**Appendix Table E81. Phenotypic test details in studies assessing the predictive ability of TEG in patients with ischemic heart disease**

| **Author, year [ref]**  **UID**  **Country**  **Study Name** | **Test/Device name**  **Device category Device name & manufacturer\*** | **Agonist used** | **Sample Collection and Procurement**  **Anticoagulant used**  **Interval between clopidogrel doses and blood sampling (in days)**  **Interval between sampling and testing (in days):** | **Grouping of Phenotypes\*\* [Definition]** | **Rational for the grouping of phenotypes reported (Yes/No)**  **[short description]** | **Frequency of phenotypes** |
| --- | --- | --- | --- | --- | --- | --- |
| Bliden, 2006  17291930  USA  NR | Thrombelastograph Hemostasis Analyzer With Platelet-  Mapping.  Thrombelastograph Hemostasis Analyzer With Platelet-  Mapping assay  (Haemoscope Corp., Niles, Illinois) | ADP and AA | Baseline samples were obtained before coronary intervention  and at 3 h and 18 to 24 h after stenting.  Heparin  at 3 h and 18 to 24 h  within 2h | High on-treatment platelet reactivity (HPR): ≥70% ADP-induced aggregation with 2-μmol ADP at baseline as measured by TEG  Normal on-treatment platelet reactivity (NPR): <70% ADP-induced aggregation with 2-μmol ADP at baseline as measured by TEG | based on previous literature | HPR: 22/100 (22%)  NPR: 78/100 (22%) |
| Kwak,  2010  211266640  Korea  OPCABG | TEG/ thromboelastography  platelet mapping  assay  NR  Haemoscope Corp., Niles, Illinois | ADP | Blood sampling and TEG  platelet mapping assay were performed immediately before  the induction of anesthesia  Heparin  NR  NR | platelet inhibitory response 70% | ROC curve | platelet inhibitory response 70% n=33 |
| Gurbel,  2010  20691842  USA  PREPARE POST-STENTING | Thromboelastography  TEG Hemostasis System  Haemoscope Corporation, Niles, IL | Thrombin & ADP | Blood;  18 to 24 hours post-PCI or  5 days post-PCI (if eptifibatide used)  40 USP lithium heparin  Clopidogrel came first  NR | Quartile of TEG Maximum amplitude with Thrombin  Quartile 1 <65 mm  Quartile 2 65-69 mm  Quartile 3 >69-72 mm  Quartile 4 >72 mm  Quartile of TEG Maximum amplitude with ADP  Quartile 1 <29 mm  Quartile 2 29-39 mm  Quartile 3 >39-72 mm  Quartile 4 >72 mm | ROC curve analysis | Quartile of TEG Maximum amplitude with Thrombin  Quartile 1 <65 mm 56 (25%)  Quartile 2 65-69 mm56 (25%)  Quartile 3 >69-72 mm56 (25%)  Quartile 4 >72 mm57 (25%)  Quartile of TEG Maximum amplitude with ADP  Quartile 1 <29 mm 56 (25%)  Quartile 2 29-39 mm 56 (25%)  Quartile 3 >39-72 mm 56 (25%)  Quartile 4 >72 mm 57 (25%) |
| Cotton, 2010  20406238  UK  NR | Clot strength and speed of clot formation  TEG R \_ platelet mapping  kit  Haemoscope Corp | ADP | Study sample drawn into a 6 mL Lithium Heparin Vacutainer  Lithium Heparin  NR  NR | sTEG <800 mm/min  sTEG >800 mm/min | Based on literature | sTEG <800 mm/min: NR  sTEG >800 mm/min: NR |
| Gurbel, 2005  16286165  USA  PREPARE POST-STENTING | Thromboelastography  TEG Hemostasis System  NR | 20um ADP | At discharge  40 USP lithium heparin  2 hrs  NR | TEG: Low reaction time R (time to initial thrombin-generated ﬁbrin formation) <3.9 minutes  TEG: Normal reaction time R(time to initial thrombin-generated ﬁbrin formation) ≥3.9 minutes  TEG: High maximum amplitude of thrombin-generated clot (MA) >72 mm  TEG: Not High maximum amplitude of thrombin-generated clot (MA) ≤72 mm | Defined by ROC curve in the same study | TEG: Low reaction time R: NR  TEG: Normal reaction time R: NR  TEG: High maximum amplitude : NR  TEG: Not High maximum amplitude : NR |
| Tang, 2012  China  NR | thrombelastograph  TEG  Haemoscope Corporation, Niles, Illinois, USA | 3.8% trisodium  citrate | 1 week, 1 month, 3 months, 6 months, 9 months, 12 months  3.8% trisodium citrate and lithium heparin  3 days  NR | inhibition >50% n=30  resistence n=60 | NR | inhibition >50% n=30  resistence n=60 |

\*If more than one test, use separate rows  
\*\*E.g., nonresponsive vs. responsive to clopidogrel, high vs. low platelet reactivity  
ADP= adenosine 5'-diphosphate; Ag= aggregation; PGE1=prostaglandin; ROC=receiver operating characteristic; AUC=area under the curve; IPA= inhibition of platelet aggregation; LTA= light transmission aggregometry; MEA= multiple electrode platelet aggregometry; PFA= platelet function analysis; TEG=thromboelastography; sTEG=short thromboelastography; VASP = vasodilator-stimulated phosphoprotein; VASP-FCT=vasodilator-stimulated phosphoprotein flow cytometry; CEPI=collagen-epinephrine ; CADP=collagen-ADP; CT=closure times; HCPR=high on-clopidogrel platelet reactivity; PCI = percutaneous coronary intervention; RPA= residual platelet aggregation; GP= glycoprotein; HRP=high platelet reactivity; NPR=normal on-treatment platelet reactivity; HPPR= high post-treatment platelet reactivity; MPA= maximum platelet aggregation; RPR= residual platelet reactivity; OTPR=on-treatment platelet reactivity; DPAI= degree of platelet aggregation inhibition; PRU=P2Y12 reaction units; CRP=C-reaction protein; PRI=platelet reactivity index; LR=low responder; IQR=interquartile range; AA= arachidonic acid; LD=loading dose; MD=maintain dose; SD=standard deviation; NR=not reported