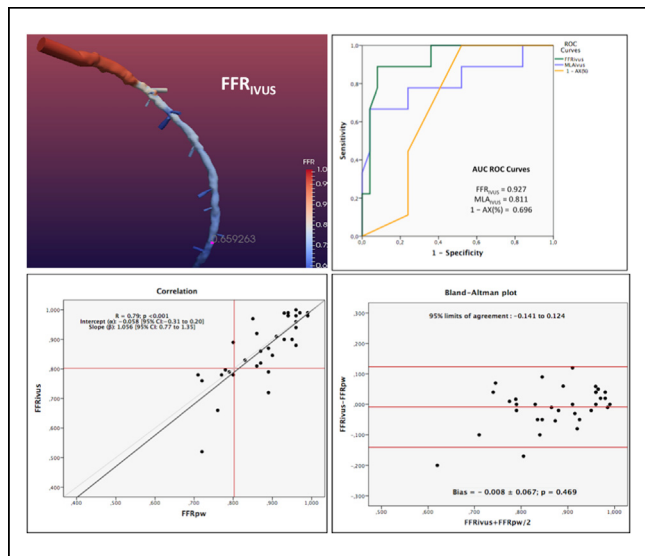


respectively: 91%, 89%, 92%, 80% and 96%. The area under the receiver operating characteristic curve was 0.93 for FFRIVUS and 0.81 for MLAIIVUS and 0.69 for maximum percent angiographic stenosis (AX%), with a gain in FFRIVUS performance compared to AX% ($p < 0.05$). No systematic nor proportional differences between FFRIVUS and FFRPW were demonstrated.



CONCLUSION FFRIVUS is a new computational method that allows the evaluation of the functional significance of intermediate coronary stenosis in an accurate way, enriching the anatomical information of IVUS.

CATEGORIES IMAGING: Cath Lab of the Future

TREATMENT OF LEFT MAIN DISEASE WITH CORONARY ARTERY BYPASS SURGERY: INSIGHTS FROM EXCEL

Abstract nos: 73 - 77

TCT-73

Off-pump Versus On-pump Coronary Artery Bypass Surgery for Left Main Revascularization: Insights From the EXCEL trial

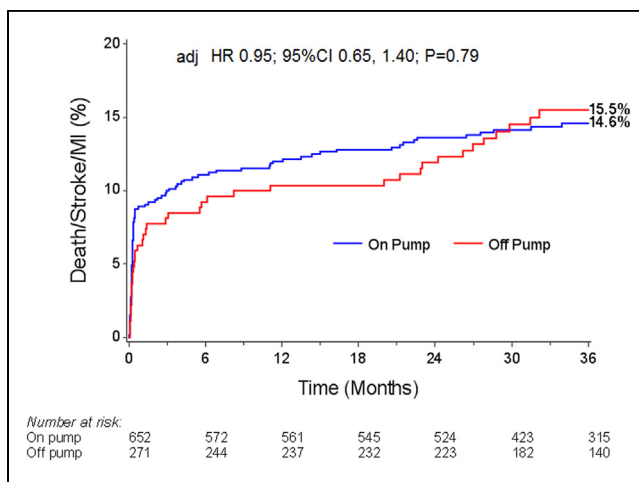
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BACKGROUND Whether off-pump CABG in patients with left main stem (LMS) disease is as safe and effective as on-pump surgery remains to be determined.

METHODS The EXCEL trial compared PCI with everolimus-eluting stents vs CABG in 1905 patients undergoing left main revascularization. A total of 271 (29%) patients assigned to CABG were treated with off-pump surgery, while 652 (71%) were treated with on-pump

surgery. We conducted a post-hoc analysis of the EXCEL trial to compare 3-year clinical outcomes between off-pump and on-pump surgery including death, myocardial infarction (MI), cerebrovascular accident (CVA) and unplanned revascularization. Due to lack of randomization between the two groups, stepwise multivariate Cox regression was used to adjust for the effects of off-pump vs on-pump surgery.

RESULTS At 3 years, crude mortality rates in the off-pump and on-pump group were 8.7% (22) vs 4.8% (30), respectively ($P=0.04$). No significant differences between off-pump and on-pump groups were present for the unadjusted rates of MI (5.4% [14] vs 8.4% [53], $P=0.11$), CVA (5.3% [13] vs 3.8% [23], $P=0.36$) or unplanned revascularization (8.6% [22] vs 7.3% [44], $P=0.46$). After adjusting for confounding factors, the risk of death was not significantly higher with off-pump surgery (HR 1.68; 95%CI 0.91-3.12; $P=0.10$); nor was composite of death, MI, or CVA significantly different (HR 0.95; 95%CI 0.65-1.40, $P=0.79$; Figure).



CONCLUSION In the EXCEL trial, off-pump and on-pump CABG were equally safe and effective at 3 years in patients with LMS disease.

CATEGORIES CORONARY: Cardiac Surgery

TCT-74

What is the Value of a Second Internal Thoracic Arterial Graft on 3-year Outcomes After CABG in Left Main Disease? Insights from the EXCEL trial



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BACKGROUND Whether the use of a single internal thoracic artery (SITA) vs. bilateral internal thoracic artery (BITA) is safe and effective in patients with left main (LM) disease undergoing CABG is uncertain.

METHODS The EXCEL trial compared PCI with everolimus-eluting stents versus CABG in 1905 patients undergoing LM revascularization. Of 908 patients undergoing CABG, 643 (70.8 %) received SITA and 265 (29.2%) received BITA. The 3-year post-operative outcomes including death, MI, stroke and ischemia-driven revascularization were compared. Differences in event rates were estimated using