Reviewer's report

Title: RAS mutations in early age leukaemia modulated by NQO1 rs1800566 (C609T) are associated with second-hand smoking exposures

Version: 1 Date: 27 August 2013

Reviewer: Wenlei Zhuo

Reviewer's report:

The authors conducted a research on the roles of RAS mutation in leukemia and found that RAS mutation might be an important event for leukemia. They further assessed the possible effects of gene-gene and gene-smoking interactions on the genesis of leukemia. Here, I have several questions as follows.

First, the study was case-case designed in which 150 ALL and 85 AML were involved. Why didn’t the authors adopt case-control as the research design? Were the controls unavailable in their district?

Second, were the distributions of NQO1 gene polymorphism in any of the groups in line with Hardy–Weinberg Equilibrium? If not, will it result in any bias?

Third, as a limitation, the parental occupational exposures were not considered and assessed in the study. Could the authors obtain relevant information from the questionnaire survey?

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