Conclusions: This study represents the largest reported dataset of patients treated with RA in the DES era with long-term follow-up. The use of DES following RA appears to be associated with reduced long-term mortality.

**TCT-194**

5-Year Outcome Of Zotarolimus-Eluting Versus Sirolimus-Eluting Coronary Stent Implantation In Patients With And Without Diabetes Mellitus

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Background: Diabetes mellitus is associated with an increased risk of major adverse cardiac events (MACE) following percutaneous coronary intervention. We compared 5-year clinical outcomes in patients with and without diabetes mellitus treated with the second-generation zotarolimus-eluting Cypher® Select® stent (E-ZES) or the first-generation sirolimus-eluting Cypher® Select® stent (C-SES).

Methods: We randomised 2,332 patients to treatment with E-ZES (n = 1,162, diabetes: n = 169) or C-SES (n = 1,170, diabetes: n = 168) and followed them for 5 years. Randomisation was stratified by presence of diabetes, defined as a composite of cardiac death, myocardial infarction, or target vessel revascularization.

Results: In diabetic patients, use of E-ZES compared with C-SES was associated with an increased risk of MACE (28.4% vs. 18.5%; hazard ratio (HR) = 1.75, 95% confidence interval (CI): 1.05-2.93). In comparison, patients without diabetes had similar 5-year MACE (15.0% vs. 15.1%, HR = 0.99, 95% CI: 0.77-1.17).

Conclusions: Implantation of E-ZES as compared to C-SES is associated with an increased risk of MACE in patients with diabetes at 5-year follow-up. This difference was not observed in patients without diabetes.

**TCT-195**

Impact of Total Stent Length on Clinical Outcomes After Percutaneous Coronary Intervention With Bioresorbable-Eluting Stents versus Everolimus-Eluting Stent

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Background: Total stent length (TSL) after first generation drug-eluting stents (DES) implantation was associated with adverse cardiac events. However, it remains unclear whether TSL after newer-generation DES implantation has impacts on clinical outcomes. Our aim was to assess the relationship between TSL and clinical outcomes after the Nobori bioresorbable-eluting stent (BES) and the Xience/Promus everolimus-eluting stent (EES) implantation.

Methods: A total of 2,284 patients with 3,097 lesions undergoing BES (1,269 patients with 1,751 lesions) and EES (1,015 patients with 1,346 lesions) implantation between February 2010 and July 2012 were analyzed. Patients and Lesions were divided into quartile groups: TSL per patient (PA: 8 to 18 mm [n = 1,170], LD: 39 to 134 mm [n = 1,162], diabetes: n = 1,157, diabetes: n = 1,168) and TSL per lesion (PA: 8 to 18 mm [n = 1,147], LD: 19 to 24 mm [n = 1,346], PC: 25 to 42 mm [n = 557], PD: 43 to 134 mm [n = 529]), and TSL per lesion (LA: 8 to 18 mm [n = 1,147], LB: 19 to 24 mm [n = 1,346], LC: 25 to 38 mm [n = 638], LD: 39 to 134 mm [n = 765]). In the BES and EES groups, we assessed the cumulative 1-year incidence of clinically driven target lesion revascularization (TLR) and definite stent thrombosis based on TSL per patient and lesion groupings, and cardiac death and myocardial infarction in the TSL per patient groupings.

Results: In per-lesion data, longer TSL increased TLR rates (p = 0.0001) but did not increased rate of stent thrombosis (p = 0.011) in the BES group. In contrast, longer TSL did not increased TLR rate (p = 0.22) and rate of stent thrombosis (p = 0.45) in the EES group. In group LA, the rate of TLR was significantly lower in the BES group than in the EES group (3.1% vs.4.6%, p = 0.005). In per-patient data, longer TSL increased TLR rates (p = 0.008) but did not increased rate of stent thrombosis (p = 0.74) in the BES group, whereas did not increased TLR rate (p = 0.24) and rate of stent thrombosis (p = 0.38) in the EES group. Incidence of cardiac death and myocardial infarction also did not increased with increasing TSL in the two groups.

Conclusions: TSL per patient and lesion has significantly impacts on TLR rates in the BES group, whereas do not in the EES group. TSL per patients and lesion do not increase the rate of stent thrombosis within 1-year in the BES and EES groups.

**TCT-193**

Effect Of Drug-Eluting Stents Versus Bare-Metal Stents On Long-Term Mortality Following Rotational Atherectomy For Complex Coronary Lesions

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Background: Rotational atherectomy (RA) facilitates delivery of stents in calcific lesions. Calcified coronary lesions are an established risk factor for long-term failure after both bare metal stents (BMS) and drug-eluting stent (DES) implantation. Whilst DES use following RA may result in high procedural success and acceptable restenosis rates, there is limited data on their long-term efficacy and prognostic benefit when used with RA.

Methods: We examined an observational cohort of 661 consecutive patients treated with RA between 2005-2011 at 8 tertiary cardiac centers across London, UK. Multivariate Cox-proportional hazards models using forward stepwise variable selection were used to determine independent predictors of mortality.

Results: 209 patients (32%) were treated with BMS and 452 patients (68%) were with DES. Patients in the BMS group were older (75.5y vs. 73.2y, p = 0.002). The female:male ratio; presence of cardiogenic shock; presence of diabetes; previous PCI and CABG was similar between both groups. A greater proportion of patients in the BMS group had ACS. GP 2b-3a inhibitor use was greater in the BMS group. The length of stented segment was greater in the DES group (24mm vs.28mm, p = 0.001). Multivariate analysis identified the use of DES as an independent predictor of 1-year mortality (HR=0.45, 95% CI: 0.26-0.78, p = 0.005) and 3-year mortality (HR=0.64, 95% CI: 0.42-0.98, p = 0.041).

Conclusions: EES showed better clinical angiographic finding in the analysis of target lesions in diabetic patients with small coronary artery diseases.