**Appendix Table D3. Descriptive characteristics of included studies**

|  | **Demographics** | **Vascular disease history** | **Vascular risk factors** | **Prior medications (pre-study)** | **Procedural data** | **Current indication for clopidogrel treatment** | **Current antiplatelet regimen** | **Co-medication** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Author, year**  **UID**  **Country**  **Study name** | **Total N Enrolled**  **Race (% by group)**  **Male (%)**  **Age†** | **Previous CAD (%)**  **Previous heart failure (%)**  **Previous TIA/stroke (%)**  **History of PCI or CABG (%)**  **Stable angina (%)**  **Unstable angina (%)**  **Previous PAD (%)**  **History of MI (%)**  **STEMI/non-STEMI (%)** | **Dyslipidemia (%)**  **Smokers (%)**  **BP(mmHg diastolic/systolic**  **HTN (%)**  **Diabetes (%)** | **Vitamin K antagonist (%)**  **Clopidogrel (%)**  **Aspirin (%)**  **PPI (%)** | **Stent implantation (%)**  **Type of stent (%)**  **Multi-or single vessel (%)** |  |  |  |
| Collet, 2009  19108880  France  AFIJI (Appraisal of risk Factors in young Ischemic patients Justifying aggressive Intervention) registry | 259  78% White European  16.6% North African  3.1% Black  2.3% Asian  92.3%  40.1 (± 5.1) | NR  NR  NR  73% PCI ; 8% CABG  NR  NR  NR  NR  78.8% STEMI; 21.2% NSTEMI | 54%  56%  NR  20.1% HTN  10.4% | 3.1%  Clopidogrel: 83.4% initiated at first event; 19.9% not on clopidogrel  NR  NR | 86%  32% DES  54% BMS | Survivors of AMI enrolled in a multicenter registry; followup was on an outpatient basis | Clopidogrel MD = 75 mg for at least 1 mo | Low dose aspirin (dose NR) |
| Fontana, 2008  17681590  Switzerland  NR | 81  100% Caucasian  79%  65.9± 12.2 | NR  NR  NR  NR  NR  NR  NR  50.6% ACS  NR | 71.6% Hyperlipidemia  30.9%  59.3% HTN  18.5% | NR  NR  98.8%  13.6% | 100%  NR  NR | PCI with stent placement | Clopidogrel LD=300 mg  MD = 75 mg | 99% Aspirin maintenance (dose NR) |
| Giusti, 2007  18004210  Italy  NR | 1419  NR  73%  Median= 69 (range: 27-94) | NR  NR  NR  NR  NR  NR  NR  NR  NR | 56.1% Dyslipidemia  40.9% “Smoking habit”  65% HTN  21.1% | NR  NR  NR  NR | NR  NR  NR | PCI for ACS | LD: clopidogrel 600 mg (orally) + 500 mg ASA (IV);  MD: clopidogrel 75 mg and ASA 100 mg (both daily) | None |
| Giusti, 2009  19268736  Italy  RECLOSE study  (Low Responsiveness to Clopidogrel and Sirolimus- or Paclitaxel-Eluting Stent Thrombosis) | 804  (of whom 772 consented to participation in the genetics substudy)  NR  74.6%  NR | NR  LVEF = 47% ±12%  NR  20.9% PCI 7.5% CABG  33.9%  40.2%  NR  25.5%  NR | 59.7% Dyslipidemia; 89.4% on statins  34.4%  65.4% HTN  22.2% | NR  NR  NR  94.8% | 100%  100% DES (sirolimus or paclitaxel)  439 (56.8%) had multi-vessel disease; NR if all received multiple stents | PCI | All patients received aspirin (loading dose = 325 mg; maintenance dose = 325 mg per day) and clopidogrel (loading dose = 600 mg; 75 mg maintenance). Loading dose was administered before the procedure | UFH was used during the procedure as the anticoagulant. |
| Gladding, 2009  19926050  New Zealand  NR | 40  88% Caucasian  78%  67±11 | 18%  5%  NR  88%  NR  NR  NR  NR | 43%  10%  NR  50%  20% | NR  100%  NR  33% | NR  NR  NR | PCI>2 wk previously | All patients had a 600-mg clopidogrel loading dose, followed by clopidogrel 150 mg once daily for 7 days | NR |
| Jinnai, 2009  19531897  Japan  Partly industry funded | 30  100% East Asian  73.3%  70 ± 8.3 | NR  NR  NR  NR  NR  NR  NR  12%  NR | 64% Hyperlipidemia; 72% on statin  16% Current smokers  68% HTN  16% | NR  NR  NR  20% | NR  NR  NR | Elective PCI, for symptoms or based on stress testing | Patients were on low-dose Aspirin (81-100 mg/day) at study enrollment; They received clopidogrel 300 mg loading dose on the first day and then 75 mg daily maintenance. | None |
| Mega, 2009  19106084  Multinational  Genetics substudy of TRITON-TIMI 38 [Therapeutic Outcomes by Optimizing Platelet Inhibition with Prasugrel-Thrombolysis in Myocardial Infarction] | 1477  Caucasian, 1442 (97.6%);  Hispanic, 18 (1.2%);  African, 10 (0.7%);  Asian, 5 (0.3%)  Other, 2 (0.1%)  1044 (70.7%)  60.1 ± 11.1 | NR  NR  51 (3.5%)  NR  NR  NR  NR  240 (16.2%)  NR | 725 (49.1)  562 (38.1%)  HTN=972 (65.8%)  322 (21.8%) | NR  NR  NR  NR | 1389 (1389 of the 1459 subjects with analyzable data = 95% of all included in analyses)  NR  NR | ACS with planned PCI | Clopidogrel 300 mg loading dose, followed by a 75 mg daily maintenance dose. | All decisions regarding concomitant medications were left to the treating physician. It was recommended that long-term aspirin therapy be 75 to 162 mg. Patients may receive unfractionated heparin, low–molecular-weight heparin, any approved direct thrombin inhibitor, and/or GPIIb/IIIa receptor antagonist. Because of a lack of information regarding the safety of thienopyridines in combination with warfarin, blinded study drug is discontinued in patients requiring anticoagulation with warfarin, and open-label thienopyridine use is left to the discretion of the treating physician. (source: Wiviott et al., American Heart Journal, Volume 152, Issue 4, Pages 627-635, PMID = 16996826) |
| Shuldiner, 2009  19706858  USA  Sinai Hospital of Baltimore Study | 227  White=140 (61.7%); African-American=83 (36.6%); other=4 (1.8%)  139 (59.9%)  64.3 ± 11.5 | 100% (all undergoing non-emergent PCI)  NR  NR  NR  NR  NR  NR  NR  All patients underwent non-emergent PCI | 183 (80.6%)  58 (25.6%) [current smoker]  SBP = 140.7 ± 20.2;DBP = 72.3± 14.1; HTN=174 (76.7%)  83 (36.6%) | NR  90 (39.6%) at the time of study entry  227(100%)  NR | NR  NR  NR | Non-emergent PCI | On the day of PCI patients received clopidogrel 600 mg (n=112) or 300 mg (n=25) loading dose; 90 subjects already on clopidogrel maintenance therapy with 75 mg daily at the time of PCI were not reloaded. All patients received 81-325 mg aspirin daily for ≥1 week prior to PCI and 325 mg on the day of the procedure.  Aspirin 325 mg per day and clopidogrel 75 mg per day was prescribed to all patients at discharge. | Patients were also treated with bivalirudin or heparin, with (n=107) or without (n=120) eptifibatide. Anticoagulant therapy was discontinued at the completion of the procedure. |
