Conclusions: We observed low rates of TVF at 1 year during post-approval clinical use of TAXUS Liberité PES in DM pts with "on-label" indications and taking aspirin + prasugrel. TVF and clinical outcomes were similar to those observed among NDM pts. Bleeding rates were low for "on-label" DM and NDM patients. These data suggest potential benefit with use of second-generation PES combined with ASA and prasugrel in selected DM pts including those without acute coronary syndromes.

TCT-149

High On-Treatment Platelet Reactivity among Contemporary Acute Myocardial Infarction Patients Treated with Percutaneous Coronary Intervention: Insights from the TRANSLATE-ACS Study

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Background: High platelet reactivity (HPR) on ADP receptor inhibitor treatment (ADPt) is associated with increased risk of adverse events, yet there are no guidelines on its management.

Methods: We studied 1,505 acute MI patients treated with PCI at 62 US hospitals in the TRANSLATE-ACS study from 4/2010 to 10/2012. All patients received either a 1st generation (clopidogrel or ticlopidine) or 2nd generation (prasugrel or ticagrelor) ADPt and underwent platelet reactivity testing using the VerifyNow assay at a median of 2 days after PCI. We used logistic regression modeling to determine factors associated with HPR (platelet reactivity unit [PRU] >250), and examined rates of treatment change in response to platelet function testing.

Results: Overall, HPR was observed in 361 (24%) of this acute MI population, more frequently among patients treated with 1st generation (29%) than those treated with 2nd generation ADPt (7%). HPR was independently associated with patient age (OR 1.18, 95% CI 1.04-1.34, per 10 year increase, p<0.001), female sex (OR 1.60, 95% CI 1.23-2.08, p<0.001), BMI (OR 1.04, 95% CI 1.02-1.06, per 1kg/m2 increase, p<0.001) and treatment with 1st generation ADPt (OR 3.12, 95% CI 2.24-4.39, p<0.001). After platelet function testing, ADPt was switched from 1st to 2nd generation in 37% of patients with HPR compared with 10% of patients with therapeutic platelet reactivity (TPR), while 8% of patients with HPR and 6% of patients with TPR were switched from a 2nd to 1st generation ADPt.

Conclusions: While the value of modifying treatment based on platelet function testing remains unclear, we found that ADPt therapy was frequently altered when HPR was detected. Further evaluation of clinical outcomes associated with modification of ADPt therapy among PCI treated MI patients with HPR is warranted.