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:** 11 February 2011

**Reviewer:** Fumiaki Tanaka

**Reviewer's report:**

**COMMENTS**

The authors report in this manuscript that they examined that the association of the ALDH2 and MTHFR polymorphisms is important in carcinogenesis of ESC in Feicheng County, China.

This manuscript contains potentially interesting facts that could be utilized for understanding the mechanisms of the carcinogenesis of esophageal cancer. However, this reviewer need to raise concerns listed below.

**Major concerns:**
1. Conducting the analysis of polymorphisms of toward carcinogenesis, the number of this study was too small to obtain the conclusion. More than thousand patients and healthy controls would be needed. This paper indicated just a sample of a county in China. Page 12, the first paragraph, the last two sentences, no information was mentioned in this study. It’s just imagination.
2. This reviewer could no find the reason why the authors selected the genes (ALDH2, MTHFR, CYP2E1, MPO, hOGG1). There are lots of other genes that have been reported concerning the relation with ESCC.
3. This reviewer requires more limitations of this study. The third paragraph on page 14 is insufficient,
4. Page 14, the second paragraph, “This finding will be benefit to detect a higj-risk population~”. Which country can pay for detecting ESC candidate in the world?

**Minor concerns:**
1. Some type errors were found, such as page 2, line 9 (ALHD), page 5, line 12 (health checkup)
2. Figure 1 can be deleted. No informative figure.

**Level of interest:** An article of limited interest

**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