POLYMORPHISMS OF HSPB7 GENE ASSOCIATE WITH IDIOPATHIC DILATED CARDIOMYOPATHY SUSCEPTIBILITY IN A CHINESE POPULATION

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Objectives Dilated cardiomyopathy (DCM) is characterised by ventricular chamber enlargement and systolic dysfunction with normal left ventricular wall thickness. The pathogenesis of DCM has been extensively investigated for many years, but it remains uncertain. HSPB7 gene has been previously found to be associated with DCM. To assess the role of HSPB7 in DCM, we examined 11 single nucleotide polymorphisms (SNPs) in HSPB7 and ACTA1 gene, namely, rs 525720, rs 533021, rs 589759, rs 670957, rs 1739843, rs 2070664, rs 3759834, rs 10927875, rs 1370154, rs 7523558 and rs 6660685.

Methods A total of 97 DCM patients and 189 controls were included in the study, and all SNPs were genotyped by matrix assisted laser desorption/ionisation time-of-flight mass spectrometry (MALDI-TOF-MS).

Results showed that the genotype of SNP rs 10927875 ($\chi^2=4.801$, $p=0.028$; OR=0.1926, 95% CI=0.037–1.002) had association with DCM in Chinese population.

Conclusions The results suggest that HSPB7 polymorphisms appear to play an important role in the susceptibility of DCM in Chinese population.