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**Aims:** To evaluate safety and effectiveness of the Elixir DESync™ Novolimus-Eluting Coronary Stent System (CSS) compared to the Endeavor Zotarolimus-Eluting CSS through assessment of clinical, angiographic, and IVUS endpoints.

**Method and Results:** 210 patients were randomized 2:1 either to the DESync CSS loaded with 5mcg per mm of stent length of Novolimus, a sirolimus metabolite, eluted via a durable methacrylate polymer, or to the Endeavor CSS loaded with 10mcg per mm of stent length of Zotarolimus eluted via a durable phosphoryl choline polymer. All patients were analyzed for the primary endpoint of late lumen loss (LLL) assessed by QCA at 9 months. All patients also underwent evaluation for secondary endpoints which included a Device-orientated Composite Endpoint (DoCE) defined as: cardiac death, MI not clearly attributable to a non-intervention vessel, and clinically-indicated target lesion revascularization (TLR); clinically-indicated Target Vessel Revascularization (TVR); and stent thrombosis all evaluated at 1, 6, 9, and 12 months and annually through 5 years. Stents were also assessed for angiographic endpoints at 9 months including: in-stent and in-segment LLL. A subset of patients underwent IVUS evaluation including percent neointimal obstruction at 9 months. The study met the non-inferiority endpoint and also demonstrated superiority of the DESync CSS as compared to control for in-stent LLL ( $0.11 \pm 0.32$  vs.  $0.63 \pm 0.42$ ,  $p < 0.001$ ). Clinical results through 2 years trend lower for the DESync stent (4.3% vs. 9.0%,  $p = 0.14$ ) driven primarily by increased TLR for the Endeavor.

**Conclusions:** The study met the non-inferiority endpoint and also demonstrated superiority of the DESync CSS as compared to control. Clinical results through 3 years and a review of angiographic and IVUS results will be presented.

means of prevention remains unclear, and almost poor. Thanks to its pleiotropic effects, statins have been used in CIN prevention, but data remains controversial.

**Objective:** To evaluate the benefit of statins in the prevention of CIN after coronary angiography.

**Methods:** We used the database of a randomized controlled trial conducted in the Cardiology B department of Monastir's Hospital during the period March to November 2010 to study the effectiveness of ascorbic acid in the prevention of CIN. Patients undergoing coronary angiography were randomly assigned to a saline hydration prevention protocol or a saline hydration associated to ascorbic acid protocol. The primary endpoint was the occurrence of CIN defined as a creatinin rise of more than 25% the baseline level during the following 48 to 72 hours. The relationship between statin intake at baseline and CIN incidence was retrospectively evaluated using a Chi-square test.

**Results:** Among the 202 patients included, 126 (62.3%) were treated with statins. There was no significant difference between the two groups concerning the baseline characteristics, particularly in ascorbic acid treatment ( $p = 0.94$ ). CIN incidence dropped from 20.8% in the patients not taking statins to 11.7% in those treated with statins. This resulted in a tendency ( $p = 0.08$ ) but difference wasn't statistically significant, probably due to the small sample of the population.

**Conclusion:** In our study, treatment with statins led to a trend to reduce CIN incidence. The small sample of the population couldn't allow stronger conclusion. Statins seem to be promising but larger trials are needed.

## CRT-68

### Long-term Comparative Analysis from an All-Comer Cohort of Coronary Patients Treated Using First and Second Generation Drug Eluting Stents

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**Background:** The long term safety and efficacy of 1st and 2nd generation drug eluting stents (DES) is of continued clinical importance. We aimed at exploring the potential differences in clinical outcomes between various DES types.

