Method 374 patients with de-novo long coronary arteries lesion who performed 2 Excel or Cypher stents which diameter varied 2.5 mm - 3.5 mm in department of cardiology, general hospital of CAPF were enrolled in from 2006.8 to 2009.3 retrospectively. These patients were divided to two groups by the type of stents implanted: Excel group and Cypher group. The incidence of composite MACE and stent thrombosis during hospitalisation and 12-month clinical follow-up outside hospital after PCI between two groups were compared, follow-up angiography were performed in several patients, and in-stent LLL, in-segment LLL and incidence of restenosis between two groups were compared.

Result Clinical characteristics and characteristics of target lesion were similar between two groups, PCI procedure were similar except the ratio of pre-dilatation between two groups. Incidence of composite MACE during hospitalisation after PCI of Excel group and Cypher group were 5.7% and 6.1%, incidence of composite MACE 12-month clinical follow-up outside hospital were 6.6% and 8.8% respectively, incidence of acute/subacute stent thrombosis defined by ARC of Excel group and Cypher group were 2.8% and 2.5%, incidence of late stent thrombosis were 2.7% and 2.7% respectively, there were no significant differences between two groups; incidence of in-stent restenosis of Excel group and Cypher group follow-up were 6.0% and 9.6%, incidence of in-segment restenosis were 9.5% and 12% respectively, that revealed non-significant differences between two groups; in-segment LLL of Excel group and Cypher group were 0.11±0.06 mm and 0.12±0.08 mm, there were no significant differences between two groups, but in-stent LLL were 0.09±0.05 mm and 0.10±0.05 mm respectively, that showed significant difference between two groups (p=0.037).

Conclusion The safety and efficacy of overlapped Excel stents were similar as overlapped Cypher stents in treatment of long coronary arteries lesion, meanwhile, overlapped Excel stents relieve in-stent LLL than overlapped Cypher stents; LLL of overlapped site was more severe than non-overlapped site, whatever Excel or Cypher stents, but there was no significant difference in ratio of restenosis between overlapped site and any other regions.

**e0507** COMPOSITION OF THE SAFETY AND FEASIBILITY BETWEEN 4F AND 5F CATHETER IN TRANSRADIAL CORONARY ANGIOGRAPHY
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**Objective** To explore the efficacy and feasibility of the transradial approach for diagnostic coronary angiography with 4F and 5F catheter.

**Methods** All patients undergoing a coronary angiogram the first time were eligible to be included in the study. They were randomised to either 4F or 5F catheters. The success rate of angiography, image quality and vascular complications between two groups were compared. Two-dimensional and colour Doppler ultrasound examination was performed on the right radial artery before procedures, 1 day and 4 weeks after procedures, respectively.

**Results** A total of 847 consecutive patients were randomised to 4F catheter group (n=446), including 266 (63.4%) men and 5F universal catheter group (n=401), including 271 (67.6%) men. There were no significant difference between 4F catheter and 5F universal catheter group in success rate of angiography (98.6% vs 97.1%), image quality (2.33±2.1 vs 2.32±2.31 (p=0.05)). Both groups had no death, acute thrombosis and major bleeding. The radial artery spasm and radial artery occlusion was more often on women. Intima-media thickness of radial artery had significantly increased among female patients after procedures.

**Conclusion** With low complication rate and better tolerance, 4F catheter should be selected in the diagnostic coronary angiography by transradial approach, especially for small built female patients.

**e0508** COMPARATIVE ANALYSIS OF DIFFERENT STRATEGY FOR REVASCULARIZATION ON EFFENCY IN OLD WOMAN DIABETIC PATIENTS WITH COMPLEX CORONARY DISEASE
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**Objectives** To evaluate and analysis the clinical efficacy and prognosis of two different strategy of revascularization by percutaneous coronary intervention (PCI) with drug-eluting stent (DES) and coronary artery bypass graft (CABG) in old woman diabetic patients with complex coronary disease.

**Background** Elder, Female and Diabetic is markable risk factor for poor prognosis after PCI and CABG. Which strategy of revascularization (PCI vs CABG) and the influence factor that could promote the choice of strategy for revascularization may be result in better outcome is uncertain in these patients. Further evaluations in adequately data are awaited to confirm the clinical benefit of two strategy.

**Methods** 523 female patients whose age were above 75 years old with DM, multivessel disease underwent PCI (206) or CABG (317) were included studied. The choice of revascularization was dependent on clinical baseline and procedural characteristics of patients and/or physician recommendation. Major adverse cardiac events (MACE) included death, myocardial infarction and repeat coronary revascularization.

**Results** MACE rates at 1 year is equivalent between CABG and PCI (2.1% vs 4.2% (OR 1.8; p>0.5)). There was a similar risk of the combined endpoints of death (1.5% vs 2.8%), myocardial infarction (1.2% vs 1.6%) and cerebrovascular events (1.1% vs 2.5%) at 1 year, but the risk of target vessel revascularisation (TVR) was significantly higher (1.8% vs 7.8%, p<0.01). Compared with PCI patients, the lesions seem more complex, the prevalence of calcified lesions, total occlusion, collateral circulation were higher in CABG patients (p<0.01). The number of the diseased vessels was the only independent predictors of type of revascularization (PCI vs CABG).

**Conclusions** PCI with DES placement was safe compared to CABG as a type of revascularization in elderly female patients with DM and MVD at 1-year. A clinical strategy for revascularization by PCI or CABG should be carefully assessed.

