Genetic polymorphisms of cytochrome P450 enzymes 2C9 and 2C19 in a healthy Mongolian population in China

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ABSTRACT. We examined the distribution of major allelic variants of CYP2C9 and CYP2C19 in the Mongolian population of China and compared it with that of other populations. The polymorphisms of CYP2C9 (including the CYP2C9*1, CYP2C9*2 and CYP2C9*3 alleles) and CYP2C19 (including the CYP2C19*1, CYP2C19*2 and CYP2C19*3 alleles) were analyzed in 280 healthy unrelated Chinese Mongolian subjects, using a PCR-RFLP assay. The frequencies of CYP2C9*1, *2 and *3 alleles were 0.97, 0.00 and 0.03, respectively. The frequencies of CYP2C19*1, *2 and *3 alleles were 0.72, 0.24 and 0.04, respectively. We did not find any differences in the allelic distribution of these two genes between age groups. However, the genotype frequency of CYP2C9*1/*3 was significantly higher in males than in females. Compared with other populations, we found that the allele frequencies of the CYP2C9*2 and CYP2C9*3 allelic variants in this Mongolian population of China were similar to those reported...
for other Asian populations, with significant differences compared to Caucasians and African-Americans.

**Key words:** CYP2C9; CYP2C19; Mongolian population; Genetic polymorphism