**Appendix Table E5. Baseline characteristics of patients with ischemic heart disease in studies assessing the predictive ability of LTA**

| **Author, year [ref]**  **UID**  **Country**  **Study Name** | **Demographics**  **Total N Enrolled**  **Race (% by group)**  **Male (%)**  **Age\*** | **Vascular disease history**  **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(%)** | **Vascular risk factors**  **Dyslipidemia (%)**  **Smokers (%)**  **BP(mmHg diastolic/systolic**  **HTN (%)**  **Diabetes (%)** | **Prior medications**  **(pre-study)**  **Vitamin K antagonist(%)**  **Clopidogrel(%)**  **Aspirin(%)**  **PPI(%)** | **Procedural data**  **Stent implantation(%)**  **Type of stent(%)**  **Multi-or single vessel(%)** | **Current indication for clopidogrel treatment** | **Current antiplatelet regimen** | **Co-medication** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Geisler, 2010  20526607  Germany  NR | 1703  NR  74.8  67.5±10.9 | NR  NR  NR  NR  NR  NR  NR  NR  NR | hyper 62.4  40.6  HTN 81.5  32 | NR  100  100  NR | 26  DES 25; BMS 1  NR | PCI | Patients who were naı¨ve to clopidogrel received a 600 mg loading dose and patients already receiving chronic clopidogrel therapy were treated by a 300 mg LD prior to stent implantation. A standard maintenance dose of 75 mg/day Clopidogrel and ASA 100 mg/day was prescribed for all patients. | NR |
| Cuisset, 2009  19801028  France  NR | 599  NR  465 (77.8)  Median: 65 | NR  NR  NR  NR  NR  NR  NR  NR  NR | 331 (55.4)  232 (38.8)  334 (55.9)  210 (35.1) | NR  NR  NR  NR | NR  182 (30.4)  NR | Treatment of NSTE ACS | Patients received oral loading doses of 250 mg aspirin and 600 mg clopidogrel ≥12 hours before stenting. | NR |
| Frere, 2007  17938809  France  NR | 195  NR  158 (81)  63.4±11.1 | NR  NR  NR  NR  NR  NR  NR  NR  NR | 107 (54.9)  96 (49.2)  111(56.9)  68 (34.9) | NR  100  100  NR | NR  NR  NR | Patients had undergone successful coronary stenting | All patients received a 600 mg loading dose of clopidogrel and a 250 mg loading dose of aspirin administered at least 12 h before stenting. After PCI, patients received clopidogrel and aspirin 75 mg daily during one-month follow-up. | Anticoagulation was performed with low-molecular-weight heparin (enoxaparin), or unfractionated heparin if age over 75 years or in case of renal insufficiency (creatinin clearance < 60 ml/min). |
| Hoshino, 2009  19106460  Japan  NR | 30  ? Asian: 30 (100%)  22 (73%)  70 ± 7 | 1  NR  Prior cerebrovascular disease: 3%  PCI: 13%  NR  NR  7%  3%  NR | hyperlipidemia: 73%  Current: 33%  HTN (systolic blood pressure >140 mmHg or diastolic blood pressure >90 mmHg): 60%  2HbA1c >6.5 %: 23% | 0  NR  NR  23% | NR  NR  NR | Patients undergoing percutaneous coronary intervention (PCI) for ischemic heart disease | Clopidogrel 300 mg LD 24 hrs before PCI + 75 mg/d MD  Aspirin 81-100 mg/day | NR |
| Breet, 2010  20179285  Netherlands  POPULAR | 1069  NR  75  64±10.6 | NR  NR  NR  NR  NR  NR  NR  54.5  NR | 80.3  11.1  HTN 76.9  18.6 | NR  100  89.4  27.8 | 100  DES 63.5  NR | coronary artery disease scheduled for elective PCI with stent | clopidogrel treatment (a maintenance of 75 mg/d therapy for>5 days or a loading dose of 300 mg ≥24 hours before PCI or 600 mg ≥4 hours before PCI) and aspirin (80-100 mg/d ≥10 days). | unless they were receiving long-term anticoagulation with warfarins |
| Gurbel, 2010  20194878  10 study sites in North America and Europe  RESPOND | 98  White 87 (89); Black 8 (8); Other 3 (3)  76 (78%)  65±8 | 1  NR  NR  PCI:48%; CABG:37%  NR  NR  NR  NR  NR | Hyperlipidemia: 94%  Current: 17%  HTN: 81%  26% | NR  NR  100%  22% | NR  NR  NR | Patients with CAD on aspirin therapy | Nonresponders and responders were randomly treated with either a 600-mg clopidogrel load followed by 14±2 days of 75-mg daily maintenance therapy or a 180-mg ticagrelor load followed by 14±2 days of 90-mg twice daily maintenance therapy (period 1). In period 2, all nonresponders switched treatment, whereas half of the responders continued the same treatment, and the other half of the responders switched to the other treatment. |  |