| Sibbing, 2009  19193675  Germany  NR | 2661 fulfilled the study inclusion criteria; of those 2485 had DNA available for genotyping  NR  539 (78.3%)  66.5 ± 10.2 | NR  NR  NR  Previous CABG 325 (13%)  NR  UA = NR; Total ACS = 846 (34%)  NR  801 (32%)  NR | Hypercholesterolemia = 1204 (48%)  402 (16%)  HTN = 1563 (63%)  881 (35%) | NR  NR  NR  NR | 100%  DES = 623 (25%); BMS = 1862 (75%)  2006 (81%) | Patients undergoing planned PCI | Clopidogrel LD= 600 mg before stent placement. | None |
| Sibbing, 2010  20083681  Germany  Part of a prospective study of the Multiplate analyzer | 1608 patients were included in a study of platelet function; 1524 (95%) of those had samples available for inclusion in the genetic study.  NR  1180 (77.4%)  67.4 ± 10.5 | All patients had known CAD  NR [ejection fraction = 54.7± 11.1]  NR  CABG = 223 (14.6%)  NR  NR  NR  483 (31.7%)  NSTE MI = 169 (11.1%) of all included patients | Hypercholesterolemia = 1068 (70.1%)  Active smokers = 207 (13.6%)  Arterial HTN = 1392 (91.3%)  430 (28.2%) | 164 (10.8%)  On any thienopyridine = 644 (42.3%)  1155 (75.8%)  270 (18.1%) | 100%  DES = 100% (planned)  1292 (84.8%) | CAD and planned DES placement | All patients received a loading dose of clopidogrel 600 mg; After PCI patients received clopidogrel 75 mg (1/d) and aspirin 100 mg (2/d) maintenance | UFH was used as the anticoagulant (“in the majority of patients”) and bivalirudin was used for “only some of the patients”. <5% of patients received abciximab |
| Varenhorst, 2009  19429918  Sweden  Genetic sub-study | 110 patients in parent study; 98 consented to inclusion in the genetics sub-study; of these 47 were on the clopidogrel group  White = 47 (100%)  96%  65 ± 5.7 | NR  NR  NR  NR  NR  NR  NR  NR  NR | NR  “Yes” = 4 (9%);”No” = 43 (91%)  NR  Yes = 8 (17%) | NR  NR  All patients were aspirin treated  9 (19%) | NR  NR  NR | Stable CAD | Patients were aspirin treated. The group relevant to this KQ received clopidogrel LD= 600 mg, followed by MD= 75 mg | None |
| Frere, 2008  18394438  France  NONE | 603  NR  456 (75.7%)  64.7± 12.2 | NR  Excluded NYHA IV heart failure  NR  NR  NR  NR  NR  NR  100% NSTE-ACS | NR [56.4% on statin treatment]  266 (44.1%)  Hypertensive = 339 (56.3%)  169 (28%) | NR  NR  NR  NR | NR  NR  NR | NSTE-ACS undergoing angiography | clopidogrel LD= 600 mg Aspirin LD= 250 mg ≥12 hours before coronary angiography | None; patients receiving IIb/IIIa inhibitors before the procedure were excluded. |
| Frere, 2009  19496924  France  Part of larger observational study | 598  NR  453 (76%)  64.7±12 (NR if SD or SE) | NR  NR  NR  NR  NR  NR  NR  NR  100% NSTE-ACS | Dyslipidemic = 321 (54%); On statin = 336 (45%)  Current smokers=263 (44%)  HTN = 332 (56%)  169 (28%) | NR  NR  NR  NR | NR  NR  NR | NSTE-ACS | clopidogrel LD= 600 mg; no additional details reported | NR |
| Bonello-Palot 2009  19932784  France  NR | 73  NR  59 (80.8%)  62.8 ± 12.4 | ACS: 40%  NR (Left ventricular ejection fraction in %: 54.6 ± 9.8)  NR  NR  NR  NR  NR  Previous MI: 40.1%  NR | Hypercholesterolemia(tot chol >250 mg/dL): 61.1%  38.4%  HTN (>140/90 mm Hg at rest): 58.9%  31.5% | NR  NR (Though all patients received clopidogrel during the study)  NR  Omeprazole: 5% | NR  NR  NR | PCI for ACS | Clopidogrel LD=600 mg; for pts with high on treatment platelet reactivity :up to 3 additional LDs of 600 mg were prescribed 24 hours after the previous dose till a VASP index <50% was obtained. | None |
| Harmsze 2010  19934793  Netherlands  NR | 428  NR  335 (78.2%)  62.9 | 65.2%  NR  NR  NR  NR  NR NR  47.2%  NR | 82%  12%  79.4%  19% | NR  69.4%  100%  23% | NR  NR  NR | PCI for ACS | Chronic clopidogrel maintenance: 75 mg/day for more than 5 days before  the coronary stent implantation  Clopidogrel loading dose (LD): Loading dose of 300 mg clopidogrel 24 h to 5 days before the coronary stent implantation followed by 75mg/day.  All patients received aspirin (80–100mg daily) for >5 days before the coronary stent implantation. | None |
| Trenk 2008  18482659  Germany  EXCELSIOR (Impact of Extent of Clopidogrel-Induced Platelet Inhibition During Elective Stent Implantation on Clinical Event Rate) | 802  NR  627 (78%)  66.4 ± 9.1 | NR  NR [LVEF<55%: 35.8%  NR  Previous balloon angioplasty:34.2%; previous CABG: 14%  CANADIAN Cardiovascular Society angina class III or IV: 24.8%  NR  NR  22.9%  NR | NR  Active smokers: 10.8%  arterial hypertension (definition NR): 82.3%  24.8% | NR  NR  100%  NR | 36.4%  100% DES  multivessel PCI: 22.2% | CAD, elective PCI with stent implantation | **Pretreatment:** with pre-treatment with 600 mg of clopidogrel & aspirin (100 mg per day for at least 5 days);  **After PCI:** All patients received aspirin (≥100 mg per day) lifelong & clopidogrel (75 mg per day) for 30 days after placement of bare-metal stents or for 6 months after placement of at least 1 drug-eluting stent. | **During procedure:** All patients received an intra-arterial dose of 100 to 140 U/kg heparin; |
| Tantry 2010  21079055  Multicountry - North America and Europe  Genetic substtudy of ONSET/OFFSET and RESPOND | 82 (clopidogrel group, from RESPOND and ONSET/OFFSET)  White 74 (90%)  Black 6 (7%)  62 (76%)  65± 8 | NR  NR  NR  CABG 32 (39%)  NR  NR  NR  41 (50%)  NR | Dyslipidemia including hypercholesterolemia 79 (96%)  8 (10%)  HTN 60 (73%)  17 (21%) | NR  NR  100%  17 (21%) | NR  NA  NA | Stable CAD receiving aspirin who consented to genotyping | All patients received 75 to 100 mg/d aspirin clopidogrel (600-mg load, 75 mg/d thereafter) | None |
