Title: Polymorphisms of XRCC1 genes and risk of nasopharyngeal carcinoma in a Cantonese population

Authors:

Yun Cao (yunsirsums@163.com)
Xiao-Ping Miao (Miaoxp@sina.com)
Ma-Yan Huang (hmy220@sina.com)
Ling Deng (dengling81@yahoo.com.cn)
Li-Fu Hu (Lifu.Hu@mtc.ki.se)
Ingemar Ernberg (Ingemar.Ernberg@mtc.ki.se)
Yi-Xin Zeng (yxzeng@gzsums.edu.cn)
Dong-Xin Lin (dlin@public.bta.net.cn)
Jian-Yong Shao (jyshao@gzsums.edu.cn)

Version: 2 Date: 23 November 2005

Dear Editor:

Here we submit a manuscript entitled "Polymorphisms of XRCC1 genes and risk of nasopharyngeal carcinoma in a Cantonese population" written by Yun Cao, et al. All authors have read and approved the final manuscript. This manuscript is not under consideration by another journal and has not been previously published. We would appreciate your consideration of this manuscript for publication as a research article in BMC Cancer.

In this study, we conducted a hospital case-control study to investigate XRCC1 genotypes in 462 NPC patients and 511 healthy controls matched by sex, age and smoking status. After adjustment for sex and age, the odds ratio (OR) of developing NPC for the XRCC1 codon 194 Trp/Trp genotype was 0.48 (95% CI 0.27-0.86) compared with the Arg/Arg genotype. Combination analysis showed that individuals with the Trp194Trp and Arg399Arg genotypes, or the Arg194Trp and Arg399Gln genotypes, had (respectively) a 0.44-fold (OR = 0.44, 95% CI, 0.23-0.83) or 0.58-fold (OR = 0.58, 95% CI, 0.36-0.93) risk of developing NPC compared to individuals with the Arg194Arg and Arg399Arg genotypes. Variation at codons 194 and/or 399 did not appear to interact with smoking during the development of NPC.

Our findings suggest that the XRCC1 Trp194Trp variant genotype is associated with reduced risk of NPC in the Cantonese population, either independently or interacting with the Arg399Arg variant genotype.

In this revised submitted manuscript, the changes include:

1. Title changed as "Polymorphisms of XRCC1 genes and risk of nasopharyngeal carcinoma in a Cantonese population".

2. Text of this manuscript was copyedited by a professional scientist for improving the quality of written English.

Best wishes,

Sincerely

Jian-Yong Shao, M.D., Ph.D., Professor