

vessel failure at 6 and 12 months, procedural success and parameters measured by QCA (MLD, DS%, ...). An OCT substudy investigates stent apposition at the initial procedure timepoint.

Results: 220 patients were enrolled in 21 European centers. Age was 66 ± 11 years, 78% male. Diabetes was present in 30% of patients, hypertension in 76%. Medina class 1,1,1 was found in 35% of the patients. STENTYS DES was implanted successfully in 98% of the patients. Stenting of SB was performed in 12% of the procedures. Revascularization was successful (TIMI 3 or 2) in 99.5% for MB, and 96.7% for SB.

Conclusions: The ongoing Open II study is the largest study assessing self-expanding STENTYS DES in bifurcation lesions in a clinical routine setting. The primary endpoint, MACE rate at 6 months, will be presented, and compared to landmark trials (Nordic and BBC studies). TVF, QCA and OCT data will also be presented.

TCT-23

Clinical Impact of Intravascular Ultrasound Guidance in Drug-eluting Stent Implantation for the Left Main: Patient Level Pooled Analysis of 4 Registries.

Jose M. De la Torre Hernandez¹, Jose A. Baz², Joan A. Gomez Hospital³, Fernando Alfonso⁴, Tamara Garcia Camarero⁵, Federico Gimeno⁶, Gerard Roura⁷, Angel Sanchez-Recalde⁸, Angel Cequier⁹, Agustin Albarran¹⁰, Jose Antonio Fernandez Diaz¹¹, Josep Gomez Lara¹², Felipe Hernandez¹³, Manuel Jimenez Navarro¹⁴, Inigo Lozano¹⁵, Josepa Mauri¹⁶, Armando Pérez de Prado¹⁷, Maria Jose Perez Vizcaino¹⁸, Eduardo Pinar¹⁹, Javier Zueco²⁰

¹Hospital Universitario Marques de Valdecilla, Santander, Spain, ²Hospital Meixoeiro, Vigo, Galicia, ³Hospital de Bellvitge, Barcelona, Cataluña, ⁴Clinico San Carlos, Madrid, Madrid, Spain, ⁵H. Marques de Valdecilla, Santander, Spain, ⁶Hospital Clinico de Valladolid, Valladolid, Castilla-Leon, ⁷Hospital de Bellvitge, Barcelona, Spain, ⁸H. La Paz, Madrid, Spain, ⁹Hospital of Bellvitge, Barcelona, Spain, ¹⁰12 OCTUBRE, MADRID, SC, ¹¹H Puerta de Hierro, Madrid, Spain, ¹²Hospital Universitari de Bellvitge, Hospitalet de Llobregat, Spain, ¹³Hospital 12 de Octubre, Madrid, Spain, ¹⁴H. Virgen de la Victoria, Malaga, Spain, ¹⁵Department of Cardiology, Oviedo, Oviedo, ¹⁶Hospital Germans Trias i Pujol, Badalona, Spain, ¹⁷HemoLeon, Fundación Investigación Sanitaria en León, Leon, Leon, ¹⁸Hospital Clinico, Madrid, Spain, ¹⁹Hospital Universitario Virgen de la Arrixaca, Murcia, Spain, ²⁰H Marques de Valdecilla, Santander, Spain

Background: We sought to investigate the clinical impact of the use of intravascular ultrasound (IVUS) during revascularization of patients with left main (LM) disease with drug-eluting stents (DES). Whether the use of IVUS during the procedure adds a clinical benefit remains unclear. There is only one previous observational study with relevant limitations supporting the value of this strategy.

Methods: We performed a patient level pooled analysis of 4 registries of patients with LM disease treated with DES. A propensity score matching method was used to obtain matched pairs of patients with and without IVUS guidance.

Results: A total of 1,670 patients were included and 505 patients (30.2%) underwent PCI under IVUS guidance (IVUS group). By means of the matching method, 505 patients without the use of IVUS during PCI were selected (no-IVUS group). Survival free of cardiac death, myocardial infarction and TLR at 3 years was 88.7% in IVUS group and 83.6% in no-IVUS group ($p=0.04$) for overall population and 90% and 80.7% respectively ($p=0.03$) for the subgroups with distal LM lesions. The incidence of definite and probable thrombosis was significantly lower in IVUS group (0.6% vs. 2.2%; $p=0.04$). Finally, IVUS resulted independent predictor for major adverse events in overall population (HR 0.70, 95% CI 0.52 - 0.99; $p=0.04$) and in the subgroup with distal lesions (HR 0.54, 95% CI 0.34 - 0.90; $p=0.02$).

Conclusions: The results of this nation-wide registries pooled analysis confirms the clinical benefit derived from IVUS-guided strategy in patients with LM disease undergoing PCI with DES, especially in distal lesions.

