

## First And Second-generation Drug-eluting Stents In Patients Presenting With Anemia.

Anemia is associated with increased risk of death, myocardial infarction (MI) and bleeding after PCI. Aim of this all-comer registry was to compare first and second-generation DES in patients presenting with anemia. Methods: We enrolled 1485 consecutive patients [Stable CAD, n=455 (30,6%); unstable angina, n=716 (48,2%); STEMI, n=91 (6,2%); NSTEMI, n=223 (15%)] treated with first (paclitaxel, sirolimus) or second generation (everolimus, zotarolimus, biolimus A9) DES (o-DES=170; n-DES=1315). Incidence of MACCE (death, MI, stroke, repeat-revascularization) at 1-year was a primary end-point. Results: The study population was stratified according to presence of anemia on admission: anemia (+) (n = 173, 11%) and no anemia (n = 1312, 89%). Patients with anemia were older ( $67 \pm 10$  vs.  $62 \pm 10$  years,  $p < 0.001$ ), had higher prevalence of diabetes (20% vs. 13%  $p = 0.01$ ), COPD (10% vs. 5%  $p = 0.02$ ), PAD (17% vs. 11%  $p = 0.02$ ), higher creatinine ( $p < 0.01$ ) and lower LVEF values ( $p < 0.01$ ). Patients with anemia had more often prior MI (57% vs. 49%,  $p = 0.03$ ) and CABG (34% vs. 21%,  $p = 0.0002$ ) and multivessel disease (33% vs. 25%  $p = 0.02$ ). However, there were no differences in complexity of CAD (SYNTAX score). In patients with anemia 1-year follow up showed that there was no difference in MACCE in comparison to patients with normal Hb ( $p = 0.60$ ). There was also no difference BETWEEN first vs. new generation des. Conclusion: Presence of anemia does not increase 1-year incidence of MACCE in patients treated with first- and second-generation DES in all-comer population of patient with stable CAD and ACS.