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## **Association Between the rs4880 Genetic Polymorphism of the Manganese Superoxide Dismutase 2 Gene and Coronary Artery Disease: A Meta-analysis of Case Control Studies**

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**ABSTRACT** Manganese superoxide dismutase 2 (MnSOD2) is pivotal for modulating oxidative stress in cells and is thought to be involved in the pathogenesis of coronary artery disease (CAD). The aim of this study was to determine the association of the MnSOD2 rs4880 polymorphism with the risk of CAD. Relevant studies were retrieved from the PubMed and Embase databases by applying predefined search strategies. A total of nine eligible studies were included in the final analysis. According to the pooled analysis of the association between the MnSOD2 rs4880 polymorphism and coronary artery diseases, there was no statistically significant association between rs4880 and the risk of CAD in the four genetic models, as the ORs were 1.03 (0.76-1.41) in the allele model, 0.97 (0.63-1.48) in the dominant model, 1.12 (0.78-1.60) in the recessive model and 1.17 (0.94-1.47) in the additive model. The results suggested that the MnSOD2 rs4880 polymorphism was not associated with the risk of CAD.