

August 12, 2020

Dear Editor,

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

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The manuscript has been redacted and spell-checked thoroughly according to the suggestions of the reviewer.

The reviewer's composition comment on the manuscript and my answers:

1. 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.

Answer: According to 2007 Chinese management guidelines for type 2 diabetes, add-on therapy with insulin secretagogues was started at week 24 in patients whose HbA1c was higher than 7%, or in those who had FPG higher than 7 mmol/L or postprandial glucose of more than 10 mmol/L for 3 consecutive days by self-monitored blood glucose. To eliminate the interference of insulin secretagogues, we analyzed changes from baseline to week 24.

2. The Results expressed as, "In patients with lower baseline AUCGLP-1 (divided by median),  $\Delta$ 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.

Answer: We further performed subgroup analysis as all patients were divided into two groups according to the median of baseline AUCGLP-1: the low AUCGLP-1 group and high AUCGLP-1 group. Effect on reducing WHtR was compared between acarbose and metformin within each AUCGLP-1 group. In the low AUCGLP-1 group,  $\Delta$ WHtR in acarbose group is higher than metformin group (-0.013 vs -0.006, P=0.017, Supplementary table 1) while no difference was found in the high AUCGLP-1 group. Logistic regression analysis (after adjusting for sex, age, and baseline WHtR) further confirmed that there was a greater likelihood (OR=2.085, P=0.001) that acarbose treatment had a higher reduction in WHtR than the metformin in the low AUCGLP-1 group (Supplementary table 2).”

3. 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.

Answer: Similar sex differences in weight loss were presented after different antidiabetic treatments; however, these changes may not be drug related but rather indicate that women are more successful than man in their weight reduction attempts.

Thank you again for publishing our manuscript in *World Journal of Diabetes*.

Best regards

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