(2) RDW was closely related with Gemini score. Patients with more severe coronary artery disease had higher level of RDW. (3) RDW was relevant to the incidence of long-term adverse cardiovascular events in ACS patients. RDW might be one of the predictors for long-term adverse cardiovascular events in patients with ACS. (4) RDW was significantly correlated with WBC, hs-CRP, N-terminal proBNP and LVEF. High levels of RDW in ACS patients might be correlated with inflammatory reaction and downgrade of cardiac function level.

GW25-e5136
Comparison of continuous platelet count method PL-11 with VASP for monitoring the platelet aggregation function
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Objectives: To evaluate the clinical application value of platelet analyzer PL-11.

Methods: This study included 69 patients with non-ST-elevation acute coronary syndrome (NSTE-ACS) requiring selective percutaneous coronary intervention (PCI). Blood samples obtained at 6–12 hours after a 600mg loading dose of clopidogrel were aspirated using continuous platelet count with PL-11 [adenosine diphosphate (ADP) as the agonist] and vasodilator stimulated phosphoprotein (VASP) assay. The results were described as maximal aggregation ratio (MAR) and platelet reactivity index (PRI) respectively. A PRI ≥ 50% was defined as high platelet reactivity (HPR). The platelet function of patients with HPR were detected respectively by the above two methods in 3 days and 7 days after antiplatelet drug maintenance treatment.

Results: There was a strong correlation between PL-MAR and VASP-PRI (Pearson r = 0.77, P < 0.001). The receiver-operator characteristic curve (ROC) analysis showed that the optimal cut-off point of MAR to distinguish between VASP-defined normal and HPR was 38%. The area under the curve (AUC) was 0.94 (P < 0.001, 95% CI: 0.84–0.97). The sensitivity and specificity of PL-11 to detect HPR were 93.5%, 76.3%. There were good consistencies among the PL-11 and VASP assay in classifying patients to normal and HPR categories (after 600mg clopidogrel: Kappa = 0.48, P < 0.001, after 3 days therapy: Kappa = 0.73, P < 0.01; after 7 days therapy: Kappa = 0.70, P < 0.01).

Conclusions: Good correlations and consistencies among PL-11 and VASP assay suggested the ability of PL-11 to detect the platelet aggregation function. Further randomized studies are required to confirm the cut-off value of HPR detected by PL-11.

GW25-e5175
Point-of-care sensitive cardiac troponin I in the rapid triage of chest pain patients in emergency department
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Objectives: To evaluate the clinical effectiveness of point-of-care sensitive cardiac troponin I (POC-Ctnl) in emergency department setting amongst acute chest pain patients admitted as suspected of AMI.

Methods: 220 participants who suspected with NSTEMI were recruited consecutively in emergency department setting amongst acute chest pain patients admitted as suspected of AMI. This assay could especially increase the rate of diagnosis amongst low-risk patients, while not increasing the occurrence of MACE at 90 days follow-up.

GW25-e1483
Combining fragmented QRS and TIMI score for predicting in-hospital short-term prognosis after acute myocardial infarction
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Objectives: To investigate the joint effect of QRS and TIMI risk score on predicting short-term prognostic in patients with acute myocardial infarction.

Methods: 300 patients with AMI were conducted with retrospective analysis on patients’ clinical data in order to assess the relationship between QRS and TIMI risk score and prognosis.

Results: (1) The fragmentation of QRS with TIMI risk score would provide more sensitive and specific prediction of prognosis for AMI patients. In patients of positive QRS, whose TIMI score ≥ 4 but without PCI intervention had elevated LVESD and mortality rates (P = 0.046, 0.009). In the group with TIMI score < 4 and without PCI intervention treatment, these patients showed 3x and 3.5x the rates of malignant cardiac arrhythmia and mortality, respectively, when compared to the intervention group (P-values as 0.012 and 0.004).

Conclusions: (1) QRS with TIMI risk score could increase the sensitivity and the specificity for prognosis evaluating for AMI patients. Patients of AMI with positive QRS, who underwent early revascularization, could lower the incidence rate of cardiovascular event. And, the presence of QRS could be used as an indication of early intervention treatment for patients with TIMI score < 4.

GW25-e2312
A preliminary study of serum CA125 levels, mechanism and clinical significance in patients with acute myocardial infarction
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Objectives: 1 To explore the changes of serum CA125, mechanism and clinical significance in patients after AMI, and according to its fluctuation we shall assess the condition and guide the treatment of HF after AMI. 2. It’s better to comprehend the pathophysiology of the HF after AMI from fluid overload of the systemic and pulmonary circulation.

Methods: 88 cases with AMI was study group, and 30 PSVT cases with normal cardiac function was control group. AMI patients did physical examination to distinguish kllip classifications immediately at admission respectively. Venous blood samples were taken at admission and after 4 hours from the first taken to check the serum CA125. All patients measured the hs-CRP, BNP and echocardiography at least once. There were 10 patients in critical condition and lined the deep venous catheter to monitor CVP to guide therapy in AMI group. We define ΔCA125 as which CA125 divided by CA125 at early AMI (myocardial infarction in 24 hours to complete the first CA125 check).

Results: 1. CA125, ΔCA125 and BNP are closely related to kllip classifications: 2. CA125 after 48 hours with EF less than 50% and kllip classification more than II, III, ivf the AUC respectively was 0.898, 0.877, 0.898, 0.797, its moderate diagnosis cut-off point were more than 9.82, 9.79, 9.82, 15.0 U / mL; 3. ΔCA125 with EF less than 50% and kllip classification more than II, III, ivf the AUC was 0.818, 0.930, 0.958, 0.900, its better diagnostic cut-off point is more than 2.75, 3.06, 7.71, 8.85 in turn; 5. Accuracy that ΔCA125 identify kllip classifications is better than the other; 6. CA125 is related to hs-CRP, BNP. EF (R = 0.435, 0.660, 0.677, P < 0.001). ΔCA125 is relation to hs-CRP, BNP. EF (R = 0.524, 0.559, -0.623, P < 0.001).

Conclusions: 1 CA125 and ΔCA125 depend on cardiac function and the time of post-AMI; 2. when CA125 more than 8.92, 7.99, 8.92, 15.0 U / mL, it suggest that EF are less than 50% and kllip classifications are more than II, III, iv in turn; 3. when ΔCA125 more than 2.75 , 3.06, 7.71, 8.85, it suggest that patients EF less than 50% and kllip classifications are more than II, III, iv in turn; 4 The increased serum CA125 values may be related to fluid overload and inflammatory.6. Necrosis myocardial cells don’t elevate serum CA125; 7 The increased CVP and PCWP may be related to the serum CA125; 8 Accuracy that ΔCA125 values identify different kllip classifications is better than the other.

GW25-e4292
Effect of Rosuvastatin on Atherosclerosis Plaque Biomarkers Patients with Metabolic Syndrome Using Multiple Tracking Techniques
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Objectives: To assess the changes of the velocity, strain and strain rate on carotid atherosclerosis plaque biomarkers before and after treatment of rosuvastatin for 6 months.

Methods: 96 patients with metabolic syndrome according to the results of according to the diagnostic standard of IDF underwent the high frequency ultrasound scanning two carotid arteries in this study. Detected carotid artery intima media thickness.