

## PROGNOSTIC VALUE OF CARDIAC TROPONIN-I OR TROPONIN-T ELEVATION FOLLOWING ELECTIVE PERCUTANEOUS CORONARY INTERVENTION: A META-ANALYSIS

i2 Poster Contributions

Ernest N. Morial Convention Center, Hall F  
Monday, April 04, 2011, 3:30 p.m.-4:45 p.m.

Session Title: Outcomes/Operator Volume/Public Reporting/Guidelines  
Abstract Category: 4. Outcomes/Operator Volume/Public Reporting/Misc. Topics/Guidelines  
Session-Poster Board Number: 2515-565

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**Background:** Recent studies have provided conflicting data in regard to predictive value of cardiac troponin-T (cTnT) and troponin-I (cTnI) elevation after elective PCI. The aim of this meta-analysis was to assess the prevalence and prognostic value regarding mortality of cTnT or cTnI elevations after elective PCI.

**Methods:** Electronic and manual searches were conducted of all published studies reporting on the prognostic impact of cTnT or cTnI elevation after elective PCI. A meta-analysis was performed with all-cause mortality at follow-up as the primary endpoint.

**Results:** We identified 22 studies, involving 22,353 patients, published between 1998 and 2009. Post-procedural cTnT and cTnI were elevated in 25.9% and 34.3% of patients, respectively. Follow-up period ranged from 3 to 67 months (mean  $17.7 \pm 14.9$  months). The results showed no heterogeneity among the trials (Q-test: 25.39; I<sup>2</sup>: 0%;  $p=0.23$ ). No publication bias was detected (Egger's test:  $p=0.16$ ). The long-term all-cause mortality in patients with cTnI or cTnT elevation after PCI (5.8%) was significantly higher when compared to patients without cTnI or cTnT elevation (4.4%); OR 1.45 (95% CI 1.22-1.72),  $p=0.01$  (Figure).

**Conclusions:** The current meta-analysis indicates that cTnI or cTnT elevation after elective PCI is indicative of an increase in long-term all-cause mortality as well as the composite adverse events of all-cause mortality and MI.

