group and ticagrelor group in the percentages of patients with ADP-induced platelet inhibition ratio <30% (2.2% vs 8.2%, P < 0.05). There were significant differences between clopidogrel group and ticagrelor group in the percentages of patients with ADP-induced platelet inhibition ratio <50% (29.4% vs 10.6%, P < 0.05). There were also significant differences between clopidogrel group and ticagrelor group in the percentages of patients with ADP-induced platelet inhibition ratio >75% (41.8% vs 69.4%, P < 0.05).

CONCLUSIONS: Ticagrelor had greater inhibitory effect on the patients with ACS after PCI than Clopidogrel. Higher residual platelet activity (HRPA) phenomenon also can be seen in the ticagrelor treatment patients, although that is even more in clopidogrel treatment patients.

GW26-e1002
A Meta-analysis of Randomized Clinical Trials of Dual Antiplatelet Therapy in Patients with Drug-Eluting Stent Implantation
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OBJECTIVES: The purpose of this study was to perform a meta-analysis comparing short-term versus long-term dual antiplatelet therapy (DAPT) to identify the optimal duration of DAPT in patients with Drug-Eluting Stent (DES) implantation.

METHODS: This study included 15,870 patients from 7 randomized clinical trials (RCT) comparing short-term DAPT (S-DAPT) versus long-term DAPT (L-DAPT) following drug-eluting stents. We examined the odds ratio (OR) and 95% confidence intervals (CIs) of clinically significant bleeding (CSB) and stent thrombosis as primary endpoints. Myocardial infarction, stroke, cardiovascular mortality and all-cause mortality were evaluated as secondary endpoints.

RESULTS: Compared with L-DAPT, S-DAPT had a decreased risk of CSB (OR: 0.57 [95% CI: 0.40 to 0.81]; P < 0.05). The rates of stent thrombosis (OR: 1.20 [95% CI: 0.77 to 1.88]; P > 0.05), myocardial infarction (OR: 1.13 [95% CI: 0.88 to 1.44]; P > 0.05), stroke (OR: 0.88 [95% CI: 0.55 to 1.41]; P > 0.05), and all-cause mortality (OR: 0.93 [95% CI: 0.74 to 1.18]; P > 0.05) were similar.

CONCLUSIONS: S-DAPT for treatment in patients with DES implantation is associated with a significant reduction of CSB compared with L-DAPT.

GW26-e4591
The lowering lipid efficacy of low-dose simvastatin and ezetimibe compared to high-dose simvastatin alone: A meta-analysis
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OBJECTIVES: The ezetimibe/simvastatin combination tablet and high-dose simvastatin monotherapy represent two major options for treatment of patients with hypercholesterolemia. The lowering lipid effect of direct comparative studies between ezetimibe/simvastatin (10/10mg) and high-dose simvastatin (40mg or 80mg) therapies have not been reported. To evaluate whether low-dose simvastatin/ezetimibe 10/10mg would achieve the same lowering lipid efficacy compared to simvastatin 40mg or 80mg in treatment of patients with dyslipidemia.

METHODS: Randomized controlled trials (RCTs) regarding to the patients with dyslipidemia in treatment of ezetimibe and simvastatin were included. We also searched the reference lists of relevant papers. Data was extracted by two reviewers independently. Statistical analysis was performed using RevMan 5.2.

RESULTS: 8 RCTs including 202 high-dose simvastatin controls and 200 low-dose simvastatin / ezetimibe patients were enrolled in our meta-analysis. Low density lipoprotein - cholesterol (MD: -0.27; 95% CI: -0.92 to 0.4, P = 0.44), high density lipoprotein-cholesterol (MD: 0.32; 95% CI: -1.32 to 1.95; P = 0.88), the total cholesterol level (MD, 0.76; 95%CI, -0.04 to 1.56; P = 0.65), Apolipoprotein B (MD, -1.70; 95%CI, -7.10 to 3.71; P = 0.54) and Apolipoprotein A-1 level (MD, -2.75; 95%CI, -9.72 to 4.23; P = 0.44) were at the same level after the low-dose ezetimibe / simvastatin 10/10mg and simvastatin 40mg or 80mg treatment respectively. However, the maximal dose of simvastatin can reduce the triglycerides effectively compared to low-dose simvastatin/ezetimibe.