| Kim, 2010  20449634  Korea  NR | 1058  NR  70.1  62.2±11.2 | 62.2±11.2  NR  3.6%  PCI 30.4%  NR  NR  NR  20.9%  NR | 19%  39.8%  52%  29% | NR  25.3%  NR  NR | NR  NR  27.6% | Patients treated with coronary stenting for symptomatic coronary artery disease, including acute myocardial infarction (AMI) and on chronic clopidogrel therapy | scheduled coronary stenting procedures, 300-mg loading-dose (LD) of clopidogrel at least 12 h before procedure. In AMI patients, all received a 600-mg LD of clopidogrel immediately after emergency room arrival, followed by a maintenance dose of 75 mg daily. | If use of glycoprotein IIb/IIIa inhibitor (GPI) was deemed necessary, only tirofiban, which has a short half-life, was administered. |
| Angiolillo, 2008  18312754  USA  OPTIMUS | 34  NR  22 (64.7)  64.5±9 | NR  NR  NR  CABG 6(17.6)  NR  NR  NR  14 (41.2)  NR | 31 (91.2)  10 (29.4)  31 (91.2)  100 | NR  100  100  NR | NR  NR  27(79.4) | Patients underwent PCI and were treated with standard clopidogrel | Clopidogrel 75 mg/day, and 1 month after clopidogrel 150 mg/ day. Thereafter, all patients resumed the standard 75 mg/day maintenance dose. | None |
| Blindt, 2007  18064332  Germany  NR | 99  NR  74 (74.7)  63.7±11.2 | NR  NR  NR  PCI 47 (47.5)  35 (35.4)  NR  NR  47 (47.5)  22(22.2)/29 (29.3) | 58 (58.6)  42 (42.4)  70 (70.1)  16 (16.2) | NR  100  100  NR | NR  DES 65 (65.7); BMS 34 (34.3)  NR | Patients with an elevated risk to develop ST acute MI within 48 hours undergoing emergency or elective PCI | All patients were given 75 mg clopidogrel and 100 mg aspirin once a day at least five days prior to PCI. Only in case of emergency PCI, patients received a loading dose of 600 mg before the intervention. Dual antiplatelets for 6 months. |  |
| Bliden, 2007  17291930  USA  NR | 100  Caucasian male 60  African-American male 12  66±11 | NR  NR  NR  CABG 31  NR  13  NR  40  NR | 83  56  HTN 74; systolic 145±22; diastolic 76±16  44 | NR  100  100  NR | 100  DES 75  BMS 24  NR | Non-emergent coronary stenting | Clopidogrel therapy (75 mg qd) for ≥1 month before undergoing non-emergent coronary stenting were enrolled after giving informed consent. A clopidogrel loading dose was not administered. All patients had received at least 81 mg aspirin for 7 days before the procedure. | Eptifibatide was administered at the discretion of the treating physician with the ESPRIT study protocol as a double bolus (180 ug/kg) followed by an infusion (2 ug/kg/min) for 18 to 24 h after procedure. Unfractionated heparin was administered according to the ESPRIT dosing regimen (60 U/kg) as a bolus to all patients in the catheterization laboratory immediately before stenting. |
| Gori,  2008  19132241  Italy  RECLOSE | 746  NR  75  68±12 | NR  NR  NR  PCI 23; coronary artery surgery 6  33  40  NR  25  26 | hyper 49  23  HTN 61  20 | NR  NR  NR  NR | 100  DES 93  multi 57 | not used | All patients received aspirin (325 mg) and a loading dose of 600 mg of clopidogrel followed by a maintenance dose of 75 mg daily. | Patients on a maintenance dose of ticlopidine or clopidogrel at the time of admission received a loading dose of clopidogrel (600 mg). |
| Gurbel, 2010  20691842  USA  PREPARE POST-STENTING | 225  White male: 54  African American male: 13  66±12 | NR  NR  CVA 12  PTCA 35;CABG 24  NR  NR  8  33  NR | hyper 80  55  Systolic BP, mm Hg: 144 ± 25  Diastolic BP, mm Hg 75 ± 17;HTN: 74  41 | NR  NR  NR  34 | NR  NR  NR | not used | Clopidogrel: 300 (n=73) to 600 mg (n=75) LD + 75 mg/d MD; no LD for pts on clopidogrel (n=77)  Aspirin: 325 mg LD + 81-325 mg MD | Eptifibatide (n=123)  Unfractionated heparin to achieve a clotting time of 200 to 250 seconds (for those given GPIIb/IIIa inhibitor) and >300 seconds (all other patients) |
