



# Association between the *FCGR2A* gene H131R polymorphism and risk of Kawasaki disease: a meta-analysis

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**ABSTRACT.** Several previous studies have investigated whether the *FCGR2A* gene H131R polymorphism confers an increased risk of Kawasaki disease (KD), but conflicting results have been reported. To further explore the association of this polymorphism with KD susceptibility, we performed an extensive search of relevant studies and conducted a meta-analysis to obtain a more precise estimate of risk. Systematic searches of the electronic databases Embase, PubMed, and Google Scholar were performed to identify relevant studies. Odds ratios (ORs) and their 95% confidence intervals (CIs) were used for statistical analysis. Six studies were included in the meta-analysis, involving 1709 patients with KD and 3207 controls. Significant association was found between the *FCGR2A* gene H131R polymorphism and KD risk in analysis of the total population (HH vs RR: OR = 1.97, 95%CI = 1.55-2.50; HH vs HR: OR = 1.38, 95%CI = 1.21-1.57; the dominant model: OR = 0.69, 95%CI = 0.60-0.78; and the recessive model: OR = 1.65, 95%CI = 1.32-2.07). In subgroup analysis by ethnicity, significant association was found between the H131R polymorphism and KD risk

in Asians, but not in Caucasians. In addition, we found no significant association between the *FCGR2A* gene H131R polymorphism and risk of KD-associated coronary artery lesions. In conclusion, this meta-analysis suggested that the H131R polymorphism in the *FCGR2A* gene might be associated with susceptibility to KD in Asians.

**Key words:** H131R polymorphism; Kawasaki disease; *FCGR2A*