

**Table 1. Baseline Clinical and Demographic Characteristics (N = 1709)**

Age, years	65 +/- 11
Female	396 (23%)
Hypertension	1269 (74%)
Tobacco use	797 (47%)
Hyperlipidemia	1411 (83%)
Diabetes Mellitus	559 (33%)
History of Coronary Artery Disease	950 (56%)
History of Renal Insufficiency	175 (10%)
Data are shown as mean +/- standard deviation, or frequency (percentage)	

**CRT-200.76****A Novel Risk Score Developed for Predicting Failure or Success for Anterograde Approach to Chronic Total Occlusion**

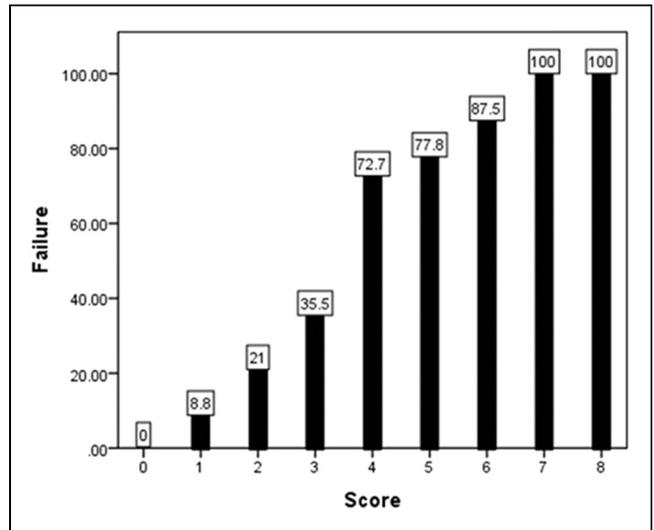
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**BACKGROUND** Total occlusion of a coronary artery for more than 3 months is defined as chronic total occlusion (CTO). The goal of this study was to develop a risk score in predicting failure or success during attempted percutaneous coronary intervention (PCI) of CTO lesions using anterograde approach.

**METHODS** This study was based on retrospective analyses of clinical and angiographic characteristics of CTO lesions that were assessed between February of 2012 and February of 2014. Success rate was defined as passing through occlusion with successful stent deployment using an anterograde approach.

**RESULTS** 188 patients were studied. Mean±SD age was 59±9 years. Failure rate was 33%. In a stepwise multivariate regression analysis, bridging collaterals (OR=6.7, CI=1.97-23.17, Score=2), absence of stump (OR=5.8, CI=1.95-17.9, score=2), presence of calcification (OR=3.21, CI=1.46-7.07, score=1), presence of bending (OR=2.8, CI=1.28-6.10, score=1), presence of near side branch (OR=2.7, CI=1.08-6.57, score =1) and absence of retrograde filling (OR=2.5, CI=1.03-6.17, score =1) were independent predictors of PCI failure. A score of 7 or more was associated with 100% failure rate whereas a score of 2 or less was associated with over 80% success rate.

**CONCLUSION** Most factors associated with failure of CTO PCI are related to lesion characteristics. A new risk score (range 0-8) is developed to predict CTO-PCI success or failure rate during anterograde approach as a guide before attempting PCI of CTO lesions.

**CRT-200.77****Fractional Flow Reserve Measurements Using Intracoronary Sodium Nitroprusside Infusions Is Similar to Intracoronary Adenosine in Moderately Stenotic Coronary Artery Lesions**

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**BACKGROUND** The aim of this study was to investigate the efficacy and safety of intracoronary (IC) sodium nitroprusside infusion in comparison with IC adenosine for fractional flow reserve (FFR) measurement in moderate coronary artery lesions.

**METHODS** During a nine month period, consecutive of 98 patients with suspected or known coronary artery disease with moderate stenosis found during angiography (40 to 70% stenosis), were enrolled in this study. Hyperemia was induced by bolus doses of IC adenosine followed by sodium nitroprusside for FFR measurement.

**RESULTS** Both IC adenosine and IC sodium nitroprusside induced similar and significant reduction in FFR. There was no statistically difference in FFR values between adenosine vs sodium nitroprusside infusions (mean FFR 84.3 ± 6.3 vs 85.7 ± 6.2, p= 0.1) respectively.

