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## TCT@ACC-i2: The Interventional Learning Pathway

**INFLUENCE OF LATE VASCULAR INFLAMMATION ON LONG-TERM OUTCOMES AMONG PATIENTS WHO UNDERWENT PERCUTANEOUS CORONARY INTERVENTION USING DRUG ELUTING STENT**

Poster Contributions

Hall C

Monday, March 31, 2014, 9:45 a.m.-10:30 p.m.

Session Title: Coronary Intervention - Stents

Abstract Category: 41. TCT@ACC-i2: Coronary Intervention: Devices

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**Background:** We assessed relationship between late vascular inflammation after DES implantation and major adverse cardiac event (MACE) by C-reactive protein (CRP).

**Methods:** Paired CRP (baseline, and 8months after PCI as late phase) was available in 1176 patients who underwent PCI with DES (sirolimus; 500, paclitaxel; 319, everolimus;191, biolimus; 166). Elevated CRP was defined as over 0.2mg/dl. We investigated occurrence of MACE which comprises from all cause death, non-fatal myocardial infarction, and target lesion revascularization (TLR) among them.

**Results:** Of all, elevated CRP at baseline was seen in 38.1 %, and it was decreased to 23.7% (including late-onset 9.3%) at late phase. By survival analysis, occurrence of MACE was powerfully related to late phase-CRP than baseline-CRP (shown in figure). Multivariate analysis revealed that elevated late phase-CRP (hazard ratio: HR; 4.31, 95% confidence interval: 95%CI; 2.98-6.24, P<0.0001) and CKD (eGFR<60ml/min; HR; 1.70, 95%CI; 1.19-2.44, P=0.004) were independent predictor of occurrence of MACE. Prevalence of elevated late phase-CRP was different among stent types (sirolimus;28.0 %, paclitaxel; 24.8%, everolimus;18.3%, biolimus; 15.1%,P=0.002) .

**Conclusions:** Elevated late phase-CRP may identify high risk subset of future MACE among patients who underwent DES implantation. Second generation DES with lower late inflammation might be better for long-term success.

