



## Lack of association of *IL-2RA* and *IL-2RB* polymorphisms with rheumatoid arthritis in a Han Chinese population

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**ABSTRACT.** Polymorphisms in *IL-2RA* and *IL-2RB* genes have been reported to confer susceptibility to rheumatoid arthritis (RA) in European populations. We investigated a possible association between SNPs in *IL-2RA* and *IL-2RB* genes and RA in a Han Chinese population. rs2104286 in *IL-2RA* and rs743777 in *IL-2RB* genes were genotyped in a Han Chinese cohort composed of 500 patients with RA and 600 controls. The levels of anti-cyclic citrullinated peptide antibodies (CCP) and rheumatoid factor were determined in all patients and controls. The genotype and allele frequencies of the two SNPs were compared in patients and controls. Additionally, serum concentrations of anti-CCP and rheumatoid factor were analyzed in the three genotype groups of *IL-2RA* and *IL-2RB* genes. There was no overall difference in the genotype and allele frequencies of the two SNPs, rs2104286 in

*IL-2RA* and rs743777 in *IL-2RB*, between the patients with RA and controls. In addition, none of the subgroups showed any significant association with RA risk after stratification by CCP and rheumatoid factor levels. We conclude that the two genetic variants within *IL-2RA* and *IL-2RB* are not associated with genetic susceptibility to RA in Han Chinese. Also, the rs2104286 and rs743777 genotypes were not significantly associated with the concentrations of anti-CCP antibodies or rheumatoid factor.

**Key words:** Rheumatoid arthritis; *IL-2RA*; *IL-2RB*; Association study