



Lack of an association between the XRCC1 Arg399Gln polymorphism and gastric cancer based on a meta-analysis

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ABSTRACT. Association between the XRCC1 Arg399Gln polymorphism and susceptibility to gastric cancer has been investigated; overall, the results have been inconclusive. We made a meta-analysis of 13 case-control studies, including 3278 cases and 6243 controls. Crude odds ratios (OR) with 95% confidence intervals (95%CI) were used to assess this possible association. We found no evidence of a significant association between the XRCC1 Arg399Gln polymorphism and gastric cancer risk (in the additive inheritance model, OR = 0.986, 95%CI = 0.831-1.156, in the dominant inheritance model, OR = 1.044, 95%CI = 0.890-1.224 and in the recessive inheritance model, OR = 0.975, 95%CI = 0.894-1.063). We conclude that the XRCC1 Arg399Gln polymorphism is not a risk factor for developing gastric cancer.

Key words: XRCC1; Polymorphism; Gastric cancer; Susceptibility; Meta-analysis