| Wallentin, 2010  20801498  Multiple countries (43 countries in North America, South America, Europe, Asia, Australia)  PLATO | 5148 (clopidogrel group)  White 5058 (98%)  3571 (69%)  62.5 ±11.04 | NR  NR  NR  NR  NR  NR  NR  NR  NR | NR  Non-smoker 2049 (40%)  Ex-smoker 1270 (25%)  Habitual smoker  829 (36%)  NR  1189 (23%) | NR  2486 (48%)  4946 (96%)  2083 (40%) | NR  NR  NR | Hospitalization for ACS, with or without ST-segment elevation | 75 mg once daily (300–600 mg loading dose) | None |
| Hochholzer, 2010  20510210  Germany  EXCELSIOR | 802  NR  72%  66 | NR  NR  NR  NR  NR  NR  NR  NR  NR | NR  NR  NR  NR  NR | NR  NR  NR  NR | 37%  NR  NR | Elective coronary stent placement | Pre-intervention: All patients received a LD of 600 mg of clopidogrel. After PCI: All patients received clopidogrel (75 mg/day) for 30 days after placement of bare-metal stents or for 6 months after placement of at least 1 drug-eluting stent.  After PCI: All patients received aspirin (≥100 mg/day), lifelong, | None |
| Jeong 2010  20650435  Korea  NR | 126  Whites: 0%  85 (67.5)  61.6±11 | NR  NR  6 (4.8)  1 (0.8)  28 (22.2)  34 (27)  NR  70 (55.6)  36 (28.6)/ 28(22.2) | 46 (36.5)  35 (27.8)  67(53.2)  31 (24.6) | NR  100  NR  1 (0.8) | 122 (96.8)  4 (3.2)  35 (27.8) | treated with PCI for symptomatic  coronary artery disease. | One-hundred and six patients were collected from a registry of the ACCEL (Adjunctive Cilostazol Versus High-MD Clopidogrel) studies , which were performed to compare the degree of platelet inhibition by adjunctive cilostazol versus high-MD clopidogrel in patients within a specific subset: HPPR, diabetes, drug-eluting stent implantation for complex lesions, and acute myocardial infarction. The high-MD group received a high-MD clopidogrel of 150 mg/day for 1 month. A minority (n = 20, 15.9%) of patients received high-MD clopidogrel for over 1 month after PCI at the attending physician’s discretion. | None |
| Barker, 2010  20965456  USA  NR | 41  NR  35 (85.3)  66.6±10.6 | NR  NR  NR  (>80%)  NR  NR  NR  13 (31.7)  NR | 36 (87.8)  NR  36 (87.8)  16 (39) | NR  NR  NR  10 (24.3) | NR  NR  NR | CAD patients if they: 1) had received maintenance clopidogrel or a loading dose of clopidogrel ≥300 mg and 2) had high OTR, defined as Verifynow P2Y12 reaction units (PRU) ≥235. | Patients were administered clopidogrel 150 mg/day for 7 days, after which platelet reactivity was reassessed. | None |
| Bonello, 2010  20708365  France  NR | 411  NR  321 (78.1)  62.9±12.2 | NR  NR  NR  NR  NR  NR  NR  NR  NR | 218 (53)  154 (37.5)  243 (59.1)  143 (34.8) | NR  100%  100%  65 (15.8) | NR  NR  NR | undergoing PCI for non–ST-segment elevation acute coronary  syndrome | All patients received oral LDs of 250 mg aspirin and 600 mg clopidogrel at least 6 h before the first VASP index measurement. Dose adjustment was performed before PCI in all patients. | None |
| Gurbel 2011  21392617  USA  NR | 118  94(63%)  52 (35%)  63± 11 | NR  NR  NR  29 (21%)  NR  NR  NR  37 (31%)  NR | 85(72%)  History 23 (19%)  Current 18 (15%)  Systolic 135±18  Diastolic 72±15  HTN 93(79%)  46 (39%) | NR  100%  100%  22(29%) | NR  NR  NR | Established CAD | Maintenance clopidogrel for at least 2 weeks (Dose NR) | None |
| Hwang 2011  21075428  South Korea  NR | 190  Asian 100%  71.6  62.6 ±11 | NR  NR  1.6  PCI 8.9, CABG 2.6;  NR  40.5  NR  8.4  NR | 22.6  41.1  HTN 57.9  30 | NR  NR  NR  2.1 | 97.9  DES  24.7 | Elective coronary stent implantation | All patients received a 300-mg loading dose (LD) of clopidogrel  and aspirin at least 12 hours before PCI, followed by 200 mg/day maintenance dose of aspirin and 75 mg/day of clopidogrel thereafter. | None |
| Kang, 2010  20724801  Korea  NR | 215  Asian 100%  136 (63.3)  63.5±10.8 | NR  NR  3(1.4)  PCI:21(9.8)/CABG: 3(1.4)  NR  NR  NR  14 (6.5)  NR | 33(15.4)  84 (39.1)  127 (59.1)  65 (30.2) | NR  100%  100%  4 (1.9) | NR  NR  58 (27.5) | Scheduled coronary stenting | A 300-mg LD of clopidogrel and aspirin was administrated 12-24 hours before scheduled PCI, followed by 200 mg/day MD of aspirin and 75 mg/day clopidogrel | None |
| Liu 2010  21163112  China  NR | 722  Whites: 0  568 (78.7)  67.4±8.9 | NR  NR  NR  PCI:139 (19.5)/ CABG: 37 (5.1)  NR  NR  NR  144 (19.9)  NR | 281 (34.9)  NR  453 (62.7)  187 (25.9) | NR  100%  100%  NR | NR  NR  NR | Elective PCI for symptomatic stable CAD | A loading dose of 300 mg clopidogrel was given to all patients and a daily maintenance dose of 75 mg for a minimum of 12 months. | None |
| Maeda, 2011  21178986  Japan  NR | 97  Asian 100%  67 (69)  67±10 | NR  NR  NR  NR  NR  NR  NR  NR  NR | NR  12(12)  NR  6(18) | NR  NR  NR  NR | NR  NR  NR | with CAD after percutaneous  coronary intervention | (i) aspirin (100 mg, q.d.), (ii) aspirin (100 mg, q.d.) plus clopidogrel (75 mg, q.d.; Plavix, Sanofi-Aventis, Tokyo, Japan), or (iii) aspirin (100 mg, q.d.) plus ticlopidine (100 mg, b.i.d.; | None |
| Malek, 2010  20924183  Poland  NR | 261  NR  67.4  60.4±10.9 | NR  6.5  1.5  10.0  NR  NR  9.2  17.7  78.5/NR | 72.7  39.8  HTN 83.5  31.6 | NR  100  96.9  NR | NR  NR  NR | AMI with or without STE; PCI with stenting was attempted. | Pre-hospital 300 or 600 mg loading dose followed by 75 mg daily for at least 1 month | None |
| Simon 2011  21262992  France  FAST-MI | 2353  NR  72.3  63.4±13.4 | NR  2.9  3.2  PCI 8, CABG 3.3;  NR  NR  NR  11.3  NR | 44.4  34.6  52.3  31.7 | NR  100  94.9  NR | NR  NR  NR | ACS patients undergoing PCI (<80%) | NR | NR |
| Yamamoto 2011  21168310  Japan  NR | 123  Asian 100%  81(66%)  68.6 ± 10 | NR  NR  NR  NR  NR  NR  NR  NR  NR | 61  16  HTN 78  49 | NR  61  39  26 | NR  NR  NR | Cardiac catheterization upon diagnosis of stable CAD | 300mg loading dose and 75mg/day clopidogrel maintenance dose plus 100mg aspirin | None |
| Park 2011  21345843  Korea  CILON-T | 474  NR  69.6  63.3±8.7 | NR  0.2  NR  PCI 10.5, CABG 3.6;  47.7  46.6  NR  5.6  NR | 44.3  20.7  HTN 67.9  33.5 | NR  NR  NR  0.8 | NR  NR  NR | Angina pectoris or positive stress test, native coronary artery lesions for which DES implantation was feasible. | Clopidogrel loading dose 300-600 mg and 75mg daily for at least 6 months | None |
