the liposome control group RNA interference group proliferation is weak (p<0.05).

**Conclusion**
1. HIF-1a, SDF-1a and VEGF gene expression can be affected by HIF-1a siRNA in MSCs. 2. Hypoxia can make HIF-1a, SDF-1a and VEGF gene expression increased. 3. SDF-1a and VEGF gene expression may be controlled by HIF-1a in MSC. 4. Cell culture medium stimulate SMC proliferation can be reduced by RNA interference.

**e0099**
**BAICALIN PROTECTION RAT CARDIOMYOCYTES FROM ISCHAEMIA-REPERFUSION INJURY AND ANTIARRHYTHMIA VIA INHIBITING L-TYPE CALCIUM CURRENT**

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**Objective**
To investigate baicalin protection rat cardiomyocytes from ischemia-reperfusion injury and antiarrhythmia via blocking ICa-L.

**Methods**
The degree of ischemia-reperfusion injury was assessed by the recovery of LVDP and the magnitude of the reperfusion contracture with using approach of the Langendorff-perfused isolated rat hearts. The effects of baicalin on APs and ouabain-induced DAD and AT were performed on rat papillary muscles by conventional microelectrode technique. ICa-L was recorded via using whole-cell patch-clamp technique in enzymatically dissociated single rat ventricular myocytes.

**Results**
Compared with the pre-ischemic control, baicalin could concentration-dependently improved recovery of LVDP and reduced the level of reperfusion contracture, and occurrence of arrhythmias. Baicalin significantly shortened ADP90, ADP50 and ADP10 in rat papillary muscles. Ouabain could apparently induced the DAD and TA in rat papillary muscles. With administration of baicalin, the electrophysiological parameters of ouabain-induced DAD and TA were markedly inclined to difficult occurrence. It illustrated that baicalin might inhibit influx of ICa-L. Baicalin significantly inhibited ICa,L in a voltage-dependent and concentration-dependent procedure, with an IC50 value of 27.7±1.9 μmol/l (Emax and nH were 115.2±3.3% and 1.07±0.05, respectively). Moreover, baicalin shifted the 1-V curve of ICa-L upwards. According to statistic kinetic data, it was suggested that baicalin especially inhibit the ICa-L by eliciting a negative shift of the steady-state inactivation without affecting the slope factor. To the effect of baicalin on the speed of ICa-L recovery from inactivation, our data indicated that the time courses of recovery were prolonged markedly (p<0.01 compare with control group, respectively).

**Conclusions**
Baicalin improved cardioprotection effects on ischemia-reperfusion injury and decreased the occurrence of ouabain-induced DAD and TA, thus inhibited ICa-L. The effects of baicalin on inhibiting ICa-L might contribute to baicalin antagonising ischemia-reperfusion injury and arrhythmia.

**e0101**
**INTERLEUKIN-17A GENE VARIANTS AND RISK OF CORONARY ARTERY DISEASE: A LARGE ANGIOGRAPHY-BASED STUDY**

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**Objective**
Recent studies have also revealed that interleukin (IL)-17A plays a key role in atherosclerosis and its complication, but the relationship of its common variants with coronary artery disease (CAD) has not been extensively studied.

**Methods**
We systematically screened sequence variations in the IL17A gene and designed an angiography-based case-controlled study consisting of 1031 CAD patients and 935 control subjects to investigate the association between the selected polymorphisms of IL-17A gene and CAD risk in Chinese Han population.

**Results**
Frequencies of IL17A rs8193037 GG homozygote and G allele were significantly higher in the patient group than those in the control group (p<0.001; OR=0.68; 95% C.I. 0.54 to 0.85). Stratification analysis showed that the IL17A rs8193037 G allele significantly increased the risk of CAD only among male subjects (p=0.001; OR=0.63; 95% C.I. 0.47 to 0.83). After adjustment for conventional risk factors, binary logistic regression analysis showed that the GG allele carriers (GG +AG) had significantly increased CAD risk compared with the AA homozygotes (adjusted p<0.001; OR 0.43; 95% CI 0.33 to 0.58). ELISA showed augmented IL17A production in serum of the AMI patients.

