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ABSTRACTS - ACCIS2002 (Angiography & Interventional Cardiology)

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1174-16 Sirolimus Coated Stent Versus Bare Stent: Angiographic and IVUS Analysis at Four-Month and One-Year Follow-Up


Background: Sirolimus (Rapamycin) coated stent has been shown to decrease intimal hyperplasia (IH) compared to bare stent.

Objective: To assess the difference of IH between 4 and 12 months of sirolimus-coated compared to non-coated (bare) Bx Velocity coronary stents in patients with CAD.

Methods: Forty-five patients underwent elective, single vessel stenting in our institution. Sirolimus-coated stents were implanted in 30 patients (15 fast [15 days] release formulation and 15 slow [28 days] release of sirolimus) and non-coated stents were implanted in 15 pts. All stents were 18 mm long and 3.0-3.5 mm in diameter. Angiographic and volumetric IVUS analyses were performed by two experience analysts, after the procedure, at 4 and 12 month follow-up.

Results: All stents were successfully deployed after balloon pre-dilatation and pts were discharged without complications. Baseline characteristics were similar between groups and 23% of the pts had diabetes. Reference vessel diameter was 2.96 ± 0.3 mm (FR), 2.98 ± 0.4 (SR) and 2.9 ± 0.4 mm (noncoated stent group), p<NS.

FR 4 mm FR12M 6 FR 12M 4 Bare 8m Bare12m

Late loss (mm) 0.11 ± 0.11 2.02 ± 0.3 0.05 ± 0.08 0.83 ± 0.37 0.91 ± 0.4

Intimal hyperplasia (mm³) 2.04 ± 3.8 2.54 ± 2.09 0.8 ± 3.9 3.0 ± 21.5 4.2 ± 32.5

FR vs SR: p = NS; FR vs Bare: p > 0.001; SR vs Bare: p < 0.001; 4 m vs 12 m: p = NS

Conclusion: Late lumen loss and intimal hyperplasia was virtually absent after implantation of sirolimus-coated stents and significantly less than non-coated stents, regardless the formulation used (FR versus SR) and the time of follow-up (4 versus 12 months).

1174-17 Effect of Restenosis With a Paclitaxel-Eluting Stent: Factors Associated With Inhibition in the Elutes Clinical Study


Background: The QUADDS-QP2 stent is a 316L stainless steel stent that delivers 4000 (an antiproliferative taxane derivative) from high capacity polymer sleeves. The QUADDS trial was stopped early due to higher thrombosis with the QP2 Stent after randomizing 267 of 400 pts with de novo lesions to a bare metal control stent or the QP2 Stent (available sizes: 3.0 or 3.5mm; 13 or 17 mm long). Methods: We report the quantitative angiographic (QCA) results of the first 260 pts enrolled, with follow-up available in 77% (n=202). Restenosis rates (RS) including thrombosis cases (H:QP2 vs 0%: Quest). Results: The stent was deployed successfully in all cases. Lesion characteristics were similar at baseline with ACC/AHA class >B1 in 30.9% QP2 vs 33.6% bare stent, 17% long lesion in 11.5% QP2 vs 16.6% bare stent, and secretion.

Conclusion: PBS and TVV had similar volumes at FU suggesting that no significant plaque shrinking or positive/negative remodeling occurred as result of sirolimus elution. In other words, effects is effective in preventing NH4 without influencing the vessel wall structure when compared with US.

1174-19 SCORE Six-Month Angiographic Results: Improved Restenosis in Patients Receiving the QUADDS-QP2 Drug-Eluting Stent Compared With the Control, Bare Stents


Background: The QUADDS-QP2 stent is a 316L stainless steel stent that delivers 4000 , an antiproliferative taxane derivative (an high capacity polymer sleeves. The SCORE trial was stopped early due to higher thrombosis with the QP2 Stent after randomizing 267 of 400 pts with de novo lesions to a bare metal control stent or the QP2 Stent (available sizes: 3.0 or 3.5mm; 13 or 17 mm long). Methods: We report the quantitative angiographic (QCA) results of the first 260 pts enrolled, with follow-up available in 77% (n=202). Restenosis rates (RS) including thrombosis cases (H:QP2 vs 0%: Quest). Results: The stent was deployed successfully in all cases. Lesion characteristics were similar at baseline with ACC/AHA class >B1 in 30.9% QP2 vs 33.6% bare stent, p<NS (see table). Follow-up restenosis was reduced by 57%. Conclusion: Despite the safety concerns of high dose QP2 delivered via a high capacity polymer the QUEST stent, striking reductions in RS are observed within the targeted stent zone, which remains overall, the thrombosis cases. Complete adjudicated 6 month data will be presented.

1174-20 Treatment of In-Stent Restenosis Using Paclitaxel Eluting Stents: Results From the Leuven Pilot Trial

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Corony stents are still hampered by an increased neointimal hyperplasia caused by vessel injury due to stent implantation and due to a foreign body response induced by the stent itself.

Paclitaxel, extracted from the Pacific Yew Tree, Taxus brevifolia, possess potent immunomodulatory effects, inhibiting cell proliferation and secretion and secretion.

Pre-clinical investigation with the Cook Paclitaxel-coated coronary stent showed a slow in vivo-release of the drug. Fourteen days after stent implantation in a pig coronary artery, 69% of the drug was locally released. This resulted in a significant decrease of late loss,