Reviewer’s report

Title: The PGC1alpha Gly482Ser polymorphism is associated with left ventricular diastolic dysfunction in men

Version: 2 Date: 25 July 2008

Reviewer: Vimaleswaran Karani Santhanakrishnan

Reviewer’s report:

The manuscript entitled 'The PGC1alpha Gly482Ser polymorphism is associated with left ventricular diastolic dysfunction in men' examines the association of the Gly482Ser polymorphism in PGC1alpha gene with left ventricular diastolic dysfunction in a community-based cohort of 499 men and 533 women.

Major compulsory revisions:
1. The authors need to explain why the stratification based on gender was done when there was no interaction between the SNP and gender. The p value for interaction between the SNP and gender should be mentioned in the results.
2. Did the authors look at the association of Gly482Ser with ventricular diastolic dysfunction in the entire cohort? Data on the entire cohort has to be given.
3. Power of the study to detect an association with the SNP studied should be mentioned?

Minor essential revisions:
1. Were any of the study subjects related? How was this determined? If they were related how was this taken account into analyses?
2. Did the authors observe any association between Gly482Ser and diastolic blood pressure?
3. Did the authors undertake any quality control measures for genotyping? What was the call rate for genotyping?
4. The p values for the Hardy-Weinberg equilibrium should be mentioned in the genotyping section.
5. The rs number for the polymorphism under study should be provided in the text.
6. The authors need to give a reference for the rural population in Vara being very homogenous.
7. The work ‘ratio’ in Table 1 needs to be corrected
8. The abbreviated terms such as BMI, LTPA in Table 2 and 3 needs to be expanded

Level of interest: An article whose findings are important to those with closely related research interests
Quality of written English: Acceptable

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

Declaration of competing interests:
I declare that I have no competing interests