

Results:

Table:

	Direct stenting	Conventional stenting	Provisional stenting	p value
PCI success	194/196(99%)	199/201 (99%)	199/200 (99.5%)	0.874
Stent implantation	192/196 (98.0%)	199/201 (99.0%)	155/200 (77.5%)	<0.001
9 month follow-up				
QCA MLD, mm	2.12 ± 0.58	2.17 ± 0.67	1.99 ± 0.69	0.059
MACE	18/192 (9.4%)	9/197 (4.6%)	17/197 (8.6%)	0.152

Conclusions: Direct drug-eluting stenting did not reduce restenosis, when compared to conventional DES stenting. Provisional stenting was associated with a higher rate of restenosis, however, no differences were observed in the rate of MACE during 9-month follow-up. The 2 year clinical follow-up will be presented at the conference.

TCT-628

Drug-eluting stent implantation for the treatment of bare-metal or drug-eluting stent restenosis

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Background: In the drug-eluting-stent (DSE) era, the rate of in-stent restenosis (ISR) was substantially decreased. Previous randomized trials have suggested that DES implantation may be efficacious to decrease incidence of repeated ISR. The purpose of this study was to assess the efficacy of DES implantation for the treatment of ISR after bare-metal stent (BMS) or DES implantation.

Methods: A total of 120 consecutive patients who developed ISR was included in this study. Angiographical follow-up was performed in 78 of 120 patients (BMS 67, DES 53). We compared the angiographical restenosis rate between the patients who underwent percutaneous coronary intervention (PCI) using DES (DES group) and the patients who underwent PCI using balloon angioplasty (balloon group).

Results: Overall rate of re-ISR was significantly lower in DES group than in balloon group (16% vs, 39%, p<0.05). In the subset of patients with BMS restenosis (n=41), rate of re-ISR between DES group and POBA group (17% vs, 24%, p=NS). On the other hand, ISR patients after DES implantation (n=37) showed significantly lower rate of re-ISR in DES group than that in POBA group (17% vs, 53%, p<0.05).

Conclusions: The efficacy of DES implantation for the treatment of ISR might be affected by the index stent types.

TCT-629

Real-World Comparison of Clinical Outcomes of Patients who Received New Generation Platinum Chromium Everolimus-Eluting Stent Versus Cobalt Chromium Everolimus-Eluting Stent

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Background: The safety and efficacy of the first generation cobalt chromium everolimus-eluting stent (EES) have been demonstrated in several trials. The PROMUS Element (Boston Scientific, Natick, Massachusetts) stent is a new generation EES, made of platinum chromium alloy with thin strut designed to improve radial strength, radiopacity, vessel conformability, fracture resistance, side-branch access and deliverability. We aim to compare the long-term safety and efficacy of this novel PtCr-EES with the first generation cobalt chromium EES (CoCr-EES) in patients who received them.

Methods: We analyzed retrospectively 788 patients who received PtCr-EES(n=378) or CoCr-EES (n=410) from our centre cardiovascular database. The primary endpoint was the one-year composite major adverse cardiac events (MACE) that include cardiac death, myocardial infarction, target vessel revascularization and stent thrombosis.

Results: The mean age of the cohort was 58.7 ± 10.1 years with males constituting 82.7%. Diabetes mellitus was present in 322 (40.0%) patients. The majority (63.1%) of the lesions treated were of AHA/ACC Type B2/C. The mean lesion length in the 2 groups were 26.14 ± 12.19 mm (PtCr-EES) vs 24.14 ± 11.86 (CoCr-EES), p=0.009 respectively; and the stent length were 31.27 ± 14.38mm (PtCr-EES) vs 31.23 ± 14.61mm (CoCr-EES), p=0.96 respectively. At one year, the results were as follow:

	CoCr-EES (n= 410)	PtCr-EES (n=378)	p value
Death	9 (2.2%)	12(3.2%)	0.394
Myocardial infarction	16 (3.9%)	9 (2.4%)	0.223
TVR	11 (2.7%)	9 (2.4%)	0.788
MACE	24 (5.9%)	22 (5.8%)	0.984
Stent Thrombosis	8 (2.0%)	5 (1.3%)	0.489

Conclusions: Our study showed that PtCr-EES stent, when used in real-world population, showed similar efficacy as the first generation EES at 1 year with no safety concerns related to the novel stent material and design. The TVR rate is low at <3% for both groups.

TCT-630

ENERGY 1'000 Subject Registry with a Thin Strut Bare Metal Stent with Passive Coating Presenting one Year MACE Data on Pre-Specified Subgroups

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Background: The aim of this registry is to evaluate the clinical performance of a new generation thin strut bare metal stent (BMS) in a large patient population with pre-specified subgroups in standard clinical care.

Methods: Between Apr 09, and Nov 11, 2010, 1'016 subjects presenting with de-novo and restenotic coronary artery lesions were consecutively enrolled in this international, multicentric ENERGY Registry using a new generation BMS (PRO-Kinetic Energy) in 48 sites in 10 countries. Safety endpoints were MACE at 6 and 12 month FUP. QoL (EQ-5D) evaluation was performed in a subgroup for all FUP intervals. Pre-specified subgroups were diabetes, acute myocardial infarction (AMI), small vessels and elderly subjects (≥ 75 yrs).

Results: The biggest subgroup was presented by AMI with 46% followed by elderly 29%, small vessel 26% and diabetes 17%. 90.7 percent (922/1'016) follow up compliance at twelve-month follow-up was achieved. Database not locked yet.

	AMI N= 470	Elderly N= 297	Small vessel N= 251	Diabetes N= 168
Male	79%	65%	73%	77%
Age	63.6 ± 13.3	80.30 ± 4.2	68.2 ± 12	68.7 ± 11
Smoker	59%	45%	57%	61%
Diabetes	6%	19%	19%	100%
B2/C type lesions	47%	45%	37%	38%
Average stent length (mm)	16.6 ± 4.9	15.5 ± 4.4	16.1 ± 4.8	15.4 ± 3.8
Mean Stent diameter (mm)	3.2 ± 0.5	3.1 ± 0.5	2.7 ± 0.4	3.1 ± 0.4
MACE hierarchical	6.2%	6.5%	9.2%	7.4%
Cardiac Death	1.2%	1.8%	1.3%	1.4%
MI	1.4%	1.8%	2.6%	2.0%
clinically driven TLR	3.6%	2.9%	5.2%	4.1%
MACE rates for all subgroups are not statistically significant different (p>0.05).				

Conclusions: This new generation BMS with very thin struts and passive coating shows excellent results through all subgroups, also confirmed in low MACE rates for AMI, elderly, small vessels and diabetic subjects. Utility of such modern BMS platforms are still very relevant in the era of DES.

TCT-631

Abstract Withdrawn