**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, 200617291930USANR | 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 interventionand at 3 h and 18 to 24 h after stenting.Heparinat 3 h and 18 to 24 hwithin 2h  | High on-treatment platelet reactivity (HPR): ≥70% ADP-induced aggregation with 2-μmol ADP at baseline as measured by TEGNormal 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,2010211266640KoreaOPCABG | TEG/ thromboelastography platelet mappingassayNRHaemoscope Corp., Niles, Illinois | ADP |  Blood sampling and TEGplatelet mapping assay were performed immediately beforethe induction of anesthesiaHeparin NRNR |  platelet inhibitory response 70% | ROC curve  | platelet inhibitory response 70% n=33 |
| Gurbel,201020691842USAPREPARE POST-STENTING | ThromboelastographyTEG Hemostasis SystemHaemoscope Corporation, Niles, IL | Thrombin & ADP | Blood;18 to 24 hours post-PCI or 5 days post-PCI (if eptifibatide used) 40 USP lithium heparinClopidogrel came firstNR | Quartile of TEG Maximum amplitude with ThrombinQuartile 1 <65 mmQuartile 2 65-69 mmQuartile 3 >69-72 mmQuartile 4 >72 mmQuartile of TEG Maximum amplitude with ADPQuartile 1 <29 mmQuartile 2 29-39 mmQuartile 3 >39-72 mmQuartile 4 >72 mm | ROC curve analysis | Quartile of TEG Maximum amplitude with ThrombinQuartile 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 ADPQuartile 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, 201020406238UKNR | Clot strength and speed of clot formationTEG R \_ platelet mappingkit Haemoscope Corp | ADP | Study sample drawn into a 6 mL Lithium Heparin VacutainerLithium HeparinNRNR | sTEG <800 mm/minsTEG >800 mm/min | Based on literature | sTEG <800 mm/min: NRsTEG >800 mm/min: NR |
| Gurbel, 200516286165USAPREPARE POST-STENTING | ThromboelastographyTEG Hemostasis SystemNR | 20um ADP | At discharge40 USP lithium heparin2 hrsNR | TEG: Low reaction time R (time to initial thrombin-generated ﬁbrin formation) <3.9 minutesTEG: Normal reaction time R(time to initial thrombin-generated ﬁbrin formation) ≥3.9 minutesTEG: High maximum amplitude of thrombin-generated clot (MA) >72 mmTEG: 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: NRTEG: High maximum amplitude : NRTEG: Not High maximum amplitude : NR |
| Tang, 2012 ChinaNR | thrombelastograph TEGHaemoscope Corporation, Niles, Illinois, USA | 3.8% trisodiumcitrate  | 1 week, 1 month, 3 months, 6 months, 9 months, 12 months3.8% trisodium citrate and lithium heparin3 days NR | inhibition >50% n=30resistence n=60 | NR | inhibition >50% n=30resistence 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