hypertension, with conflicting results. Kazakhs of the pasturing area in Xinjiang, China, have higher prevalence of hypertension and mean blood pressure than other populations of Xinjiang. But up to now no study in this population. To investigate the relationship between the G (+252)A polymorphism of ADRB2 gene and essential hypertension in Kazakhs of Xinjiang.

Method A total of 276 patients with confirmed hypertensives and 157 healthy control were genotyped for the G (+252)A by PCR restriction fragment length polymorphism (PCR-RFLP) analysis.

Result Compared with control group, there was no significant difference in the distribution of genotypes and allele frequency of G (+252) A polymorphisms in EH group (p > 0.05). In addition, age, body mass index, systolic blood pressure and diastolic blood pressure had no significant difference in the groups classified according to genotypes (p > 0.05).

Conclusion G (+252)A polymorphism of β2-AR gene was not related with essential hypertension in Kazakhs of Xinjiang.

**THE ASSOCIATION OF FURIN GENE CODING POLYMORPHISM WITH ESSENTIAL HYPERTENSION IN KAZAKAN OF XINJiang**

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**Introduction** The proprotein processing enzyme furin is involved in many blood pressure-regulating factors. In the Golgi, furin appears to activate ENaC. Thus the gene of furin (FUR) may be a candidate gene of hypertension. We investigate the relationship between Furin gene polymorphism and hypertension in Xinjiang Kazakans.

**Methods** 924 Kazakans was selected randomly from the pasturing area aged in Xinjiang (422 hypertensives, 502 normotensive controls). We sequenced the coding regions of FUR in 94 hypertensive individuals to identify genetic variations of FUR. Genotyping by the TaqMan-PCR method was performed for common SNPs. The possible relationship between the polymorphism and hypertension of Kazakans was analysed.

**Results** 1. Direct sequencing from 94 hypertension subjects identified 6 SNPs in the Furin gene promoter. 2. The genotypes and allele frequencies of −229C→T, 12690G→C polymorphisms are not significant between these two groups. 3. There was no significance of blood pressure among the three genotypes of −229C→T, 12690G→C polymorphism. In multiple logistic analyses, the genotypes of the −229C>T were excluded as independent variables. None of haplotypes composed of −229C→T and 12690G→C was significantly different in EH and controls.

**Conclusion** The Furin gene −229C→T, 12690G→C polymorphism might not be associated with essential hypertension in Kazakans.

**VARIATION OF ADRB2 IS ASSOCIATED WITH COMMON RISK FACTORS FOR CARDIOVASCULAR**

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**Introduction** Hypertension, overweight/obesity and dyslipidemia are common risk factors for cardiovascular disease. β2-adrenergic receptor (ADRB2) regulates blood pressure, lipid mobilisation, and energy expenditure.

**Methods** A cross-sectional study was conducted in Kazakh of Xinjiang (169 males, 238 females) aged 30 to 60 years. The widely studied polymorphisms A46G, C79G, C491T and A523C in ADRB2 gene were selected to be genotyped by PCR-RFLP.