**TCTAP A-150**
The Efficacy of 2.25mm Everolimus-Eluting Stents for Very Small Vessel Lesions in Real-World Patients
Takenobu Shimada,1 Kazushige Kadota,1 Yu Izawa,1 Takeshi Tada,1 Kazuaki Mitsudo1
1Kurashiki Central Hospital, Japan

**BACKGROUND** Very small vessel coronary artery disease represents a challenging entity for treatment with percutaneous coronary intervention. Recently, 2.25 mm platinum chromium everolimus-eluting stent (PtCr-EES) is available. We evaluated the efficacy of 2.25 mm PtCr-EES in real-world patients.

**METHODS** Between September 2012 and February 2014, we treated 247 de novo very small vessel lesions using 2.25 mm PtCr-EES. Angiographic follow-up was routinely performed at 8 months after procedure. The follow up rate was 76.5%.

**RESULTS** The reference diameter was 2.33±0.30 mm, the lesion length was 23.8±13.7 mm, and the acute gain was 1.55±0.6 mm. The restenosis rate was just 2.8%, the target lesion revascularization rate was just 1.0%, and the late lumen loss was 0.22±0.4 mm.

**CONCLUSION** Based on the 8-month angiographic data, restenosis and target lesion revascularization rate were low. 2.25 mm PtCr-EES is considered effective in treating very small vessel lesions.

**TCTAP A-151**
Five-Year Clinical Outcomes in Aorto-Ostial Lesion Treated with Drug Eluting Stent
Kyu-Hwan Park,1 KangUn Choi,1 Chan-Hee Lee,1 YoonJung Choi,1 Jang-Won Son,1 Ung Kim,1 Jong-Seon Park,1 Dong-Gu Shin,1 Young-Jo Kim,1 Han-Young Jin,1 Jae-Sik Jang,1 Tae-Hyun Yang,1 Dong-Soo Kim,1 Guang-Won Seo,1 Dong-Kie Kim,1 Pilsang Song,1 Doo Il Kim,1 Yun-Kyeong Cho,1 Hyuck Jun Yoon,1 Chang-Wook Nam,4 Seung-Ho Hur,1 Kwon-Bae Kim1
1Yeungnam University Hospital, Korea (Republic of); 2Inje University Busan Baik Hospital, Korea (Republic of); 3Keimyung University Dongsan Medical Center, Korea (Republic of)

**BACKGROUND** Clinical outcomes in patients treated with drug eluting stent (DES) implantation between Right coronary artery ostial (RCAos) lesion and left main coronary ostial (LMos) lesion still unclear. The purpose of this study is to compare clinical outcomes of DES implantation for RCAos lesion and LMos lesion 5 years.

**METHODS** A total of 74 consecutive patients with de novo RCAos lesion or LMos lesion who underwent percutaneous coronary intervention (PCI) with DES from July 2005 to August 2009 were enrolled. The patients were divided into two groups according to the type of ostial lesion. (RCAos group; n=40, LMos group; n=34). Study endpoints were a composite of major adverse cardiac events (MACE), including all-cause death, myocardial infarction (MI), target lesion revascularization (TLR), target vessel revascularization (TVR) for 5 years.

**RESULTS** There was no significant difference between two groups in baseline characteristics. Cumulative MACE for 5 years in patients with aorto-ostial lesion was higher in RCAos group than LMos group (37.5% vs. 14.7%, p=0.028). In RCAos group, the incidences of all-cause death (15.0% vs 5.9%, p=0.518), MI (12.5% vs. 5.9%, p=0.332), TLR (10.0% vs. 8.8%, p=0.863), and TVR (15.0% vs. 11.8%, p=0.685) were higher than LMos group (12.8% vs. 5.1%, p=0.074).

**CONCLUSION** Long-term clinical outcomes in patients treated with DES implantation for aorto-ostial lesion seem to be acceptable. A patient with LMos lesion may have better clinical outcome, however further study will be needed.

**TCTAP A-152**
Angioplasty in Small Vessel Disease: Drug Coated Balloon or Drug Eluting Stent?
Dasdo Antonius Sinaga,1 Hee Hwa Ho,1 Fahim Haider Jafary,1 Yau Wei Ooi,1 Julian K.B. Tan,1 Jason Kwok Kong Loh,1 Paul J.L. Ong2 1Tan Tock Seng Hospital, Singapore

**BACKGROUND** Percutaneous coronary intervention (PCI) with drug eluting stent (DES) in small vessel coronary disease (SVD, diameter ≤2.8 mm) is the standard of care with low target lesion revascularization (TLR) rate of 6-9%. Recently, drug coated balloon (DCB) has been used to treat de novo SVD with promising result. We studied the efficacy and safety of drug coated balloon-only angioplasty (DCBA) in SVD amongst high-risk patients.

**METHODS** We retrospectively analyzed the outcome of consecutive patients who underwent PCI to de novo SVD with DCB or DES sized ≤2.5 mm in 2013 with 1 year follow up data.

**RESULTS** One hundred and twenty (120) patients were intervened with DCBA (100% Sequent Please, Bbraun), male 83.3%, mean age 62 ± 11.5 years old; 48% had diabetes mellitus, 70% had hyperlipidemia, 75.6% had hypertension and 26% had history of smoking. Three quarter of the patients presented with acute coronary syndrome (ACS), unstable angina pectoris/NSTEMI (59.2%) and STEMI (25.8%). In the DCBA arm, the most common target vessel was LCX (39%), followed by LAD (36%) and RCA (24%). On average, 1.38 DCB was used per patient. Mean diameter or DCB was 2.26 ± 0.25 mm and mean length was 16.3 ± 4.1 mm. In the same period, 24 patients had DES implantation using stents diameter ≤2.5 mm. The demographics of the DES patients were not significantly different from the DCBA group. In total 26 devices were used. Mean diameter of the DES was 2.44 ± 0.1 mm with mean length of 22.6 ± 8.4 mm.

Despite the predominantly ACS presentation, patients treated with DCBA had shorter duration of DAPT than the DES group (8.2 months vs. 12 months, p<0.0001). At 1 year, 10 MACEs were observed at DEBA arm (8.33%), consisting of 4 MIs (3%) and 5 TLRs (4.16%). In patients treated with DES, there was 1 TLR (4.1%) at 1 year, without any other MACE. No death or major bleeding was found in either group during 1-year period.

**CONCLUSION** DCBA has similar TLR at 1 year compared to second generation DES implantation (4.16% vs. 4.16%, respectively, p = 0.74) in treating SVD in a high-risk group of patients. The DAPT duration was also shorter using DCBA.