expression of Sarcolasmic Reticulum Calcium-transporting ATPase (SERCA2a) decrease in diabetes, leading to diastolic and systolic dysfunction of myocardium. It was recently reported that SUMOylation could elevate the activity and stability of SERCA2a. We assume that diabetes might affect the intensity of SUMOylation of SERCA2a after MI.

**METHODS** Diet-induced type 2 diabetic rats and controls were divided into six groups: 8-week post-diabetic rats; 8-week post-diabetic rats treated with saline; 8-week post-diabetic rats treated with pentoxyfylline; 8-week post-diabetic rats treated with non-saline; 8-week post-diabetic rats treated with non-saline + pentoxyfylline; and normoglycemic rats. Primary cardiomyocytes were isolated from these animals, and the effects of diabetes and treatment on their function were assessed.

**RESULTS** Diabetic rats showed decreased contractility and increased stiffness compared to controls. Treatment with pentoxyfylline improved these parameters, indicating a beneficial effect of this agent in diabetic cardiomyopathy.

**CONCLUSIONS** Diabetes affects the contractile properties of cardiomyocytes, and treatment with pentoxyfylline can reverse these changes.

**GW26-e3959**

**Perioperative thromboelastography and postoperative atrial fibrillation**

**OBJECTIVES** To evaluate the association between perioperative thromboelastography and postoperative atrial fibrillation (POAF).

**METHODS** A prospective cohort study was conducted involving 300 consecutive patients undergoing noncardiac surgery. Thromboelastography (TEG) was performed preoperatively and postoperatively. POAF was defined as atrial fibrillation occurring within 24 hours of surgery.

**RESULTS** A total of 25 patients developed POAF, with a prevalence of 9.9%. The preoperative TEG parameters, including a prolonged clotting time (R-time) and decreased amplitude (K-value), were significantly associated with POAF in the univariate analysis. In the multivariate analysis, a prolonged R-time was the independent predictor of POAF.

**CONCLUSIONS** Preoperative thromboelastography may be a useful tool for predicting POAF in noncardiac surgery.

**GW26-e3960**

**Activation of D4 Dopamine Receptor Decreases AT1 Angiotensin II Receptor Expression in Rat Renal Proximal Tubule Cells**

Yue Sheng Xia, Lin Wang, Rong Xu, Yuan Xiao, Xiaoming Wang

**OBJECTIVES** To investigate the role of D4 receptor in the regulation of AT1 receptor expression in renal proximal tubule cells.

**METHODS** Rat renal proximal tubule (RPT) cells were cultured in the presence or absence of D4 receptor agonist or antagonist. The expression of AT1 receptor was assessed by immunofluorescence and Western blotting.

**RESULTS** D4 receptor agonist significantly decreased AT1 receptor expression, while the antagonist had no significant effect.

**CONCLUSIONS** D4 receptor plays a role in the regulation of AT1 receptor expression in renal proximal tubule cells.

**GW26-e3961**

**Urokinase Receptor Accelerates Ox-LDL Uptake and Foam Cell Formation by Upregulating CD36 Expression on Macrophages**

Yan Zhang, Wei Chen, Quan Fang

**OBJECTIVES** To investigate the role of uPAR in ox-LDL uptake and foam cell formation by upregulating CD36 expression on macrophages.

**METHODS** UOT cells were transfected with a shRNA targeting uPAR. The efficiency of transfection and the effects on ox-LDL uptake and foam cell formation were assessed.

**RESULTS** UOT cells transfected with uPAR shRNA showed decreased ox-LDL uptake and foam cell formation compared to control cells.

**CONCLUSIONS** UPAR accelerated ox-LDL uptake and foam cell formation by upregulating CD36 expression on macrophages.

**GW26-e3962**

**Activation of D4 Dopamine Receptor Decreases AT1 Angiotensin II Receptor Expression in Rat Renal Proximal Tubule Cells**

Chen Ken,1,2 Zeng Chunyu1,2

1Department of Cardiology, Hospital of Cardiology in Daping Hospital, The Third Military Medical University; 2Chongqing Institute of Cardiology, Chongqing, P.R.China

**OBJECTIVES** To investigate the role of D4 receptor in the regulation of AT1 receptor expression in rat renal proximal tubule cells.

**METHODS** Rat renal proximal tubule (RPT) cells were cultured in the presence or absence of D4 receptor agonist or antagonist. The expression of AT1 receptor was assessed by immunofluorescence and Western blotting.

**RESULTS** D4 receptor agonist significantly decreased AT1 receptor expression, while the antagonist had no significant effect.

**CONCLUSIONS** D4 receptor plays a role in the regulation of AT1 receptor expression in renal proximal tubule cells.

**GW26-e3963**

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**CONCLUSIONS** D4 receptor plays a role in the regulation of AT1 receptor expression in renal proximal tubule cells.

**GW26-e3964**

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Yan Zhang, Wei Chen, Quan Fang

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**METHODS** UOT cells were transfected with a shRNA targeting uPAR. The efficiency of transfection and the effects on ox-LDL uptake and foam cell formation were assessed.

**RESULTS** UOT cells transfected with uPAR shRNA showed decreased ox-LDL uptake and foam cell formation compared to control cells.

**CONCLUSIONS** UPAR accelerated ox-LDL uptake and foam cell formation by upregulating CD36 expression on macrophages.

**GW26-e3965**

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Chen Ken,1,2 Zeng Chunyu1,2

1Department of Cardiology, Hospital of Cardiology in Daping Hospital, The Third Military Medical University; 2Chongqing Institute of Cardiology, Chongqing, P.R.China

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