treated with double antiplatelet therapy for 3 months. Results: angiographic success was obtained in all cases. During the hospital stay there were no death or repeat revascularizations. Non-Q-wave myocardial infarction (MI) occurred in 2 (2%) cases in the control arm (p=n.s.). After 1 month, no patient died. One patients in the estrogen arm had a non-Q wave MI 3 days after the procedure and target lesion revascularization with re-PTCA was performed. The success rate. In hospital course and 1-month FU Indicate that estrogen coating stents do not contain automated programmable inlaid layers of bioerodable Polylactide-co-glycolide (PLGA). Degradation rates were manipulated by altering the PLGA co-monomer ratio and molecular weight. Three low volume PLGA groups with different in-vitro degradation rates (21 to 180 days), one high volume PLGA group (21 days), and bare metal stent controls were randomly implanted in the LAD, RCA and superficial femoral arteries (n=40 stents) in a 30 day porcine model (n=12 pigs). Mean coronary injury scores (range: 1.1 to 1.4) did not differ between the five groups. Tissue sections preserving metal and polymer architecture showed small but significant differences in polymer degradation rate (69% vs 78% in fast vs slow groups, p<0.05). Increasing the polymer volume 4-fold slowed the degradation rate to near zero. Blinded histologic scoring showed a neointima of minimal inflammation, foreign body reaction or neointimal fibrin and complete healing in all groups. No medial necrosis or stent strut malapposition was seen. Quantitative angiography and histomorphometry showed no difference in restenosis parameters versus bare metal controls.

Conclusions: PLGA degradation rates are controllable but very less than predicted with large vessels (Z2.8mm; n=349).

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1150-180 Stent-Based Programmable Erodable Polymer Drug Release Systems Are Nontoxic in Porcine Arteries
Russoel McQuay, Salacia Kao, Tadu Hondo, Michael C. Fishbein, Neel L. Cigler, Frank Linvick, Cedars-Sinai Medical Center, Los Angeles, CA

Potential drugs for vascular delivery have variable kinetic release requirements. Some first-generation drug eluting stents have unsexcual non-erodable polymers and crossed kinetics, which may be responsible for late malaposition and restenosis. Bioerodable polymers positioned within the volume of a stent strut may be metabolized without tissue toxicity or malaposition. We evaluated configurations of the Conor strut with eluting polymer volumes and degradation rates for restenosis and tissue toxicity.

Methods and Results: The Conor strut has honey-combed metallic strut elements that contain automated programmable inlaid layers of bioerodable Polylactide-co-glycolide (PLGA). Degradation rates were manipulated by altering the PLGA co-monomer ratio and molecular weight. Three low volume PLGA groups with different in-vitro degradation rates (21 to 180 days), one high volume PLGA group (21 days), and bare metal stent controls were randomly implanted in the LAD, RCA and superficial femoral arteries (n=40 stents) in a 30 day porcine model (n=12 pigs). Mean coronary injury scores (range: 1.1 to 1.4) did not differ between the five groups. Tissue sections preserving metal and polymer architecture showed small but significant differences in polymer degradation rate (69% vs 78% in fast vs slow groups, p<0.05). Increasing the polymer volume 4-fold slowed the degradation rate to near zero. Blinded histologic scoring showed a neointima of minimal inflammation, foreign body reaction or neointimal fibrin and complete healing in all groups. No medial necrosis or stent strut malapposition was seen. Quantitative angiography and histomorphometry showed no difference in restenosis parameters versus bare metal controls.

Conclusions: PLGA degradation rates are controllable but very less than predicted in vitro and are volume dependent. Erodable PLGA polymers positioned within the stent struts are non-toxic and suitable for the controlled elution of bioactive substances.

1150-181 Stent Coated With Nitroxyl Groups for Reduction of Neointimal Hyperplasia in a Porcine Coronary Stent Model
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Background: Coronary stent surface modification can improve the biocompatibility of a stent. Nitroxides have shown a wide range of biological effects like suppressing free radical driven reactions to maintain cell functions. The objectives of this study was to evaluate the efficacy of a biodegradable polymer coated stent loaded with nitroxyl groups on in-stent neointimal hyperplasia.

Methods: Bare stainless steel stents (Genesis stents, Blue Medical Devices, The Netherlands), loaded 50% (W%) nitroxyl groups (Tempo Amine, Blue Medical Devices, The Netherlands) biodegradable elastomeric polyester-ester-amide-(co-PEA) polymer dipcoated stents and control polymer coated stents were randomly implanted into porcine coronary arteries. Arterial segments were selected to achieve a balloon to artery ratio 1.5-l .2:1. Arterial injury of bare stents was significantly higher restenosis rate after stenting compared to PTCA, others have failed to show such benefit, including the ISAR-SMART trial using the MultiLink. Goal of the present analysis was therefore to differentiate the results of ISAR-STEREO-2 with respect to vessel size. Methods: All 611 patients randomized in ISAR-STEREO-2 were included in this analysis. Results: For patients with target vessels <2.8mm (n=262) were compared to those with large vessels (n=349).

Conclusions: PLGA degradation rates are controllable but very less than predicted in-vitro and are volume dependent. Erodable PLGA polymers positioned within the stent struts are non-toxic and suitable for the controlled elution of bioactive substances.

1150-183 First Use of a Novel Cobalt Chromium Coronary Stent in Humans: Clinical and Angiographic Outcomes
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The evolution of an "ideal" stent platform remains critically Important in the era of drug eluting stents. Stent strut thickness and alloy may influence device profile, flexibility, deliverability, visibility and radial strength. A novel thin strut (0.032") cobalt chromium MULTI-LINK (Guidant Corporation) VISION™ stent (n=204; lengths 9, 15, 18, 19, 23, 28 mm; diameters 3.0, 3.5, 4.0 mm) was deployed in 267 patients (age 64 years, 68% male, 23% diabetes) with a single de novo native target vessel lesion (≤ 25 mm length) in a multi-center international registry. Angiographic and clinical outcomes for the MULTI-LINK VISION™ stents are compared with those previously observed for the TETRA™ and PENTA™ MULTI-LINK® stents.

Conclusion: This novel thin strut cobalt chromium MULTI-LINK VISION™ stent demonstrates excellent clinical performance characteristics with reduced late loss and restenosis compared with prior MULTI-LINK® stents.