CLINICALLY-BASED PATIENT RISK SCORES AND THE ‘TARGET LESION REVASCULARIZATION PARADOX’ IN PATIENTS WITH MULTI-VEssel CAD UNDERGOING PCI

i2 Poster Contributions
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Authors: Atul M. Limaye, Jason Kovacic, Roshan Patel, Sweta Chandela, Biana Trost, Samantha Sartori, Roxana Mehran, Michael Kim, Prakash Krishnan, usman baber, Robert Pyo, Joseph Sweeney, Pedro Moreno, George Dangas, Annapoorna Kini, Samin Sharma, Mount Sinai Medical Center, New York, NY, USA

Background: Various risk scores predict clinical events. However, the criteria used in these scores vary widely, ranging from purely angiographic (SYNTAX risk score [SRS]) to purely clinical (ACEF, modified ACEF [ACEFmod], NCDR), while other scores combine both elements (Clinical SYNTAX score [CSS], New York State Risk Score [NYSRS]). With such disparity, we sought to clarify the utility of these 6 scores for predicting clinical events in pts with multi-vessel CAD undergoing PCI.

Methods: Consecutive pts with triple vessel and/or LM disease from Jan 2007 to June 2008 with 1 year follow up were studied from our single center PCI registry. Clinical events at 12 months were compared to calculated risk scores.

Results: We identified 496 pts (mean age 69 ± 12 yrs, 150 females) that fulfilled these criteria. All scores were positively predictive of mortality, but with the SRS and NCDR being least predictive. The most accurate scores for predicting mortality were the ACEF and CSS (p=0.01 and 0.005 vs. SRS, respectively). For TLR, while the SRS trended toward being positively predictive (p=0.16), other scores were negatively associated with this outcome (p≤0.05 for ACEF, ACEFmod, NCDR). No score was particularly accurate for predicting MI or overall MACE (death+MI+TLR).

Conclusions: Competing factors influence mortality and TLR after PCI in pts with multivessel CAD. An increasing burden of clinical co-morbidities is associated with a higher probability of mortality, but a paradoxically reduced likelihood of TLR.