**Appendix Table E23. Results from studies assessing the ability of LTA to predict platelet reactivity during followup (continuous 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** | **No. with given phenotype** | **Platelet reactivity measurement for the phenotype group****[metric]** | **SD/SE (report value and metric)** | **Statistical method** | **Mean difference (state if other metric)** | **95% CI of mean difference (state if other metric)** | **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)** |
| Matetzky, 2004{Matetzky, 2004 188 /id}15184279Israel No | Clopidogrel | Aggregometer (not cone and platelet device) | % Change from baseline in ADP-induced platelet aggregation | NR | 6 days vs. baseline | Q1 | 15 | -9% | NR | NR | NR | NR | <0.05 (P for trend”) [2-tailed Fisher’s exact test] | NR | NR | NO |
|  |  |  |  |  |  | Q2 | 15 | -22% |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | Q3 | 15 | -28% |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | Q4 | 15 | -45% |  |  |  |  |  |  |  |  |
| Angiolollo, 2007{Angiolillo, 2007 194 /id}17936152SpainNR | clopidogrel (75 mg/day) | LTA-ADP | Platelet aggregation (late)  | Platelet aggregation (late) | 1 year | HPR + | First quartile  | Mean 24.7 | 11.3 | ANOVA | NR | NR | <0.0001 | NR | NR |  |
|  |  |  |  |  |  | HPR + | Second quartile | Mean 36.8 | 11.4 |  |  |  |  |  |  |  |
|  |  |  |  |  |  | HPR + | Third quartile | Mean 48.2 | 7 |  |  |  |  |  |  |  |
|  |  |  |  |  |  | HPR + | Fourth quartile | Mean 65.1 | 8.4 |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | clopidogrel (75 mg/day) | LTA-ADP | Platelet disaggregation  | Platelet disaggregation | 1 year | HPR + | First quartile  | Mean 30.5 | 26.2 | ANOVA | NR | NR | <0.0001 | NR | NR |  |
|  |  |  |  |  |  | HPR + | Second quartile | Mean 22.9 | 23.3 |  |  |  |  |  |  |  |
|  |  |  |  |  |  | HPR + | Third quartile | Mean 15.4 | 10.3 |  |  |  |  |  |  |  |
|  |  |  |  |  |  | HPR + | Fourth quartile | Mean 5.4 | 7 |  |  |  |  |  |  |  |
| Bellemain-Appaix 2010{Bellemain-Appaix, 2010 87 /id}20170822FranceALBION (Assessment of the Best Loading Dose of Clopidogrel to Blunt Platelet Activation, Inflammation and Ongoing Necrosis) | Clopidogrel LD= 300 mg or 600 mg or 900 mg) | LTA | VASP Index | VASP index was calculated from the median fluorescence intensity (MFI) | 6 hrs | Slow responders | 50 | 76.4 | 15.8 (SD) | Linear regresssion | NR | NR | 0.0192(slow vs fast) | YES;NR | NR |  |
|  |  |  |  |  |  |  | 38 | 66.4  | 20.3 (SD) |  |  |  |  |  |  |  |
|  | Clopidogrel LD= 300 mg or 600 mg or 900 mg) | LTA | VASP index | VASP index was calculated from the median fluorescence intensity (MFI) | 24 hrs | Slow responders | 50 | 70.2 | 22.2 (SD) | Linear regresssion | NR | NR | 0.0192(slow vs fast) | YES;NR | NR |  |
|  |  |  |  |  |  |  | 38 | 61.5 | 19.1 (SD) |  |  |  |  |  |  |  |
| Cuisset, 2006{Cuisset, 2006 212 /id}16371119FranceNR | Clopidogrel+aspirin | PAP4 aggregometer | P-selectin expression after ADP stimulation | Meansured in mean channel ﬂuorescence intensity (MFI) | NR | Q1 (highest responder) | NR | 0.44 mean MFI | 0.38 | NR | NR | NR | 0.04 for Q1 vs. Q4 (general linear model with ADP-induced aggregation as depe ndent variable) | NR | NR | NO |
