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 Kazaks of Xinjiang.

**e0165**

**GENETIC VARIATION OF NEDD4L IS ASSOCIATED WITH ESSENTIAL HYPERTENSION IN FEMALE KAZAKH GENERAL POPULATION**

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Introduction NEDD4L is a candidate gene for hypertension on both functional and genetic grounds. The study is to investigate the relationships between the variation of NEDD4L and essential hypertension (EH) in Kazakh in China.

Methods We screened the promoter and exons of NEDD4L in 94 Kazakh hypertensive individuals to identify representative variations. Then the representative variations were genotyped in a Kazakh general population, a case-control study was conducted.

Results We did not identify any functional mutations in functional regions of NEDD4L. Three representative variations (296921-296923delTTG, rs2288774, rs2288775) were successfully genotyped in Kazakh population. The distribution of the dominant model (AA vs AG+GG) of rs2288775, the additive model and recessive model (II+ID vs DD) of 296921-296923delTTG differed significantly between case and control in female (p=0.040), p=0.024 and p=0.007 respectively). Logistic regression analysis showed that rs2288775 and 296921-296923delTTG were significantly associated with hypertension (rs2288775: OR=1.479, 95% CI 1.011 to 2.064, p=0.044; 296921-296923delTTG: OR=1.908, 95% CI 1.020 to 3.568, p=0.043) in female. The frequency of D-C-G haplotype was significantly higher for case than for control in female (p=0.020).

Conclusions The genetic variations of NEDD4L may be associated with EH in female Kazakh.

**e0164**

**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.