Reviewer's report

Title: Lymphotoxin-alpha polymorphisms and prevalence of whole cancer: a study in 1,536 consecutive autopsy cases

Version: 1  Date: 13 February 2008

Reviewer: Han-Yao Huang

Reviewer's report:

Major Comments:
1. The study was a cross-sectional study on autopsy samples. It was not designed to investigate the relationship between genetic polymorphisms and tumorigenesis (i.e., the risk of developing cancer).

2. The study might have been subject to selection bias (i.e., those cases who had a particular genotype might have been associated with the decision on performing an autopsy) and survival bias (i.e., those who had a particular genotype might have been alive and could not be selected for autopsy). It is unclear what characteristics the non-cancer cases had. Did they have diseases that led to an autopsy? For these reasons, the conclusion drawn from the study findings could very possibly be biased.

3. More detailed information about factors other than genotypes is needed. Why was aged dichotomized by 80? How were smoking and alcohol consumption measured? Inaccurate measurements on covariates often result in unchanged OR estimates after adjustment.

4. Overall, this analysis did not inform readers of useful information as to whether LTA genetic polymorphisms play a role in carcinogenesis cancer survivorship. The selection of cases/controls and the lack of sufficient information on the environmental factors undermine the validity of the study.

Discretionary Revision:
1. The study is not based on a random sample, so "prevalence" is not the right word to describe the proportion of samples with a particular genotype.

What next?: Reject because scientifically unsound

Level of interest: An article of insufficient interest to warrant publication in a scientific/medical journal

Quality of written English: Acceptable

Statistical review: No, the manuscript does not need to be seen by a statistician.
Declaration of competing interests:

I declare that I have no competing interests.