**Conclusions**
Based on our data, we speculated that rs8193037 of IL17A is associated with CAD risk in Chinese Han population and G allele of rs8193037 may be an independent predictive factor for CAD.

**e0102**
**EXPRESSION OR SECRETION OF IL-34 AND IL-35 IN THE PERIPHERAL BLOOD MONONUCLEAR CELLS FROM PATIENTS WITH DILATED CARDIOMYOPATHY**

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**Objective**
The aim of this study was to observe the level of interleukin (IL)-34 and IL-35 in peripheral blood mononuclear cells (PBMCs) with dilated cardiomyopathy (DCM), and explore the role of IL-34 and IL-35 in human DCM.

**Methods**
Eighty patients with DCM and 30 normal adults as control were studied. IL-34 and the subunit Epstein-Barr virus-induced gene 3 (EBI3) of IL-35 mRNA expression in PBMCs were detected by reverse transcription–PCR (RT-PCR). IL-34 and IL-35 protein level in plasma were measured by ELISA.

**Result**
(1) Results showed that the IL-34 mRNA level or its protein level was significantly elevated in DCM patients compared with...
THE HINDIII POLYMORPHISM IN THE LIPOPROTEIN LIPASE GENE PREDICTS TYPE 2 DIABETES RISK AMONG CHINESE ADULTS

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Objective To explore whether the HindIII polymorphism in the lipoprotein lipase (LPL) gene has a potential role in susceptibility to type 2 diabetes, and whether this relation is influenced by regulating LPL or other risk factors.

Research design and methods Overall, 654 Han Chinese adults were recruited from a community-based cross-sectional study. Genotyping was performed using the PCR-RFLP technique. Pre-heparin LPL (PrLPL) and other metabolic variables were measured using standard methods.

Results Individuals with the HindIII H/H− genotype tended to have higher PrLPL and lower triglyceride (TG) levels but an unexpected higher prevalence of type 2 diabetes compared with carriers with the H/H+ genotype. The association between the H/H− genotype and diabetes risk remained unchanged across all subgroups of diabetes-related risk factors and PrLPL. In an additive model, the H−/H− genotype conferred 178% increased risk [OR: 2.78; 95% CI 1.04 to 7.47] for diabetes after controlling for age and sex. The strength of this association increased further after adjusting for other traditional risk factors, and for PrLPL (OR = 4.06; 95% CI = 1.35 to 12.23). Furthermore, the H−/H− genotype was also associated with an increased risk of dysglycemia defined as insulin resistance plus diabetes.

Conclusions This study revealed that Chinese adults with the LPL gene HindIII H/H− genotype had a significantly increased risk of type 2 diabetes compared with individuals with other genotypes, even if they had favourable lipid profiles.

IN VITRO BLOCKADE OF OESTROGEN RECEPTOR PROMOTES THE PROLIFERATION OF VASCULAR SMOOTH MUSCLE CELLS

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Background The proliferation of vascular smooth muscle cells (VSMCs) is a key event in the development of atherosclerosis. Oestrogen receptor is expressed in VSMCs. In vivo studies have shown that reduced levels of oestrogen receptor associate with atherosclerosis in females. Accordingly, we performed a series of experiments to test the hypothesis that blocking oestrogen receptor could enhance the proliferation of VSMCs in vitro.

Methods and results IC1182, 780, a pure oestrogen receptor antagonist, has been shown to block oestrogen receptor completely. When VSMCs isolated from rat aorta were cultured in the presence of IC1182, 780, the cellular growth augmented significantly in a dose-dependent manner. An increase in proliferating cell nuclear antigen (PCNA)-positive cells was also observed in VSMCs treated with IC1182, 780. Flow cytometry demonstrated that the S-phase progression of cell cycle in the VSMCs was promoted significantly by IC1182, 780, this effect was associated with an increase in cyclin D1 expression.

Conclusions These findings demonstrate that in vitro blockade of oestrogen receptor promotes the growth of VSMCs, suggesting that oestrogen receptor expressed in arteries acts to inhibit the