TCT-24

Late Outcomes of Unprotected Left Main Stenting in Comparison With Surgical Revascularization - Ten-Year Clinical Follow up of the LEMANS trial

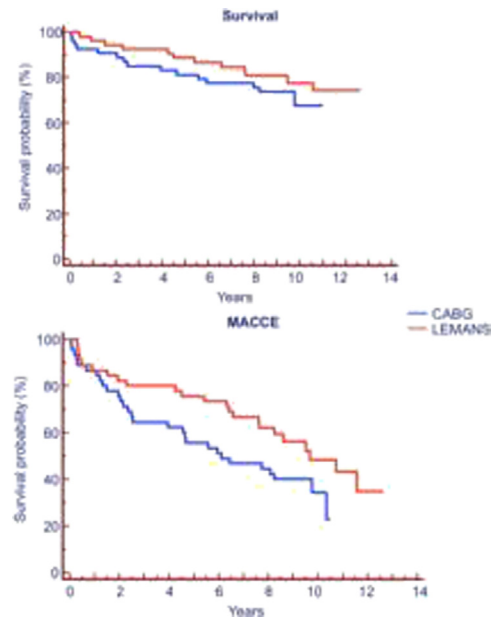
Buzzman E. Pawel¹, Piotr P. Buzzman¹, Iwona Banasiewicz Szekrobka¹, Krzysztof P. Milewski², Aleksander Zurakowski², Bartłomiej Orlik², Wojciech Wójcikowski², Adam Janas², R. Stefan Kiesz³, Andrzej Bochenek¹
¹American Heart of Poland, Katowice, Poland, ²American Heart of Poland, Katowice, Silesia, ³San Antonio Endovascular and Heart Institute, UTHSC San Antonio, TX

Background: The very long term outcome after left main stenting (LEMANS) in comparison wit surgical revascularization remains unknown. Therefore we report a 10 year clinical follow-up of patients enrolled in the prospective, randomized LEMANS trial.

Methods: We randomly assigned 105 patients with unprotected left main coronary artery stenosis (ULMCA) to percutaneous coronary intervention (PCI; 52 patients) or coronary artery bypass grafting (CABG; 53 patients). Study design, protocol and mid-term results were reported previously. In the current study, the mean long term follow up was collected at 9.8 ± 1 years after baseline procedure. Data on all cause mortality

were collected from all patients, whereas incidence of MACCE, which included all cause death, myocardial infarction, stroke, repeated revascularization, from 90%.

Results: At ten years, the mortality was comparable between stenting group when compared to surgery (23.0% vs. 28.7% $p=0.69$). Similarly, the incidence of MACCE was statistically not different to surgery (51.1 vs. 64.4%, $p=0.28$), however numerically the difference was in favor of stenting. The probability of long term survival up to 14 years was comparable between PCI and CABG (74.2 vs. 67.5%, $p=0.34$ HR:1.45 95%CI: 0.67-3.13), however there was a trend toward higher MACCE-free survival in the PCI group (34.7 vs 22.1%, $p=0.06$, HR :1.71 95%CI: 0.97-2.99, Figure).



Conclusions: Left main stenting offers favorable long term outcomes up to 10 years and constitutes an alternative therapy for CABG.

TCT-25

Five-year clinical follow-up of unprotected left main bifurcation lesion stenting: one- versus two-stent techniques versus double-kissing crush technique

Yao-Jun Zhang¹, Shao Liang Chen², Javaid Iqbal³, Bo Xu⁴, Jun-Jie Zhang⁵
¹Nanjing Medical University, Rotterdam, Rotterdam, ²Nanjing First Hospital, Nanjing Medical University, Jiangsu, China, ³Erasmus Medical Center, Rotterdam, Rotterdam, ⁴Fu Wai Hospital, National Center for Cardiovascular Diseases, Beijing, China, ⁵Nanjing Medical University, Nanjing, Jiangsu

Background: The present study aimed to compare the long term (5-year) safety and efficacy between the one-stent, two stent, and DK crush strategies, utilizing drug-eluting stents, for unprotected left main coronary artery (ULMCA) bifurcation lesions. **Methods:** Between March 2004 and April 2007, 633 consecutive patients with ULMCA bifurcation lesions (232 in one-stent group and 401 in two-stent group) were prospectively enrolled. The primary endpoint was the occurrence of major adverse cardiac events (MACE), a composite of cardiac death, myocardial infarction (MI), and target vessel revascularization (TVR), at 5-year follow-up.

Results: Patients in the two-stent group were classified as DK crush ($n=155$) and the other two-stent techniques (culotte, T stenting, Kissing stenting and classical crush, $n=246$). Forty-seven (16.8%) patients in the one-stent group crossed-over to the two-stent group. The one-stent group was associated with increased incidence of MI compared to the two-stent approach (10.5% vs. 5.5%, $p=0.025$). The crude rate of MACE at 5-year was 28.0% in one-stent group and 28.4% in two-stent group ($p=0.927$). DK crush was associated with a significantly decreased 5-year MACE compared to other two-stent approaches or the one-stent approach (DK-crush: 14.8% vs. Other two-stent approaches: 37.0%, one-stent approach: 28.0%, $p<0.001$). The main benefit of DK-crush appeared to be primarily secondary to a reduction in TVR (7.7% vs. 30.5% vs. 18.1%, $p<0.001$). By Cox regression analyses, the non-DK crush two-stent technique, a high SYNTAX score (≥ 33) or New Risk Stratification (NERS) score (>20), and incomplete revascularization were shown to be independent predictors of MACE at 5-year follow-up.

Conclusions: With distal left main true bifurcations, the two-stent technique (excluding DK-crush) is an independent predictor of long term MACE. DK-crush is associated with more favorable long-term clinical outcomes. Confirmation of these findings is required from randomized controlled trials.