**CONCLUSION** An IC bolus of sodium nitroprusside (100 µg) infusion induces a similar degree of hyperemia as IC bolus of 100-300 µg of adenosine. Therefore, IC sodium nitroprusside could be considered as an alternative drug to adenosine for FFR measurement with lower side effect profile.

**CRT-200.78****Exercise Test to Manage Nonculprit Coronary Stenoses in Asymptomatic Patients After NSTEMI Intervention**

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**BACKGROUND** Incomplete revascularisation is the determinant of MACE at 1 year in ACS patients. FFR discriminates the lesions based upon ischemia, but an invasive procedure thus contains all risks and expenses of invasive procedures. Exercise testing is most widely used safe and inexpensive procedure. The aim of our study was to investigate whether exercise testing can be used or not, instead of FFR measurement in ACS patients whose culprit lesion were revascularized, and have one more borderline coronary stenoses and asymptomatic with medical therapy.

**METHODS** Between February 2013 and March 2015 78 NSTEMI patients whose culprit lesion were successfully revascularized; have one more borderline (%40-70) coronary stenoses to which FFR

measurement was planned and asymptomatic within given period were enrolled.

**RESULTS** When the association between exercise test parameters and FFR values were investigated by correlation analyses, we have detected statistically significant associations with all parameters except RPP. (Table 1).

Lesions were separated serious and nonserious according to FFR. When each exercise test parameter differences between groups were tested. Duke score, exercise induced ST deviation, the sum of net ST deviation were statistically significantly different between significant and nonsignificant lesions.

With the variables Diabetes mellitus, the sum of net ST segment deviation and rate pressure product; it is hypothetically possible to produce a model that predicts the FFR cut-off value. And when we examine the probability value of 78 patients; model has %87,2 success rate.

**CONCLUSION** Exercise testing can provide useful diagnostic information when considered beyond ST segment in ACS patients whose culprit lesion were revascularized, and have one more borderline coronary stenoses and asymptomatic with medical therapy.

Table 1

	r	P
Total exercise time	0.244	0.031
Maximal METS	0.227	0.045
Duke SCORE	0.683	0.0013
The number of leads showing 0.1 mm or more ST displacement	-0.544	0.002
The sum of net ST segment deviation	-0.662	0.0024
Exercise induced ST deviation	-0.651	0.0017
Heart rate recovery	0.271	0.069
Rate Pressure Product	0.069	0.550

#### CRT-200.79

##### Clinical-Weighted Risk Scores Remain Invaluable Predictors of Outcomes in Surgically Rejected Patients Undergoing Intervention for Unprotected Left Main Coronary Artery Disease

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**BACKGROUND** In patients evaluated for Coronary Artery Bypass Grafting (CABG), established risk scores are used to stratify patients and determine surgical candidacy. Evidence demonstrates that comorbidities also influence outcomes in patients undergoing high-risk percutaneous coronary intervention (HRPCI) and recent studies have criticized anatomic-based scores, such as the SYNTAX score (SXS), due to the absence of clinical factors. The aim of our study is to compare established and novel risk scores, including clinical and anatomic-weighted scores, and investigate their ability to predict mortality in surgically rejected patients undergoing HRPCI for unprotected left main coronary disease (ULMD).

**METHODS** A retrospective study was performed involving 71 patients with ULMD who were denied CABG and subsequently underwent HRPCI at Keck School of Medicine (4/2008-6/2014). Patients were stratified based on STS score: >10 (n=18) v. <10 (n=53); euroSCORE II (ErS) >15 (n=13) v. <15 (n=58); anatomic SXS: >33 (n=20) v. <33 (n=51); Global Risk Score (GRS): high risk [defined as ErS >6 AND SXS >33] (n=10) v. non-high risk (n=61); Clinical SXS: >27.5 (n=54) v. <27.5 (n=17).

**RESULTS** 71 patients underwent HRPCI of ULMD after being declined for surgical revascularization (mean age 69.6 +/- 13 years; 63% male). Mean STS score was 8.46; mean ErS was 10.43; mean anatomic SXS was 24.56; mean Clinical SXS was 89.45. In-hospital mortality was 7%; 30-day mortality was 7%; 1-year mortality was 22%; total mortality was 37%. Compared to those with low STS, patients with STS scores >10 had significantly higher mortality in-hospital (27.7% v. 0%, p=0.01), at 30 days (27.7% v. 0%, p=0.01), and at 1-year follow-up (55.6% v. 11.3%, p=0.02). Compared to those with low ErS, patients with ErS >15 had significantly higher mortality in-hospital (38.5% v. 0%, p=0.01), at 30 days (38.5% v. 0%, p=0.01), and at 1-year follow-up (53.9% v. 15.5%, p=0.03).