| Matetzky,  2004  15184279  Israel  No | 60  NR  80  58±13 | 55  NR  NR  NR  NR  NR  NR  13  100 | 28  47  18  27 | NR  NR  NR  NR | NR  NR  NR | NR | All received 300 mg of chewable aspirin on admission and 200 mg/d thereafter throughout the study period. Clopidogrel was administered as a loading dose of 300 mg on completion of the PCI, followed by doses of 75 mg/d for 3 months. | Heparin was administered during the procedure but was discouraged after the procedure. Eptifibatide was administered for a mean of 14±2 hours. |
| Angiolollo, 2007  17936152  Spain  NR | 173  173 (100)  113 (65)  67±9 | 127 (73)  NR  7(4)  7(4)  NR  NR  21 (12)  92 (53)  NR | 118 (68)  23(13)  112 (65)  100 | NR  100  100  NR | 108 (62)  Drug-eluting stent  127 (73) | Patients with coronary artery disease (CAD) | Treatment with clopidogrel (75 mg/day) had been prescribed for 12 months. Aspirin (100 mg/day) was used indefinitely. |  |
| Aradi, 2008  18388039  Hungary  NR | 134  NR  79 (58.96%)  61.07 ±10.66  mean ± SD | NR  NR  NR  NR  NR  NR  NR  25 (18.66%) previous MI  NR | 15 (11.19%) Hypecholesterinaemia  Ever 57 (42.54%)/Current 28 (20.90%)  HTN 104 (77.61%) (>140/90 or receiving antiHTN treatment)  32 (23.88%) | NR  NR  NR  NR | 100%  Bare metal  NR | Patients referred for PCI with stenting | Antiplatelet agents were given at the time of the procedure, 300 mg ASA with 300 mg clopidogrel or 500 mg ticlopidine, orally at the discretion of the operator. After PCI, 100 mg ASA supplemented by 75 mg clopidogrel or 2 x250 mg ticlopidine were given daily to patients until 12 months. | PCI done after administration of 60 to 90 IU/body weight kilograms of unfractionated heparin.  No platelet glycoprotein IIb/IIIa receptor blocker was used. |
| Bellemain-Appaix, 2010  20170822  France  ALBION (Assessment of the Best Loading Dose of Clopidogrel to Blunt Platelet Activation, Inflammation and Ongoing Necrosis) | 96  NR  76 (79%)  mean: 61.7 | NR  NR  NR  NR  NR  NR  NR  100%  n-STEMI: 100% | hyperlipidemia: 51%  Tobacco use: 30%  High BP: 57%1  21.9% | NR  NR  39.5%  NR | NR  NR  NR | Patients with ACS | In the RCT, patients were allocated to receive a clopidogrel LD of 300, 600, or 900 mg orally on the morning of day 1 of the study. All patients received an LD of 250 to 500 mg of aspirin twice daily. | All patients received low molecular weight heparin twice daily. |
| Breet, 2011  21478385  The Netherlands  POPular | 951  NR  717 (75.4)  64±10.6 | NR  NR  NR  NR  NR  NR  NR  519 (54.6)  NR | Hyper 769 (80.9)  107 (11.3)  737 (77.5)  175 (18.4) | NR  489 (51.4)  NR  270 (28.4) | Total length 28.3±17.1  DES 604 (63.8)  NR | Patients scheduled for PCI with stent implantation | All patients on aspirin 80-100 mg daily for >0 days unless they were on long-term anticoagulation with coumarin derivatives; clopidogrel - chronic maintenance therapy of 75 mg for >5 days or a clopidogrel loading dose of 300 mg at least 24 h before PCI or 600 mg at least 4 h before PCI. Aspirin 80-100 mg daily for ≥10 days unless they were on long-term anticoagulation with coumarin derivatives. |  |
| Breet, 2010  20695984  Netherlands  Substudy of a larger cohort (Breet 2010 PMID: 20179285) | 692  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 PCI and stent implantation | Clopidogrel and aspirin maintenance doses were 75 mg and 80 to 100 mg daily, respectively.  [These details are obtained from original study] |  |
| Buonamici, 2007  17572245  Italy  NR | 804  NR  602 (75)  NR | NR  NR  NR  186 (23)  275 (34)  312 (39)  NR  206 (26)  NR | 405 (50)  179 (22)  501 (62)  169 (21) | NR  100  100  NR | 100  Drug-eluting  457 (57) | Patients received successful drug eluting stent implantation | All patients received aspirin (325 mg) and a loading dose of 600 mg of clopidogrel followed by a maintenance dose of 75 mg daily. Patients on a maintenance dose of ticlopidine or clopidogrel at the time of admission received a loading dose of clopidogrel (600 mg). |  |
