Reviewer's report

Title: Genetic Polymorphisms of Angiotensin-2 Type 1 Receptor and Angiotensinogen and Risk of Renal Dysfunction and Coronary Heart Disease in Type 2 Diabetes Mellitus

Version: 1 Date: 19 January 2009

Reviewer: Madhu Khullar

Reviewer's report:

In the present study, investigators have examined association of genetic polymorphisms in RAS genes (AGT1R and AGT genes including AGT1R T573C, AGT1R A1166C, and AGT M235T) and presence of CKD and CHD in type 2 diabetes. This is a pertinent study as RAS gene polymorphisms have been found to be associated with both chronic kidney diseases (CKD) and coronary heart disease (CHD) independently, but there are few studies addressing this jointly in diabetic patients.

Major Compulsory Revisions

1. The authors need to give detailed inclusion criteria for CKD and CHD as this is the most pertinent group (s).
2. How many patients had both CKD and CHD? What was genotypic association in this group?
3. Not much detail has been provided about the phenotyping of patients in terms of kidney function assessment. Urinary Albumin excretion is an important parameter which needs to be assessed. A more accurate measure of GFR involves the one depending on Serum Creatinine values (as per the following reference: Stevens LA, Coresh J, Greene T, Levey AS: ASSESSing kidney function: Measured and estimated glomerular filtration rate. N Engl J Med 354: 2473–2483, 2006).
4. What was the power of the study for the SNPs genotyped for CKD and CHD? The number of sample with CKD or CHD is rather small and may lack adequate power for genetic studies.
5. The paper is well written and discussed. Limitations of the study are acknowledged.

Level of interest: An article of limited interest

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