Reviewer’s report

Title: The Renalase Asp37Glu polymorphism is not associated with hypertension and cardiovascular events in an urban-based prospective cohort: the Malmo Diet and cancer study.

Version: 1 Date: 2 April 2012

Reviewer: Dongfeng Gu

Reviewer’s report:

Fava et al. genotyped rs2576178 A>G and rs2296545 C>G on RNLS gene in a population-based cohort including 5696 participants (MDC_CC), and interrogated that whether these two SNPs could affect blood pressure levels, hypertension prevalence, and risk of incident CVD events in middle-aged Swedes. Generally, the topic is interesting to the EH and CVD genetic research community, especially testing the hypothesis in a population-based cohort. However, there are several concerns to be considerable:

Major Comments

1. Blood pressure measurements were not obtained according to a standard protocol recommended by the American Heart Association. BP was measured once with the participant in the supine position rather than sitting position. What kind impact on subject’s blood pressures was yielded by this methodological issue compared with other relevant study?

2. The rationale without excluding subjects with a clinical history cardiovascular diseases, diabetes, and kidney disease from the study, especially in the cohort at baseline for analysis needs explanation, since subject BPs could be changed when with those diseases and you have defined the first CVD event incidence during the follow-up period as the end point of observation.

3. For BP analysis by logistic regression, was adjustment conducted for covariates including glucose (Glu), lipids such as triglycerides, total cholesterol, high density lipoprotein cholesterol and serum creatinine besides age, gender, BMI, smoking and drinking status?

4. What are the results for BP analysis when excluding a clinical history cardiovascular diseases, diabetes, and kidney disease?

5. Is there any difference for clinical characteristics between subjects used and the majority not included in this analysis?

Minor comments

1. Does the genotype distribution of Sweden differ with that of Chinese? In addition to the different definition of hypertension, such genetic background information should be referred to.
2. The perspective part is almost duplicated with the last two sentences of discussion part.

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