| Campo, 2007  17868803  Italy  NR | 143  NR  99 (69)  67±10 | NR  NR  NR  PCI 25 (17)/ CABG 7 (5)  NR  NR  NR  26 (18)  NR | NR  31 (22)  104 (73)  32 (27) | NR  100  NR  NR | NR  NR  NR | Patients undergoing PCI | clopidogrel 300-mg loading dose, followed by 75 mg/day+ aspirin (250 mg intravenously) for patients with STEMI. Patients with stable angina (SA) received aspirin (100 mg once a day) at least 7 days and clopidogrel at least 6 h before procedure. Aspirin (100 mg once a day) was given to all patients indefinitely, whereas thienopyridines were given for 1 or 6 months according to implanted stent. | All pts received , heparin (50 to 70 U/kg), and glycoprotein IIb/IIIa inhibitors |
| Cuisset, 2009  19736156  France  NR | 597  NR  456 (76.4%)  Mean: 64.2 | NR  NR  NR  NR  NR  NR  NR  NR  NR | 54.1%  Current: 44.2%  HTN: 59.8%  28.5% | NR  NR  NR  NR | NR  NR  NR | Patients admitted with a NSTE ACS for coronary angiography/PCI | Clopidogrel 600 mg LD + Aspirin 250 mg LD at least 12 hours before coronary angiography and PCI as indicated |  |
| Cuisset, 2006  16371119  France  NR | 106  NR  82 (77%)  64 ± 10 mean ± SD | NR  NR  NR  NR  NR  NR  NR  NR  NR | 59 (56%)  40 (38%)  HTN 62 (58%)  26 (25%) | NR  NR  NR  NR | NR  NR  NR | Patients with clinical symptoms compatible with acute myocardial ischemia admitted for PCI and stenting | Patients on chronic therapy with a daily dose of 75 mg clopidogrel for >5 days did not receive a loading dose of clopidogrel. Other patients received 300 mg of clopidogrel at least 12 h before stenting. All patients received aspirin 160 mg daily administered at least 12 h before stenting. |  |
| Cuisset, 2006  17010792  France  NR | 292  NR  222 (76%)  64.7 | Previous ACS: 44.5%  NR  NR  NR  NR  NR  NR  NR  NSTEMI: 100% | 55.5%  Current: 46%  HTN:57%  31% | NR  NR  NR  NR | NR  NR  NR | Patients undergoing percutaneous coronary intervention (PCI) for NSTEMI ACS | Patients were randomly assigned to receive a 300-mg or 600-mg loading dose of clopidogrel at least 12 h before stenting.  All patients received aspirin 160 mg daily after a loading dose of 250 mg administered at least 12 h before stenting. | For all patients, anticoagulation was begun before PCI in the intensive care unit and performed with low-molecular-weight heparin (enoxaparin), or unfractionated heparin in patients over 75 years old or with renal insufficiency. |
| Cuisset, 2007  17264958  France  NR | 190  NR  146 (76.8)  NO PMI 66±11/PMI 4±13 | NR  NR  NR  NR  NR  NR  NR  NR  NR | 190 (100)  91 (47.9)  110 (57.9)  64 (33.7) | NR  42 (22.1)  89 (46.8)  NR | NR  NR  NR | NSTE ACS patients | After collecting baseline blood samples for troponin I (TnI), patients received oral loading doses of 250 mg aspirin and 600 mg of clopidogrel at least 12 h before stenting | Anticoagulation was performed with low-weight-molecular heparin (LWMH) (enoxaparin) when possible, or unfractionated heparin (UFH) in patients over 75 years or with renal failure. Use of a GPIIb/IIIa antagonist was allowed at the operator’s discretion. |
| Geisler, 2008  17949474  Germany  NR | 1092  NR  806 (73.8%)  67.5 ±10.8 yr | 100%  NR  NR  NR  529 (48%)  NR  NR  222 (27.4%)  193 (17.7%)/225 (20.6%) | Hyperlipidemia 641 (58.7%)  425 (38.9%)  HTN 876 (80.2%)  363 (33.2%) | NR  155 (14.2%)  around 90%  NR | 100%  DES 206 (18.9%)/BMS 793 (72.6%)/Both 93 (8.5%)  NR | Adults undergoing coronary stenting for symptomatic CAD | 300 or 600 mg clopidogrel given as loading dose before PCI and stenting. After, daily dose was 75 mg for 3 mo. 500 mg ASA given as loading dose, followed by 100 mg/day. | Unfractionated heparin given periprocedurally (70 U per kg of body weight). |
