



A single nucleotide polymorphism of the TNRC9 gene associated with breast cancer risk in Chinese Han women

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ABSTRACT. A single nucleotide polymorphism (SNP) in the TNRC9 gene was identified as a breast cancer susceptibility genetic variant in recent genome-wide association studies of women of European ancestry. We investigated whether TNRC9 polymorphisms are associated with risk of breast cancer in Chinese women of the Han nationality. We genotyped the SNPs rs3803662, rs1362548, rs1123428 in 870 women, including 388 breast cancer patients and 482 healthy controls, via the PCR-single strand conformation polymorphism procedure and by sequence detection. We found that the T allele and the TT genotype of the SNP rs3803662 is significantly associated with risk for breast cancer in Chinese Han women; however, no significant association was found for rs1362548 or rs1123428. We

conclude that SNP rs3803662 is a putative risk factor for breast cancer in Chinese Han women.

Key words: Trinucleotide-repeat-containing 9; Breast cancer; SNP; Han nationality; PCR-SSCP