Reviewer's report

Title: Polymorphisms in the coagulation factor VII gene and the risk of coronary heart disease: a meta-analysis

Version: 1 Date: 11 March 2011

Reviewer: Jie Huang

Reviewer's report:

1. The analysis put quite a focus on the difference between Asian and European Population, but the title seems to be on a general meta-analysis without alluding to the ethnic component.

2. The manuscript aims to study the association of 3 cis-acting polymorphism within the FVII gene with the risk of CHD, but the association of these SNPs with plasma FVII level is not well described. It is not clear either the LD structure among these SNPs, in both the European and Asian population.

3. For the 3 polymorphisms chosen, it would be good to have the rsID. For example, rs6046 is for R353Q. The manuscript states that "the 323Ins10, a 10-bp insertion in the promoter region in complete linkage disequilibrium with R353Q". Are these two polymorphisms really in perfect LD?

4. The "Key Words" should have listed FVII.

5. The manuscript states that both "fixed effects" and "random-effects" methods are used. But later it states that "The combined ORs along with 95% CIs, were estimated using the random-effects methods, which in the presence of heterogeneity is more appropriate". So, was "fixed effects" method actually used for this study?

6. It would not be sufficient to simply state that "further studies are needed to confirm the association and elucidate its mechanisms". The study needs to have a paragraph on the biological implication/interpretation in regard to its findings.

7. There are minor English writing issues such as "before the 23 November 2010". It is not clear what a "population-based case-control design" is and how "the counts of persons with different genotypes in cases and controls" could be done when genotype data is not available.

8. Also, the logic is not clear in "manuscripts in languages of Chinese and English were considered for review, in order to avoid the local literature bias".

9. It might need a "limitations" section.

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, but I do not feel adequately qualified to assess the statistics.

Declaration of competing interests:

I declare that I have no competing interests