| Tiroch, 2010  20826260  Germany  NR | 928  NR  75  64.8±12.9 | NR  NR  NR  CABG 6.1  NR  NR  NR  13.9  NR | 51.9  36.5  HTN 74.5  24.1 | NR  NR  NR  NR | 97.5  NR  NR | ACS patients (M)I, >90% PCI with BMS | All patients received a loading dose of 600mg clopidogrel. Post procedural therapy consisted of aspirin (100mg twice daily, indefinitely) and clopidogrel ( 75mg once Daily for at least 6months). | None |
| Sorich, 2010  20492467  707 sites in 30 countries  Substudy of TRITON-TIMI 38 | 2943  Caucasian 91.9  Hispanic 4  African 3  Asian 0.9  Other 0.2  75  60.9±11.2 | NR  NR  2.7  NR  NR  NR  NR  18  74/30.2 | 55.6  38.3  HTN 64.1  23.1 | NR  NR  NR  NR | NR  NR  NR | Acute coronary syndromes (representative of the entire spectrum of those syndromes) with scheduled PCI | clopidogrel (300-mg loading dose and 75-mg daily maintenance dose) for 6–15 months. | None |
| Sibbing, 2010  20492469  Germany  NR | 986  NR  77.2  67.3±10.3 | NR  NR  NR  17  NR  NR  NR  40.2  NR | 77.6  10.9  68.1  25.9 | NR  100  100  NR | NR  NR  NR | CAD patients in a stable condition and were on dual antiplatelet treatment with aspirin and clopidogrel | Aspirin (dose NR) and clopidogrel (75 mg/day) | NR |
| Sawada, 2010  21099121  Japan  NR | 100  NR  85  69.6±9.2 | NR  NR  NR  NR  NR  NR  NR  NR  NR | 69  41  HTN 81  42 | NR  100  NR  50 | NR  NR  NR | CAD, PCI with DES implantation | All patients with DES implantation received dual antiplatelet therapy consisting of aspirin and clopidogrel | NR |
| Pare, 2010  20979470  Multiple countries  CURE | 2549  Whites: 86.2  58.8  63.8±11 | NR  NR  NR  PCI=3.2% & CABG=9.8  NR/NR  NR/NR  NR/NR  NR/NR  NR/NR | NR  23.1  135.5±22.3&78.6±13.6  NR  20.7 | NR  NR  NR  NR | 15.5  NR  NR | ACS & Stroke | Clopidogrel (at a dose of 75 mg per day) | None |
| Pare, 2010  20979470  Multiple countries  ACTIVE-A | 570  Whites: 100  54.4  70.8±10.1 | NR  NR  NR  NR  NR  NR  NR  NR  NR | NR  8.4  136.6±19&80.9±11.5  NR  21.8 | NR  NR  NR  NR | NR  NR  NR | ACS & Stroke | Clopidogrel (at a dose of 75 mg per day) | None |
| Mega, 2010  20801494  707 sites in 30 countries  TRITON-TIMI 38 | 2932  Whites: 97.6  72%  60.2±10.9 | NR  NR  NR  NR  NR  NR  NR  868 (30)  2064 (70) | NR  NR  NR  NR | NR  NR  NR  NR | NR  NR  NR | Patients with acute coronary syndromes undergoing planned percutaneous coronary interventions | clopidogrel (300-mg loading dose and 75-mg daily maintenance dose) for 6–15 months. | None |
| Bouman, 2011  21628721  Netherlands  Genetic substudy of the Popular study | 1024  NR  75.1%  64±11 | 100  NR  NR  NR  NR  NR  NR  NR  NR | NR  1.2  76.9  18.5 | NR  41.1  NR  15.1 | 100  DES 63.2  BMS 36.8 | CAD patients undergoing PCI with stenting | pretreated with clopidogrel (75 mg daily for >5 days, or a loading dose of 300 mg ≥24 h or 600 mg ≥4 h before (PCI)) and aspirin (80-100 mg daily ≥10 days prior to PCI) unless on long-term anticoagulation with coumarin derivatives.  All patients (after receiving drug-eluting or bare-metal stenting) were treated with clopidogrel for at least 1 year. Clopidogrel and aspirin maintenance doses were 75 mg and 80 to 100 mg daily, respectively. | NR |
| Campo, 2011  21679849  Italy  NR | 300  NR  77  66 ± 13 | NR  NR  NR  PCI 16, CABG 11  NR  NR  NR  27  Non-STEMI ACS 61 | 51  24  HTN 72  24 | NR  100 at 6month 97  100 at 6month 99  53 | NR  DES 71  Multivessel PCI 36 | Patients with ischemic HD undergoing PCI with stenting | aspirin (300 mg as loading dose [LD] at hospital admission, followed by 100 mg daily, independently to previous or not chronic use). Clopidogrel 600 mg was given as LD at least 12 h before PCI. After intervention, clopidogrel 75 mg/day was continued for 12 months. | Anticoagulant and glycoprotein IIb/IIIa inhibitors treatment was administered at the interventionalist’s discretion. |
| Fernando, 2011  21696537  Australia  NR | 31  NR  93  62 ± 11 | NR  NR  NR  NR  NR  24  NR  See next row  41/34 | 76  3  HTN 83  3 | NR  0  100  NR | See next row  BMS 62  DES 38  NR | ACS patients undergoing PCI | open label clopidogrel 75 mg daily and randomized to either esomeprazole 40 mg or placebo (sugar ﬁlled) capsule daily for a period of 6 weeks. All patients continued routine medications, including aspirin (100 mg). This was followed by a 2-week wash-out period after the ﬁrst treatment period where study medications were ceased. Patients then resumed clopidogrel 75 mg daily and the opposite therapy to which they were randomized in the ﬁrst 6-week period (crossed-over to alternative therapy). | NR |
| Geisler, 2008  18781853  Germany  NR | 237  Caucasian 100    76.4  69(11.3) median and IQR | NR  NR  NR  NR  NR  NR  NR  NR  12.7/22.8 | 73.8  NR  HTN 85.2  34.6 | NR  NR  NR  NR | NR  NR  NR | CAD patients undergoing PCI | Loading dose of 600 mg clopidogrel was given prior to PCI, followed by a daily dose of 75 mg; also 500 mg IV aspirin given PCI, followed by 100 mg orally per day after, unless contraindicated because of GI bleeding or allergy; 70 units per kg body weight of unfractionated heparin given before PCI | NR |
| Gladding, 2008  19463375  New Zealand  PRINC (Plavix Response in Coronary Intervention) Trial | 60  Caucasian 95  83  68 (10) | NR  CHF 3  NR  PCI 20, CABG 10;  NR  NR  NR  NR  5/7 | NR  10  HTN 57  18 | NR  0  98  NR | Multi stent 15  DES 35  DES  NR | CAD patients undergoing elective PCI | All patients: 600-mg clopidogrel at the start of the PCI procedure. At 2 hours after, 37 patients received 600 mg clopidogrel and 23 received placebo. Starting the next day, all patients were separately randomized to receive clopidogrel 75 or 150 mg once daily for 1 week, followed by 75 mg once daily thereafter. | glycoprotein IIb/IIIa inhibitor and medications inhibiting CYP3A4. Patients on warfarin were eligible if the international normalized ratio was <1.5 at study entry and warfarin could be withheld for the 7-day study duration |
