Reviewer's report

Title: Multi-susceptibility genes associated with esophageal squamous cell cancer risk and their potential use to identify subjects at high risk

Version: 1 Date: 21 February 2011

Reviewer: YIH-GANG G GOAN

Reviewer's report:

This manuscript presented an interesting but not novel results regarding the association between genetic polymorphism and esophageal neoplasm. According to the results of this manuscript, there are several questions needed to be clarified.

Major Compulsory Revisions

1. The patient numbers of each group with esophageal lesion as well as normal control were similar in this study. How can the authors select patient prospectively and get equally distributed population groups? Are there inclusion and exclusion criteria for patient selection?

2. In this study, the results revealed the genotype of ALDH significantly associated with the development of esophageal cancer. However, risk factors for esophageal squamous cell carcinoma are varied geographically. Cigarette smoking, alcohol consumption, culture of life and condition of foods are well-known risk factors for esophageal cancers. Did the authors analyze the interaction effect of alcohol consumption on the relationship between genotype of ALDH and the stages of esophageal mucosal transformation?

3. How many patients with ALDH2*2 were none alcohol consumption and got esophageal cancer? How many patients with ALDH 1*1 were heavy drinkers and got esophageal cancers?

4. Socio-economic status might correlate with the incidence of esophageal cancer. How the authors interpret their positive correlation between esophageal mucosal transformation and school year as well as annual income using the cut-off value of 6 years of school and 150 US. Does it indicate that learning more and earning more might reduce the risk of esophageal cancer?

Discretionary Revisions

1. The description about the location of Feicheng in discussion has any meaningful value to this manuscript?

Major Compulsory Revisions

Level of interest: An article of limited interest

Quality of written English: Needs some language corrections before being
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.