and Group N (n=11). However, ∆SVV was significantly less in Group P than in Group N (4.9±2.2 vs. 13.8±12.5 mm², p=0.03). Lead SVV tended to be associated with greater ∆SVS although this correlation did not reach statistical significance (r=0.26, p=0.22).

Conclusions: The IVUS substudy of PREVENT demonstrated a variable degree of vessel remodeling exterior to the coronary stent during the follow-up period. In addition to the direct anti-proliferative effect of brachytherapy, the positive per-stent remodeling may be another contributing factor to intrastent neointimal suppression following beta irradiation.

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**887-2** Inter-Assay Variability in the Degree of Platelet Inhibition Following GPIIb/IIIa Receptor Blockade in Patients Undergoing Coronary Intervention: A Comparison of Three Different Point-of-Care Assays


Background: The degree of platelet inhibition (PI) induced by GPIIb/IIIa antagonists has been shown to influence clinical outcomes following percutaneous coronary intervention (PCI). There is no comparative data on the degree of PI using different commercially available point-of-care PI assays.

Methods: We prospectively enrolled 24 pts (66 ± 10 yrs, 18 males) who received a GP IIb/IIIa inhibitor during PCI. Pts received tirofiban; n=15 (10mcg/kg, 0.15mcg/kg/min), eptifibatide; n=7 (single bolus; 180mcg/kg, 2mcg/kg/min), and abciximab; n=2 (0.25mg/kg, 0.125mcg/kg/min). We compared the degree of PI using 3 different assays: 1) 20µmol ADP/Citrate in the IchorTM platelet analyzer (Helena Laboratories, Beaumont, TX), 2) iso-TRAP/Citrate and 3) iso-TRAP/PPACK as platelet agonist/anticoagulant respectively in the UltraTRAP system (Accumetrix, San-Diego, CA). PI was measured in all pts 30 min following GP IIb/IIIa bolus, with each assay performed on the same blood sample.

Results: The mean ± SD values of PI following GP IIb/IIIa administration are shown below.

Conclusion: There is significant variation in the degree of PI assessed by the three assays. The greater inter-patient variability and the lower mean PI, detected by the IchorTM system may enhance patient stratification based upon response to GP IIb/IIIa inhibitors. The practical implications of these findings need to be validated in large-scale clinical outcome trials.

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**887-3** Point-of-Care Measurement of Platelet Function Before Angioplasty Strongly Predicts Future Target Vessel Revascularization

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Background: Baseline platelet activation correlates with the need for target vessel revascularization (TVR) following PCI but is of limited clinical utility due to the need for specialized testing. The Ultragre-IIA is a simple, point-of-care assay approved for use in monitoring platelet function in patients treated with GP IIb/IIIa antagonists that also quantifies the patient's baseline platelet function.

Method: As part of the GOLD study, baseline Platelet Activation Units (PAU) were measured using the Ultragre-IIA in 500 patients undergoing percutaneous coronary intervention with the adjunctive use of a GP IIb/IIIa antagonist. TVR at 7 months was evaluated in a subset of 164 abciximab-treated patients and analyzed with respect to baseline platelet function.

Results: Baseline platelet function ranged from 52 to 471 PAU (median 234). Patients with the lowest PAU values at baseline, consistent with more activated or "exhausted" platelets had a significantly greater risk of TVR than those patients with highest baseline PAU levels (Figure).

Conclusion: These results confirm that increased levels of platelet activation prior to PCI are associated with an increased risk of TVR, and confirm that this can now be easily determined utilizing a simple point-of-care assay.

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**ORAL CONTRIBUTIONS**

**887** Antiplatelet and New Anti-Thrombin Studies

Wednesday, March 20, 2002, 10:30 a.m.-Noon

Georgia World Congress Center, Hall D1

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