| Gurbel , 2010  19817997  USA  NR | 36  Whites: 70%  NR  NR | NR  NR  NR  NR  NR  NR  NR  NR  NR | NR  NR  NR  NR | NR  NR  NR  NR | NR  NR  NR | CAD patients undergoing PCI with stenting now in stable condition | chronic daily 75 mg clopidogrel and 81 mg aspirin therapy PLUS one 60-mg dose of elinogrel | NR |
| Harmsze, 2010  20833683  Netherlands  NR | 176 cases,  334 controls  NR  77.8, 79.5  64.1(10.5),  62.1(9.4) | NR  NR  NR  NR  NR  NR  NR  23.9, 42.4;  NR | 52.3, 50.5;  22,2, 12.1;  HTN 46.6, 49.5;  17.6, 16.4; | NR  100  100  29.0, 22.7; | 100, 100  DES 31.3, 47.4;  NR | CAD patients undergoing PCI with stenting | Cases: still on aspirin and clopidogrel at the time of stent thrombosis. All control subjects were on clopidogrel maintenance therapy and aspirin (80–100 mg) during the entire followup period. | NR |
| Kim. 2011  21511217  South korea  ACCELAMI2C19  (High-dose clopidogrel group) | 62 pts on 150 mg clopidogrel daily  NR  69.4  59.4±12.2 | NR  NR  3.2  NR  NR  NR  NR  6.5  56.5/43.5 | 25.8  62.9  NR  45.2  24.2 | NR  100  100  0 | 93.5, 96.9;  DES 93.5, BMS 0;  DES 95.3, BMS 1.6;  Multivessel 25.8  20.3; | Patients with ACS (AMI undergoing PCI with stenting ) | all patients received a 600-mg loading-dose (LD) of clopidogrel, followed by a maintenance dose (MD) of 75 mg daily before randomization. All patients also took a 300-mg LD of aspirin, followed by aspirin 200 mg daily throughout the study period. After blood sampling pre-discharge, the patients were randomly assigned to high-MD clopidogrel of 150 mg daily (high-dose group) or adjunctive cilostazol 100 mg twice daily to clopidogrel 75 mg daily (standard dose + cilostazol group). | Use of low-molecular-weight heparin (enoxaparin) or unfractionated heparin was at the physician’s discretion, and only tiroﬁban with a short half-life was administered if needed. |
| Kim, 2011  21511217  South korea  ACCELAMI2C19  (cilostazol group) | 64 pts on 75 mg clopidogrel +cilostazol daily  NR  76.6  63.9±11.9 | NR  NR  7.8  NR  NR  NR  NR  4.7  48.4/51.6 | 29.7  56.3  NR  48.4  31.3; | NR  100  100  1.6 |  |  |  |  |
| Lee, 2011  21786436  South korea  NR | 166  NR  69  64.4±11.6 | NR  NR  NR  NR  NR  NR  NR  NR  NR | NR  49  HTN 68  30 | NR  NR  NR  NR | NR  NR  NR | Patients with cerebrovascular disease | 75 mg clopidogrel daily for at least six days before platelet testing | NR |
| Malek, 2008  18577829  Poland  NR | 105  NR  70  60.0±11.6 | NR  NR  4  10  NR  NR  8  16  82 | 34  47  HTN NR  17 | NR  100  100  NR | NR  NR  NR | Patients with ACS undergoing PCI | loading dose of 300 mg of aspirin followed by a daily regimen of 75 mg and a loading dose of either 300 or 600 mg of clopidogrel followed by 75 mg daily | NR |
| Pettersen, 2011  21426546  Norway  Aspirin and Clopidogrel non-responsiveness clinical Endpoint Trial (ASCET) | 219  Caucasian 100  79  62 (8.5) | 100  NR  NR  PCI 38, CABG 19;  NR  NR  NR  37  NR | NR  16  Diastolic 82.1±9.2  /systolic 138.2±18.6  11 | NR  100  100  14 | NR  NR  NR | CAD patients undergoing PCI (<80% PCI) | 75 mg/day clopidogrel; also possibly aspirin but details NR | NR |
| Sibbing, 2011  21527445  Germany  NR  (cohort) | 1524  NR  77  67.4±10.6 | NR  NR  NR  CABG 14.6  NR  NR  NR  31.9  NR | NR  13.6  NR  HTN 91.3  28.2 | NR  100  100  18.1 | 100  NR  NR | CAD pts undergoing PCI | Pretreatment with a loading dose of 600 mg of clopidogrel prior to the procedure. The recommended pr-treatment interval was ≥ 2 h. | Excluded patients on GP IIb/IIa during the 10 days before the PCI |
| Sibbing, 2011  21527445  Germany  NR  (case control) | 1566  NR  78  67.6 | NR  NR  NR  13  NR  NR  NR  32.3  NR | NR  14.6  NR  90  29.1 | NR  100  100  NR | NR  NR  NR | CAD pts undergoing PCI | Pretreatment with a loading dose of 600 mg of clopidogrel prior to the procedure. | Excluded patients on GP IIb/IIa during the 10 days before the PCI |
| Simon, 2009  19106083  France  FAST-MI | 2208  NR  71  66.2/13.7 | 23  4  TIA 3, stroke 5;  PCI 14, CABG 5;  NR  NR  NR  9  STEMI 53 | 49  NR  diastolic 81/17, systolic 141/28  32 | NR  14  23 at screening and 98 in hospital  73 | NR  NR  NR | ACS patients undergoing PCI (<80% PCI) | Mean loading dose, 300 mg/day; mean maintenance dose at time of hospital discharge, 75 mg/day | NR |
| Hwang, 2010  20823393  Korea  ACCEL-RESISTANCE, DM, COMPLEX  (High-dose clopidogrel group) | 65  Whites:0  NR  69.2±7.9 | NR  NR  6.2  18.4  NR  NR  NR  9.2    NR | 30.8  40  NR  58.5  26.2 | NR  89.2  NR  15 | 96.9  DES  30.8 | CAD patients undergoing PCI | All patients received a 300-mg loading dose of clopidogrel at least 12 hours before PCI (n=98) or were receiving chronic clopidogrel therapy (75 mg daily for >=7 days, n=36). All patients received a 300-mg loading dose of aspirin, followed by 200 mg daily for 1 month. They were randomly assigned to adjunctive cilostazol (triple group) or high-MD clopidogrel (high-MD group). | The high-MD group received clopidogrel 150 mg daily for 30 days. |
| Hwang, 2010  20823393  Korea  ACCEL-RESISTANCE, DM, COMPLEX  (Triple antiplatelet therapy group) | 69  Whites:0  NR  63.4±9.4 | NR  NR  4.3  29  NR  NR  NR  17.4  NR | 18.8  36.2  NR  55.1  28.9 | NR  99.5  NR  4.3 | 95.7  DES  30.4 | CAD patients undergoing PCI | All patients received a 300-mg loading dose of clopidogrel at least 12 hours before PCI (n=98) or were receiving chronic clopidogrel therapy (75 mg daily for >=7 days, n=36). All patients received a 300-mg loading dose of aspirin, followed by 200 mg daily for 1 month. They were randomly assigned to adjunctive cilostazol (triple group) or high-MD clopidogrel (high-MD group). | The triple group (n=69) received adjunctive cilostazol 100 mg twice daily to clopidogrel 75 mg daily for 30 days |
