

serum albumin level and lymphocyte count, is an independent prognostic factor for mortality in CABG patients.

### 3270 Prognostic evaluation of elevation of cardiac biomarkers after myocardial revascularization. Long-term follow-up of MASS-V trial

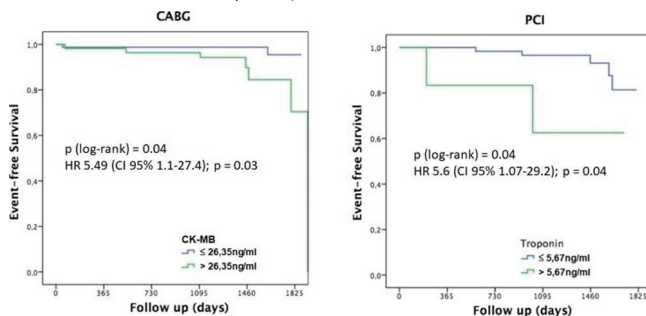
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**Introduction:** Release of creatine kinase (CK-MB) and high-sensitivity cardiac troponin (hs-cTn) is common after revascularization procedures and represents myocardial injury. On the other hand, the correlation between release of cardiac biomarkers and prognostic impact in a long-term follow-up is controversial.

**Purpose:** To evaluate prognostic utility of elevation of myocardial necrosis biomarkers in a long-term follow-up.

**Methods:** Patients with stable multivessel coronary disease who underwent percutaneous or surgical revascularization were included. Cardiac biomarkers were collected before and after procedures. The primary outcome was a composite of death, nonfatal myocardial infarction, additional revascularization, or hospitalization for cardiac cause.

**Results:** In a median follow-up of 4 years, 202 patients were followed, of whom 136 (67.3%) underwent coronary artery bypass grafting (CABG) and 66 (32.7%) underwent percutaneous coronary intervention (PCI). Fifty-nine (29.2%) and 47 (23.2%) patients had a peak of CK-MB ( $>26.35$  ng/ml) and a peak of hs-cTn ( $>5.67$  ng/ml). During follow-up, primary outcome was documented in 16 patients (7.9%). In CABG patients, CK-MB elevation above 26.35 ng/ml was associated with an increased risk of primary outcome (p log-rank 0.04; HR 5.49, 95% CI: 1.1–27.44;  $p=0.03$ ). In percutaneous group, release of troponin above 5.67 ng/ml was also associated with a higher risk of primary outcome (p log-rank 0.04, HR 5.6, 95% CI: 1.07–29.2;  $p=0.04$ ).



**Conclusion:** In this sample, release of cardiac biomarkers after myocardial revascularization procedures was a predictor of cardiovascular events.

### 3271 Role of a rapid point-of-care platelet function test on bleeding risk prediction in patients undergoing coronary artery bypass grafting surgery

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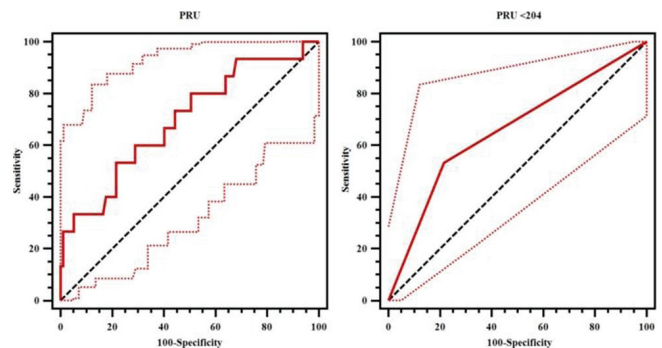
**Background:** A substantial proportion of patients treated with dual antiplatelet therapy undergo coronary artery bypass grafting (CABG) surgery. Given the increased risk of surgical bleeding, the current recommendation is to discontinue

the P2Y12 inhibitor before going to the operation room, which ranges from 3 to 7 days depending on the antiplatelet used. However, the interindividual variability in antiplatelet effects of P2Y12 receptor inhibitors may be related to bleeding risk in this population.

