



# ***IL10* rs1800896 polymorphism is associated with liver cirrhosis and chronic hepatitis B**

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**ABSTRACT.** We conducted a case-control study to assess the role of two *IL10* gene polymorphisms (rs1800896 and rs1800872) in susceptibility to liver cirrhosis, and their association with chronic hepatitis B in a Chinese population. A case-control study was designed to investigate the association between functional polymorphisms of *IL10* (rs1800896 and rs1800872) and the development of liver cirrhosis. Between March 2012 and March 2014, we recruited 241 patients with liver cirrhosis and 254 controls from Xianyang Central Hospital. Genotyping of *IL10* rs1800896 and rs1800872 polymorphisms was carried out using the polymerase chain reaction coupled with restriction fragment length polymorphism. Using multivariate logistic regression analysis, we found that individuals with the AA genotype of *IL10* rs1800896 showed an increased risk of liver cirrhosis compared with those with the GG genotype in a codominant model (OR = 2.01, 95%CI = 1.10-3.65). In dominant and recessive models, we found that the *IL10* rs1800896 polymorphism was correlated with the development of liver cirrhosis (for the dominant model, OR = 1.46, 95%CI = 1.01-2.13; for the recessive model, OR = 1.72, 95%CI = 1.01-3.02). In summary, our

study suggests that the *IL10* rs1800896 polymorphism is associated with the development of liver cirrhosis.

**Key words:** Interleukin-10; Polymorphism; Liver cirrhosis; Chronic hepatitis B