

years, clinical follow-up or death occurred in 95.5% (968/1014) of patients. The 2-year rate of TVF was 10.4% (101/972), of which 6.4% (62/972) was considered related to the study stent. Cardiac death was 1.7% (7/987), with 0.2% considered related to the study stent. Target vessel-related MI was 1.7% (17/972) (1.5% study stent-related), and TVR was 8.3% (81/972) (5.7% study stent-related). ARC definite/probable ST was 1.0% (10/972), with 0.9% (9/972) considered related to the study stent. Two-year outcomes for subsets, including small vessels, long lesions, and diabetes, will be available at the meeting.

Conclusions: At 2 years post-procedure, the thin-strut, platinum chromium, paclitaxel-eluting TAXUS Element stent continues to demonstrate good performance and safety in everyday clinical practice.

TCT-581

Long-term Patient-related and Stent-related Outcomes of Second-Generation Everolimus-Eluting Xience V Stents versus Zotarolimus-Eluting Resolute Stents in Real-World Practice: Three Year Results From the Multicenter Prospective EXCELLENT and RESOLUTE-Korea Registries

Joo Myung Lee¹, Kyung Woo Park¹, Jung-Kyu Han¹, Han-Mo Yang¹, Hyun-Jae Kang¹, Bon-Kwon Koo², Han Cheol Lee³, Sung-Il Woo⁴, Jin Sik Park⁵, Dong-Kyu Jin⁶, Dong Woon Jeon⁷, Seok-Kyu Oh⁸, Jong Seon Park⁹, Doo-Il Kim¹⁰, Min Su Hyun¹¹, Hui-Kyung Jeon¹², Do-Sun Lim¹³, Taehoon Ahn¹⁴, Hyo-Soo Kim¹
¹Department of Internal Medicine and Cardiovascular Center, Seoul National University Hospital, Seoul, Korea, Republic of, ²Department of Internal Medicine and Cardiovascular Center, Seoul National University Hospital, Seoul, Seoul, ³Pusan National University Hospital, Busan, Korea, Republic of, ⁴Inha university hospital, Incheon, Korea, Republic of, ⁵Sejong General Hospital, Bucheon, Gyeonggi, ⁶Soonchunhyang University Cheonan Hospital, Cheonan, Korea, Republic of, ⁷NHIC Ilsan hospital, Koyang, Korea, Republic of, ⁸Wonkwang University hospital, Iksan, Korea, Republic of, ⁹Yeungnam University Medical Center, Dae gu, Korea, Republic of, ¹⁰Inje University Haeundae Paik Hospital, Busan, Korea, Republic of, ¹¹Soonchunhyang University Hospital, Seoul, Korea, Republic of, ¹²Uijeongbu St Mary's Hospital, Uijeongbu, Korea, Republic of, ¹³Korea University Anam Hospital, Seoul, Korea, Republic of, ¹⁴Gachon University Gil Hospital, Incheon, South Korea

Background: Long term outcomes are imperative to confirm safety of drug-eluting stents. Only two randomized controlled trials have reported 2-year comparisons of these stents, and no study has reported the 3-year long term clinical outcomes. This study was performed to compare the long-term clinical outcomes of Xience V/Promus everolimus-eluting stents (EES) with Resolute zotarolimus-eluting stents (ZES-R) in "all-comer" cohorts.

Methods: The EXCELLENT and RESOLUTE-Korea registries prospectively enrolled 3,056 patients treated with EES and 1,998 with ZES-R, respectively, without exclusions. Stent-related composite outcomes (target lesion failure) and patients-related composite events up to 3 years follow-up were compared in crude and propensity score matched analyses.

Results: Of 5054 patients, 3830 patients (75.8%) had off label indication (2217 treated with EES and 1613 treated with ZES-R). The stent-related outcome (189 [6.2%] vs. 127 [6.4%], p=0.812) and the patient-related outcome (420 [13.7%] vs. 250 [12.5%], p=0.581) did not differ between EES and ZES-R respectively at 3 year, which was corroborated by similar results from the propensity score-matched cohort (HR 0.92, 95% CI 0.70-1.20, p=0.523 and 0.85, 95% CI 0.70-1.02, p=0.081, for stent and patient related outcomes, respectively). The rate of definite or probable stent thrombosis up to 3 years (22 [0.7%] vs. 10 [0.5%], p=0.370) was also similar. The rate of very late definite or probable stent thrombosis was very low and comparable between the two stents (3 [0.1%] vs. 1 [0.1%], p=0.657). In multivariate analysis, chronic renal failure (adjusted HR 3.615, 95% CI 2.440-5.354, p<0.001) and off label indication (adjusted HR 1.782, 95% CI 1.169-2.718, p=0.007) were the strongest predictors of target lesion failure at 3-year.

Conclusions: In this robust real world registry with unrestricted use of EES and ZES-R, both stents showed comparable safety and efficacy at 3-year follow-up. Overall incidences of target lesion failure and definite stent thrombosis, including very late stent thrombosis, were low, even in the patients with off label indications, suggesting excellent long term safety and sustained efficacy of both types of second generation DES.

TCT-582

Percutaneous Coronary Intervention of Very Small Vessels in the RESOLUTE Global Clinical Program

Antonio Serra¹

¹Hospital de Sant Pau y Santa Creu, Barcelona, Spain

Background: Limited clinical data is available in patients who underwent percutaneous coronary intervention (PCI) with drug eluting stents in very small vessels (reference vessel diameter [RVD] ≤ 2.25 mm).

