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DRUG-ELUTING STENTS FOR THE TREATMENT OF CHRONIC TOTAL OCCLUSION: A COMPARISON WITH SIROLIMUS, PACLITAXEL, ZOTAROLIMUS, BIOLIMUSA9, EPC CAPTURE AND EVEROLIMUS-ELUTING STENT: MULTICENTER REGISTRY IN ASIA

i2 Poster Contributions
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Session Title: Intravascular Diagnostics and Complex Lesions
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Authors: Sunao Nakamura, *Shotaro Nakamura, Hisao Ogawa, Jang-Ho Bae, Yeo Hans Cahyadi, Wasan Udayachalerm, Damras Tresukosol, Sudaratana Tansuphaswadikul, New Tokyo Hospital, Chiba, Japan*

Aim: The aim of this study is to compare the safety and efficacy of Sirolimus (SES), Paclitaxel (PES), Zotarolimus (ZES), BiolimusA9 (BES), EPC capture (ECS) and Everolimus-eluting stent (EES) on the outcome of patients with chronic total occlusion (CTO).

Methods: A prospective analysis of 1148 patients with 1253 CTOs (396 SES, 526 PES, 177 ZES, 70 BES, 41 ECS, 43 EES) in six high volume Asian centers after successful recanalization of CTO was performed. The study endpoints were 30 days and 9 months major adverse cardiac events (MACE), 9 months angiographic restenosis and target lesion revascularization (TLR).

Results: See table for clinical results.

Conclusion: The use of drug-eluting stents in patients with CTO was safe with low acute complication. Patients treated with SES, BES and EES showed lesser rate of restenosis compared with other drug-eluting stents.

	SES	PES	ZES	BES	ECS	EES
Number of patients/lesions	365/396	482/526	154/177	66/70	39/41	42/43
LAD/LCX/RCA (%)	54/26/20	52/22/26	50/22/28	46/23/31	52/24/24	58/16/26
Procedural success (%)	100	100	100	100	100	100
MACE at 30 days (%)	0	0.4	0.6	0	0	0
Proximal reference diameter (mean: mm)	2.86	2.80	2.83	2.88	2.90	2.88
Minimum lumen diameter at post (mean: mm)	2.65	2.54	2.59	2.79	2.60	2.68
Minimum lumen diameter at 9 mo. (mean: mm)	2.55	2.33	2.09	2.67	2.34	2.59
Restenosis rate at 9 months (%)	4.0*	6.7	12.3	4.5*	12.8	4.8*
TLR at 9 months (%)	3.6*	6.7	10.4	4.5*	10.3	2.4*
MACE at 9 months (%)	3.6*	6.7	10.4	4.5*	10.3	2.4*
*p<0.05 vs. ZES, ECS						