**e0509** EFFENCY OF TRIPTOLOGE-COATED STENT ON PREVENT RESTENOSIS
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**Objective** The aim of this study is to test the efficacy and safety of triptolide-coated stent on anti-inflammatory and inhibiting intimal hyperplasia compared with that of a drug eluting stent and a bare metal stent in a pig after angioplasty.

**Methods** 15 triptolide-coated stents (TCS), 12 drug eluting stent (Cypher select) and 12 bare metal stents (BMS) were deployed with over sizing (stent/artery ratio 1:1.1) in a porcine coronary arteries. Coronary angiography, histopathologic and inflammatory markers levels were carried out and analysed at week 4 after stenting.
Results The distribution of stented vessels, diameter of reference vessels, and post-procedural minimal lumen diameter were compared in each group. At week 4 follow-up, quantify coronary angiography (QCA) showed that the minimal lumen diameter were greater, and percent stenosis and late lumen loss in the triptolide-coated stent group and DES group were less than that of the bare metal stents group. In the histopathologic analysis, compared to BMS group, the injury score, inflammation score in TCS group and DES group were decreased, p<0.05, and there were significant reduced neointimal area and enlarged Lumen area in TCS, DES group as well. Conclusion Triptolide-coated stent showed the similar effect of preventing restenosis through inhibition of neointimal hyperplasia as DES and anti-inflammation acts after coronary angioplasty in pigs.

**e0510** RELATION BETWEEN CLOPIDOGREL RESISTANCE AND INFLAMMATION FACTOR IN PATIENTS UNDER CORONARY STENTING
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Objective To observe the serum levels of inflammatory cytokines in patients with clopidogrel resistance underwent PCI.

Methods Platelet aggregation (PAG) induced with ADP were detected in 593 patients with unstable angina pectoris and had received coronary stenting. All patients were divided into clopidogrel resistance (CLR) group (n=335) and normal response group (n=260) according to PAG. At the same time, peripheral blood sample of all the patients were taken before, 24 h, 1 week and 1 month after implanting stents. The levels of C-reactive protein (CRP), P-selection and soluble fragment of CD40 ligand (sCD40L) in these patients were detected by enzyme linked immunosorbent assay.

Results The incidence of clopidogrel resistance in 24 h, 1 week and 1 month after PCI was 35.5%, 26.9% and 19.3%. The levels of CRP (3.8±2.5 mg/dl at 24 h, 5.3±2.5 mg/dl at 1 week), P-selection (73.8±34 ng/ml at 24 h, 70.5±31.6 ng/ml at 1 week and 66.4±22.3 ng/ml at 1 month) and sCD40L (7.7±2.5 ng/ml at 24 h) had significant difference compared with the levels before and normal group (p<0.05). The CLR at 30 days after stent implantation was significantly correlated with the level of P-selection (r=1.334) and smoking (r=1.053).

Conclusion The levels of CRP, P-selection and sCD40L of in some patient after undergoing coronary stenting increased and may correlated with clopidogrel resistance. The levels of P-selection and smoking were the predictor for clopidogrel resistance.

**e0512** IMPACT OF SMOKING-CESSATION ON PLATELET INHIBITION OF CLOPIDOGREL IN PATIENTS UNDERGOING ELECTIVE CORONARY DRUG-ELUTING STENT IMPLANTATION
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Objective Cigarette smoking, as an inducer of CYP1A2 and increase the CYP1A2 activity, might enhance the generation of the active metabolite of clopidogrel. The study aimed to examine the impact of smoking cessation on platelet inhibition of clopidogrel.

Method Current smoking patients undergoing elective coronary stent implantation were enrolled. Every patient was aggressively advised to quit smoking at admission. All the patients were given loading dose of 300 mg clopidogrel and 300 mg aspirin and daily maintenance dose of 75 mg clopidogrel in addition to 100 mg aspirin. Blood samples were collected before and 24 h after clopidogrel loading and pre-discharge. Platelet aggregation was determined by conventional light transmittance aggregometry after stimulation with 5 mmol/L ADP.

Results 224 male smoking patients were enrolled in our study. During staying in hospital, 157 patients gave up smoking and 67 still kept smoking. Before loading, the maximal platelet aggregation (MPA) was not significantly different between non-smokers and smokers (56.4±12.5% and 58.2±15.8%, p=0.557). However, MPA after clopidogrel loading (42.3±11.5% and 38.6±14.8%, p=0.033) and pre-discharge (40.2±10.5% and 36.5±12.2%, p=0.041) showed significant difference between two groups.

Conclusion Smoking cessation might weaken inhibition effect of clopidogrel on platelet aggregation for smokers.

**e0513** PLASMA NGAL COULD EARLY PREDICT CONTRAST-INDUCED ACUTE KIDNEY INJURY AFTER PERCUTANEOUS CORONARY INTERVENTIONS
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Objective To examine the changing trend of plasma Neutrophil gelatinase-associated lipocalin (NGAL) after contrast exposure and to elucidate whether NGAL was good early biomarker for diagnosis of contrast induced acute kidney injury (CIAKI).

Method 251 patients undergoing percutaneous coronary intervention were enrolled. Blood samples were collected before and 2, 4, 8, 24, and 48 h after procedure. NGAL was measured with ELISA kit. CIAKI was defined as an increase in the serum creatinine values of ≥25% or ≥44.2 μmol/L. Receiver-operating characteristic (ROC)