the primary end-point was in-hospital mortality. Fisher's Exact Test was used to examine relationships. Inferences were made at the 0.05 level of significance. Ventricular assist device (VAD) is defined as the use of either IABP or Impella 2.5 device before, during, or following PCI.

RESULTS The eighty-nine patients with LM PCI were divided into those with ventricular support (n=39) and without ventricular support (n=50). The former group was further divided into those with support from either Impella 2.5 (n=28) or intra-aortic balloon pump [IABP] (n=11).

Age, race, and gender did not differ between patients who received unassisted LM-PCI from those with ventricular support (P= 0.142, 1.0, and 0.776 respectively). The angiographic stenosis of atherosclerotic lesions in LM, proximal LAD, other native coronary vessels, vein grafts and bypasses were similar between the groups. Duration of hospitalization was significantly longer for patients with VAD support compared to those without VAD (7.19±6.89 vs. 2.78±3.39, p<0.001). The incidence of cardiogenic shock and in-hospital mortality was significantly higher in the VAD group (p=0.009 and 0.001 respectively).

Overall, in-hospital mortality was 9% (8 of 89). The IABP and Impella 2.5 groups had mortality proportions of 46% (5 of 11) and 11% (3 of 28), respectively; p = 0.028. For all patients, in-hospital mortality was higher for those with versus without cardiogenic shock (56% or 5 of 9 vs. 4% or 3 of 80; p < 0.001), and for those with versus without LVEF 40 (17% or 7 of 42 vs. 2% or 1 of 46; p < 0.025).

CONCLUSION In a select group of patients with LM disease, unsupported PCI appears to be a feasible and safe procedure. In high-risk patients, the utilization of Impella 2.5 appears to be superior to IABP in LM PCI resulting in a favorable short-term mortality outcome.

CRT-200.58

Acute MI With and Without Hemodynamic Support: A Network Meta-Analysis and Systematic Review

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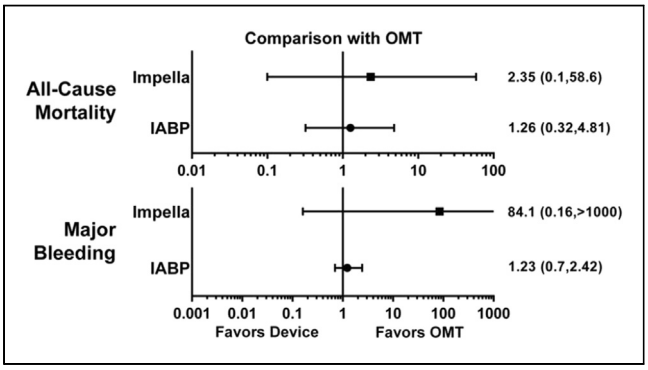
BACKGROUND The intra-aortic balloon pump (IABP) and Impella may be used for hemodynamic support during percutaneous coronary interventions (PCI). However, controversy exists regarding its use in patients with acute myocardial infarction (MI). We performed a network meta-analysis of studies in patients with acute MI to compare clinical outcomes with IABP, Impella, and optimal medical therapy (OMT).

METHODS MEDLINE/PubMed, Cochrane CENTRAL, and ClinicalTrials.gov were searched for studies assessing Impella and IABP in patients with AMI with or without cardiogenic shock. Network meta-analysis with a Bayesian framework was performed to directly and indirectly compare clinical outcomes at 30 days or closest available. Odds ratios with 95% confidence intervals (OR [95% CIs]) were generated with random-effects models to compare outcomes.

RESULTS Our analysis included 7 RCTs with 1838 patients who were randomized to IABP (n=908), Impella (n=24), or OMT (n=906), and 2 non-RCTs with 13,539 patients who received IABP (n=956) or OMT (n=12,583). The mean age was 67.4+/-12 years, 78.6% were male, 72.1% had hypertension, 39.1% had diabetes mellitus, and 24.0% had a prior MI. There was no significant difference in all-cause mortality, stroke, or vascular complications. There was a trend towards higher mortality with both IABP and Impella (Figure). Major bleeding was also higher with IABP and Impella although this was not significant (Figure). However, when compared to IABP, Impella trended toward higher major bleeding as well (OR 65.6 [0.14,>1000]).

CONCLUSION There is no apparent benefit for the routine use of either device against OMT for patients presenting with AMI. The number of patients included for Impella is very limited, and further studies are needed to elucidate the outcomes, benefits and risks of these devices during PCI for acute MI.



CRT-200.59

The Fribourg Synergy Experience: One-year Outcomes With the Bioabsorbable Polymer-coated Thin Strut Everolimus-eluting Synergy Stent for Coronary Revascularization in All-comers

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BACKGROUND New-generation thin strut bioabsorbable polymer drug-eluting stents (DES) have shown promising mid-term results in clinical trials and real-world registries. We sought to assess 1-year efficacy and safety outcomes in all-comer patients treated with the SYNERGY stent at our institution.

METHODS All consecutive patients treated with the SYNERGY stent at University and Hospital Fribourg between January 2013 and March 2015 were prospectively included in the Fribourg SYNERGY registry. Clinical follow-up was performed at 1 year. Intermediate safety monitoring was performed in September 2015 in all patients and assessed the occurrence of stent thrombosis (ST). Overall lesion complexity was assessed by the SYNTAX Score. The primary endpoint was the Academic Research Consortium (ARC) defined device-oriented composite of cardiac death, myocardial infarction of the target vessel and clinically indicated target lesion revascularization at 1 year.

RESULTS A total of 425 patients were enrolled in the registry. Mean age was 66±11 years and 73% (n=309) of treated patients were men. Diabetes was found in 23% (n=98) of patients. The clinical presentation at index procedure was acute coronary syndrome in 63% (n=267) of cases. Mean SYNTAX score was 15±9. Chronic total occlusions were treated in 6% (n=27) and left main coronary arteries in 3% (n=11) of patients. One-year follow-up was available in the first 264 patients. The primary endpoint occurred in 4.2% (n=11) of patients. Cardiac death occurred in 1.9% (n=5) of patients. The rate of target vessel MI was 1.5% (n=4). All target lesion revascularizations were clinically indicated and occurred in 2.7% (n=7) of cases.

Overall, definite stent thrombosis according to ARC criteria had occurred in 4 patients (0.9%) at the time of intermediate safety assessment (mean follow-up: 329±201 days). The rate of early and late ST were 0.7% (n=3) and 0.2% (n=1), respectively.

CONCLUSION This single center experience confirms the excellent safety and efficacy profile of the bioabsorbable polymer-coated thin strut everolimus-eluting SYNERGY stent in daily clinical practice.

CRT-200.60

Multi-analysis With Oct and Vasomotion in Everolimus-eluting Synergy Coronary Stents - The Moves Trial

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BACKGROUND To compare endothelium-dependent and -independent vasomotor function and vascular healing 15 months after implantation of 2 new-generation drug eluting stents and biovascular scaffolds (BVS).