Conclusions: This "trumpeting" may also partially explain the observed use of more Xience stents per lesion compared to Resolute (1.18±0.45 vs. 1.15±0.42, p = 0.02) in the Resolute All Comers (RAC) trial. The primary cause for secondary stenting in RAC was "to stabilize target lesion" which includes procedural complications including dissection or perforations.

TCT-653
Assessment of endothelial function in patients randomly treated with a polymer-free sirolimus eluting stent and its bare-metal equivalent: results of the VESTASYNC II trial
Breno Almeida1, Jose Costa Jr2, Ricardo Costa1, Alexandre Abizaid4, Mirela Lima3, Marco Perin1, Amanda Sousa2, J Eduardo Sousa2
1Santa Marcelina, Sao Paulo, Brazil, 2Instituto Dante Pazzanese de Cardiologia, Sao Paulo, Brazil, 3Instituto Dante Pazzanese de Cardiologia, São Paulo, Brazil, 4Visiting Professor Columbia University, São Paulo, Brazil, 5Centro Cardiovascular Research Center, São Paulo, Brazil, 6Dante Pazzanese, São Paulo, Brazil

Background: Endothelium dysfunction is among the possible causes related to higher thrombosis rates after 1st generation DES. Whether the presence of durable polymer or high anti-proliferative drug dose, or both, can be responsible for this phenomenon is not clear. In the present study we compared the endothelial function following the implant of a polymer-free DES with a nanofib-microporous hydroxyapatite surface coating impregnated with a low-dose of Sirolimus (55μg) to a BMS equivalent coated with a hydroxyapatite surface (Vestacor stent).

Methods: The VestaSync II is a randomized, double-blinded trial with 20 pts (10 in each group) with de novo lesions in native coronary arteries of 3.0-3.5mm diameter and ≤15mm in length. The primary goal was to compare the vasomotoric at implantation of stents with the same platform, and without and with drug elution. Endothelial function was assessed with atrial pacemaker stimulation (20 ppm over basal cardiac frequency until reach 150 ppm) and the lumen diameter was measured at 5 mm of proximal and distal stent edges and in a control segment, in different stages (at rest, at successive phases of stimuli and after nitroglycerin IC infusion).

Results: As shown in the figure, there was a negative variation in luminal diameter between basal and maximum stimuli at proximal (10%) and distal (8%) edges of both groups. Among control segments this variation was less than 3%, an acceptable variation of QCA method.

Conclusions: The elution of sirolimus does not seem to interfere in endothelial function 8 months after polymer-free hydroxiapatite coating stent implantation.

TCT-654
Comparison in the 5-year Outcome of Pericardium and Polytetrafluoroethylene-Covered Stents for Saphenous Vein Graft Lesions
Sandeep Basavarajaiah1, Massimo Slavich2, Ahmed Rezq3, Tassaka Hasegawa3, kensuke Takagi3, Toru Naganuma4, Chiara Bertelli5, Azzet Lattib6, Mauro Carlino3, Aloide Chieffy7, Matteo Montorfano2, Cosmo Godino8, Antonio Colombo9
1EMO-GVM Centro Cuore Columbus, Milan, Italy, 2San Raffaele Scientific Institute, Milan, Italy, 3Department of cardiology, Amin Shams University, Cairo, Egypt, Cairo, Egypt, 4Ospedale San Raffaele, Milan, MI, 5San Raffaele Scientific Institute, Milan, N/A, N/A, Milan, Italy, 6San Raffaele Scientific Institute, Milan, Italy, Milan, Italy, 7San Raffaele scientific institute, Milano, Milano, Italy, 8EMO GVM Centro Cuore Columbus srl, Milan, Italy

Background: Percutaneous intervention (PCI) for degenerated saphenous vein graft (SVG) lesions are well known for high rates of no-reflow, restenosis (ISR) and stent thrombosis. Covered stents have been tried in an aim to trap the debris to minimize no-reflow and ISR. Two types of covered stents have been used for SVG lesions: pericardium covered stent (PCS) & polytetrafluoroethylene (PTFE) covered stent. We present our long-term follow-up data following the use of both types of covered stents in our practice.

Methods: Between 1997 and 2004, 52 patients (mean age: 67.14 years) with 65 lesions in SVG were treated with PTFE covered stents as a part of multicenter trial (RECOVERS). Between 2003 and 2007, 33 patients (mean age: 67.78 years) with 48 SVG lesions were treated with pericardium-covered stents covered stents as a part of multicenter trial (SLEEVE II).

Results: All case had TIMI 3 flow post PCI and there were no immediate post-procedural complications. There were no significant differences in the baseline characteristics except that mean length of PCS were significantly longer than PTFE covered stents (32.3 mm vs 25.1 mm, p<0.001). At 5-year follow-up, the rates of TLR was [PTFE: 12 (18.5%), PCS: 13 (27%)] p = 0.17, TVR was [PTFE: 14 (21.5%), PCS: 16 (33%) p = 0.07]. During the 5-year follow-up period, 8 patients (15%) in the PTFE group and 2 patients (6%) in the PCS group had died; p = 0.33. The MACE defined as death, MI, clinically driven TVR occurred in 34 of 52 PTFE patients (63%) vs. 18 of 33 PCS patients (54.5%) p = 0.2. There were two reported cases of definite very late stent thrombosis in the PCS group, but none in the PTFE group.

Conclusions: The 5 year follow-up data shows no significant differences in the clinical endpoints between the two covered stents, although numerically it was slightly worse in the PCS group. The rates of TLR and TVR are not discouraging in either stents given the complexity of SVG lesions. Considering the complexity of the lesions treated and the absence of no-reflow, covered stents may provide additional protection. Since there are no very long-term follow-up with other stents in SVG, we cannot compare these results with the traditional stents.

TCT-655
Outcomes of high-risk patients undergoing percutaneous coronary interventions in the ambulatory versus in-hospital setting
Mark Kahn1, Annapoorna Kini1, Ziad Sergie2, Rosuma Mehran3, Suman Sharma3, Michael Kim4
1Mount Sinai School of Medicine, New York, New York

Background: In this study, we investigated the safety of ambulatory percutaneous coronary intervention (PCI) in high-risk patients according to age, creatinine, ejection fraction (ACEF) scores.

Methods: The ambulatory PCI group consisted of all consecutive PCI with same-day discharges at Mount Sinai Hospital from January 1, 2003 to March 31, 2011 who had follow-up data. The overnight group consisted of all PCI outpatients in 2004 who were then hospitalized for at least one night. Patients were stratified into two groups based on complexity of SVG lesions. Considering the complexity of the lesions treated and the absence of no-reflow, covered stents may provide additional protection. Since there are no very long-term follow-up with other stents in SVG, we cannot compare these results with the traditional stents.

Results: Of 4932 patients, 3216 or 65.2% were in the ambulatory group and the rest (1716) were in the control group. The average age was 61.5 years and were no significant differences in baseline characteristics. Overall 30-day MACE occurred in similar frequency in both groups (Table), in high and low ACEF scores.