| Geisler, 2006  17005534  Germany  NR | 363  NR  277 (73.1)  67.5±10 | NR  NR  NR  NR  NR  NR  NR  NR  NR | 220 (60.6)  151 (41.6)  289 (79.6)  126 (34.7) | NR  100  100  NR | NR  NR  NR | CAD patients | A loading dose of 600 mg clopidogrel was given to all patients prior to PCI followed by a daily dose of 75 mg for at least 3 months. All patients received a standard dose of aspirin 100 mg daily before enrollment in the study. |  |
| Geisler, 2010  19812059  Germany  NR | 1019  NR  756 (74.2%)  mean: 67.8 | NR  NR  NR  NR  NR  NR  NR  NR  NR | Hyperlipidemia: 59.6%  37.9%  HTN: 80.4%  33.1% | NR  NR  NR  NR | 100%  BMS: 72.7%/DES: 27.3%  Multivessel: 76.1% | Patients with CAD & ACS for PCI | Clopidogrel: 600 mg LD (300 mg for those on clopidogrel therapy) + 75 mg/d MD x 6-12 months  Aspirin: 500 mg LD + 100 mg/d MD | Unfractionated heparin was peri-procedurally administered to all patients at a dosage of 70 U/kg body weight |
| 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  576 (74.6%)  NR | NR  LVEF = 47% ±12%  NR  PCI = 161 (20.9%)/CABG = 58 (7.5%)  262 (33.9%)  310 (40.2%)  NR  197 (25.5%)  NR | Dyslipidemia = 461 (59.7%)/ Statin = 690 (89.4%)  266 (34.4%)  HTN = 505 (65.4%)  171 (22.2%) | NR  NR  (100% on current study)  NR (100% on current study)  732 (94.8%) | 772  (100%)  100% DES (sirolimus or paclitaxel)  439 (56.8%) had multi-vessel disease; NR if all received multiple stents | Patients with ACS or CAD undergoing PCI with stenting | 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 |
| Gori, 2008  18718420  Italy  RECLOSE study  (Low Responsiveness to Clopidogrel and Sirolimus- or Paclitaxel-Eluting Stent Thrombosis) | 764  NR  563 (75.4%)  68.1 | 100%  NR  NR  PCI: 22.8%/CABG: 6%  33.4%  39.9%  NR  24.5%  NR | Hypercholesterolemia: 49.5%  22.8%  HTN: 62.3%  20.4% | NR  NR  NR  NR | NR  Sirolimus-eluting stent: 54.8%/Paclitaxel-eluting stent: 38.6%/Both stent types: 6.6%  NR | Patients with CAD & ACS treated with PCI and stenting | 600 mg clopidogrel LD + 75-mg MD  Aspirin 325 mg MD |  |
| Gurbel, 2008  19012177  USA  None | 297  213/293 white (73%) [n=4 had missing data]  193/293 (66%) [n=4 had missing data]  65 +/-12 (mean/SD) | Family history of CAD 140 (47%)  NR  NR  PCI 119 (40%)/CABG 66 (22%)  NR  NR  NR  100 (34%)  NR | Hyperlipidemia 244 (82%)  162 (55%)  74+/-16 diastolic/ 143+/-23 systolic/ HTN 221 (74%)  123 (41%) | NR  115 (39%)  NR  NR | NR  DES 56%/BMS 42%  NR | patients undergoing nonemergent PCI | On the day of PCI, 113 patients (38%) received 600 mg clopidogrel loading dose and 68 patients (23%) received a 300 mg loading dose. One-hundred fifteen patients (39%) were on maintenance therapy with a 75 mg daily dose at the time of PCI and were not reloaded. All patients received 81–325 mg aspirin daily for at least 1 week prior to PCI and 325 mg on the day of the procedure. Aspirin (325 mg/qd) and clopidogrel (75 mg/qd) were prescribed in all patients at the time of hospital discharge according to ACC/ AHA guidelines. | All patients received bivalirudin (n =94) or heparin therapy (n =203) either with eptifibatide (n =122) or without eptifibatide (n =175). Anticoagulant therapy was discontinued at the completion of the procedure in all patients. |
| Gurbel, 2004  15154601  USA  None | 94  Caucasian or African American? 71 (65%) [reporting unclear]  60 (64%)  Mean +/- SE 65 +/17 yr | NR  NR  NR  PTCA 22 (23%)/CABG 18 (19%)  NR  NR  NR  30 (32%)  NR | Hypercholesterolemia 65 (70%)  <6 mo ago 22 (23%); >6 mo ago 32 (34%); Never 40 (43%)  NR  48 (42%) | NR  NR  100%  NR | 100%  NR  NR | Patients undergoing elective PCI | All patients received 300 mg clopidogrel in th catheterization laboratory after successful coronary artery stent implantation followed by 75 mg daily for 30 days. In addition, all patients had received at least 81 mg aspirin for 7 days prior to the procedure and were administered 325 mg on the day of the procedure and daily thereafter. | Intravenous unfractionated heparin to achieve an activated clotting time >300 s was administered to all patients immediately before stent implantation.  GP IIb/IIIa inhibitors were not given as specified by the research protocol. |
