



IL-17A and IL-17F polymorphisms and gastric cancer risk: a meta-analysis

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ABSTRACT. We conducted a meta-analysis of eligible studies to estimate the association between gastric cancer risk and rs2275913G>A IL-17A and rs763780T>C IL-17F polymorphisms. We searched the relevant studies in both Chinese and English through PubMed, the Web of Science, the Cochrane Library, and EMBASE up to January 1, 2014, including 3939 cases and 5407 controls. Seven eligible case-control studies were selected, including seven studies on rs2275913G>A IL-17A and four studies on rs763780T>C IL-17F. The rs2275913 AG [odds ratio (OR) = 1.50, 95% confidence interval (95%CI) = 1.04-2.15] and GG (OR = 1.40, 95%CI = 1.00-1.96) genotypes were significantly associated with increased risk of gastric cancer compared with the AA genotype. The rs763780 TC (OR = 1.47, 95%CI = 1.32-1.64) and TT (OR = 1.49, 95%CI = 1.11-1.99) genotypes can influence gastric cancer risk. Subgroup analysis showed that rs2275913 GG (OR = 1.35, 95%CI = 1.05-1.73) and rs763780 TC (OR = 1.44, 95%CI = 1.20-1.75) genotypes were not significantly associated with increased risk of gastric cancer in Japanese populations. Our meta-analysis is the first to indicate that the rs2275913G>A and rs763780T>C polymorphisms are risk factors for gastric cancer development.

Key words: IL-17A; IL-17F; Polymorphism; Gastric cancer