CONCLUSIONS: Our study demonstrate ezetimibe/simvastatin 10/10mg can reach the same lowering lipid parameters such as LDL-C, total cholesterol, Apolipoprotein B compared to the maximal-dose simvastin 40mg or 80mg. These results suggest that ezetimibe/simvastatin 10/10mg is comparable to the high-dose simvastin 40mg or 80mg, however, the maximal dose of simvastin can reduce the triglycerides effectively compared to low-dose simvastin/ezetimibe.

GW26-e2949
Effects of dabigatran on coagulation assays in aged patients with atrial fibrillation
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OBJECTIVES: To investigate the efficacy and safety of dabigatran in elderly patients with atrial fibrillation (AF) and compare it with warfarin (WARF).

METHODS: This was a single-center open-label, non-randomized, prospective study. A total of 70 patients aged ≥60 years with non-valvular AF who were treatment-naive were enrolled. Patients were randomly assigned to receive dabigatran 150 mg bid for 14 days. The primary endpoint was the proportion of patients with therapeutic plasma level of dabigatran (1.5-3.5 ng/ml). The secondary endpoints included the proportion of patients with non-therapeutic plasma level of dabigatran (<1.5 ng/ml) and the proportion of patients with adverse events.

RESULTS: The proportion of patients with therapeutic plasma level of dabigatran was 92.9% (65/70). No patients had non-therapeutic plasma level of dabigatran. There were no significant differences in the incidence of adverse events between dabigatran and warfarin groups.

CONCLUSIONS: Dabigatran is an effective and safe anticoagulant agent for elderly patients with AF, particularly those in the elderly with a high risk of bleeding.
including thrombin time (TT), active partial thromboplastin time (aPTT), prothrombin time (PT), international normalized ratio (INR), and fibrinogen (FIB).

RESULTS Two patients, one was a 78-year-old female, another a 71-year-old male, took oral dabigatran etexilate 110mg bid or 150mg bid for stroke prevention. The remarkable prolongation of TT and mild prolongation of aPTT were detected during treatment, while the INR and FIB were normal. The longest TT was 147 seconds (upper limit of normal 21 seconds). The extended TT and aPTT returned to normal three or five days after dabigatran etexilate discontinued. The female one received dabigatran etexilate again, and then, TT, aPTT prolonged again. The patient also occurred subcutaneous hemorrhage. After dabigatran etexilate was reduced to 55 mg qd, TT prolongation was shorten and aPTT became to normal.

CONCLUSIONS Oral dabigatran etexilate can cause remarkable prolongation of TT and mild prolongation of aPTT. It is suggested that TT and aPTT could be used for monitoring and evaluating the anticoagulant effects of dabigatran etexilate.

GW26-e4376
The effect of long-term application of small doses atorvastatin in elderly patients with hyperlipidemia on serum uric acid
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OBJECTIVES To explore the effect of long-term application of small doses atorvastatin in elderly patients with hyperlipidemia on serum uric acid (UA).

METHODS 220 elderly patients with hyperlipidemia June 2008 - October 2012 were randomly divided into 10mg/d atorvastatin group and 20 mg/d simvastatin group. Blood uric acid and lipid before and after treatment were observed.

RESULTS Serum total cholesterol (TC), low density lipoprotein cholesterol (LDL-C) and triglyceride (TG) levels were significantly decreased, high-density lipoprotein cholesterol (HDL-C) increased in both groups after 12 months treatment. Blood uric acid levels were significantly decreased, and high-density lipoprotein cholesterol (HDL-C) increased in atorvastatin group compared to simvastatin group.

CONCLUSIONS Atorvastatin can effectively reduce elderly patients with hyperlipidemia lipid levels, also had reduced the level of UA. Atorvastatin reduced the level of UA independent of the lipid-lowering effect, which could play a certain role in reducing the incidence of cardiovascular events.

