



***PTGS2* gene polymorphism -765G>C is associated with coronary artery disease: a meta-analysis**

C.-L. Xuan¹, W. Yan¹, L. Xuan² and R.-H. Xu¹

¹Department of Cardiac Surgery, Second Hospital of Jilin University, Jilin University, Changchun, Jilin, China

²Norman Bethune Medical College, Jilin University, Changchun, Jilin, China

Corresponding author: R.-H. Xu

E-mail: xu6mouse@163.com

Genet. Mol. Res. 13 (1): 1491-1496 (2014)

Received June 29, 2013

Accepted October 23, 2013

Published January 14, 2014

DOI <http://dx.doi.org/10.4238/2014.January.14.10>

ABSTRACT. Previous studies focusing on the association of *PTGS2* polymorphism -765G>C with coronary artery disease (CAD) have failed to reach the same conclusion. In the present study, we performed a meta-analysis to systematically summarize the possible association between *PTGS2* polymorphism -765G>C and the risk of CAD. We conducted a search of case-control studies on the associations of *PTGS2* with susceptibility to CAD in PubMed, EMBASE, and Chinese National Knowledge Infrastructure databases. Data from eligible studies were extracted for meta-analysis. CAD risk associated with *PTGS2* -765G>C was estimated by pooled odds ratios (ORs) and 95% confidence intervals (95%CI) with the RevMan 5.2 software. Eleven independent case-control studies on *PTGS2* -765G>C were included in our meta-analysis. Our results showed that *PTGS2* -765G>C was associated with a decreased risk of CAD (OR = 0.66, 95%CI = 0.56-0.79; P < 0.001). This meta-analysis suggests that *PTGS2* -765G>C is associated with a decreased risk of CAD.

Key words: *PTGS2*; Coronary artery disease; Meta-analysis