



Acute and Stable Ischemic Heart Disease

PROGNOSTIC VALUE OF SOLUBLE ST2 IN PATIENTS WITH ST-SEGMENT ELEVATION MYOCARDIAL INFARCTION UNDERGOING PRIMARY PERCUTANEOUS CORONARY INTERVENTION

Poster Contributions
Poster Hall, Hall C
Friday, March 17, 2017, 3:45 p.m.-4:30 p.m.

Session Title: Coronary Angiography, Intra-Vascular Imaging, Revascularization and Outcomes
Abstract Category: 2. Acute and Stable Ischemic Heart Disease: Clinical
Presentation Number: 1166-342

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Background: Soluble ST2 has shown to be an independent predictor for adverse outcome in heart failure. We evaluated the prognostic value of soluble ST2 in ST-segment elevation myocardial infarction (STEMI) patients undergoing primary percutaneous coronary intervention (PCI).

Methods: A total of 323 patients with STEMI undergoing primary PCI were enrolled and divided into two groups based on the median level of ST-2 measured at the time of presentation: the high ST2 group (ST2 \geq 327 pg/mL, n=162) and the low ST2 group (ST2 <327 pg/mL, n=161). The primary endpoint was 1-year major adverse cardiovascular and cerebrovascular events (MACCE), defined as the composite of all-cause death, non-fatal MI, non-fatal stroke, and ischemia-driven revascularization.

Results: Demographic, echocardiographic and angiographic characteristics were similar between the high and low ST2 groups. The cumulative incidence of MACCE at 1 year was significantly higher in the high ST2 group than in the low ST2 group (15.4% vs. 8.1%, P=0.044, Figure). By multivariate Cox regression analysis adjusting for age, sex, diabetes and blood test measured at the time of presentation including troponin I, hsCRP, NT-proBNP and hepatic transaminase, the high ST2 level was independently associated with 1-year MACCE (adjusted hazard ratio 2.15, 95% CI 1.02-4.54, p=0.044).

Conclusions: The level of ST2 measured at the time of presentation can be a powerful, independent predictor of 1-year adverse clinical outcomes in patients with STEMI.

