be re-written as "Acarbose and metformin are considered to be first-line oral antidiabetic drugs." 2. In Materials and Methods, authors mix past and future tenses. For example, they write "To achieve 80% power to show the non-inferiority of acarbose compared with metformin, the total number of subjects required to complete the study will be at least 590. Assuming a 20% drop-out rate, the total number that will be enrolled in the study will be 738 (369 patients per treatment group)." This is a post hoc study. Therefore, future tense (will) is not appropriate. 3. Similarly, in Materials and Methods, "Considering the additional disturbance from add-on therapy, we analyzed data at week 24." This idea should be expressed more accurately. 4. The Results expressed as, "In

patients with lower baseline AUCGLP-1 (divided by median), Δ WHtR in acarbose group is higher than metformin group (-0.013 vs -0.006, $P=0.017$, Supplementary table 1). As logistic regression adjusted for sex, age, and baseline WHtR, there was a greater likelihood ($OR=2.085$, $P=0.001$) that the acarbose group had a higher reduction in WHtR than the metformin group (Supplementary table 2).” These data must be more clearly expressed in proper English. 5. In Results “Multivariate analysis revealed that only a greater increase in Δ AUCGLP-1 ($OR=1.105$, $P=0.016$) and a greater increase in HDL-C/non-HDL-C ($OR=20.735$, $P=0.001$) was associated with a high Δ WHtR (Table 6).” Plural “were” must be used here. 6. In Discussion the sentence “Similar sex differences in weight loss that presented after different antidiabetic treatments may be partly explained by stronger motivation for body weight management, but not solely by acarbose or metformin[14].” Needs to be re-written to better express the idea. 7. In Discussion, authors must clarify as to what they mean by the sentence “GLP-1 is the most important gastrointestinal incretin today.” 8. In Discussion, “abdomen obesity” should be changed to “abdominal obesity.” 9. In Discussion, “Boyer M reported” is totally UNCONVENTIONAL. 10. Please SPELL-CHECK the entire manuscript. For example, ‘centre’ 11. The Table 1, why is the line “HbA1c, %” included TWICE? 12. The Table 3, formatting is needed to correct inconsistent sized letters Δ WHtR.