without prolonged DAPT (duration between 6 to 12 months), patients with DAPT > 12 months were older, more often had history of hypertension, diabetes and chronic kidney disease and were more likely to have presented with non-ST-elevated myocardial infarction and left ventricular dysfunction, treated with more drug-eluting stents (DES) with longer stent length and stent size. In multivariable models, variation of centers, age (risk ratio [RR] 1.01, 95% confidence interval [CI] 1.00 to 1.02, p<0.001), history of chronic kidney disease (RR1.73, 95%CI 1.02 to 2.95, p=0.042) and numbers of DES implantation per patient (RR1.14, 95%CI1.02 to 1.28, p=0.021) were independent predictors of extended DAPT beyond 12 months.

CONCLUSIONS Almost half of patients after stent deployment continued DAPT beyond 12 months. Prolonged DAPT was associated with a high incidence of comorbidities and complex intervention as well as significant region variation.

GW26-e0217

A Long Noncoding RNA, AC100865.1, Regulates CAD by Targeting miR-205-5P

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OBJECTIVES Coronary artery diseases (CAD) is one of the most common and serious cardiovascular diseases. Studies have shown that lncRNA closely associated with a number of human diseases, including CAD. However, the potential functional role of lncRNAs in CAD remains unclear. We identified LncRNA-AC100865.1(LncRNA-CAD) and miR-205-5p. Here, we tested the hypothesis that LncRNA-CAD and miR-205-5p can participate in the regulation of CAD in vivo and in vitro.

METHODS A microarray was performed to discovery LncRNA-CAD and miR-205-5p. Then, a real-time fluorescence quantitative PCR was used to verify this results. Luciferase reporter was performed to verify the direct binding site for LncRNA-CAD and miR-205-5p.

RESULTS According to microarray and Q-PCR, compared with controls, LncRNA-CAD and miR-205-5p were significantly upregulated in the plasma of patients with AS. The results from loss and gain function of LncRNA-CAD indicated that LncRNA-CAD could promote the expression of miR-205-5p. And PTEN was identified as a miR-205-5p target gene to mediate the function of miR-205-5p in AS. By knockdown the expression of PTEN in HUVECs, it showed enhanced inflammation responses. Further, we investigated the molecular mechanism by which LncRNA-CAD expression is regulated, Bioinformatics analysis was performed to find LncRNA-CAD and miR-205-5p have potential binding sites and confirmed through luciferase reporter, and found that LncRNA-CAD could directly bind to the promoter of miR-205-5p, and regulate the expression of PTEN in the CAD.

CONCLUSIONS Our study reveals a novel CAD regulating model which is composed of LncRNA-CAD, miR-205-5p and PTEN. Modulation of their levels may provide a new approach for tackling CAD.

GW26-e0269

Incidence Predictors Of Discontinued Dual Antiplatelet Therapy Among Patients After Percutaneous Coronary Intervention

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OBJECTIVES Dual antiplatelet therapy (DAPT) cessation increases the risk of adverse events after percutaneous coronary intervention (PCI). The present study sought to elucidate the frequency and predictors of discontinued DAPT (duration shorter than 6 months) after stent deployment in Chinese population.

METHODS We examined the incidence of discontinued DAPT within 6 months among patients after successful PCI enrolled in a 28-site Chinese registry. Predictors of prolonged DAPT beyond 12 months were evaluated using multivariable cox proportional hazards model.

RESULTS Among 3,102 patients, DAPT cessation was in 6.9% (n=214) within 6 months after PCI procedure. There was a significant heterogeneity of DAPT duration among centers. Compared to those without DAPT discontinuation (duration ≥ 6 months), patients with DAPT discontinued were older, less often had history of hyperlipidemia, and were more likely to have presented with higher incidence of left ventricular dysfunction and lower hemoglobin level, underwent more emergent PCI procedure with increasing number of longer

drug-eluting stents (DES). In multivariable models, variation of centers, history of dyslipidemia (RR 0.68, 95%CI 0.50 to 0.93, p=0.014), hemoglobin level (RR 0.98, 95%CI 0.97 to 0.99, p<0.001) and total amounts of DES deployment (RR0.64, 95%CI 0.54 to 0.76, p<0.001) were independent predictors of DAPT cessation< 6 months.

CONCLUSIONS Only less than 7% of patients discontinued DAPT within 6 months after stent deployment. DAPT cessation was associated with significant region variation, low incidence of comorbidities and less complex intervention.

GW26-e0809

The Relationship between Urokinase-type Plasminogen Activator and Its Receptor and the Stenosis of the Coronary Artery in Patients with Coronary Heart Disease

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OBJECTIVES We investigated the change of u-PA and its receptor in different types of the CHD. With the results of coronary artery angiography, we discussed the relationship between the results of coronary artery angiography and the levels of u-PA, u-PAR, to uncover the clinic role of u-PA, u-PAR in the patients with coronary heart disease.

METHODS We divide all the cases into 4 groups: 30 cases in NCAD group, 20 patients in SA group, 25 patients in UA group, 30 patients in AMI group. In all these groups, we measured the expression of u-PAR on neutrophile with flow cytometry and measured the levels of u-PA in plasma with a solid phase enzyme-linked immuneosorbent assay (ELISA) and analysis the relationship between the results of coronary artery angiography and the levels of u-PA, u-PAR.

RESULTS All the samples taken from the coronary artery in this 4 groups were analyzed. The difference between the expression levels of u-PAR on neutrophile and the plasma levels of u-PA was significant, the AMI group were higher than the UA group[(69.07±5.92)% vs.(51.05±3.15)%, (0.81±0.11) mg/L vs. (0.50±0.05) mg/L, $P<0.001$]; the UA group were higher than the SA group[51.05±3.15% vs. (30.37±4.77)%, (0.50±0.05) mg/L vs. (0.36±0.04) mg/L,$P<0.001$]; but the different between the SA group and the NCAD group was not significant[(30.37±4.77)% vs. (30.02±4.65)%, (0.36±0.04) mg/L vs. (0.30±0.03) mg/L, $P>0.05$]. Compared the samples taken from the peripheral vessel with the samples taken from the coronary artery, the difference between the plasma levels of u-PA and the expression levels of u-PAR on neutrophile was not significant (0.003±0.002, $P>0.05$; -0.12±0.099, $P>0.05$). In the samples taken from the coronary artery, the plasma levels of u-PA and the expression of u-PAR on neutrophile were all significantly related to Jenkins score (r_1=0.943, $P<0.001$; r_2=0.814, $P<0.001$).

CONCLUSIONS We may predict the severity of the pathological change of the coronary artery through measured the levels of u-PA in the plasma or the expressions of u-PAR in neutrophile which taken from the peripheral vessel.

GW26-e1306

Serum bone morphogenetic proteins can predict the coronary artery calcification in the elderly

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OBJECTIVES Coronary artery calcification (CAC) is associated with greater risk of mortality in elderly individuals. Basic researches have indicated that bone morphogenetic proteins (BMPs) might activate coronary artery smooth muscle cell calcification. However, the predictive values of serum BMPs for the progression of CAC remain uncertain. We aimed to assess the values of serum BMP-2, BMP-4 and BMP-7 for predicting the CAC in the elderly.

METHODS The present study was performed in 573 subjects ≥ 65y undergoing 64 or 320-slice coronary computed tomography angiography (CCTA). CAC was evaluated by the Agatston calcium score determined by CCTA. Serum levels of BMP-2, BMP-4 and BMP-7 were measured using the appropriate ELISA kits. Correlations between CAC and BMPs were assessed by Pearson correlation analysis. Multivariate