**Methods and Results:** We followed 9,584 consecutive patients undergoing PCI at our institution (years 2004-2012, mean f/u duration 4 years). Patients treated with bare metal stents 5,599 (58.4%) were compared to 3,985 (41.5%) DES counterparts. The sirolimus eluting stent (SES) was taken as the prototype DES and compared to other DESs (e.g. Paclitaxel [P], Zotarolimus-Endeavor [ZE], Zotarolimus-Resolute [ZR], Everolimus [E] and Biolimus [B] ESs), using propensity matching. Primary outcome was the rate of composite endpoint of total mortality, MI, clinically driven TVR/CABG. At 3 years, the composite end point was significantly lower in the DES vs. BMS group (20.0% vs. 26.4%;  $P < 0.001$ ). The comparisons between SES with each one of the 5 other DESs, were very well balanced and did not yield significant differences for the 3 year primary composite endpoint: SES vs. PES ( $n = 350$  pairs; 18.1% vs. 17.7%  $p = NS$ ), SES vs. ZES ( $n = 474$  pairs; 21.8% vs. 23.2%,  $p = NS$ ), SES vs. ZRES ( $n = 434$  pairs; 16.9% vs. 11.7%  $p = NS$ ), SES vs. EES ( $n = 824$  pairs; 14.2% vs. 14.1%,  $p = NS$ ) and SES vs. BES ( $n = 117$  pairs; 13.7% vs. 13.4%,  $p = NS$ ).

**Conclusions:** We found: 1) no differences in the cardiac prognosis between SES and other DESs, 2) the use of DES was associated with better clinical outcomes compared to BMS.

## CRT-69

### Non Invasive Evaluation Of Cocaine Induced Chest Pain Reduces Cost Compared To Invasive Strategy

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**Purpose:** Evaluate the effect of invasive (IT) and non-invasive treatment (NIT) modalities on hospitalization cost and readmission rate in patients admitted with cocaine induced chest pain (CICP).

**Introduction:** As cocaine use has become more widespread, the number of cocaine-related cardiovascular events and cost of care has increased. A high percentage of patients with cocaine associated chest discomfort are admitted to the hospital, with an average stay of three days. A 9-12 hours observation in a chest pain unit has been validated to be safe

## CRT-66

### Prevention Of Contrast Induced Nephropathy In Patients Undergoing Coronarography With Ascorbic Acid

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**Background:** Contrast induced nephropathy (CIN) is an increasing problem in cardiology invasive imaging, limited by the absence of treatment and few prevention methods. Anti oxidant benefits of ascorbic acid have been reported by small series but evidence remains poor.

**Aim:** To evaluate the effect of ascorbic acid administration in CIN occurrence in patients undergoing coronarography.

**Methods:** Patients undergoing coronarography between March and November 2010 were prospectively and blindly randomized to control group receiving a standard CIN prevention protocol including saline hydration and ascorbic acid group receiving saline hydration with ascorbic acid (3g 2hours before the procedure then 2g the day after and next day). We excluded patients requiring hemodialysis, those with acute renal insufficiency, heart failure with LVEF  $\leq 40\%$ , digestive resections, and previous contrast medium injection and aspirin or ascorbic acid intake. Endpoint was occurrence of CIN defined as a 25% raise of creatinine level 48 to 72 h after coronarography.

**Results:** Two hundred two patients were included, 95 in control group and 107 in ascorbic acid group. Mean age was 66 years and 60% were men. Baseline characteristics were similar between the two groups. Creatinin level before intervention was  $98.6 \pm 29 \mu\text{mol/l}$  and contrast medium administrated was  $71.6 \pm 25 \text{ ml}$ . CIN occurred in 31 (15.3%) patients. It was significantly lower in ascorbic acid group (10.3% vs 21.1%,  $p = 0.03$ ).

**Conclusion:** Ascorbic acid showed to reduce CIN incidence in patients undergoing coronarography compared with saline hydration alone.

## CRT-67

### Effect Of Statins In Contrast-induced Nephropathy After Coronary Angiography

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**Background:** Contrast-induced nephropathy (CIN) is a frequent complication after coronary angiography. In the exclusion of saline hydration, the effectiveness of other