i2 summit 2011
innovation in intervention
ACC in partnership with CRF

E1638
JACC April 5, 2011
Volume 57, Issue 14

i2 SUMMIT

COMPARISON OF EFFICACY AND SAFETY BETWEEN SIROLIMUS, PACLITAXEL, EVEROLIMUS-ELUTING STENT AND SEQUENT™ PLEASE, A DRUG-ELUTING BALLOON ON THE OUTCOME OF PATIENTS WITH DIFFUSE IN-STENT RESTENOSIS AFTER BARE METAL STENT IMPLANTATION

i2 Oral Contributions
Ernest N. Morial Convention Center, Room 353
Sunday, April 03, 2011, 4:59 p.m.-5:13 p.m.

Session Title: Restenosis and In-stent Restenosis
Abstract Category: 22. Restenosis/Instent Restenosis - Prevention and Mgt.
Presentation Number: 2904-6

Authors: *Sunao Nakamura, Hisao Ogawa, Jang-Ho Bae, Yeo H. Cahyadi, Wasan Udayachalerm, Damras Tresukosol, Sudaratana Tansuphaswadikul, New Tokyo Hospital, Chiba, Japan*

Purpose: The aim of this study is to compare the safety and efficacy of Sirolimus (SES), Paclitaxel (PES), Everolimus-eluting stent (EES) and SeQuent™ Please, a drug-eluting balloon (DEB) on the outcome of patients with diffuse in-stent restenosis (D-ISR) after bare metal stent (BMS) implantation.

Methods: A prospective analysis of 911 patients with 1080 D-ISR lesions (384 SES, 334 PES, 221 EES and 141 DEB) in six high volume Asian centers after successful stent implantation (SES: LAD 45.7%, LCX 27.8%, RCA 26.5%) (PES: LAD 46.1%, LCX 22.9%, RCA 31.0%) (EES: LAD 50.0%, LCX 21.3%, RCA 28.7%) (DEB: LAD 54.1%, LCX 22.8%, RCA 23.1%) was performed. The study endpoints were major adverse cardiac events (MACE) at 12 months, restenosis rate and target lesion revascularization (TLR) at 12 months.

Results: See table for clinical results.

Conclusion: (1) The use of SES, PES, EES and DEB in patients with D-ISR seems to be favorable in terms of in-hospital clinical outcome. (2) Patients treated with DEB showed higher restenosis rate and TLR compared with DES.

	SES	PES	EES	DEB
Number of patients/lesions	320/384	294/334	188/221	109/141
Procedural success (%)	100	100	100	98.1
MACE at 30 days (%)	0.9	1.0	0	1.5
Proximal RD (mm)	2.86±0.74	2.80±0.80	2.79±0.71	2.81±0.79
MLD post procedure (mm)	2.60±0.77	2.61±0.74	2.66±0.71	2.28±0.78
MLD 6 months (mm)	2.41±0.80	2.29±0.72	2.50±0.60	2.01±0.79
MLD 12 months (mm)	2.33±0.79	2.19±0.75	2.44±0.71	1.89±0.89
Restenosis rate (%)	7.5	11.5	5.3	28.4*
TLR (%)	6.9	11.5	5.3	27.5*
MACE at 12 months (%)	7.8	12.5	5.3	29.0*
RD: reference diameter, MLD: minimum lumen diameter, *p<0.05 vs SES, PES and EES.				