



Meta-analysis demonstrates no association between p53 codon 72 polymorphism and prostate cancer risk

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ABSTRACT. We examined whether p53 codon 72 polymorphism confers prostate cancer risk by conducting a meta-analysis. Two investigators independently searched the Pubmed, Embase and CBM databases. This meta-analysis was made of seven case-control studies, that included 892 prostate cancer cases and 1020 healthy controls. Meta-analysis results based on all the studies showed no significant association between p53 codon 72 polymorphism and prostate cancer risk in the comparisons of Pro allele vs Arg allele; Pro/Pro + Pro/Arg vs Arg/Arg; Pro/Pro vs Pro/Arg + Arg/Arg; Pro/Pro vs Arg/Arg, and Pro/Arg vs Arg/Arg [odds ratio (OR) = 1.09, 95% confidence interval (CI) = 0.87-1.36, P = 0.47; OR = 1.22, 95%CI = 0.86-1.73, P = 0.27; OR = 1.03, 95%CI = 0.62-1.72, P = 0.91; OR = 1.22, 95%CI = 0.66-2.26, P = 0.52; OR = 1.25, 95%CI = 0.84-1.87, P = 0.27, respectively]. In

the subgroup analysis by ethnicity, no association was found between p53 codon 72 polymorphism and prostate cancer risk both in Caucasian and Asian populations. We found no association between p53 codon 72 polymorphism and prostate cancer risk.

Key words: Prostate cancer; p53 codon 72; Gene polymorphism; Meta-analysis