**Appendix Table E68. Results from studies assessing the ability of Multiplate Analyzer to predict death in patients with ischemic heart disease**

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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Author,year**  **UID**  **Country**  **Study name** | **Treatment** | **Phenotypic Test Used [index test]** | **Clinical Outcome** | **Outcome Definition** | **Timing of measurement** | **Index test result: category (e.g., HPR+) – ONE ROW PER PHENOTYPE GROUP** | **Outcome status (e.g., bleeding or no bleeding)** | **No. with outcome status within phenotype group** | **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)** |
| Sibbing, 2009{Sibbing, 2009 135 /id}  19264241  Sibbing 2010{Sibbing, 2010 100 /id}  20062919  Germany  NR | Clopidogrel: 600 mg LD + 150 mg/day clopidogrel for 3 days + 75 mg/day clopidogrel MD & Aspirin: 500 mg IV LD + 100 mg aspirin (twice per day) MD | MEA | Death | Death | 30 days | Low Responders (>416 aggregation units\*min) | Death | 4 (1.2%) | OR=3.2 | 0.92- 11.1 | P=0.07  (low vs normal responder)  [log rank] | NO | NR | Secondary |
|  |  |  |  |  |  | Normal Responders (≤416 aggregation units\*min) |  | 5 (0.4%) |  |  |  |  |  |  |
|  | Clopidogrel: 600 mg LD + 150 mg/day clopidogrel for 3 days + 75 mg/day clopidogrel MD & Aspirin: 500 mg IV LD + 100 mg aspirin (twice per day) MD | MEA | Mortality | Death | 6 months | Low Responders (>416 aggregation units\*min) | Mortality | 10 (3.2%) | OR=1.6 | 0.8- 3.3 | P=0.20  (low vs normal responder)  [log rank] | NO | NR | Secondary |
|  |  |  |  |  |  | Normal Responders (≤416 aggregation units\*min) |  | 25 (2%) |  |  |  |  |  |  |
|  | Clopidogrel: 600 mg LD + 150 mg/day clopidogrel for 3 days + 75 mg/day clopidogrel MD & Aspirin: 500 mg IV LD + 100 mg aspirin (twice per day) MD | MEA | Cardiac Death | Cardiac Death | 6 months | Low Responders (>416 aggregation units\*min) | Cardiac Death | 8 (2.5%) | OR=2.5 | 1.1- 5.8 | P=0.037  (low vs normal responder)  [log rank] | NO | NR | Secondary |
|  |  |  |  |  |  | Normal Responders (≤416 aggregation units\*min) |  | 13 (1%) |  |  |  |  |  |  |
| Schulz, 2010{Schulz, 2010 67 /id}  20691843  Germany  NR | Clopidogrel 75 mg/d + Aspirin 100 mg/d | MEA by Multiplate analyzer | Death | Death | 1 year | Low responder | Death | 16 (5%) | HR=1.5 | 0.9-2.7 | 0. 144  (low vs normal)    cox proportional hazard model | NO | NR | Secondary outcome |
|  |  |  |  |  |  | Normal responder |  | 42 (3.3%) |  |  |  |  |  |  |
|  | Clopidogrel 75 mg/d + Aspirin 100 mg/d | MEA by Multiplate analyzer | Cardiac Death | Cardiac Death | 1 year | Low responder | Cardiac Death | 9 (2.8%) | HR=1.8 | 0.8-4 | 0. 139  (low vs normal)  cox proportional hazard model | NO | NR | Secondary outcome |
|  |  |  |  |  |  | Normal responder |  | 20 (1.6%) |  |  |  |  |  |  |
