**ABSTRACT.** The aim of this study was to investigate correlations between apolipoprotein A-V (*APOA5*) -1131T>C and apolipoprotein C-III (*APOC3*) -455T>C polymorphisms and coronary heart disease (CHD). PubMed, Ovid, Cochrane Library, Embase, China National Knowledge Infrastructure, and Wanfang databases were searched using combinations of keywords relating to these polymorphisms and CHD. Studies retrieved from database searches were screened using our stringent inclusion and exclusion criteria, and Comprehensive Meta-Analysis Version 2.0 software was used for statistical analyses. In total, 115 studies were initially retrieved and after further selection, 11 were included in the meta-analysis. These 11 articles comprised 4840 patients with CHD in the case group and 4913 healthy participants in the control group. Meta-analysis revealed that *APOA5* -1131T>C and *APOC3* -455T>C polymorphisms increased CHD risk. In addition, subgroup analysis by ethnicity showed that while the -1131T>C polymorphism elevated the risk of CHD in the Caucasian population under both allelic and dominant models, this increased risk was observed only under a dominant model in the Asian population.
population. The results of our meta-analysis point to a strong link between both *APOA5* -1131T>C and *APOC3* -455T>C polymorphisms and an increased risk of CHD. Thus, these polymorphisms constitute important predictive indicators of CHD susceptibility.

**Key words:** Coronary heart disease; Apolipoprotein A-V; Apolipoprotein C-III; Polymorphism; Single nucleotide polymorphisms; Triglycerides