Reviewer's report

Title: Plasminogen Activator Inhibitor-1 4G/5G Polymorphism and Retinopathy Risk In Type 2 Diabetes: A Meta-analysis

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Reviewer: Daniel Petrovic

The MS Plasminogen Activator Inhibitor-1 4G/5G Polymorphism and Retinopathy Risk In Type 2 Diabetes: A Meta-analysis is very well-written manuscript with good design. The aim of the present study was to perform a meta-analysis of 9 published case-control studies covering 1217 cases and 1459 controls. In the present meta-analysis they have showed the evidence that 4G/5G polymorphism in PAI-1 gene potentially increased the risk of DR in T2D and had a discrepancy in different ethnicity. A higher susceptibility in patients with longer diabetes duration (more than 10 years) indicated a gene-environment interaction of DR’s risk.

Abstract is informative, and well written.

Background section is generally well written (see comment 1).

Methods section is appropriate (see comments 2 and 3). Results section is appropriate. Quality of data is adequate and consistent with the conclusions. Regarding the data, I did not find any duplication in text, and tables. Figures are OK. Discussion section is generally well written (see comment 4).

Regarding the references, few should be added (see comment 5).

Comment 1: In the background sections (page 3, paragraph 1, line 4) few information should be added regarding some additional candidate genes for DR, for example for oxidative stress genes, eNOS gene, P-selectin, etc.

Comment 2: In Method section, data collection, line 5:
“number of cases and controls, number of DR and number of without DR (DWR)” should be written more clear - number of subjects with DR and number of subjects without DR (DWR)

Comment 3: Statistical analysis seems OK to me, however it should be checked by the statistician.

Comment 4: English language should be improved (at least spell checking) – there are few mistakes.

Comment 5: few references could be added (ref 1-4).


Quality of written English: Needs some language corrections before being published

Statistical review: Yes, but I do not feel adequately qualified to assess the statistics.

Declaration of competing interests:

I have no conflicts of interest.