**Purpose:** We aimed to analyze the role of platelet function as assessed by VerifyNow (VN)-P2Y12 system in bleeding risk prediction during CABG surgery.

**Methods:** This is a prospective, observational study in which coronary artery disease patients who have been accepted for CABG surgery were recruited. All of them were on aspirin and P2Y12 receptor inhibitor therapy at screening time. The discontinuation period for the P2Y12 receptor inhibitor was at the referring physician discretion. A fasting blood sample was drawn the morning of the surgery. Bleeding events were recorded in the intensive care period. Major bleeding events were defined as the composite of chest tube output  $\geq 1$ L in 24-h, reoperation for the purpose of controlling bleeding, transfusion of  $\geq 5$  units of whole blood or packed red blood cells, transfusion of  $\geq 2$  units of platelets, or hemoglobin drop  $\geq 5$  g/dL within 48-h. Platelet function was assessed by VN-P2Y12 system.

**Results:** We included 112 patients undergoing CABG (93 under clopidogrel and 19 under ticagrelor therapy). The median P2Y12 receptor inhibitor discontinuation time was 5 (IQR 4–8) days. 47 (42.3%) patients underwent in-pump coronary bypass, and 82 (73.2%) patients received  $\geq 2$  grafts. Major bleeding events were suffered by 15 (13.6%) patients. There was no difference in discontinuation time between those with and without major bleeding events (6 [IQR 5–11] vs. 5 [IQR 4–8] days;  $p=0.502$ ). However, there was lower platelet reactivity in patients with major bleeding than without (PRU:  $201.2 \pm 78.8$  vs.  $245.3 \pm 53.6$ ;  $p=0.008$ ). C-index for major bleeding was 0.700 (95% CI 0.601–0.779;  $p=0.013$ ) using PRU VN-P2Y12 as continuous variable. The Youden test showed the cut-off point of PRU  $<204$  as the best combination of sensitivity (66.7%) and specificity (60.0%). When we tested the predictive performance of PRU as categorical ( $<204$ ), this still demonstrated a c-index of 0.658 (95% CI 0.536–0.745;  $p=0.023$ ) (Figure). High bleeding risk patients (defined as PRU  $<204$ ) showed higher rate of major bleeding in comparison with low-risk patients (27.6% vs. 8.4%;  $p=0.009$ ). Indeed, patients with PRU  $<204$  had a significantly higher risk for major bleeding (OR 4.14, 95% CI 1.35–12.72).



ROC curves for PRU

**Conclusion:** A point-of-care platelet function test could predict the occurrence of major bleeding in patients exposed to P2Y12 receptor inhibitors undergoing CABG surgery.

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### 3272 Preoperatively continued aspirin in elective isolated coronary-artery bypass grafting: a single institutional propensity score matched study

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**Background:** The 2017 ESC focused update on dual antiplatelet therapy in coronary artery disease recommends continued aspirin preoperatively for non-emergent cardiac surgery (Class I, Level C), however, whether patients received elective coronary-artery bypass grafting (CABG) could exactly benefit from this strategy remains unclear.

**Purpose:** To investigate the efficacy and safety of continued aspirin for patients received elective isolated CABG.

**Methods:** We retrospectively reviewed data from 6024 consecutive patients who underwent isolated elective CABG in our single institution from January 2013 to March 2017, multivariate analysis and propensity score matching were used to obtain risk-adjusted outcome comparisons between patients received continued (n=1239) and discontinued (n=1239) aspirin preoperatively. Continued aspirin was defined as aspirin prescription less than five days before CABG procedure according to the pharmacokinetics of enteric coated aspirin, and the primary outcome was a composite of in-hospital all-cause mortality, postoperative myocardial infarction, re-exploration, new-onset stroke, renal failure and perioperative blood transfusion.

**Results:** Propensity score matching created 1239 matching sets. The median age is 62 years old (interquartile range (IQR) 55–67), 78% patients were male,