| Hochholzer, 2006  17084243  Germany  EXCELSIOR | 802  NR  627 (78.2)  66.4±9.1 | NR  NR  NR  112 (14)  NR  NR  NR  184 (22.9)  NR | NR  87 (10.8)  660 (82.3)  199 (24.8) | NR  100  100  NR | NR  Drug-eluting stents  178 (22.2)  NR | Patients undergoing elective coronary stent placement | After PCI, all patients received aspirin (≥100 mg/day) and 75 mg/day  clopidogrel for the duration of the study. |  |
| Htun, 2011  21273381  Germany  NR | 1567  Caucasian 100%  1170 (74.7)  67.4± 0.27 | NR  NR  NR  NR  NR  NR  NR  NR  NR | 943 (60.2)  521 (33.2)  1259 (80.3)  499 (32.4) | 70 (4.5)  698 (44.6)  NR  NR | NR  bare metal 1143 (74.1) drug eluting 297 (19.2)  NR | patients underwent coronary stenting | 600-mg clopidogrel loading dose and 100 mg of aspirin. All of the patients were prescribed clopidogrel (75 mg/d) and aspirin (100 mg/d) treatment for at least 3 months after the index PCI. |  |
| L’Allier 2008  18342223  Canada  PREPAIR study | 148  NR  116 (78%)  61.7 (9.2) yr mean (SD) | NR  NR  NR  Coronary angioplasty 31 (21%); Coronary bypass 14 (9%)  NR  NR  NR  36 (24%)  NR | Hypercholesterolemia 122 (82%)  Current smoker 35 (24%)  HTN 106 (72%)  37 (25%) | NR  NR  144 (97%)  NR | NR  NR  NR | Patients with suspected or documented coronary artery disease admitted to our hospital for elective coronary angiography and PCI when appropriate | Group A, clopidogrel 300 mg the day before (≥15 h) plus 75 mg the morning of the procedure; Group B, clopidogrel 600 mg the morning of the procedure (≥ 2 h); and Group C, clopidogrel 600 mg the day before (≥ 15 h) and 600 mg the morning of the procedure (≥ 2 h); All stented patients received 75 mg of clopidogrel daily for at least 30 days as clinically indicated after implantation. |  |
| Liu, 2011  21613806  China  None | 111  [NB 2 withdrew before 12 hr]  Chinese 100%  73 (66%)  Mean/SD 66.2/8.9 yr | NR  NR  NR  PCI 13%  CABG 4%  NR  NR  NR  NR  NR | Hypercholesterolemia 16%  47%  HTN 78%  32% | NR  100%  100%  51% | 100%  NR  NR | Patients undergoing elective stenting | A loading dose of 300 mg of clopidogrel was administered on the first day, approximately 12 h before PCI. A maintenance dose (75 mg) was administered daily after PCI. In addition, all patients received 100 mg of aspirin for 7 days before the procedure and 100 mg daily thereafter. | Heparin was administered as a bolus to all patients immediately before stenting. |
| Muller, 2003  12719773  Germany  None | 105  NR  65 (71%)  65+/-10 mean +/-SD | 100%  NR  NR  NR  NR  NR  NR  NR  NR | NR  14%  HTN 77%  21% | NR  NR  NR  NR | NR  NR  NR | patients with stable coronary artery disease  undergoing coronary angiography | All patients received regular aspirin therapy with a daily dose of  100 mg. Before coronary angiography, initial dose of 600 mg clopidogrel |  |
| Muller, 2010  20728084  Germany  NR | 903  NR  673 (75.5%)  68.5±10.7 | ACS:56.9%  NR  NR  NR  NR  NR  NR  NR  NR | Hyperlipidemia (triglycerides ≥175 mg/dl and/or LDL-cholesterol ≥100 mg/dl and/or taking any of lipid lowering drugs): 62.4%  Tobacco use: 41.5%  HTN:80.7%  32.3 | NR  NR  NR  NR | NR  NR  NR | Patients undergoing percutaneous coronary intervention (PCI) for ACS and CAD | Clopidogrel: 600 mg LD + 75 mg MD  Aspirin: 100 mg/d MD |  |
| Obradovic, 2009  19318922  Serbia  NR | total 52  NR  42 (80.8)  59.9±9.2 | NR  NR  NR  elective PCI 30 (57.7); urgent PCI 22 (42.3)  17 (32.7)  35 (67.3)  NR  NR  NR | NR  15 (28.8)  34 (65.4)  10 (23.1) | NR  NR  NR  NR | 100  NR  29 (55.8) | PCI patients | After the angiogram, patients with one or two vessel disease suitable for PCI were scheduled for PCI 3-4 h later, and these patients received a loading dose of clopidogrel of 300 mg. | Patients scheduled for PCI received clopidogrel 75 mg once daily or ticlopidine 250 mg twice daily together with 100 mg of aspirin once daily for at least 5 days before PCI. Patients received nonenteric-coated aspirin (300mg) and subcutaneous enoxaparin (1mg/kg) at admission and had a priority for the angiogram. |
