

E235 JACC March 12, 2013 Volume 61, Issue 10



THE PROGNOSTIC VALUE OF ABSOLUTE AND RELATIVE CHANGES IN CARDIAC TROPONIN CONCENTRATIONS AMONG NON-ACUTE MYOCARDIAL INFARCTION PATIENTS

Poster Contributions Poster Sessions, Expo North Monday, March 11, 2013, 9:45 a.m.-10:30 a.m.

Session Title: Cardiac Biomarkers and Cardiovascular Risk Abstract Category: 1. Acute Coronary Syndromes: Clinical Presentation Number: 1303-208

Authors: Affan Irfan, Tobias Reichlin, Raphael Twerenbold, Karin Wildi, Christian Mueller, University Hospital Basel, Basel, Switzerland

Background: It is unknown whether high sensitive cardiac troponin (hs cTn) at baseline and early changes carry long term mortality prognosis among chest pain patients presenting to emergency department, diagnosed with non acute myocardial infarction (AMI).

Methods: In a prospective, international multicenter study, hs cTn was measured with three assays (hs cTnT, Roche Diagnostics; hs cTnI, Beckman Coulter; hs cTnI Siemens) at presentation and after 1 and 2 hours in unselected patients with suspected AMI. Associations of all cause mortality were assessed by Cox regression. The median follow up period was 494 days. 198 patients (16%) were adjudicated by two independent cardiologists to have AMI.

Results: 42 (4 %) died in the follow up period. The baseline values of all three assays were associated with increased mortality (p<0.001). However the absolute and relative changes, of all three assays, did not achieve significant association with mortality. However, when the changes of all three assays were divided into tertiles, increased mortality was observed in patients with higher absolute changes and lower relative changes. Interestingly, higher absolute changes and lower relative changes were also observed with increasing baseline troponin values.

Conclusion: In all patients diagnosed with nonacute myocardial infarction cause of chest pain, early changes in troponin concentrations as measured by high sensitive assays, do not seem to provide any additional prognostic value.

