**Reviewer's report**

**Title:** Interaction of functional NPC1 gene Polymorphism with smoking on coronary heart disease

**Version:** 3  **Date:** 6 June 2010

**Reviewer:** Fakhredin Sayed Tabatabaei

**Reviewer's report:**

In the 1st revised version of the manuscript, the authors made appropriate changes and addressed some of the issues sufficiently. There are some points, however, that still need improvement:

**Minor Essential Revisions,**

1. The results are presented in dominant, additive, and recessive models. These models are only appropriate for Mendelian diseases. Multifactorial and polygenic (complex) disorders do not usually follow such genetic models. Instead we may only consider two by two comparisons between genotypes, as well as the trend. The authors should merge table 3 and 4, by removing those genetic models and only presenting two by two comparisons. Table 5 should also present two by two comparisons between the genotypes instead of the models. I suppose what the authors mean by "additive model" is actually the trend between the three genotypes. In this case, those results may remain. Table 6, and the text should also be amended accordingly.

2. The authors claim in conclusion: "...in smokers, NPC1 variants seem to confer protection to coronary heart disease onset." The word "onset" should be removed, because this study is based on prevalence and not the incidence of the disease.

3. There are multiple spelling/gramatical mistakes in the manuscript that has to be corrected before publication.

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

**Quality of written English:** Needs some language corrections before being published

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

**Declaration of competing interests:**

I declare that I have no competing interests.