|  |  |  |  |  |  | Q4 (nonresponder) | 23 | 0.57 mean MFI | 0.29 |  |  |  |  |  |  |  |
| Liu, 2011{Liu, 2011 12 /id}21613806ChinaNone | Clopidogrel+aspirin | Aggregometry | Mean maximal aggregation rate, 5 mcmol ADP | NR | 36 hr after stenting | Nonrespoders | 35 (32%) | 48.65% | 15.46% | NR | NR | NR | NR | NR | NR | NONE |
|  |  |  |  |  |  | Low responders | 28 (25%) | 45.20% | 14.70% |  |  |  |  |  |  |  |
|  |  |  |  |  |  | Responders | 46 (41%) | 30.31% | 16.04% |  |  |  | <0.0001 vs. two rows above and <0.05 vs. previous row (ANOVA) |  |  |  |
|  | Clopidogrel+aspirin | Aggregometry | Mean maximal aggregation rate, 20 mcmol ADP |  | 36 hr after stenting | Nonrespoders | 35 (32%) | 63.54% | 14.81% |  |  |  |  |  |  |  |
|  |  |  |  |  |  | Low responders | 28 (25%) | 62.53% | 17.64% |  |  |  |  |  |  |  |
|  |  |  |  |  |  | Responders | 46 (41%) | 45.74% | 19.94% |  |  |  | <0.0001 vs. two rows above and <0.05 vs. previous row (ANOVA) |  |  |  |
| Obradovic, 2009{Obradovic, 2009 123 /id}19318922SerbiaNR | Clopidogrel LD 300 mg | ADP-PA | ADP-PA | ADP-PA | Before PCI | PA>20% | 26 | 47.35( 34.95-68.8) | NR | NR | NR | NR | <0.001 comparing with the lower row | NR | NR | NR |
|  |  |  |  |  | Before PCI | PA<20% | 26 | 8.5 (2.3-14.15) | NR | NR | NR | NR |  | NR | NR | NR |
|  | Clopidogrel LD 300 mg | ADP-PA | ADP-PA | ADP-PA | 24 h afterPCI | PA>20% | 26 | 23.4 (12.97-48.35) | NR | NR | NR | NR | <0.001 comparing with the lower row | NR | NR | NR |
|  |  |  |  |  | 24 h afterPCI | PA<20% | 26 | 7.5 (0.8-16.75) | NR | NR | NR | NR |  | NR | NR | NR |
| Kalantzi, 2012{Kalantzi, 2012 18174 /id} 21806493Greece | LD 600mg clopidogrel+MD 75 mg/day | LTA-ADP | LTA -ADP | platelet aggregation | 30 days | responder | 12 | 2.5uMADP 23 (12-35)5uM ADP 32 (17-50)10uM ADP 50(31-65) | NRNR | t-test | NR | NR | p<0.001p<0.001p<0.001 | NR | NR |  |
| Kalantzi, 2012{Kalantzi, 2012 18174 /id} 21806493Greece | LD 600mg clopidogrel+MD 75 mg/day | LTA-ADP | LTA -ADP | platelet aggregation | 30 days | non-responder | 28 | 2.5uMADP 24(10-30)5uM ADP 37 (20--55)10uM ADP 53(33-62) | NRNR | t-test | NR | NR | p<0.01p<0.01p<0.01 | NR | NR |  |
| Gurbel, 2012{Gurbel, 2012 18183 /id} 21862113USANR | LD 600mg clopidogrel+Aspirin 325 mg/day | LTA with 20 μM ADP | LTA ADP & collagen  | platelet aggregation | 24 hours | non-responder (≤ 10% absolute change in 20uMADP-induced PA in 0-6 hrs)(n=21) | 21 | 5 μM ADP mean= 15.2 % (estimate from Fig 1)20 μM ADP mean= 6.5% (estimate from Fig 1)4 μg/mL collagen = 8.8% (estimate from Fig 1) | NR | NR | NR | NR | P<0.001 (responder vs nonresponder) for 5 μM ADP, 20 μM ADP & 4 μg/mL collagen | NR | NR | Data obtained from digitizng fig 1 |
|  |  |  |  |  |  | Responder (> 10% absolute change in 20uMADP-induced PA in 0-6 hrs)(n=57) | 57 | 5 μM ADP mean= 34.9% (estimate from Fig 1)20 μM ADP mean=37.2% (estimate from Fig 1)4 μg/mL collagen = 18.5 (estimate from Fig 1) |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |