

Responses to Reviewer

Dear Editor and reviewer:

Thank you and the reviewer for your comments on our manuscript " Review of KCNQ1 rs2237895 gene polymorphism increases susceptibility to type 2 diabetes mellitus in Asian populations ". The reviewer's comments helped us to further improve the paper. We have carefully revised our manuscript based on the reviewer's comments. And we have addressed the reviewer's comments and explained it below.

Reviewer #1:

Comment: 1: Rewrite the background of abstract connected to your study.

Response:

We are grateful for the reviewer's comment. We rewrote the background of abstract related to the study. The rewrite is as follows: "The association of single nucleotide polymorphism of KCNQ1 (potassium voltage-gated channel, KQT-like subfamily, member 1) gene rs2237895 with type 2 diabetes mellitus (T2DM) is currently controversial. Meanwhile, it is unknown whether this association is generalizable across different populations." And we have highlighted the revised contents with yellow color in the revised manuscript.

Comment: 2: Objective should be also re written properly.

Response:

We are grateful for the reviewer's comment. We rewrote the objective. The rewrite is as follows: "We aimed to determine the association of the KCNQ1 gene rs2237895 with T2DM and to provide reliable evidence for genetic susceptibility to T2DM." And we have highlighted the revised contents with yellow color in the revised manuscript.

Comment: 3: Last 4 lines of abstract need to rewrite.

Response:

We are grateful for the reviewer's comment. We rewrote the last 4 lines of abstract. The rewrite is as follows: "This study demonstrated that the KCNQ1 gene rs2237895 was significantly associated with susceptibility to T2DM in an Asian population. Carriers of the C allele have a higher risk of developing T2DM compared to those who do not carry the C allele. However, this association was not significant in non-Asian populations." And we have highlighted the revised contents with yellow color in the revised manuscript.

Comment: 4: In method write the detail of forest plot and funnel plot.

Response:

We greatly appreciate your kind comment. We have added the detail of forest plot and funnel plot according to your comment. The additions are as follows: "The forest plots were used to show the OR and its 95% CI for each study. Meanwhile, the pooled results can be directly observed on the forest plots (significant differences were considered when the 95% CI did not include 1)." "In the funnel plot, the dashed line perpendicular to the horizontal axis indicates the

combined effect size. It suggests that the studies are without publication bias when the distribution of studies in the funnel plot is approximately symmetrical.” And we have highlighted the revised contents with yellow color in the revised manuscript.

Following the comments of the reviewer, we made all the corresponding changes.

We tried our best to improve the manuscript and made some changes in the manuscript. These changes will not influence the content and framework of the paper. We believe that these changes will make the paper more suitable for publication in your journal. I should like to express my appreciation to you and the reviewer for suggesting how to improve our paper. I hope that the revised manuscript is now suitable for publication.

Once again, thank you very much for your comments and suggestions.

Yours sincerely,

DXL & JJS

2023.12.13