



Lack of association between *ERCC5* gene polymorphisms and gastric cancer risk in a Chinese population

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ABSTRACT. We conducted a case-control study to assess the association between single nucleotide polymorphisms in the *ERCC5* promoter (rs2094258 and rs751402) and development of gastric cancer in a Chinese population. This investigation included 184 patients with pathologically diagnosed gastric cancer and 206 healthy subjects recruited between October 2012 and December 2014. The genotyping of *ERCC5* rs2094258 and rs751402 variants was performed by polymerase chain reaction coupled with restriction fragment length polymorphism. Genotype distributions of these polymorphisms conformed to Hardy-Weinberg equilibrium in both patient ($P = 0.25$ for rs2094258 and $P = 0.61$ for rs751402) and control groups ($P = 0.48$ for rs2094258 and $P = 0.42$ for rs751402). Using unconditional logistic regression analysis, we found that neither of these *ERCC5* variants was associated with increased risk of gastric cancer under co-dominant, dominant, or recessive models ($P < 0.05$). In conclusion, we suggest that the rs2094258 and rs751402 polymorphisms are not connected to the development of this disease under codominant, dominant, and recessive models.

Key words: *ERCC5*; rs2094258; rs751402; Polymorphism; Gastric cancer