

	Overall	Paclitaxel n=57 (29%)	Sirolimus n=96 (49%)	Everolimus n=44 (22%)	P-value
<b>R-ISR Presentation</b>					
Pattern					0.27
Focal	22%	11(19%)	26(27%)	7(16%)	
Diffuse	78%	46(81%)	70(73%)	37(84%)	
Time index procedure to R-ISR, months $\pm$ SD	34 $\pm$ 20	35 $\pm$ 21	42 $\pm$ 20	16 $\pm$ 8	0.28
Time index procedure to first-ISR, months $\pm$ SD	18 $\pm$ 16	18 $\pm$ 16	23 $\pm$ 18	7 $\pm$ 4	0.52
<b>R-ISR Treatment</b>					
Stent use	53%	48%	57%	52%	0.54
<b>Outcome</b>					
Death	4%	9%	1%	2%	0.05
MI	3%	7%	2%	0%	0.12
TVF	18%	23%	17%	14%	0.58
MACE (Death, MI, and TVF)	21%	32%	18%	16%	0.06

## TCT-483

### Predictors of Early Stent Thrombosis After Implantation of Drug-Eluting Stents in Daily Clinical Practice – A Subanalysis of the Large, Prospective DESIRE (Drug-Eluting Stent In the REAL World) Registry

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**Background:** Previous studies have suggested that early ST (<30 days) may have a different pathophysiology as compared to late events occurring after this period. Our objective was to investigate the predictors of ST in a large cohort of patients enrolled in the prospective, single center DESIRE Registry.

**Methods:** A total of 4,790 pts (7,530 lesions) undergoing elective for emergency PCI solely with DES (n=8,058) as a default strategy were enrolled between May/02-Mar/13. Clinical follow-up (FU) was performed at 1, 6 and 12 months and yearly up to 10 years (97.3%). ST was defined according to the propositions of the Academic Research Consortium.

**Results:** The overall incidence of ST was 2.4% (n=111), given that 95% of patients were ST-free up to 10 years FU (Kaplan-Meier estimate). Compared to those without ST, pts with ST had a trend towards more diabetes (36 vs. 30.5%, p=0.18) and target lesion in saphenous vein grafts (SVG) (7.4 vs. 5.6, p=0.10), and significantly more current smoking (41.2 vs. 30.1%, p=0.02), clinical presentation of recent MI (29.9 vs. 15.2%, p<0.001), moderate/severe lesion calcification (36.1 vs. 26.8%, p<0.001), poor left ventricle ejection fraction (<30%) (18.2 vs. 2%, p=0.02), multiple DES implanted (56.6 vs. 46.1%, p=0.03), and residual stenosis as assessed by QCA (5.0 vs. 3.7%, p=0.001). In the multivariate model, independent predictors of ST were recent MI (<72 hours) (HR 2.66, 95% CI 1.52-4.66, p=0.001), recent MI (3-30 days) (HR 1.89, 95% CI 1.08-3.29, p=0.03), >1 DES implanted (HR 1.89, 95% CI 1.28-2.80, p=0.002), SVG (HR 2.21, 95% CI 1.29-3.78, p=0.004), and residual stenosis (HR 1.03 per % unit, 95% CI 1.00-1.05, p=0.03). Early ST was found in 12.6% of cases (14/111) and independent predictors for this event were diabetes (OR 2.45, p=0.01) and recent MI (<72 hours) (OR 3.65, p<0.001).

**Conclusions:** Early ST was a rare event and was significantly associated with diabetes and clinical presentation of recent MI (< 72 hours). When considering the overall incidence of ST (2.4%), significant independent predictors were recent MI (< 72 hours and between 3-30 days), multiple DES implanted, SVG and stent underexpansion.

