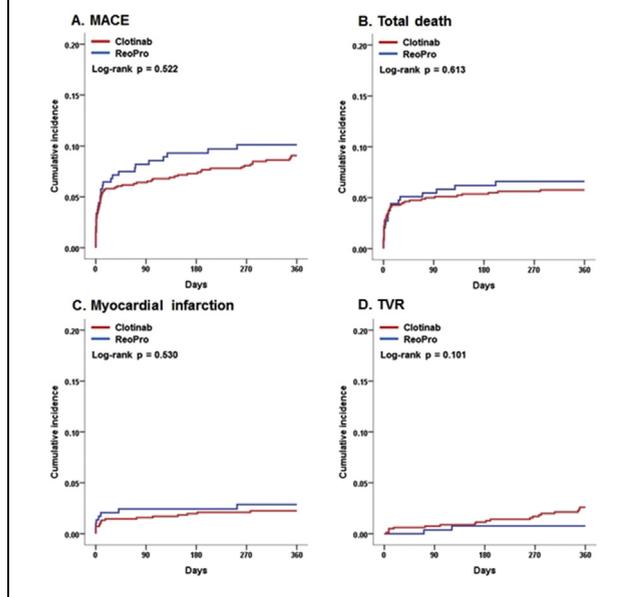


Figure. Kaplan-Meier curves of clinical outcomes at 1-year in the propensity-score matched population. A. MACE; B. Total death; C. Myocardial infarction; D. TVR.



#### CRT-200.40

##### Impact of Left Ventricular Support Device on Surgically Rejected Patients Undergoing Unprotected Left Main Percutaneous Coronary Intervention

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**BACKGROUND** In patients undergoing high risk percutaneous coronary intervention (PCI) a percutaneous left ventricular support device is often used, especially in unprotected left main (ULM) disease. For these patients, we sought to determine if there is an impact of device support use on short and long term mortality.

**METHODS** We performed a retrospective study of 71 patients who were deemed high risk for surgery and subsequently underwent PCI of ULM disease at Keck School of Medicine (4/2008-6/2014). Patients were divided based on support: none (n=17), lower level support [intra-aortic balloon pump (IABP) support (n=33)] vs. high level of support [Tandem Heart (TH) or Impella support (n=21)].

**RESULTS** 71 patients underwent high-risk PCI after being denied surgical revascularization (mean age 69.61±13.5 years, 45 male and 26 female). When evaluating patients based on extent of coronary disease defined by syntax score and by risk profile defined by STS or euroSCORE II, there was no statistically significant correlation with support device used. The mean ejection fraction (EF) was significantly higher in the no support and low level support groups (45±15 and 46±15, respectively) than the high level support group (34±14, p<0.01). Patients with any support used were more likely to have an ejection fraction of 50% than the patient who had high level support used (41.18% vs 35.19%). Furthermore, use of no support vs. any support showed no statistically significant difference in regards to in-hospital mortality (5.88% vs. 7.4%, p=1.0), 30 day mortality (5.88% vs. 7.4%, p=1.0), and 1 year mortality (17.65.0% vs. 24.07%, p=0.87).

**CONCLUSION** In patients with ULM disease deemed surgically high risk and undergoing PCI, there is no significant difference in regards to in-hospital, 30 day, and 1 year mortality in patients who had no support device used versus patients who had a support device used, despite similar high risk profiles determined by syntax, STS, and euroSCORE II. Furthermore, patients with EF <30% are more likely to have device support used when undergoing intervention of ULM disease. However, despite the complexity of coronary disease, these patients can be safely managed without the use of high support devices if they have a preserved ejection fraction.

#### CRT-200.41

##### Anatomical Complexity and Percutaneous Coronary Revascularization in Patients With Severe Left Ventricular Dysfunction

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**BACKGROUND** Severe dysfunction ventricular (<40%) is one of the main predictors of mortality together with multivessel coronary disease. Surgical revascularization has proven superior versus optimal medical treatment. Coronary angioplasty in this clinical setting has not been sufficiently evaluated and often the clinical cardiologist should determine the type of revascularization variables as diabetes, anatomical complexity or patient (pts) preferences.

