Association between RAGE gene polymorphisms and ulcerative colitis susceptibility: a case-control study in a Chinese Han population

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ABSTRACT. Ulcerative colitis (UC) is an immune-related disease with genetic predisposition. The aim of this study was to investigate the association of three polymorphisms in the receptor for advanced glycation end-products (RAGE) gene with UC risk in a Chinese population. This case-control study involved 72 UC patients and 479 age- and gender-matched healthy controls. Genotyping was performed using the polymerase chain reaction-ligase detection reaction method. Data were analyzed using the Haplo.stats program. There were no significant differences between patients and controls in the allele/genotype distributions of rs1800624 (Pallele = 0.11; Pgenotype = 0.20), rs1800625 (Pallele = 0.16; Pgenotype = 0.11), or rs2070600 (Pallele = 0.37; Pgenotype = 0.65). In addition, no positive haplotypes were identified. To the best of our knowledge, the current study describes polymorphisms of RAGE in Chinese UC for the first time. We found no
association between RAGE polymorphisms and the development of UC in the Chinese population.

**Key words:** RAGE; Polymorphism; Ulcerative colitis; Susceptibility; Association study