| Saw, 2008  19038679  Canada  ELAPSE trial | 33 (but 7 withdrew, so baseline & follow-up data reported for only 26)  NR  22 (84.6%)  63.0 +/- 8.6 mean +/- SD | NR  NR  NR  NR  NR  NR  NR  NR  NR | Hyperlipidemia 25 (96.2%)  2 (7.7%)  HTN 21 (80.8%)  4 (15.4%) | NR  0%  100%  NR | 1  DES 18 (69.2%)  NR | patients undergoing coronary stenting | Patients were already receiving aspirin. Clopidogrel 600 mg was given before stenting. Clopidogrel 75 mg/day and aspirin 325 mg/day were continued for 1 year | Procedural anticoagulant choice was at the discretion of the interventionalists. Eptiﬁbatide or tiroﬁban was permitted, but had to be discontinued 10 h before the next day’s blood work. Abciximab was not permitted due to its long effective half-life. |
| 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 (SD) | NR  NR; Left ventricular ejection fraction <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  Drug-eluting stents  multivessel PCI: 22.2% | Patients undergoing percutaneous coronary intervention (PCI), including those who have undergone PCI with stent implantation, and those who have undergone coronary artery bypass grafting surgery | 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; |
| Wang, 2010  21171668  China  None | 154  NR  90 (58%)  mean±SD 60±10 yr | NR  NR  NR  NR  NR  NR  NR  NR  NR | 97 (63%)  47 (31%)  HTN 107 (69%)  56 (36%) | NR  NR  NR  NR | 100%  DES 100%  Single 40 (26%); Dual 74 (48%); Multi 40 (26%) | patients who underwent selective PCI with DES | A 300 mg loading dose of clopidogrel was given to all patients at least 6 hours prior to PCI, followed by a daily dose of 150 mg for 2 weeks and then 75 mg for a minimum of 11.5 mo. In addition, from the first day of the procedure, all patients were administered aspirin 300 mg daily for 1 mo nth and then 100 mg for the lifetime of the patient. | Use of glycoprotein IIb-IIIa inhibitors at discretion of the operator. A weight-adjusted intra-procedural unfractionated heparin (with a goal activated clotting time of 250–300 seconds) was administered during the procedure and was routinely discontinued at the end of the procedure. |
| Wang, 2009  19041120  China  NR | 386  NR  male 257 (66.6)  68.8±9.2 | NR  NR  NR  PCI 49 (12.7); CABG 15 (3.9)  NR  NR  NR  86 (22.3)  NR | 190 (49.2)  162 (41.9)  262 (67.9)  128 (33.2) | NR  100  100  NR | 100  NR  NR | Patients for elective coronary intervention in symptomatic stable coronary artery disease (CAD) | A loading dose of 300 mg clopidogrel was given to all patients at least 6 h prior to PCI, followed by a daily dose of 75 mg for a minimum of 12 months. In addition, all patients were administered 300 mg aspirin daily, begun the day of the procedure. | the use of Glycoprotein IIb/IIIa inhibitors at discretion of the operator. Weight adjusted intra-procedural unfractionated heparin (with a goalactivated clotting time 250 s to 300 s) was administered during the procedure andwas routinely discontinued at the end of the procedure. |
| Yong, 2009  19081397  Australia  Platelet Responsiveness to Aspirin and Clopidogrel and Troponin Increment after Coronary intervention in Acute  coronary Lesions (PRACTICAL) Trial | 256 (all subjects)  NR  180 (70.3%)  Mean: 62.7 | NR  NR  NR  PCI: 11.3%; CABG: 7.4%  NR  NR  NR  18.4  NR | Hypercholesterolemia: 50.4%  Current: 30%  HTN: 52%  21.5 | NR  NR  39.8  NR | NR  NR  Multivessel disease: 53.9% | Patients undergoing percutaneous coronary intervention (PCI) for ACS | An open-label 300-mg LD of clopidogrel and then pts randomized to 300 mg of clopidogrel (clopidogrel 600-mg group) or matching placebo (clopidogrel 300-mg group). | All other treatments were administered at the discretion of the treating physician. |
