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P53 Codon 72Arg Polymorphism is Not a Risk Factor for Carcinogenesis in the Chinese

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Abstract

The potential association of distinct polymorphism of the tumor suppressor gene p53, with an increased susceptibility to malignant transformation has been reported for various cancers. A polymorphism at codon 72 of p53 results in translation to either arginine (p53Arg) or proline (p53Pro), and recent study showed that Caucasian women with arginine form of p53 are more susceptible to HPV-associated carcinoma of the cervix. To examine whether arginine 72 could be a significant risk factor for tumor development, we used a PCR-based assay to analyze p53 genotypes of patients for several types of carcinoma. No significant difference in the frequency of p53Arg was found between normal and cancer patients, the results showed that the individuals homozygous for arginine variant were not at increased risk for cancer.