DIFFERENTIAL IMPACT OF HIGH PLATELET REACTIVITY ON CLOPIDOGREL IN WOMEN AND MEN FOLLOWING PERCUTANEOUS CORONARY INTERVENTION (PCI) WITH DES

Moderated Poster Contributions
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Background: Women have higher rates of ischemic and bleeding events than men following PCI performed after aspirin and clopidogrel loading. However, the differential risk of high platelet reactivity (HPR) in women vs. men is unknown.

Methods: We compared baseline characteristics and 2-year outcomes of 8,448 patients enrolled in the ADAPT-DES (Assessment of Dual Antiplatelet Therapy With Drug-Eluting Stents) study according to sex and HPR status (women with HPR=1118, 13.2%; women without HPR=1045, 12.4%; men with HPR=2491, 29.5%; men without HPR=3794, 44.9%). Multivariable associations between HPR and outcomes were assessed using Cox proportional hazards regression stratified by propensity score quintiles.

Results: HPR was associated with a roughly doubled risk of stent thrombosis (ST) in both men and women (Figure LEFT) and with significantly reduced bleeding in women but not in men (Figure RIGHT). In propensity-adjusted multivariable models, HPR was an independent predictor of reduced bleeding only in women (women, HR 0.59, 95% CI, 0.44-0.80; men, HR 0.91, 95% CI, 0.75-1.11; P interaction 0.003) and of ST only in men; this association was attenuated among women (women, HR 1.86, 95% CI, 0.77-4.53; men, HR 1.86, 95% CI, 1.08-3.2; P interaction 0.85).

Conclusion: HPR has differential clinical impact on women versus men treated with clopidogrel. Although the associated risk of HPR for stent thrombosis was similar in both sexes, HPR was associated with reduced bleeding only among women.