| Price, 2012  22624833  US  GIFT (Genotype Information and Functional Testing) Study—a prespeciﬁed genetic substudy of GRAVITAS [Price 2011, PMID 21406646] | 1028  100% white  70.7  65.3 +/-10.5 years | CAD or ACS, 100  NR  NR  100  NR  NR  NR  NR  NR | NR  NR  NR  NR  NR | NR  100  NR  NR | 100  DES, 100  NR | CAD or ACS patients undergoing PCI | Of the 578 patients with high on-treatment reactivity (OTR, PRU>=230), 285 randomized to high-dose clopidogrel and 293 randomized to standard-dose clopidogrel; of the remaining 450 patients with normal OTR (PRU<230), 163 given standard-dose clopidogrel and 287 were not followed in the study. | NR |
| Cuisset, 2011  21803320  France  NR | 346  NR  81.2  mean 62.7±12 | 30.9  NR  NR  NR  NR  NR  NR  NR  NR | hyper 60.4  40.2  HTN 60.4  28.6 | NR  NR  NR  87.3 | NR  NR  NR | NSTE ACS patients undergone PCI | LD clopidogrel 600mg and aspirin 250mg, low responders received higher 150 mg MD clopidogrel | NR |
| Chen. 2012  22723959  Taiwan  CAPTAIN | 60  Asian 100  78  mean 59.4±8 | NR  NR  NR  NR  NR  NR  NR  NR  NR | NR  46.7  51.7  35 | NR  NR  NR  NR | NR  NR  NR | CAD patients received PCI | clopidogrel | NR |
| Gajos, 2012  22623230  Poland  OMEGA-PCI | 63  NR  24  mean 63.8±9.4 | 60  NR  stroke 30.2  PCI 23.3; CABG 3.3  NR  NR  36.7  40  NR | hyper 96.7  active 20; previous 53.3  96.7  30 | NR  NR  NR  26.7 | 100  BMS 76.7  DES 23.3  3.3 | stable CAD patients undergoing PCI | LD clopidogrel 600mg and MD 75mg daily+75 mg aspirin daily | NR |
| Luo, 2011  22118006  China  NR | 1738  Asian 100  67  mean 71 | NR  NR  NR  CABG 2.4  NR  NR  NR  12.4  NR | hyper 39.1  25  62.1  35.8 | NR  NR  NR  7.6 | NR  DES 75.5  BMS 24.2  NR | patients with CAD undergoing PCI | LD clopidogrel 300mg and MD 75mg/d and aspirin 300mg LD and MD 100mg/d | NR |
| Tello-Montoliu, 2012  22116003  Spain  study one of the paper | 40  Caucasian 100  90  mean 65.8 | NR  NR  NR  NR  NR  NR  NR  NR  NR | hyper 59.5  18.9  HTN 75.7  45.9 | NR  NR  NR  NR | NR  NR  NR | stable ACS patients with stent | 100mg AA and 75mg MD clopidogrel | NR |
| Tello-Montoliu, 2012  22116003  Spain  study two of the paper | 428  Caucasian 100  65  mean 67.3 | NR  NR  NR  NR  NR  NR  NR  NR  NR | hyper 70  22  HTN 70  42.4 | NR  NR  NR  NR | NR  NR  NR | non-ST elevation acute coronary syndrome | 100mg AA and 75mg MD clopidogrel | NR |
| Harmsze, 2011  21854540  Netherlands  POPular | 725  NR  76  63.2 | NR  NR  NR  NR  NR  NR  NR  NR  NR | 80.6  9.5  75.3  17 | NR  NR  NR  NR | NR  NR  NR | CAD for PCI | clopidogrel LD 600 mg and 75mg/d >5 days+  aspirin 80-100 mg day | NR |
| Harmsze, 2012  22228204  Netherlands  NR | 820  NR  74.4  63.3+/-10.5 | 100  NR  NR  7.0 CABG  NR  NR  42.1  NR | 80.4  10.0  NR  76.0  18.2 | NR  100  100  25.4 | 100  NR  NR | CAD patients undergoing elective stenting | All patients used clopidogrel during the entire followup period at a daily dose of 75 mg  Before PCI, all patients were pretreated with clopidogrel (75 mg/day for >5 days, loading dose of 300 mg >24 hr before PCI, or 600 mg >4 hr before PCI) | Aspirin maintenance dose, 80-100 mg daily  Aspirin loading dose, 80-100 mg/day for >10 days before PCI  6.5% of patients received glycoprotein IIb/IIIa inhibitors after platelet function testing |
| Kreutz, 2012  22427735  US  NR | 151  White 77  African-American 23  63  58.4±9.9 yr | 100  NR  NR  PCI 36, CABG 17  NR  NR  18  NR  NR | 96  44  NR  96  40 | NR  100  100  34 | NR  NR  NR | CAD patients receiving clopidogrel | Before study, 81-325 mg clopidogrel and aspirin daily; clopsidogrel 75 mg/day at least 14 days before enrollment or 600 mg loading dose for PCI | Glycoprotein IIb/IIIa users during PCI excluded  All patients were on aspirin |
| Dai, 2012  22704413  China  NR | 520  Chinese 100  59  63.5± 10.7 | NR  NR  NR  100 (all PCI)  NR  NR  NR  39  13§ | NR  26  NR  85  27 | NR  100  100  21 | 100  NR  NR | Patients undergoing PCI with stenting (some PCI was emergency for AMI)‡ | Pretreatment with loading dose of 300 mg clopidogrel and aspirin 12 hr before PCI; after, 300 mg/day of aspirin and clopidogrel for the first month and 75 mg/day for the next 11 months | For AMI patients undergoing emergency PCI, 0.4 ml Low-molecular-weight heparin calium every 12 hr on the first day, followed by clopidogrel 75 mg/day and aspirin twice/day |
| Ono, 2011  21862109  Japan  NR | 202  Asian  75.2  mean 68.9 | NR  NR  NR  NR  NR  NR  NR  NR  NR | hyper 75.7  21.8  HTN 80.7  40.1 | NR  NR  NR  28.7 | NR  NR  NR | CAD patients undergoing PCI | clopidogrel LD 300mgand 75mg MD  aspirin 100mg/day | NR |
| Delaney, 2012  22190063  USA  NR | 693  European American 88.2  63.5  68.4 | NR  NR  NR  NR  NR  NR  NR  NR  NR | hyper 92.8  current 16.2  HTN 80.8  34.8 | NR  NR  NR  NR | 95.1  BMS 29.6; DES 62.9  NR | patients started clopidogrel after an MI and/or PCI with stent placement | clopidogrel | NR |
| Bhatt, 2012  22450429  USA  CHARISMA | 2266  100  71.9  64 | NR  7.4  10.4  PCI 28.4  NR  NR  20.8  41.1  NR | NR  20.1  HTN71.2  43.8 | NR  NR  NR  NR | NR  NR  NR | patient on clopidogrel for high atherothrombotic risk and ischemic stabilization | clopidogrel | NR |
| Fontana, 2011  21692977  Switzerland  ADRIE | 548  NR  82  61.9 | 73.4  NR  ICD 9.1  NR  NR  NR  17.5  NR  NR | hyper 66.2  20.6  HTN 56.2  21.1 | NR  96.7  NR  NR | 80.3  NR  NR | ischemic atherothrombotic disease (CAD, ICD, PAD) | aspirin and clopidogrel | NR |
| Aleil, 2009  19624462  France  VASP-02 [genetic reanalysis thereof] | 153  NR  82  64.9 | NR  NR  NR  7  NR  NR  NR  11  NR | 65  16  NR  63  24 | NR  100  100  27 | 100  NR  NR | Adults without ACS undergoing elective stenting | 300-600 mg clopidogrel as loading dose day before stenting; subsequent randomization to 75 or 150 mg daily for 2 weeks; also 75 mg/day aspirin | NR |
| Chen, 2012  22071359  China  NR | 654  Chinese, 100%  81.5  65.17 | 100  NR  NR  20.3 (PCI, 15.7; CABG, 4.6)  NR  NR  NR  NR  NR | NR (but 28.7 on statins)  NR  75.74/129.58  56.4  19.4 | NR  95.7  97.7  22.8 | 65.9  NR  NR (but triple vessel in 17.0) | Adults with CAD proven on angiography (ACS or stable angina) | Clopidogrel (details NR; in 95.7% of patients) Aspirin (details NR; in 97.7% of patients) | NR |
