



T174M polymorphism in the angiotensinogen gene and risk of myocardial infarction: a meta-analysis

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Genet. Mol. Res. 14 (2): 3767-3774 (2015)

Received May 29, 2014

Accepted October 23, 2014

Published April 22, 2015

DOI <http://dx.doi.org/10.4238/2015.April.22.5>

ABSTRACT. Numerous studies have evaluated the association between the T174M polymorphism in the angiotensinogen (*AGT*) gene and myocardial infarction (MI) risk. However, the specific association remains controversial because of small sample sizes and varied study designs among different studies. We performed a meta-analysis to assess this correlation. A comprehensive search was conducted to identify all published articles regarding the association between the *AGT* gene T174M polymorphism and MI risk from different databases. Pooled odds ratios (ORs) with 95% confidence intervals (CIs) were calculated, and heterogeneity and publication bias were assessed. A total of 1032 patients with lung cancer and 1286 controls from 6 comparative studies were included in this meta-analysis. The results revealed a significant association between the *AGT* gene T174M polymorphism and MI risk (MM vs TT: OR = 2.87, 95%CI = 1.71-4.83; dominant model: OR = 1.57, 95%CI = 1.10-2.25; recessive model: OR = 0.41, 95%CI = 0.25-0.66). In subgroup analysis by nationality, we observed a significant association between the *AGT* gene T174M polymorphism and susceptibility to MI

in both Caucasian and Asian populations. In conclusion, the T174M polymorphism in the *AGT* gene may be related to an increased risk of MI. Further larger studies are needed to confirm these conclusions.

Key words: Angiotensinogen; Gene polymorphism; Meta-analysis; Myocardial infarction