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THE VERIFYNOW PRU IS ASSOCIATED WITH OPTIMAL DURATION OF CLOPIDOGREL INTERRUPTION PRIOR TO CABG SURGERY: SUB-ANALYSIS OF TARGET CABG STUDY

Poster Contributions
Poster Sessions, Expo North
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Authors: *Paul A. Gurbel, Elisabeth Mahla, Omair Yousuf, Kevin Bliden, Young-Hoon Jeong, Ali Tabrizchi, Christopher Franzese, Martin Gesheff, Udaya Tantry, Sinai Center for Thrombosis Research, Baltimore, MD, USA, John Hopkins University School of Medicine, Baltimore, MD, USA*

Background: The utility of thrombelastography (TEG) to determine the timing of CABG in patients (pts) treated with clopidogrel was evaluated in the first prospective study, TARGET CABG which showed that pts non-responsive by TEG had no greater chest tube output when operated within 24 hrs of last clopidogrel dose compared to clopidogrel naïve pts. The utility of VerifyNow-P2Y12 assay (VN) to optimally time CABG is unknown.

Methods: In TARGET CABG, we also analyzed platelet function recovery (PFR) using VN in 81 pts on aspirin and clopidogrel therapy undergoing elective first time isolated on-pump CABG. CABG was done within 1 day (nonresponse), 3-5 days (moderate response), and >5 days (high response) based on ADP-induced platelet-fibrin clot strength (MA-ADP). Proportion of pts achieving pre-surgical PRU >208 was used to indicate PFR.

Results: Baseline PRUs were in agreement with MA-ADP within each response group and there was significant difference in mean baseline PRUs between response groups ($p<0.05$) (Figure 1). 97% of pts demonstrated PFR prior to surgery. The total amount of transfused red blood cells and 24-hr chest output drainage did not differ between response groups.

Conclusions: PFR by VN-P2Y12 assay agrees with TEG, suggesting PFR specific to the P2Y12 receptor significantly influenced the primary outcome of TARGET-CABG. The use of platelet function testing may allow for improved pre-surgical management of P2Y12 inhibitor therapy and a further prospective study is warranted.