Reviewer's report

Title: Association Analysis of ADPRT1, AKR1B1, RAGE, GFPT2 and PAI-1 gene polymorphisms with chronic renal insufficiency among Asian Indians with type-2 diabetes

Version: 3 Date: 5 November 2009

Reviewer: Ilja Nolte

Reviewer's report:

Prasad et al. submitted a new version of their manuscript 'Association Analysis of ADPRT1, AKR1B1, RAGE, GFPT2 and PAI-1 gene polymorphisms with chronic renal insufficiency among Asian Indians with type-2 diabetes'. In this version they adequately replied to all the issues I raised in my review. I appreciate the effort that they made to genotype the Phe54Leu SNP in ADPRT1. Only some minor essential revisions remain.

Minor essential revisions

1. In their reply to comment 3 Prasad et al. mentioned that this manuscript is a pilot study and that they are currently performing a genotyping study on a larger sample. I think that this is worth mentioning in the discussion, e.g. at p13 after line 266.

2. The authors state that only one of the p-values of the Fisher's exact test was incorrect (reply to comment 8). However, I cannot imagine that all the others are correct as the p-values differ very much. I seriously think there must be something wrong in the way Prasad et al. calculate this Fisher's exact p-value.

3. The OR of the interaction on p 11, line 219 is not within the confidence interval (a CI of 0.41-0.92 seems more likely). Check this!

4. p11, lines 210-212: is the line 'Gene-gene interaction ... between TGFB1 and GFPT2 genes' not in contradiction with lines 210-211 on the same page? If so, remove this sentence. If not, please explain more clearly the meaning of this sentence.

5. What is meant with the 'candidate variables with a P value < 0.05'on p9, line 169? Were these genetic polymorphisms or other confounding variables? If genetic polymorphisms, then this is not what they did according to p11, lines 206-211. If other confounding variables, please explain which variables.

Discretionary Revisions

1. The abbreviation for odds ratio that was introduced was OR (p9, line 163). Use this throughout the manuscript and not O.R.

2. For the HWE calculation I would suggest to state that if was 'based on
genotyping 220 normal healthy individuals’ instead of 'based on genotyping of 440 chromosomes of normal healthy individuals' (p8, line 158).

3. p11, line 209: remove 'in'.

4. p11, line 212: remove one of the 'based'.

**Level of interest:** An article whose findings are important to those with closely related research interests

**Quality of written English:** Acceptable

**Statistical review:** Yes, and I have assessed the statistics in my report.

**Declaration of competing interests:**

I declare that I have no competing interests