| Freynhofer 2011{Freynhofer, 2011 1 /id}  21614416  Austria  NR | 300 or 600mg LDClopidogrel and maintain dose 75 mg+aspirin 100mg | MEA | CV death | CV death | 6 months | High reactivity/poor response | CV death | 4/57 | OR (calculate)=23 | 1.2-443.3 | P=0.006  (High vs low reactivity)  [Fisher’s exact test] |  |  | Fig 1 |
|  |  |  |  |  |  | Low reactivity/good response |  | 0/139 |  |  |  |  |  | Fig 1 |
| Eshtehardi,2010{Eshtehardi, 2010 78 /id}  20435201  Switzerland  NR | 600 mg LD Clopidogrel+500 mg aspirin | Aggregometry | Death | Death | 30 days | Clopidogrel low response | Death | 0 | OR (calculate)=9.8 | 0.4-243.2 | P=0.023  (High vs low reactivity)  [Fisher’s exact test] |  |  |  |
|  |  |  |  |  |  | Aspirin low response |  | 0 |  |  |  |  |  |  |
|  |  |  |  |  |  | Dual low response |  | 1 (5.3%) |  |  |  |  |  |  |
|  |  |  |  |  |  | Normal response |  | 0 |  |  |  |  |  |  |
| Ivandic, 2009{Ivandic, 2009 125 /id}  19359538  Germany  NR | Clopidogrel600mg LD+aspires 0.5g | Aggregometry | Cardiac death | Cardiac death | 14 months | Responders (n=163) | Cardiac death | 4 (2.4%) | OR (calculate)=0.91 | 0-17.5 | P=1.0  (dual nonresponder + clopidogrel nonresponder vs responder)  [Fisher’s exact test] |  |  |  |
|  |  |  |  |  |  | Dual nonresponders (n=19) |  | 0 (0%) |  |  |  |  |  |  |
| Siller-matula, 2012{Siller-Matula, 2012 1 /id}22260716  PEGASUS-PCI | clopidogrel LD 600mg, MD 75mg | MEA | cardiac death | stent  thrombosis (definite and probable) | 12-month | non-responder | stent thrombosis | 6/81 (8) | HR=2.1 | 0.7-6.2 | NR | yes,CY  P2C19\*2 carrier status,BMI, CRP levels,DM, age, renal failure(creatine clearance<60mg mL,MI,sex,PPI | NR |  |
|  |  |  |  |  |  | responder |  | 14/321(5) |  |  |  |  |  |  |
| Johnston, 2012{Johnston, 2012 18242 /id}  22465351  New Zealand  NR | aspirin ≥300 mg at and clopidogrel  ≥300 mg and/or aspirin (≥75 mg) and clopidogrel (≥75 mg) | MEA | Death |  | 3 days | High on treatment platelet reactivity >468 AU\*min  n=95 | HTPR | 0 | OR (calculated)=1.63 | NR | P=0.81  (HTPR vs normal)  [Fisher’s exact] | No | NR |  |
|  |  |  |  |  |  | normal platelet reactivity  ≤468 AU\*min  n=155 |  | 0 |  |  |  |  |  |  |
| Sibbing, 2012{Sibbing, 2012 18239 /id}  22682553  Germany  ISAR-REACT 4 | LD: 600 mg of clopidogrel and 500 mg aspirin MD: clopidogrel 75 mg x 12 months and aspirin 100 mg twice daily for an indefinite period | MEA | Death in pts on Abciximab Plus UFH | death | 30 days | high on-treatment platelet reactivity  >468 AU\*min  n=96 | death | 1 | OR=0.6 | 0.1-5.6 | P=0.64  (HTPR vs normal)  [Cox regression] | No | NR |  |
|  |  |  |  |  |  | normal platelet reactivity  ≤468 AU\*min  n=178 |  | 3 |  |  |  |  |  |  |
|  |  |  | Death in pts on Bivalirudin | death | 30 days | high on-treatment platelet reactivity  >468 AU\*min  n=109 | death | 1 | OR=1.9 | 0.1-30.1 | P=0.66  (HTPR vs normal)  [Cox regression] | No | NR |  |
|  |  |  |  |  |  | normal platelet reactivity  ≤468 AU\*min  n=181 |  | 1 |  |  |  |  |  |  |