## TCT-484

### Impact of Second Generation Drug-Eluting Stents on the Occurrence of Late and Very Late Stent Thrombosis – A Subanalysis of the Large, Prospective DESIRE (Drug-Eluting Stent In the REAL World) Registry

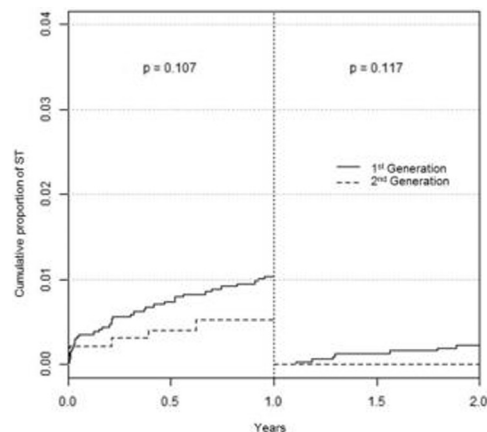
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**Background:** Stent thrombosis (ST) has been described as a rare event in current drug-eluting stent (DES) era; however, its occurrence has been associated with relatively high morbimortality. Our objective was to investigate the impact of second generation DES on the occurrence of ST in daily clinical practice.

**Methods:** A total of 4,790 pts (7,530 lesions) undergoing elective for emergency PCI solely with DES as a default strategy were enrolled between May/02-Mar/13. Clinical follow-up (FU) was performed at 1, 6 and 12 months and yearly up to 10 years (97.3%). Overall, a total of 8,058 DES were implanted including 1st generation

(Cypher/Taxus) in 69% and 2nd generation (Xience/Promus/Resolute/Endeavor/Bio-Matrix) in 31%, given that mean FU for pts treated with 1st vs. 2nd generation DES were 5.3 $\pm$ 2.6 vs. 1.1 $\pm$ 1.0, respectively.

**Results:** Overall, mean age was 64 years, 31% had diabetes, 23% had previous MI and 41% presented with acute coronary syndrome. Compared to pts treated with 1st generation DES, those treated with 2nd generation DES had more diabetes (p<0.001), multivessel disease (p<0.001), and multiple DES implanted (p<0.001), but angiographic success was similar in both groups (>99%). The occurrence curve for ST (ARC) up to 2 years FU with landmark analysis at 1 year is shown in the Figure.



**Conclusions:** Compared to 1st generation DES, the use of 2nd generation DES was associated with a non-significant trend towards less occurrence of ST up to 2 years FU, given that there were no very late ST found with 2nd generation DES.

## TCT-485

### Paclitaxel Prevented the Intimal Proliferation after Percutaneous Coronary Intervention for Patients with Renal Insufficiency

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**Background:** In the first generation drug-eluting stent (DES) era, it had reported that clinical outcome of paclitaxel-eluting stent (PES) deployment was better than sirolimus-eluting stent. But clinical outcome of PCI with second generations DES was not established. Our aim was to investigate the clinical outcomes of hemodialysis (HD) patients after PCI with DES.

**Methods:** In 6298 consecutive cases which underwent PCI with DES between April 2007 and June 2012, 182 consecutive patients (247 lesions) on HD patients were treated with PES (P group: 93 patients, 117 lesions), everolimus-eluting stent (E group: 54 patients, 78 lesions) or biolimus-eluting stent (B group: 35 patients, 52 lesions) implantation and were follow up to 8 months. The primary endpoints were angiographic outcomes and MACE (death, myocardial infarction, CABG, target lesion revascularization: TLR).

**Results:** Clinical follow up was obtained on all patients. Angiographic follow up was obtained in 201 lesions (81.4%). No significant difference was detected in the baseline demographic, angiographic, and lesion characteristics. In eight month follow-up, the mean values of late lumen loss (P group: 0.5 $\pm$ 0.8mm, E: 0.6 $\pm$ 0.8mm, B: 1.0 $\pm$ 0.6mm; p=0.01), TLR (P group: 9.3%, E: 15.4%, B: 28.9%; p<0.01) and MACE (P group: 12.7%, C: 19.2%, B: 28.9%; p=0.04) in P group were the lowest in these groups. In multivariate analysis, predictors of TLR were diabetes mellitus (OR: 2.7, 95%CI: 1.1-7.0, p=0.025), BES deployment (OR: 3.4, 95%CI: 1.5-7.5, p=0.0027) and product of serum calcium and phosphorus>38 (OR: 3.6, 95%CI: 1.6-8.9, p=0.0016).

**Conclusions:** In PCI with DES for HD patients, second generation DES hasn't improved clinical outcomes. PES deployment is still usefulness today.