Reviewer's report

Title: HPV seropositivity synergizes with susceptibility loci identified in GWASs at apoptosis associated genes to increase the risk of esophageal squamous cell carcinoma (ESCC)

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Reviewer: George Papaxoinis

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This is an interesting study of the influence of some apoptosis-related single-nucleotide polymorphisms (snps) on the risk of ESCC.

However, there are several major comments:

1) There are numerous apoptosis-related snps. Why the authors did choose especially these snps?

2) No distinction between heavy/light/no smokers or heavy/light/no drinkers was made. This seems to be of importance according to the literature. (Ishiguro S, et al; JPHC Study Group. Effect of alcohol consumption, cigarette smoking and flushing response on esophageal cancer risk: a population-based cohort study (JPHC study). Cancer Lett. 2009;275:240-6)

3) Was heavy/light/no smoking or heavy/light/no drinking associated with HPV seropositivity?

4) Were the snps associated with age, sex, drinking, smoking?

5) Was there an interaction between snps and age, sex, drinking and smoking regarding their effect on ESCC risk?

6) The authors could construct a table illustrating the final model of multivariate analysis (including interactions) of independent risk factors for ESCC (smoking, drinking, age, sex, HPV seropositivity, and the 3 SNPS). This could better illustrate the relative effect of its factor on ESCC risk.

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

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