| Kreutz, 2012  22385219  USA  NR | 96  NR  53.1  56.3 | 100  NR  NR  CABG 16  NR  NR  20  82  NR | 100  NR  NR  97  35 | NR  NR  100  30 | NR  NR  NR | Adults with stable CAD receiving dual antiplatelet therapy | 75 mg clopidogrel daily and aspirin 81-325 mg daily, for at least 14 days prior to enrollment | NR |
| Marcucci, 2012  22390861  Italy  NR | 1187  NR  75  69 | NR  NR  NR  NR  NR  NR  NR  100 (ACS)  35 | 54  37  NR  65  24 | NR  100  100  94 | 100  DES 18%/BMS NR  NR | Adults undergoing PCI and stenting for ACS | 600 mg clopidogrel loading dose followed by 75 mg daily dose  ASA IV 500 mg followed by 100-325 mg daily dose | “Unfractioned” heparin 70 IU/kg during PCI |
| Mega, 2011  22088980  USA  ELEVATE-TIMI 56 | 333  White 88.0, black 9.0, Asian 2.4, other 0.6  74.8  60.2 | NR  NR  NR  PCI 97.3, CABG 17.7  NR  NR  NR  57.1  NR | 94.6  0 (exclusion criterion)  76.0/126.8  86.2  35.4 | NR  NR  100  0 (exclusion criterion) | NR  NR  NR | Adults with stable CV disease (MI or PCI >=4 weeks or <=6 mo before enrollment) | \*2 noncarriers randomized to receive 75 mg clopidogrel daily for 14 days and then 150 mg daily for 14 days OR vice versa  \*2 carriers randomized to receive 225 mg clopidogrel daily for 14 days and then 300 mg daily for 14 days OR vice versa  Patients had been taking 81-325 mg aspirin daily and maintained a stable dose if medically indicated | NR |
| Nishio, 2012  22785462  Japan  NR | 160  100 Japanese  76  69.7 | NR  NR  NR  NR  NR  NR  NR  NR  NR | 68  39  NR  83  47 | NR  NR  NR  49 | 100  DES 100  NR | PCI with DES | Clopidogrel: 300 mg loading dose given at least 24 hr before PCI; maintenance dose, 75 mg  Aspirin: 100 mg maintenance  Maintenance doses given for at least 1 yr after | NR |
| Park, 2012  22507978  Korea  ACCEL-STATIN | 50  NR  68  61 | NR  NR  NR  100 PCI  0  0  NR  68  NR | 100  32  NR  48  18 | NR  100  100  0 | 94  92 DES, 2 BMS  NR | Adults with HPR having had a PCI with >=6 mo of antiplatelet therapy | All patients had received clopidogrel (75 mg/day), atorvastatin (10 mg/day), and aspirin (100 mg/day) for at least 6 mo | NR |
| Teixeira, 2012  22377481  Portugal  NR | 95  NR  83.2  62.0 median | NR  NR  NR  NR  NR  27.4  NR  72.6  37.9/34.7 | 62.1  20.0  790/140.0  76.8  31.6 | NR  16.8  40.0  NR | NR  NR  NR | Patients <75 yr admitted for ACS and survived | 75 mg/day clopidogrel on discharge from hospital  Aspirin 100 mg/day on discharge | NR |
| Parri, 2012  22727972  Italy  NR | 105  NR  78  60 | NR  NR  NR  100 PCI  NR  NR  NR  11  100/0 | 56  54  NR  54  17 | NR  100  100  NR | NR  NR  NR | Patients with STEMI and undergoing PCI | Aspirin 100 mg/day; clopidogrel loading dose 300 mg, then 75 mg/day | Periprocedural gp IIb/IIIa antagonists used at the discretion of investigators |
| Yamane, 2012  22472213  Japan  NR | 40  NR  82.5  67.8 | NR  NR  NR  NR  NR  NR  NR  50  NR | NR  22.5  92.5  60 | NR  NR  NR  62.5 | 100  NR  NR | PCI, stent | aspirin 82-162 mg/day and 75 mg/day clopidogrel daily | PPI (omeprazole or rabeprazole) |
| Hsu, 2011  21144850  Taiwan  NR | 165  NR  75.2  71.9 | NR  NR  NR  NR  NR  NR  NR  NR  NR | NR  9.1  68.5  35.2 | NR  NR  NR  NR | NR  NR  NR | atherosclerosis | clopidogrel 75 mg or 35.5 mg/day for 2 weeks | esomeprazole |
| Kim, 2012  22007612  Korea  ACCEL-TRIPLE | 127  NR  70.1  62.9 | NR  NR  3.1  3.1  25.2  31.5  NR  52.8  22.8/20.5 | hyper 25.2  44.1  53.5  35.4 | NR  NR  NR  3.1 | 100  DES 96.8  BMS 1.6  Ballooning only 1.6  multi 29.1 | patients with PCI | cilostazol 100 mg twice a day  clopidogrel 75 mg once a day  aspirin 200mg once a day | none |
| Siller-matula, 2012  22260716  Austria  PEGASUS-PCI | 416  NR  76  64±12 | NR  NR  NR  PCI 47  NR  NR  13  31  18/NR | hyper 76  55  htn 84  32 | NR  100  100  76 | 100  DES 99  NR | CAD patients undergoing PCI | clopidogrel LD 600mg, MD 75mg | NR |
| Bonello, 2012  22285300 France NR | 498  NR  80  Mean: 62±12 | NR  NR  NR  NR  NR  NR  NR  NR  NR | 53  42  NR  54  29 | NR  NR  NR  12 | NR  NR  NR | PCI for non-ST elevation Acute Coronary Syndrome (NSTE  ACS) | oral LD: 600 mg clopidogrel and 250 mg aspirin | NR |
| Simon, 2011 21918510 France FAST-MI | 2208 (1538 who underwent PCI)  NR  NR  NR | NR  NR  NR  NR  NR  NR  NR  NR  NR | NR  NR  NR  NR  NR | NR  NR  NR  NR | NR  NR  NR | Patients with Acute MI (subgroup of patients with Acute MI who undergoing PCI) | Clopidogrel LD: 300-900 mg; MD 75 mg/d | NR |
| Collet, 2011 21511218 France CLOVIS-2 | 106  White European: 81.1%; North African 12.3%; Black 0.9%;Asian 5.6%  100  Mean 40.1 ± 4.8 | 38  NR  NR  Bypass: 5.6%; PCI:88.8%; Both:5.6%  NR  NR  NR  100  NR | 68.9  56.9  NR  HTN:28.3  15.1 | NR  82.1  92.1  44.3 | NR  NR  Triple vessel: 16.2 | CAD patients with a history of AMI | LD: Clopidogrel 300 or 900 mg  MD: Aspirin 75 mg/d and/or clopidogrel 75 mg and | NR |
| Jaitner, 2012 22298798 Germany NR | 1474  Caucasian: 100%  78  Weighted mean (from cases and control groups reported separately): 67.4 | NR  NR  NR  CABG 14.1  NR  NR  NR  32.2  STEMI:3.1 | 17  14  NR  HTN 90.9  29 | NR  100  100  NR | 100  DES:100%  NR | CAD pts undergoing PCI (from a cohort and a registry) | Pretreatment with a loading dose of 600 mg of clopidogrel prior to the procedure. The recommended pr-treatment interval was ≥ 2 h. | Excluded patients on GP IIb/IIa during the 10 days before the PCI |
| Hochholzer, 2011  21884870  NR  EXCELSIOR | 765  Caucasian: 100%  NR  NR | NR  NR  NR  NR  NR  NR  NR  NR  NR | NR  NR  NR  NR  NR | NR  NR  100  NR | NR  NR  NR | Patients undergoing PCI | Pretreatment with LD of 600 mg of clopidogrel prior to PCI. After PCI, MD of aspirin (≥100 mg/d) and clopidogrel (75 mg/d) for 30  days (bare-metal stents) or 6 months (at least 1 drug-eluting stent) | NR |
