Reviewer’s report

**Title:** A meta-analysis of genome-wide data from five European isolates reveals an association of GABRR2 and SYT1 with serum creatinine level.

**Version:** 1  **Date:** 16 November 2009

**Reviewer:** Farook Thameem

**Reviewer’s report:**

They authors demonstrated a significant association between the SCR levels and the genetic variants from the genes of GABRR2, EBE2J1, COL22A1, and SYT1 using a meta-analysis of GWA studies of serum creatinine (SCR) in five population isolates, all of which are part of the European Special Population Network (EUROSPAN) project. Subsequently, the genes showing the strongest evidence for an association with SCR were replicated in two additional population-based samples. They suggest that the neurotransmitters GABAA receptors may play a role in the regulation of the glomerular basement membrane and a possible interaction between GABAA receptors and synaptotagmin-I at the podocyte level. I have a comment for the authors.

1. What covariates were used for association analysis?. It looks to me that the authors have used only age and sex. How about the potential other covariates for SCR such as BMI, diabetes, duration of diabetes, diabetes medication, blood pressure and its medication, lipids profile and lipid medications ?. If they have not used them in their analysis, please re-do the association analyses incorporating all the other potential confounders mentioned above. Also, all the tables should have a foot note for the covariates used for association analysis.

**Level of interest:** An article of importance in its field

**Quality of written English:** Acceptable

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

**Declaration of competing interests:**

No