Methods: We examined the outcomes of patients who underwent PCI using ResoluteTM zotarolimus-eluting stent (R-ZES) in the pooled RESOLUTE program in vessels with RVD ≤ 2.25 mm and compared them to those of patients with RVD > 2.25 but ≤ 2.75 mm. The RESOLUTE global clinical program includes: RESOLUTE First-in-Human, RESOLUTE All Comers (R-AC), RESOLUTE International, RESOLUTE US, RESOLUTE Japan, RESOLUTE Japan Small Vessel, RESOLUTE

Asia, RESOLUTE China, and Resolute China Registry. Target Lesion Failure (TLF) was the composite of death from cardiac causes, target vessel myocardial infarction (TV-MI), and target lesion revascularization (TLR). The incidence of clinical events was calculated using the Kaplan Meier. Given differences in baseline characteristics, patients were matched by propensity scores based on 24 baseline variables and adjusted p-values are provided.

Results: A total of 1203 subjects with RVD ≤ 2.25 mm RVD and 2773 subjects with RVD > 2.25 but ≤ 2.75 mm were treated with R-ZES. Compared with patients with RVD > 2.25 but ≤ 2.75 mm, patients with RVD ≤ 2.25 mm had more complex baseline characteristics including prior PCI (33% vs. 26%, p<0.001) and history of hypertension (78% vs. 72%, p<0.001), respectively. However, there was no significant difference in TLF, TLR, CD/TV-MI or ARC definite/probable ST at 3 years (Table).

Conclusions: No increased risk is associated with the use of R-ZES in very small vessels (RVD ≤ 2.25 mm) compared with use in small vessels between 2.25 and 2.75 mm. Low rates of clinical events were observed through long-term follow-up in both groups. Submitted on behalf of the RESOLUTE Global Clinical Program

	≤ 2.25 mm reference vessel diameter	>2.25 but ≤2.75 mm reference vessel diameter	Adjusted p-value
Target Lesion Failure, %	11.2%	10.0%	0.59
Target Lesion Revascularization, %	6.2%	4.5%	0.12
Cardiac Death / Target Vessel Myocardial Infarction, %	6.0%	6.3%	0.57
ARC definite/probable stent thrombosis, %	1.2%	0.8%	0.26

TCT-583

Longest available clinical follow-up of a cohort of "real-world" patients treated exclusively with drug-eluting stents: Results of 12 years of the DESIRE (Drug-Eluting Stents In the REal world) Registry

Jose d Costa Jr¹, Amanda Sousa², Adriana Moreira³, RICARDO A. COSTA⁴, Manuel N. Cano⁵, Galo Maldonado⁵, cantidio campos neto⁶, Lucas P. Damiani⁷, Dimytri A. Siqueira⁸, J. Eduardo Sousa⁹
¹Instituto Dante Pazzanese de Cardiologia, São Paulo, Brazil, ²Dante Pazzanese, São Paulo, Brazil, ³HCOR, São Paulo, Bouvet Island, ⁴INSTITUTO DANTE PAZZANESE DE CARDIOLOGIA, SAO PAULO, Brazil, ⁵HCOR, São Paulo, Brazil, ⁶HCOR, São Paulo, Brazil, ⁷Hospital do Coração - Associação do Sanatório Sirio, São Paulo, São Paulo, ⁸Dante Pazzanese Institute of Cardiology, São Paulo, Brazil, ⁹Instituto Dante Pazzanese de Cardiologia, São Paulo, CA

Background: There is still uncertainty about the durability of the results of drug-eluting stents (DES) in real-world complex patients. We sought to provide the longest clinical follow-up data on outcomes of unselected patients treated solely with DES.

Methods: The DESIRE registry is a prospective, single-center registry encompassing all consecutive patients treated solely with DES since May 2002. The primary goal is the very long-term occurrence of MACE and stent thrombosis (ST). Patients were clinically followed at 1, 6 and 12 months and then annually. A multivariate model was built to determine independent predictors of MACE, TLR and ST.

Results: A total of 5,500 patients were included. The mean age was 64 ± 11 years. DM was detected in 29.7% and 44.8% presented with acute coronary syndrome. SVG lesions and STEMI represented 6% and 12% of the cohort, respectively. Follow-up was obtained in 98.2% of the patients (median 5.6 years). Currently, 79.6% of the population is free of any MACE. TVR was performed in 5.3% of the patients. Q-wave MI rate was only 1.7% while total ST rate was 1.9%. The majority of definite ST cases occurred between the 1st and 3rd years. Independent predictors of MACE were treatment of SVG (HR 1.63; 95% CI, 1.22 to 2.18, p=0.001), multivessel disease (HR 1.39; 95% CI, 1.03 to 1.87, p<0.001), residual stenosis (HR 1.3; 95% CI, 1.1 to 1.5, p=0.034), DM (HR 1.6; 95% CI, 1.1 to 2.2, p=0.006) and renal insufficiency (HR 1.5; 95% CI, 1.34 to 1.81, p=0.004). Independent predictors of ST were PCI for STEMI (HR 3.5; 95% CI, 1.3 to 9.4, p=0.013), stent length (HR 1.8; 95% CI, 1.09 to 3.02, p=0.023), moderate/severe calcification at lesion site (HR 2.38; 95% CI, 1.34 to 4.23, p=0.003), and in-stent residual stenosis (HR 1.04; 95% CI, 1.01 to 1.06, p=0.003).

Conclusions: In our single center experience, the use of DES was associated with very long-term safety and effectiveness with acceptable low rates of adverse clinical events, including ST.