| Gurbel, 2003  12714161  USA  No | 63  NR  60  67±11 | NR  NR  NR  CABG 18  NR  NR  NR  24  NR | hyper 60  NR  HTN 72  39 | NR  100  100  NR | 100  NR  NR | elective stenting | all received ± 81 mg of aspirin for 7 days before the procedure. All patients received the same clopidogrel regimen (300 mg in the catheterization laboratory after stent implantation, then 75 mg/day for 30 days) with 325 mg/day aspirin. | Heparin (activated clotting time >300 seconds) was administered to all patients immediately before stent implantation, and per protocol, GP IIb/IIIa inhibitors were not given. |
| Gurbel, 2005  16286165  USA  PREPARE POST-STENTING | 182  White: 115 (59%)  108 (56)  65±12 | NR  NR  NR  PTCA:39.6/CABG:24.5%  NR  NR  NR  36.9%  NR | Hyperlipidemia: 66.7%  43.8%  HTN: 66.2%  42.2% | NR  100  NR  NR | 96%  DES: 69.8%/BMS: 28.1%  NR | PCI for ACS | Clopidogrel (loading dose of 300 or 600 mg or continuation of pre-enrollment maintenance dose; maintenance dose 75 mg daily) + aspirin (81- to 325-mg daily dose for seven days before the procedure, and 325 mg on day of procedure and daily thereafter) |  |
| Gurbel, 2003  12796140  USA  NR | 96  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 with stenting | All patients received aspirin (325 mg). Clopidogrel (300 mg) was administered in the catheterization laboratory and followed by 75 mg daily. |  |
| Kalantzi, 2012  21806493  Greece  NR | 40  NR  70  57.6±10.8 | NR  NR  NR  NR  NR  NR  NR  NR  NR | hyper 40  57.5  HTN 60  0 | NR  NR  NR  NR | NR  NR  NR  NR | patients with ACS with or without ST elevation for PCI | LD 325 mg aspirin+MD 100mg/day  LD 600mg clopidogrel+MD 75 mg/day | heparin 1mg/kg every 12 h  atorvastatin 40mg/day |
| Angiolillo, 2011  Italy  NR | 187  Caucasian 100  70.5  64±10 | 71  NR  NR  2  NR  NR  10.7  56.7  NR | 72.7  14.9  65.2  32.6 | NR  NR  NR  78.6 | NR  NR  NR | CAD for PCI | aspirin 100mg/day indefinitely and clopidogrel 75mg/day for 12 months | NR |
| Gurbel, 2012  21862113  USA  NR | 78  Caucasians: 67%  64%  65±10 | 100%  NR  NR  NR  NR  NR  NR  NR  NR | NR  67%  NR  NR  32% | NR  NR  100%  NR | NR  NR  NR | CAD patients and also CAD patients for PCI | 325 mg of aspirin and a loading dose of 600 mg of clopidogrel | NR |
| Saad, 2012  22146578  Egypt  NR | 90  NR  58%  56.2 y | 100%  NR  NR  NR  NR  NR  NR  NR  NR | Hypercholesterolemia: 31.1%  67%  19%  HTN: 57%  62% | NR  NR  100%  NR | NR  NR  NR | CAD patients for PCI | clopidogrel LD: 600 mg; MD: 75 mg/d; aspirin 162 mg/d | nitrates, b-blockers, , lipid-lowering drugs, antihypertensive drugs and oral hypoglycemic drugs |
| Aradi  21902692  Hungary  NR | 200  NR  60.7  61.9 | NR  NR  3.1  PCI 7.7; CABG 10.2  NR  100  NR  NR  NR | 52.6  36.7  85.2  38.3 | NR  NR  NR  24.5 | NR  DES 68.4  NR | stable angina patients with de novo stenosis feasible for as hoc coronary stent implantation | LD clopidogrel 600 mg, 300 mg aspirin. MD clopidogrel 75 mg or 150 mg for 4 weeks | NR |
| Gaglia, 2012  21919956  USA  NR | 200  69.5  72.5  63.5 | NR  17.5  NR  PCI=39.9/CABG-23%  NR  NR  14.6  NR  NR | NR  29.5  87.4  34.8 | NR  NR  NR  NR | NR  NR  NR | CAD and ACS patients undergoing PCI & stenting | LD: 600 mg loading clopidogrel or 75-mg for 5 days  MD: Aspirin + clopidogrel 75 mg for 1 month in patients with BMS and 12 months in patients receiving DES | 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 |
| Ge, 2012  21602258  China  NR | 352  NR  190 (54)  55.3 (8.8) | NR  NR  118 (34)  NR  NR  NR  NR  NR  NR  NR | 156 (44)  NR  NR  239 (68)  159 (45) | NR  NR  NR  NR | 352 (100)  DES = 352 (100)  NR | PCI for DES implantation | Patients were on aspirin for ≥5 d but not clopidogrel (within 2 w). They received clopidogrel a loading dose of clopidogrel 600 mg pre-PCI and maintenance treatment with clopidogrel 75 mg/d and aspirin 100 mg/d, for 1 yr. | Unfractionated heparin; use of IIb/IIIa inhibitors was at the discretion of the investigator. |

\*Mean (standard deviation), unless otherwise stated.