**Appendix Table E21. Results from studies assessing the ability of LTA to predict platelet reactivity during followup (discrete outcome) in patients with ischemic heart disease**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Author, year**  **UID**  **Country**  **Study name** | **Treatment** | **Phenotypic Test Used [index test]** | **Reactivity Outcome** | **Outcome Definition** | **Timing of measurement** | **Index test result: category (e.g., HPR+) – ONE ROW PER PHENOTYPE GROUP** | **Outcome status (e.g., HPR+ or HPR-)** | **No. with outcome status within phenotype group** | **Cut-off** | **Comparative metric (OR, RR, HR)** | **95% CI** | **P (between which groups?)**  **[statistical test]** | **Adjusted?**  **[YES/NO/NR]**  **If YES, for what factors?** | **Procedures for multiple comparisons [YES, NO, NR]** | **Comments (e.g., additional data in figures)** |
| Hoshino, 2009{Hoshino, 2009 143 /id}  19106460  Japan  NR | 300 mg clopidogrel LD + 74 mg MD | 12-channel light transmission aggregometer | Responder | based on the the inhibition of platelet aggregation (IPA) | 28 days | IPA <10% (clopidogrel non-responders) | In Fig 2 | In Fig 2 | In Fig 2 | In Fig 2 | In Fig 2 | NR | NR | NR | Data is presented in Fig 2 which can be digitized to obtain the change in status within the three phenotype groups |
|  |  |  |  |  |  | 10%≤ IPA <30% (hypo-responders) | In Fig 2 | In Fig 2 | In Fig 2 | In Fig 2 | In Fig 2 | NR | NR | NR |  |
|  |  |  |  |  |  | IPA ≥30% (responders) | In Fig 2 | In Fig 2 | In Fig 2 | In Fig 2 | In Fig 2 | NR | NR | NR |  |
| Gurbel, 2010{Gurbel, 2010 84 /id}  20194878  10 study sites in North America and Europe  RESPOND | 600-mg clopidogrel LD + 75-mg daily MD | LTA | On treatment high platelet reactivity (HPR) by LTA associated with long-term ischemic event occurrence | Platelet aggregation (20 mol/L  ADP, maximum extent) ≤59% | 30 days | Nonresponder (absolute change in maximum platelet aggregation (MPA) ≤10% between pre-dose and 6-8 hr post-dose measurements) | On treatment high platelet reactivity (HPR) + | 20/33 (61%, 95% CI: 44–77) | ≤10 | NR | NR | 0.15 (fisher’s exact calculated from data) | NO | NR | NR |
|  |  |  |  |  |  | Responder (absolute change in maximum platelet aggregation (MPA) >10% between pre-dose and 6-8 hr post-dose measurements) | On treatment high platelet reactivity (HPR) + | 41/54 (76%, 95% CI: 65–87) | ≤10 |  |  |  |  |  |  |
|  | 600-mg clopidogrel LD + 75-mg daily MD | LTA | On treatment high platelet reactivity (HPR) by VerifyNow P2Y12 associated with long-term ischemic event occurrence | VerifyNow P2Y12-PRU ≤235 | 30 days | Nonresponder (absolute change in maximum platelet aggregation (MPA) ≤10% between pre-dose and 6-8 hr post-dose measurements) | On treatment high platelet reactivity (HPR) + | 17/32 (53%, 95% CI: 36–70) | ≤10 | NR | NR | 0.258 (fisher’s exact calculated from data) | NO | NR | NR |
|  |  |  |  |  |  | Responder (absolute change in maximum platelet aggregation (MPA) >10% between pre-dose and 6-8 hr post-dose measurements) | On treatment high platelet reactivity (HPR) + | 35/53 (66%, 95% CI: 53–79) | ≤10 |  |  |  |  |  |  |
|  | 600-mg clopidogrel LD + 75-mg daily MD | LTA | On treatment high platelet reactivity (HPR) by VASP associated with long-term ischemic event occurrence | VASP-PRI ≤50% | 30 days | Nonresponder (absolute change in maximum platelet aggregation (MPA) ≤10% between pre-dose and 6-8 hr post-dose measurements) | On treatment high platelet reactivity (HPR) + | 10/34 (29% , 95% CI: 14-45) | ≤10 | NR | NR | 0.00458 (fisher’s exact calculated from data) | NO | NR | NR |
|  |  |  |  |  |  | Responder (absolute change in maximum platelet aggregation (MPA) >10% between pre-dose and 6-8 hr post-dose measurements) | On treatment high platelet reactivity (HPR) + | 28/53 (53%, 95% CI: 39–66) | ≤10 |  |  |  |  |  |  |
| Gurbel, 2003{Gurbel, 2003 224 /id} 12714161  USA No | Clopidogrel+aspirin | Platelet aggregation ADP 5 mcmol/liter | Continued nonresponse since baseline | NR | 5 days | Nonresponders at baseline (n=23) | Nonresponders at 5 days | 15/23 (66%) | <10% change from baseline | NR | NR | <0.0001 (fisher’s exact calculated from data) | NR | NR | NONE |
|  |  |  |  |  |  | Responders at baseline (n=40) | Responders at 5 days | 38/40 (95%) |  |  |  |  |  |  |  |
|  |  |  |  |  | 30 days | Nonresponders at baseline (n=23) | Nonresponders at 30 days | 7/13 (54%) with data (10 were not measured at 30 days) |  |  |  | 0.013 (fisher’s exact calculated from data) |  |  |  |
|  |  |  |  |  |  | Responders at baseline (n=40) | Responders at 30 days | 18/20 (90%) with data (20 were not measured at 30 days) |  |  |  |  |  |  |  |
|  |  | Platelet aggregation ADP 20 mcmol/liter | Continued nonresponse since baseline |  | 5 days | Nonresponders at baseline (n=13) | Nonresponders at 5 days | 9/13 (69%) |  |  |  | 0.003 (fisher’s exact calculated from data) |  |  |  |
|  |  |  |  |  |  | Responders at baseline (n=25) | Responders at 5 days | 22/25 (88%) |  |  |  |  |  |  |  |
|  |  |  |  |  | 30 days | Nonresponders at baseline (n=13) | Nonresponders at 30 days | 3/8 (38%) with data (5 were not measured at 30 days) |  |  |  | 0.25 (fisher’s exact calculated from data) |  |  |  |
|  |  |  |  |  |  | Responders at baseline (n=25) | Responders at 30 days | 12/13 (92%) with data (12 were not measured at 30 days) |  |  |  |  |  |  |  |