| Kassimis, 2012  21831410  Greece  NR | 146  NR  91.8  mean 62.02 ± 11.08 | NR  NR  NR  PCI: 10.3  NR  NR  NR  11  NR | 63.7  52.7  NR  HTN: 61  33.6 | NR  >7 days: 22.6  NR  95.9 | NR  NR  NR | CAD patients undergoing PCI with stenting | No clopidogrel LD for those on 75 mg/d MD; LD 600 mg before PCI (if no and <7 days pretreatment)  Post PCI: Clopidogrel MD 75 mg/d and aspirin 100 mg/d | NR |
| Namazi, 2012  22265638  Iran  NR | 112  NR  70  mean 58 ± 11 | NR  NR  NR  NR  NR  NR  NR  NR  NR | 68  42  NR  HTN: 51  19 | 0  7 days before PCI: 0  7 days before PCI: 100  NR | 100  DES: 100  NR  Multivessel disease: 30% | CAD patients undergoing PCI with stenting | Clopidogrel LD: 600 mg Clopidogrel MD: 150 mg/day for two weeks and 75 mg/day for 12 months  Aspirin 80 mg/d | Unfractionated heparin (50–70 IU/kg) immediately before stenting |
| Rideg, 2011  21806387  Hungary  DOSER | 189  NR  61.4  weighted mean 61.8 | NR  NR  2.6  PCI-7.4/CABG-10.6  100  0  NR  NR  NR | 51.9  35.4  NR  85.2  37.5 | NR  17.5  NR  23.2 | NR  DES: 68.8  NR | Stable angina patients for coronary stent implantation | LD: 600 mg clopidogrel & 300 mg aspirin  Randomized to 4 weeks of 75 or 150 mg clopidogrel  MD: 75 mg clopidogrel/day | NR |
| Jeong, 2011  22045970  Korea  NR | 266  East Asian: 100  73.3  mean 63±11.9 | NR  NR  2.6  PCI: 7.5/CABG:0.8  NR  NR  NR  100  52.6/47.4 | 26.7  53  NR  47  26.3 | NR  NR  NR  1.5 | 90.6  DES: 89.8/BMS:0.8  mulitvessel: 25.6 | AMI patients who underwent PCI/angiography | LD: 600 mg clopidogrel & 300 mg aspirin  MD: 75 mg/d clopidogrel & aspirin 200 mg/d for 1 month and 100-200 mg/day for 1 year | Anticoagulation with low-molecular weight  heparin (enoxaparin) or unfractionated heparin  before angiography |
| Chan,2012  22462746  Singapore  NR | 89  Chinese: 61.8/Malay & Indian: 38.2  75.3  weighted mean: 55.4 | 89.9  NR  NR  NR  NR  NR  NR  NR  NR | NR  32.5  NR  NR  40.4 | NR  100  100  30.3 | NR  NR  NR | CAD patients undergoing PCI/angiography | LD: 300 mg clopidogrel MD: 75 mg/d clopidogrel for 5-7 days | NR |
| Goodman, 2012  22261200  Multi-country  PLATO | 4,903  NR  NR  NR | NR  NR  NR  NR  NR  NR  NR  NR  NR | NR  NR  NR  NR  NR | NR  NR  NR  NR | NR  NR  NR | ACS patients undergoing PCI | Clopidogrel 300-mg loading dose, 75-mg daily maintenance  dose | NR |
| Park, 2012  22735685  Korea  CROSS-VERIFY | 1258  East Asian: 100  67.9  mean: 64±9 | NR  NR  NR  NR  58.1  35.6  NR  5.1  NR | 45.9  49.1  NR  68  32.1 | NR  NR  NR  2.5 | 100  DES: 100  NR | CAD and ACS patients undergoing PCI | LD: 300 -600 mg of clopidogrel  Aspirin 100 mg per day. | NR |
| Kreutz, 2012  22459907  USA  NR | 55  African American: 13  80  mean 62±9 | 67  15  NR  NR  NR  NR  NR  NR  NR | 91  33  NR  98  45 | NR  NR  NR  42 | NR  NR  NR | CAD patients undergoing PCI | LD: 600 mg of clopidogrel | NR |
| Yan, 2011  21778720  China  NR | 497  East Asian:100  82.7  65.2 | NR  NR  NR  PCI:10.7/CABG:3.8  NR  NR  NR  37.8  NR | NR  60.8  129.1±22.3/75.6±13.7  54.1  18.9 | NR  NR  40.4  NR | NR  NR  NR | Adult ACS patients for PCI | Clopidogrel + Aspirin (Regimen and Dose NR) | β-Blockers, CCB, ACEI/ARB, Statin, PPI |
| Jeong, 2012  22837373  Korea  ACCEL-DM | 80  NR  68.8  63 | NR  NR  7.5  20/3.8  26.3  25  NR  13.8  48.8 | hyper 33.8  42.5  70  NR | NR  chronic use 58.8  300 mg loading dose 41.3  NR  7.5 | NR  DES 96.3  ballooning 3.8  28.8 | type 2 diabetes undergoing PCI | elective patients LD clopidogrel 300mg.  Acute MI clopidogrel LD 600 mg. after randomization, triple group receive cilostazol 100mg bid, clopidogrel 75mg MD, aspirin 200 mg/d, double group receive clopidogrel 150mg/d MD, and aspirin 200 mg/d. | NR |
| Cayla, 2011  22028352  France  ONASSIST | 369  Caucasian: 96.3/Black:0.4/Asian:3.3  80.5  62.7 | NR  NR  NR  4.1 (CABG)  NR  NR  11.4  43.9  NR | 58.1  30.9  50.4  21.5 | 2.4  100  100  53.3 | NR  DES: 51.5  3 vessel: 26.8 | Cases: Patients with stent thrombosis from a registry  Controls: Patients receiving dual antiplatelet therapy | clopidogrel or aspirin (Dose and frequency NR) | NR |
| Hulot, 2011  21972404  France  AFIJI | 371  European: 94.8/Black 2.2/Asian 3  84.6  40.3 | NR  NR  NR  PCI = 79.8; CABG = 8.1  NR  NR  NR  100  NR | 56.1  51.5  23.2  10.5 | NR  NR  NR  NR | NR  NR  NR | CAD patients with history of MI | MD clopidogrel 75 mg/d | NR |
| Hulot, 2011  21972404  France  CLOVIS-2 | 106  NR (~95% in parent registry)  100  40.1 | NR  NR  NR  NR  NR  NR  NR  100  NR | NR  NR  NR  NR | NR  NR  NR | NR  NR  NR  NR | CAD patients with history of MI | LD: 300 or 900 mg | NR |
| Roberts, 2012  22464343  Canada  RAPID GENE | 187  White: 94.7  78.1  60.2 | NR  NR  NR  NR  NR  NR  NR  16  NR | 81.3  31  63.6  22.5 | 0  NR  92  19.8 |  | Adult patients undergoing PCI for non- ST-elevation acute coronary syndrome or stable coronary artery disease | CYP2C19\*2 Carriers : 10 mg  prasugrel daily  Non-carriers: 75 mg clopidogrel daily | NR |

† Mean (standard deviation), unless otherwise stated.  
§This entry is intended to be for “STEMI/Non-STEMI” but the article reports “Non-STEMI/STEMI” given as a single percentage, so the meaning is unclear.  
‡Patients were selected for “blood stasis syndrome” (a diagnosis in traditional Chinese medicine) but also for having undergone PCI with stent placement. Because patients were only eligible if they had undergone PCI and were enrolled after PCI, the study was included.  
Data are means unless otherwise indicated; “estimated” is noted if reported as an estimate. ACS = acute coronary syndrome; AMI = acute myocardial infarction; BMS=Bare metal stents; BP = blood pressure; CABG = coronary artery bypass grafting; CAD = coronary artery disease; DES=Drug eluting stent; HTN = hypertension, IV=Intravenous; LD=Loading dose; MD=Maintenance dose; MI = myocardial infarction; NR=Not reported; NSTE = non-ST-elevation; NSTEMI = non-ST-elevation MI; PAD = peripheral artery disease; PCI = percutaneous coronary intervention; pts = patients; STEMI = ST-elevation MI; TIA = transient ischemic attack; UFH=Unfractionated Heparin; ICD, ischemic cerebrovascular disease.