RESULTS The mRNA expression levels of KCNN3 were obviously increased in persistent atrial fibrillation patients compared with SR patients (p < 0.05). This was consistent with the change of current density of apamin-sensitive SK channels.

CONCLUSIONS Our results demonstrated that SK3 are involved in electrical remodeling of persistent atrial fibrillation. The SK3 showed increased expression in persistent atrial fibrillation. These findings provide a new insight into mechanisms of electrical remodeling of human persistent atrial fibrillation.

GW26-e1796 Effect of Ruanmaining containing serum on twinflinin-1 in PDGF-activated vascular smooth muscle cells
Ruowan Gao, Guili Lian, Liangdi Xie
Fujian Hypertension Research Institute; First Affiliated Hospital of Fujian Medical University; Fujian Medical University Union Hospital

OBJECTIVES It was confirmed previously by our group that Ruanmaining component, one of traditional Chinese Medicine, may inhibit migration of vascular smooth muscle cells (VSMCs) induced by PDGF. In this study, we tested the effect of Ruanmaining containing serum on twinflinin-1 in PDGF-activated VSMCs to further illuminate the possible mechanism of Ruanmaining in anti-vascular remodeling.

METHODS Ruanmaining containing serum was prepared from rats after drug gavage every 12 hours for 5 days. VSMCs were isolated from thoracic aortas of Sprague-Dawley rats. Cells at 90% confluences were passaged by trypsinization and cells between 3-5 passage were used for experiment. Twinflinin-1 in cells was detected by confocal microscopy with Alexa647 staining. Structure of actin filament was detected by FITC-phalloidin labeling under confocal microscope.

RESULTS In quiescent cells without any stimulants in medium, twinflinin-1 was localized in cytoplasm prominently around the nucleus with no apparent stress fibers in cells. Compared with the control, after PDGF (10ng/ml) stimulation, twinflinin-1 was upregulated and redistributed mainly from peri-nucleus to the whole cytoplasm, especially lamellipodia and actin rich filopodias. Actin cytoskeleton was rearranged with a cluster of stress fibers intensely distributed in cytoplasm. Interestingly however, after treatment with 10% Ruanmaining containing serum, both expression and redistribution of twinflinin-1 induced by PDGF were suppressed. Twinflinin-1 scarcely localized to the lamellipodia and filopodias. The stress fiber was markedly reduced and loosely arranged simultaneously. Treatment of 5µmol/l LY294002 led to the same change of twinflinin-1 and cytoskeleton to that of 10% Ruanmaining containing serum.

CONCLUSIONS PDGF induces expression and redistribution of twinflinin-1 together with the rearrangement of cytoskeleton in VSMCs. Ruanmaining containing serum may suppress twinflinin-1 in VSMCs and inhibit the rearrangement of act cytoskeleton induced by PDGF.

GW26-e2200 Association of a SNP in the CYP19 gene with risk of coronary heart disease
Bei Wang, Zhen Y. Fu, Ding Huang, Fen Liu, Chun L. Dong, Ting Wang, Ya J. Meng, Yitong Ma
Department of Cardiology, First Affiliated Hospital of Xinjiang Medical University, Urumqi, 830054 P.R., China

OBJECTIVES There is a positive relationship between the imbalance of sex hormone ratio and coronary heart disease(CHD). Aromatase is the key enzyme in the conversion of androgen to estrogen and play an important role in the balance of the sex hormone levels. There is little related research. The goal of this study was to investigate the interaction between the SNPs in CYP19 gene and coronary heart disease.

METHODS We collect 1706 blood samples and use propensity score matching techniques to match the confounding factors between the case and control. Finally, the case-control study including 596 individuals was conducted to identify the association of three SNPs in CYP19 with CHD by using χ2 test or fisher exact test and binary Logistic regression analysis. Differences in lipids and the parameters of echocardiography among individuals with different genotypes were assessed by using one way analysis of variance(ANOVA).

RESULTS The distribution of rs2289105 in CYP19 gene showed a significant difference between CHD and controls(P=0.014) and the heterozygote GT has a significant lower risk than the homozygous GG(rs2289105). ANOVA indicated the blood lipids and the parameters of echocardiography among individuals with different genotypes did not differ from case and control, at the same time, although we find out the distribution of rs4774585 may be associated with CHD in Uygur population, after adjustment for potential confounders, the associations are not statistically significant.

CONCLUSIONS The GT genotype of rs2289105 in CYP19 gene is associated with CHD and might be a protective genetic marker of CHD.

GW26-e2462 Effects of Rosuvastatin on Aortic Artery and Expression of IL-6 as well as hs-CRP in ApoE/- Mice
Zhiyun Wang
Affiliated Hospital of Shangdong Academy of Medical Sciences

OBJECTIVES To aim the effects of Rosuvastatin on articular atrophy and expression of IL-6 as well as hs-CRP in ApoE/- mice.

METHODS 30 male ApoE/- mice were randomly divided into model group, interventional group and control group. Model group and interventional group were fed with high-fat diet, while control group were fed with normal diet. ApoE/- mice in experimental group were administered orally with Rosuvastatin, once a day for 13 weeks. All mice were sacrificed when the mice were 18 weeks old, blood was collected and plasma triglyceride (TG), total cholesterol (TC), high density lipoprotein cholesterol (HDL-C), low density lipoprotein cholesterol (LDL-C), IL-6 and hs-CRP were measured. Aortic sections were stained with hematoxylin and eosin (HE) to observe the aortic pathological changes in mice.

RESULTS Rosuvastatin significantly decreased the expression of IL-6 as well as hs-CRP in ApoE/- mice. Rosuvastatin markedly ameliorated the morphology of aortic artery in ApoE/- mice, which were treated with high-fat diet. The expression of IL-6 and hs-CRP were significantly decreased by Rosuvastatin in ApoE/- mice.