Reviewer's report

Title: Susceptible Gene of Stasis-Stagnation Constitution from Genome-Wide Association Study Related to Cardiovascular Disturbance and Possible Regulated Traditional Chinese Medicine

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Reviewer: Bu-Yeo Kim

Reviewer's report:

Major Compulsory Revisions
1. The revised manuscript is greatly improved in the overall aspect of description and authors addressed adequately about questions raised in original manuscript. In spite of this improvement, I cannot understand the main theme of the manuscript. Why authors selected type 2 diabetes population? Authors answered about this question in the letter that "We selected type 2 diabetes because this population has a higher risk of cardiovascular disease that we have more opportunity to discover a gene that associated cardiovascular risk." Is the purpose of this manuscript discovering genes associated with cardiovascular disease? Or YZ constitution in type 2 diabetes patients? Then what is the target of PON2 in TCM? Could PON2 regulate YZ constitution in type 2 diabetes patients or regulate cardiovascular disease? Could authors clarify the relationship between YZ constitution, diseases and target of PON2 in TCM?

2. QQ plot does not show significant deviation of observed p-values from expected ones. Manhattan plot of p-value distribution and FDRs for the top-selected SNPs in Table 2 seems also to be within the error range. As authors indicated in manuscript, this result demonstrates the typical complex trait of YZ constitution. In that case, approach using only top SNPs like this manuscript is not suggested to obtain biologically relevant information from GWAS. Moreover, authors selected one gene, PON2, as single target of TCM regulation based on this statistically non-significant GWAS result. Could authors suggest the possible explanation?

Minor Essential Revisions
1. ORs in Table 3 are all located within 95% CI but authors indicated statistical significance of p<0.05.

Level of interest: An article of limited interest

Quality of written English: Acceptable

Statistical review: No, the manuscript does not need to be seen by a statistician.

Declaration of competing interests:
I declare that I have no competing interests.