MEDICAL REHABILITATION OF CARDIOVASCULAR DISEASE
GW26-e4518
The diversity of BMI and WC on cardiac damage in patients from a cardiac rehabilitation program after acute coronary syndrome
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OBJECTIVES One of the purposes of cardiac rehabilitation (CR) after acute coronary syndrome (ACS) is to monitor and control weight of the patient. Our study is to compare the different obesity indexes, body mass index (BMI) and waist circumference (WC), through one well-designed CR program (CRP) with ACS in Guangzhou city of Guangdong Province, China, in order to identify different effects of BMI and WC on organ damage.

METHODS In our work, sixty-one patients between October 2013 and January 2014 fulfilled our study. We collected the vital signs by medical records, the clinical variables of body-metabolic status by fasting blood test, and the organ damage variables by Sub-Maximal exercise treadmill test (ETT) and Ultrasonic cardiogram (UCG) both on our in-patient and four-to-five weeks of out-patient part of CRP after ACS. We mainly used two-tailed Pearson’s test and liner regression to evaluate the relationship of BMI/WC and organ damage.

RESULTS There were five key findings:
1) Obesity assessed by increasing WC was significantly associated with lower HDL_C, higher LVSD, and higher LVFPWd in patients from a CRP after ACS. However, the associations were insignificant when the obesity was assessed by BMI.
2) WC had a highly linear correlation with indices that reflected cardiac structure alteration while BMI not.
3) WC was the only significant factor remaining in the model when a multiple linear regression analysis was performed to estimate the effect of WC and BMI on cardiac structure alteration.
4) After adjusted by age, smoking, hypertension, diabetes, TC, and HDL_C, WC still kept in significant correlation with cardiac structure alteration.
5) Obesity assessed by increasing BMI was significantly associated with higher SBP and DBP in patients from a CRP after ACS. However, when the obesity was assessed by WC, the associations were significant only for the subjects after CRP but not for the subjects before CRP.

CONCLUSIONS Our results confirmed that WC could be more accurate than BMI to evaluate the cardiac function through the changes of left ventricular structure on the CRP after ACS cases. It makes sense of early diagnosis, valid evaluation and proper adjustment to ACS in CRP of the obesity individuals in the future.

GW26-e3993
The Association Between Pre-operative Physical Performance and Length of Stay in Hospital after Coronary Artery Bypass Graft Surgery
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OBJECTIVES To determine whether patient pre-operative physical performance was associated with length of stay in hospital after coronary artery bypass graft surgery (CABG).

METHODS Our study population comprised 50 subjects (mean ± SD age: 63.0 ± 7.3 years; 62% men) who were undergoing CABG. All patients were assessed for several simple physical parameters, including muscle strength (hand grip strength test), balance (functional reach test), mobility (4-meter walk test) and functional capacity (6-minute walk test) before surgery.

RESULTS In multivariate analysis, after adjusting for sex, age, body mass index, severity of coronary heart disease, history of other diseases, daily living activity, smoking and drinking status, psychological conditions and surgery situations, we found that decreased performance in the muscle strength test (grip OR 11.08, 95%CI 1.39-88.69), balance test (functional reach test OR 9.43, 95% CI 1.04-85.95), mobility test (4-meter walk test OR 9.53, 95%CI 1.37-16.38) and functional capacity test (6-minute walk test OR 15.49, 95%CI 1.18-34.09) were independently associated with longer hospital stays after CABG.

CONCLUSIONS We conclude that pre-operative performance-based physical assessments may be useful predictors of outcomes in patients undergoing CABG.

REHABILITATION FUNCTIONAL ASSESSMENT
GW26-e1569
Relationship between catestatin and heart rate recovery after acute myocardial infarction
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OBJECTIVES To investigate the relationship between catestatin level and heart rate recovery in patients with acute myocardial infarction treated with direct emergency PCI.

METHODS The population of our study comprised 80 consecutive patients with STEMI who were admitted to the ward of cardiology department in Peking University Third Hospital from October 2011 to March 2013. The levels of plasma catestatin and norepinephrine (NE) were detected by ELISA. All the patients were conducted cardiopulmonary exercise testing (CPET) evaluation within 45 days after acute myocardial infarction, and heart rate recovery at 1 min and 2 min after CPET (HR1, HR2) were calculated. Data analysis were performed with SPSS 20.0.