**OBJECTIVE** To evaluate whether the anatomical complexity impact on clinical outcomes and coronary angioplasty in pts with left ventricular dysfunction.

**METHODS** From June 2001 - August 2015 were performed 199 coronary angioplasty procedures in pts with severe left ventricular dysfunction. Were excluded pts with AMI SST, epiphenomenon acute coronary syndrome; cardiogenic shock, pts resuscitated from cardiac arrest and those with prior myocardial revascularization surgery. The population with coronary single vessel disease was 88(44%) group A (PCI DVs c/ single vessels) and the remaining 111 had multivessel coronary disease (56%) group B (PCI DVs c/ EMV). The baseline characteristics, group A and B n(%), respectively: average age 63,7±12.8 vs 65.7±10 years; male 71(81) vs 92(83); diabetics 30(34) vs 49(44); test positive ischemia 44(50) vs 72(65) p<0.04; prior myocardial infarct 35(39) vs 55(49); average LVEF 31±2 vs 32.1±6.9%; silent ischaemia 27(31) vs 40(36); stable chronic angina 10(11) vs 7(6) ACS non ST 30(34) vs 51(46) and other symptoms 21(24) vs 13(12); radial access 38(43) vs 49(44); LAD artery treated 16(18) vs 33(29) p=0.08; number of lesions treated 1.2±0.4 vs 1.8±0.8 p<0.0001; small vessels 15(17) vs 23(21); bifurcation lesion 7(8) vs 11(10); moderate or severe calcification 15(17) vs 42(38) p=0.002; drug eluting stents 46(52) vs 62(56); use of intra-aortic balloon pump 0 vs 8(7) p=0.02.

**RESULTS** In the in-hospital results, group A and B n(%) respectively were: clinical success 87(99) vs 105(94) p=0.1; cardiovascular death 0 vs 2(2) p=0.4 early coronary occlusion 0 vs 2(2)p=0.4 and myocardial infarction 1(1) vs 1(1) p=1. At follow-up to 6 months group A and B n(%) respectively: cardiovascular death 2(2) vs 6(5) p=0.5, myocardial infarction 0 vs 1(1); new coronary intervention 12 (14) vs 15(13)p=1; RePCI restenosis 3 (3) vs 5(4) p=1; and CABG 1(1) vs 3(3) p=0.6.

**CONCLUSION** In pts with severe impaired left ventricular function, the extent, degree and complexity of the coronary anatomy had no impact on the clinical results of coronary angioplasty procedures.

#### CRT-200.42

##### The Role of Calcium Channel Blockers in Radial Cocktail on Radial Artery Spasm, A Meta Analysis

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**BACKGROUND** Radial access has become the preferred access in coronary angiography. Radial artery spasm (RAS) remains a challenge in some of these cases resulting in transfemoral conversion. Various intra-arterial vasodilators like calcium channel blockers (CCB) have been used to help decreasing RAS. We therefore conducted this meta analysis to investigate the effects of calcium channel blockers on RAS.

**METHODS** We searched PubMed, Cochrane Library & Web of Science for randomized studies comparing the administration of intra-arterial CCB (Including Verapamil or Diltiazem) versus placebo on RAS. The primary outcome assessed was the incidence of RAS. Unfortunately, we were unable to evaluate other secondary outcomes like hypotension, pain and bradycardia as they were not reported in most of the studies. We conducted our metaanalysis using the random effects model. Visual inspection of the funnel plot showed publication bias. P value less than 0.05 was considered statistically significant.

**RESULTS** A total 6 randomized studies with a total of 2067 patients (CCB arm:1144; Placebo arm: 923) were included in the final