Compared to those with lower GRS, patients with high risk GRS had significantly higher mortality in-hospital (30% v. 3.3%, p=0.02), at 30 days (30% v. 3.3%, p=0.02), and at 1-year follow-up (50% v. 18%, p=0.05). However, there was no significant difference for in-hospital, 30-day, or 1-year mortality in patients stratified by anatomical or Clinical SXS.

**CONCLUSION** In patients with ULMD rejected for CABG and undergoing HRPCI, clinical-weighted scores are useful predictors of short-term and late mortality; the anatomic and even Clinical SXS appear biased by anatomic data and are not effective predictors of mortality in this population.

#### CRT-200.80

##### Primary Percutaneous Coronary Intervention in Diabetic Patients. Independents Predictors of Survival and Event-free Survival

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**OBJECTIVE** Some studies showed that diabetic patients (D) group (DG) had a worse outcome when compared to nondiabetic (ND) patients group (NDG), after primary percutaneous coronary intervention (PCI). The objectives were to compare mortality and major coronary events (MACE) at 30 days and 1 year of DG and NDG submitted to primary PCI and to study whether another conditions were related to worst outcome of patients in 30 days or one year.

**METHODS** Prospective study with 450 consecutive patients submitted to PCI from 01/01/2001 to 12/31/2006 (121 D and 329 ND) with ST-segment elevation acute myocardial infarction (AMI) in the first 12 hours of symptoms presentation treated with balloon catheter or bare metal stent and without cardiogenic shock. We used in statistical analysis: Student t test, chi-square test, Fischer exact test, and multivariate analysis: logistic regression and Cox analysis.

**RESULTS** DG and NDG had similar age (63.1±10.0 and 62.3±11.7 years, p=0.443), male gender (63.6% and 69.9%, p=0.205) and multivascular disease (66.1% and 60.8%, p=0.301). The diabetic group had more dyslipidemia (65.3% x 51.7%, p=0.009) and severe left ventricular dysfunction (15.7% x 8.2%, p=0.019). The stent implantation rate was (83.5% and 81.1%, p=0.863) and glycoprotein (GP) IIb/IIIa inhibitors utilization (79.3% and 82.2%, p=0.831) were similar. The mortality at 30 days (2.5% and 2.7%, p=1.000) and at 1 year (5.0% and 6.7%, p=0.650) and MACE at 30 days (4.1% and 6.4%, p=0.496) and at 1 year (19.4% and 15.4%, p=0.3492) were similar. The absence of TIMI III flow after the procedure (procedure failure) was the only independent hospital mortality (30 days) predictor (P<0,001, OR=8,045, CI95 2,327-27,816). Procedure failure (p=0,023, HR=3,364, CI95 1,182-9,578) and age ≥ 65 years (P=0,035, HR=3,391, CI95 1,091-10,543) were independent predictors of mortality at 1 year. The multivessel coronary disease (p=0,023, OR=4,218, CI95 1,223-14,545 and procedure failure (P<0,028, OR 3.155, CI95 1,132-8,799) were independent predictors of MACE at 30 days and multivessel coronary disease was independent of MACE at 1 year (p=0.034, HR=1.854, CI95 1.048-3.280).

#### CRT-200.81

##### Primary Percutaneous Coronary Intervention in Women

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**BACKGROUND** Coronary heart disease is the leading cause of mortality and morbidity. A higher mortality risk for women with acute ST-elevation myocardial infarction has been a common finding in the past, even after acute percutaneous transluminal coronary angioplasty (PTCA). Prior studies have reported worse results after PTCA in women than in men. However, recent data suggest that this difference is less marked.

**OBJECTIVE** To determine gender-related differences and risk factors for death and major events, both in-hospital and at six-month follow-up, of patients that have been admitted within the first twelve hours of ST-segment elevation acute myocardial infarction (AMI) and primary PTCA in order to set out whether there are gender differences in a real-world contemporary treatment and outcome.

**METHODS** For two consecutive years, 199 consecutive patients were enrolled in the study, with ST-segment elevation AMI and primary PTCA without cardiogenic shock. The immediate outcome, in-hospital and