



Lack of an association between matrix metalloproteinase polymorphisms and coronary heart disease in a Han Chinese population

C.M. Wang^{1*}, H.D. Ye^{2*}, Y.R. Li^{2*}, Q.X. Hong², L.L. Tang², A.N. Zhou², M.Q. Xu³ and S.W. Duan²

¹Department of Cardiology, People's Hospital of Yinzhou, Ningbo, Zhejiang, China

²Zhejiang Provincial Key Laboratory of Pathophysiology, School of Medicine, Ningbo University, Ningbo, Zhejiang, China

³Bio-X Institutes, Key Laboratory for the Genetics of Developmental and Neuropsychiatric Disorders (Ministry of Education), Shanghai Jiao Tong University, Shanghai, China

*These authors contributed equally to this study.

Corresponding author: S.W. Duan

E-mail: duanshiwei@nbu.edu.cn

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ABSTRACT. Coronary heart disease (CHD) has become a leading cause of human deaths worldwide. Recent studies showed that polymorphisms of the matrix metalloproteinase (MMP) genes played important roles in extracellular matrix remodeling and contribute to the pathogenesis of vascular diseases. Here, we investigated whether these MMP gene polymorphisms were associated with CHD in Han Chinese. Our case-control study was involved with 1509 unrelated individuals,

including 777 CHD cases and 732 controls. We selected a total of five polymorphisms whose genotypes were determined using Sequenom iPLEX technology. Our results showed there were no significant associations between the five MMP gene polymorphisms and CHD risk at either genotype or allele levels ($P > 0.05$). Further subgroup analyses by sex were also unable to reveal any significant association ($P > 0.05$). In conclusion, no significant associations were found between the five MMP gene polymorphisms and the risk of CHD in Han Chinese.

Key words: Coronary heart disease; Matrix metalloproteinase; Polymorphism; Han Chinese population