Clinical outcomes amongst the subgroups. Two years data of the full cohort will be available upon presentation.

Conclusions: The Energy demonstrates very good results which were promising for subgroups with diabetes, small vessels and even acute coronary syndrome. Utility of such modern bare metal stent platforms is still relevant in the era of drug-eluting stents.

TCT-184
Late Adverse Events After Implantation of Sirolimus-eluting Stent and Bare-metal Stent: 4-7 years follow-up of the CREDO-Kyoto Registry Cohort-2
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Background: Late adverse events such as very late stent thrombosis (VLST) or late death beyond 1-year was slightly but significantly higher in SES group than in the BMS group (20.8% vs. 19.6%, P<0.001). However, there was no excess of all-cause death beyond 1-year in the SES group as compared with the BMS group (23.4% vs. 17.2%, P<0.001). The Kaplan-Meier analysis showed no significant differences in freedom from all-cause death between SES and BMS groups (1.73% vs. 1.63%, respectively; p<0.001).

Methods: Among 13058 consecutive patients undergoing percutaneous coronary intervention in the CREDO-Kyoto registry Cohort-2, 5078 patients were treated with SES only and 5920 patients were treated with BMS only. Median follow-up duration was 1974 (inter-quartile range: 1700-2225) days.

Results: During 4-7 years follow-up after SES implantation, VLST and late TLR beyond 1-year occurred constantly and without attenuation at 0.24%/year, and 2.0%/year, respectively. Cumulative 7-year incidence of VLST was significantly higher in the SES group than in the BMS group (1.43% vs. 0.68%, P<0.001). However, there was no excess of all-cause death beyond 1-year in the SES group as compared with the BMS group (23.4% vs. 17.2%, P<0.001). Cumulative 7-year incidence of VLST was significantly higher in the SES group than in the BMS group (3.0% vs. 1.8%, P=0.02). Cumulative 7-year incidence of late TLR and clinically-driven late TLR were also significantly higher in the SES group than in the BMS group (12.0% vs. 4.1%, P<0.0001 and 8.5% vs. 2.6%, P<0.0001, respectively), leading to significant late catch-up of the SES group to the BMS group regarding the cumulative incidence of over-all and clinically-driven TLR through 7-year (18.8% vs. 25.2%, and 10.6% vs. 10.2%, respectively). Clinical indication of late TLR in the SES group included acute myocardial infarction (13.1%), unstable angina (8.1%), stable angina (34.0%), asymptomatic ischemia (7.9%) and non-clinically driven (36.9%).

Conclusions: During 4-7 years follow-up after SES implantation, late adverse events including VLST and late TLR continued to occur without attenuation of their incidences. Late catch-up phenomenon of SES relative to BMS in terms of TLR was real and should be the target for the development of drug-eluting stents.

TCT-185
Three-Year Safety And Efficacy Of Newer Generation Limus-Eluting Stents Compared To Bare Metal Stents And First-Generation Sirolimus-eluting Stents In Patients With Acute Coronary Syndrome
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Background: Late target lesion revascularization (TLR) and stent thrombosis with drug-eluting stents (DES) remain a concern, especially in the thrombogenic milieu of acute coronary syndrome (ACS). This study aims to investigate the long-term safety and efficacy of everolimus- (EES) and zotarolimus-eluting stents (ZES) to 1st-generation sirolimus-eluting stents (SES) and bare metal stents (BMS) in ACS patients.

Methods: We identified 1612 patients presenting with ACS who received either BMS, SES, ZES or EES. The primary end points were probable or definite stent thrombosis (ST) and major adverse cardiovascular event (MACE) defined as composite of all-cause death, myocardial infarction, or TLR up to 3 years.

Results: The 3-year MACE was 44.9% in the BMS group versus 34.6% in the SES group versus 21.8% in the ZES group and 18.5% in the EES group (p<0.001). Mortality at 3 years was highest in the BMS group (36.7%) than in the SES, ZES or EES groups (22.5% vs 12.9% vs 12%, respectively; p<0.001). The 30-day ST was highest in the SES group (8.1%) compared to BMS group (1.4%), ZES group (2.3%) and EES group (1.1%) (p<0.001). These findings were reflected at 3 years (7.5% vs 1.9% vs 2.3% vs 1.5%, respectively; p<0.001).

Conclusions: The newer drug-eluting stents, EES and ZES, have shown improved rate of MACE over BMS and 1st-generation SES. In addition, ST rates up to 3 years in EES and ZES were comparable to BMS in ACS patients.

TCT-186
Comparison of 5-year outcomes between drug-eluting and bare-metal stents in patients after acute myocardial infarction with or without diabetes
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Background: Patients with acute myocardial infarction (AMI) have had conflicting results between drug-eluting stents (DES) and bare-metal stents (BMS). The aim of this study was to compare 5-year outcomes between DES and BMS in Asian patients after AMI with or without diabetes (DM).

Methods: This study enrolled 1137 consecutive AMI patients who received stent implantation in a single tertiary medical center from 2004 to 2011. The patients were divided into DES (N=210, 60 DM patients) and BMS group (N=927, 302 DM patients) in the study. The 5-year outcomes were collected, including early thrombosis events (<1 month), late thrombosis events (1-12 months), very late thrombosis events (>12 months), time to the occurrence of myocardial re-infarction and time to cardiovascular death.

Results: The baseline characteristics and complication rates were not different between BMS and DES study groups. BMS and DES had almost identical rate of early thrombosis (0.9% vs 0%, p=0.117), late thrombosis (2.2% vs 1.0%, p=0.252) and very late thrombosis (0.8% vs 0%, p=0.207). The Kaplan-Meier analysis showed there was no difference of 5-year myocardial re-infarction event rate and 5-year cardiovascular survival between DES and BMS groups, whether DM or non-DM patients (Please see Figure).
Conclusions: This study demonstrated DES showed the same early, late and very late thrombosis rate as BMS. In long term follow up, whether DM or non-DM patients, DES had similar 5-year re-infarction rate and cardiovascular death as BMS in Asian patients after AMI.

TCT-187
Mid-term Clinical Outcomes after Polytetrafluoroethylene (PTFE)-covered Stent Implantation
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Background: Polytetrafluoroethylene (PTFE)-covered stents have improved the inhospital clinical outcomes of patients with coronary perforation. However, there are a few reports regarding their long-term outcomes.

Methods: We analyzed data that was prospectively collected from 17,277 patients who underwent percutaneous coronary intervention in New Tokyo Hospital between January 2004 and December 2012. Of the total, we identified 238 (1.38%) patients with coronary perforation. We then evaluated their mid-term clinical outcomes. The study endpoints were major adverse cardiac events (MACEs), definite or probable ST (361-720 days) was found.

Results: Among the 238 patients with coronary perforation, 42 (17.6%) were treated with PTFE-covered stents. All patients were followed-up for over 6 months (median follow-up period, 1015 days; interquartile range, 401–1739 days). Although the all-cause death rate was relatively high, at 11.9% because of complications associated with coronary perforation, the cardiac death rate was 2.6% at 1 year (Figure). TLR occurred in 5 patients, and it occurred within 3 months in 3 of these patients. MI occurred in 1 patient because of side branch occlusion following PTFE-covered stent implantation. No definite or probable ST was found.

Conclusions: The 1-year cardiac death rate of 2.6% in this study indicates a better mid-term clinical outcome of PTFE-covered stenting for coronary perforation.