Reviewer's report

Title: Common variation in EMSY and risk of breast and ovarian cancer: a case-control study using HapMap tagging SNPs

Version: 1 Date: 6 April 2005

Reviewer: Nelson Tang

Reviewer's report:

General

The manuscript reported two association studies involving a large sample of breast cancer patients and another sample of ovarian cancer patients. The candidate gene EMSY was studied which was a putative cancer predisposition gene. The genotyping method and data analysis used were appropriate. Tagging SNPs were defined from HapMap data and additional novel SNPs were identified by dHPLC. Given a high degree of LD in this gene, this study excluded EMSY as a predisposition gene for the two cancers.

Major Compulsory Revisions (that the author must respond to before a decision on publication can be reached)

Nil

Minor Essential Revisions (such as missing labels on figures, or the wrong use of a term, which the author can be trusted to correct)

1. Criteria used in selection of tagSNPs were not detailed in the method section, though it was mentioned briefly in the discussion.
2. Methods and results of the leave-one-out analysis of tagging SNPs should be placed under the methods and results sections instead of the discussion.
3. The SNP nomenclature does not follow a conventional system (Table 1 and text). A name (e.g. 5’up t>g) could be used to call a SNP but the proper nomenclature should be given in a separate column in table 1 (like -3136 T/G) and with the first appearance in the text for those SNPs that are not listed in table 1.
4. page 7: should be “Wavemaker 4.1”
5. In table 4, the estimated haplotype frequencies in the 2 control groups should also be shown.

Discretionary Revisions (which the author can choose to ignore)

1. The authors may consider revising the orders of SNPs in Figure 1 to a 5’ to 3’ order.

What next?: Accept after minor essential revisions

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

**Quality of written English:** Acceptable

**Statistical review:** No

**Declaration of competing interests:**

I declare that I have no competing interests in relation to the 5 specified items. I was an overseas collaborator in a previous project carried out in this laboratory.