Conclusion: This represents the first time that patient-reported outcomes have been reported in both COURAGE-like and non COURAGE-like patients exclusively receiving a DES. Although there were no differences in clinical outcomes, marked improvements in patient’s health status were observed 12 months after XIENCE V. Both procedures show exceptional safety, with no deaths and only minor adverse events rate at periprocedural period. At long term PCI with DES is non inferior to MIDCAB. Patients in PCI group were older (63.6±9.3 vs 59.7±10.2, y.o.; p=0.05), more often female (32 vs 21%; p<0.01) had higher CCS class (2.53±0.9 vs 2±0.3; p=0.01), higher Euroscore (4 vs 2.2; p<0.01) and more often presented with peripheral artery disease (8 vs 2%; p<0.01). At 30 day follow up there was no death in both groups. There were also no differences in the occurrence of major adverse cardiovascular and cerebral events (MACCE) defined as death, stroke, myocardial infarction or repeated revascularization between PCI and MIDCAB groups (0% vs 0.7%;p=0.22). However there were less serious adverse events (SAE) defined as atrial fibrillation, wound infection, low output syndrome or serious bleeding in patients who underwent MIDCAB (0 vs 5%; p<0.01). After adjustment at 5 year follow up there were no differences in survival (93.5 vs 95.7%; p=0.56), MACCE free survival (64.9 vs 74.4%; p=0.04) and MI – free survival (94.9 vs 95.8%; p=0.46) between PCI and MIDCAB respectively. There was significantly higher freedom from repeated revascularization in patients who underwent MIDCAB (86.4 vs 64.1%; p=0.01).

Conclusion: Both procedures show exceptional safety, with no deaths and only minor adverse events rate at periprocedural period. At long term PCI with DES is non inferior to MIDCAB with regard to safety endpoints. The rate of repeated revascularizations remained higher in the PCI group.

TCT-199

ENERGY 1’000 Patient Registry with a Thin Strut Bare Metal Stent with Passive Coating Presenting Six Month Follow-Up MACE
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Background: The minimally invasive direct coronary artery bypassing (MIDCAB) has proven its superiority over bare metal stenting of proximal left anterior descending (LAD) artery in reducing the need of repeated revascularizations. Nevertheless, the long term outcome of percutaneous coronary intervention (PCI) utilizing new generation of drug eluting stenting (DES), in this lesion subset is unknown.

Methods: This is a multicentre, retrospective registry of 463 consecutive patients, enrolled between 2004 and 2009 with proximal, significant, type B and C LAD lesion (>70% DS) who underwent either PCI with exclusive use of DES (72% of 2nd. generation) or MIDCAB. We excluded patients with myocardial infarction (MI) on admission, concomitant lesions in the right and/or circumflex coronary arteries, previous PCI within 6 months, or previous CABG. A propensity score was utilized for patients baseline characteristics matching and results adjustment.

Results: One hundred and eighty seven patients underwent PCI while DES while 276 MIDCAB. Patients in PCI group were older (63.6 ± 9.3 vs 59.7 ± 10.2 y.o.; p=0.05), more often female (32 ± 21%; p<0.01) had higher CCS class (2.53 ± 0.9 vs ± 2 ± 0.3; p<0.01), higher Euroscore (4 ± 2.2; p<0.01) and more often presented with peripheral artery disease (8% vs 2%; p<0.01). At 30 day follow up there was no death in both groups. There were also no differences in the occurrence of major adverse cardiovascular and cerebral events (MACCE) defined as death, stroke, myocardial infarction or repeated revascularization between PCI and MIDCAB groups (0% vs 0.7%;p=0.22). However there were less serious adverse events (SAE) defined as atrial fibrillation, wound infection, low output syndrome or serious bleeding in patients who underwent MIDCAB (0 vs 5%; p<0.01). After adjustment at 5 year follow up there were no differences in survival (93.5 vs 95.7%; p=0.56), MACCE free survival (64.9 vs 74.4%; p=0.04) and MI – free survival (94.9 vs 95.8%; p=0.46) between PCI and MIDCAB respectively. There was significantly higher freedom from repeated revascularization in patients who underwent MIDCAB (86.4 vs 64.1%; p=0.01).

Conclusion: Both procedures show exceptional safety, with no deaths and only minor adverse events rate at periprocedural period. At long term PCI with DES is non inferior to MIDCAB with regard to safety endpoints. The rate of repeated revascularizations remained higher in the PCI group.

TCT-201

Incidence of Periprocedural Myocardial Infarction Following Stent Implantation: Comparison Between First and Second Generation Drug-Eluting Stents
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Background: Drug eluting stents (DES) of the first and second generation, differ in their coating material which may have implications for the incidence of periprocedural myocardial infarction (PMI). In this study we compare the incidence of PMI using the revised Academic Research Consortium (ARC) definition of PMI between Taxus Liberté, Endeavor Sprint, Endeavor Resolute and Xience V.

Methods: We assessed 800 patients treated with first (Taxus Liberté or Endeavor) or second generation DES (Xience V or Resolute). Each DES group consisted of 200 consecutive patients, who were treated during the transition from first to second generation DES. Routine peri-interventional assessment of cardiac biomarkers was performed to compare the incidence of PMI between DES groups according to ARC: 2x upper reference limit of creatine kinase (CK), confirmed by CK-MB elevation.

Results: In 800 patients, a total of 1522 DES (363 Taxus; 385 Endeavor; 382 Xience V; 392 Resolute) were implanted to treat 1232 lesions. Patient characteristics did not differ between the two groups. MACE (hierarchically) occurred in 4.7% subjects between baseline and 6-month follow-up including 2.5% target lesion revascularizations, 2.3% stent thrombosis, 1.5% myocardial infarctions (incl. AMI) and 0.7% cardiac death.