



Association between the rs3795879 G/A polymorphism of the *SERPINE2* gene and chronic obstructive pulmonary disease: a meta-analysis

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ABSTRACT. The present study aimed to investigate the effects of the rs3795879 polymorphism of the *SERPINE2* gene on the development of chronic obstructive pulmonary disease (COPD) based on a systematic meta-analysis. An extensive literature search was performed to retrieve previously published case-control studies on the polymorphisms of *SERPINE2* in COPD patients. Odds ratios (ORs) with 95% confidence intervals (CIs) were used to assess the association between *SERPINE2* polymorphisms and risk of developing COPD. A total of 5 studies including 3034 COPD cases and 3068 controls were incorporated in the present meta-analysis. Generally, no significant association was identified between the rs3795879 polymorphism of *SERPINE2* and the risk of developing COPD (G allele vs A allele: OR = 1.23, 95%CI = 0.97-1.32; GG vs GA: OR = 1.19, 95%CI = 0.81-1.76; GG vs AA: OR =

1.23, 95%CI = 0.89-1.70; dominant model: OR = 1.18, 95%CI = 0.85-1.62; recessive model: OR = 1.19, 95%CI = 0.85-1.66). In addition, subgroup analyses according to different ethnicities and the source of controls suggest no statistically significant association between the rs3795879 polymorphism of *SERPINE2* and COPD risk. The results suggest that the rs3795879 polymorphism of *SERPINE2* is not a risk factor for COPD.

Key words: *SERPINE2*; rs3795879; SNP; COPD; Meta-analysis