



Prostate stem cell antigen rs2294008 (C>T) polymorphism and bladder cancer risk: a meta-analysis based on cases and controls

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Genet. Mol. Res. 13 (3): 5534-5540 (2014)

Received June 17, 2013

Accepted September 19, 2013

Published July 25, 2014

DOI <http://dx.doi.org/10.4238/2014.July.25.7>

ABSTRACT. Several published articles have evaluated the association between the prostate stem cell antigen (PSCA) rs2294008 (C>T) polymorphism and bladder cancer risk, but the results remain inconclusive. In order to derive a more precise estimation of the association, we performed a meta-analysis of four case-control studies that included 9617 cases and 16,323 controls. Odds ratios (ORs) and 95% confidence intervals (CIs) were used to assess the strength of the association. Our meta-analysis showed that, overall, the rs2294008 (C>T) polymorphism was associated with bladder cancer susceptibility (OR = 1.29, 95%CI = 1.20-1.40 for TT vs CC; OR = 1.24, 95%CI = 1.16-1.31 for CT vs CC; OR = 1.25, 95%CI = 1.18-1.33 for TT/CT vs CC; OR = 1.13, 95%CI = 1.06-1.20 for TT vs CT/CC). In the stratified analyses, the risk remained significant for studies of European populations, Asian populations, population-based studies, and hospital-based studies.

In conclusion, the results suggest that the PSCA rs2294008 (C>T) polymorphism is a risk factor for bladder cancer development.

Key words: PSCA; rs2294008 (C>T) polymorphism; Bladder cancer; Meta-analysis