Table H-3. Subgroup results for KQ 3: antiplatelet and anticoagulant medications in the postdischarge treatment of patients with UA/NSTEMI

| **Study** | **Study Details** | **Subgroup** | **Results Reported by Authors** |
| --- | --- | --- | --- |
| Bonde, 201045 | ObservationalTotal N: 31,295Placebo vs. clopidogrelFair | Heart failure | Total mortalityHR 0.86 (0.78-0.95) c/w HF no clopidogrelclop 28.1% vs. 32.2% no clopidogrel |
| Butler, 200946 | ObservationalTotal N: 2980Clopidogrel vs. aspirinFair | Type of stent | BMS (N=1311)Total mortality in-hospitalBMS (N=1311): 3.1%DES (N=1669): 1.4%p=0.002 |
| Charlot, 201047 | ObservationalTotal N: 56,406PPI vs. no PPIGood |  PPI type | PPI + clopidogrel vs. no PPIComposite outcome (CV death, nonfatal MI, stroke)Pantoprazole: HR 1.42, 95%CI 1.22-1.67Omeprazole: HR 1.40, 95%CI 1.10-1.78Lansoprazole: HR 1.47, 95%CI 1.21-1.81Esomeprazole: HR 1.29, 95%CI 1.09-1.48 |
|  | PPI vs. No PPIComposite outcome (CV death, nonfatal MI, stroke)Pantoprazole: HR 1.5, 95%CI 1.36-1.69Omeprazole: HR 1.25, 95%CI 1.09-1.41Lansoprazole: HR 1.45, 95%CI 1.27-1.68Esomeprazole: HR 1.53, 95%CI 1.39-1.71 |
| Age | Age ≤70 yrsComposite outcome (CV death, nonfatal MI, stroke)PPI + clopidogrel vs. No PPI:HR 1.37, 95%CI 1.19-1.62PPI vs. No PPI:HR 1.19, 95%CI 0.99-1.39 |
| Age >70 yrsComposite outcome (CV death, nonfatal MI, stroke)PPI + clopidogrel vs. No PPI:HR 1.30, 95%CI 1.18-1.43PPI vs. No PPI:HR 1.33, 95%CI 1.24-1.43 |
| Sex | MaleComposite outcome (CV death, nonfatal MI, stroke)PPI + clopidogrel vs. No PPI:HR 1.38, 95%CI 1.23-1.58PPI vs. No PPI:HR 1.18, 95%CI 1.004-1.37 |
| FemaleComposite outcome (CV death, nonfatal MI, stroke)PPI + clopidogrel vs. No PPI:HR 1.34, 95%CI 1.23-1.46PPI vs. No PPI:HR 1.32, 95%CI 1.21-1.44 |
| Diabetes | With diabetesComposite outcome (CV death, nonfatal MI, stroke)PPI + clopidogrel vs. No PPI:HR 1.36, 95%CI 1.10-1.70PPI vs. No PPI:HR 1.28, 95%CI 1.16-1.43 |
| Without diabetesComposite outcome (CV death, nonfatal MI, stroke)PPI + clopidogrel vs. No PPI:HR 1.25, 95%CI 1.06-1.45PPI vs. No PPI:HR 1.35, 95%CI 1.26-1.44 |
| Charlot, 201248 | ObservationalTotal N: 29,268Clopidogrel up to 90 days vs. clopidogrel > 90 daysFair | Type of MI | Death or MISTEMImedically treated IRR 0.79 (0.11-5.61; p=0.81)PCI treated IRR 2.65 (1.25-5.64; p=0.011)NSTEMImedically treated IRR 0.99 (0.58-1.69; p=0.97)PCI treated IRR 1.24 (0.78-1.99; p=0.37) |
| Cheng, 201049T-ACCORD Registry | ObservationalTotal N: 1331Aspirin vs. clopidogrelGood | Timing of treatment | Survival rateAspirin & clopidogrel 0-3 months: 96.5%Aspirin & clopidogrel 3-6 months: 94.6%Aspirin & clopidogrel 6-9 months: 100%Aspirin & clopidogrel 9-12 months: 100% |
| Gwon, 201250 | RCTTotal N: 1443ASA + clopidogrel 6 months vs. ASA + clopidogrel 12 monthsGood | Age | <65 years (n=767)Primary endpointDAPT 6 months vs. 12 months 5.1% vs. 3.2% HR, 95%CI 1.61 (0.78-3.31) |
| =>65 year (n=676)Primary EndpointDAPT 6 months vs. 12 months 4.5% vs. 5.5% HR, 95%CI 0.83 (0.42-1.65) |
| ACS | Primary endpointDAPT 6 months vs. 12 months 3.6% vs. 4.7% HR, 95%CI 0.78 (0.38-1.60) |
| Diabetes | primary endpointDAPT 6 months vs. 12 months 9.1% vs. 3.0% HR, 95%CI 3.16 (1.42-7.03) |
| Harjai, 201151 | ObservationalTotal N: 2604PPI vs. no PPIGood | propensity adjusted looking at omeprazole or esomeprazole versus no PPI | omeprazole or esomeprazole vs. no PPIMACEHR 0.51, 95%CI 0.28-0.92NACEHR 0.59, 95%CI 0.35-1.01Total mortalityHR 0.49, 95%CI 0.17-1.37Nonfatal MIHR 0.65, 95%CI 0.29-1.43Death/MIHR 0.52, 95%CI 0.26-1.03Stent thrombosisHR 0.59, 95%CI 0.18-1.97BleedingHR 0.59, 95%CI 0.18-1.94 |
| Harjai, 200952 | ObservationalTotal N: 1859Aspirin vs. clopidogrelGood | Diabetes | Composite outcome (all cause death or MI)DAP > 12 months (N=277): 12%DAP ≤ 12 months (N=209): 16%log rank p-value=0.22 between group 1 and 2. Adjusted HR (95% CI): 0.85 (0.51 - 1.43) p = 0.55 |
| MI | Composite outcome (all cause death or MI)DAP > 12 months (N=322): 13%DAP ≤ 12 months (N=391): 14%log rank p-value = 0.76Adjusted HR (95% CI): 0.90 (0.59 - 1.39) p = 0.63 |
| Harjai, 201153GHOST | ObservationalTotal N: 2820Aspirin 81 mg/day vs. aspirin 162-325 mg/dayFair | Diabetes | Patients with diabetesMACElow dose vs. high dose 12.1% vs. 12.6%NACElow dose vs. high dose 17.6% vs. 13.8%Death/MIlow dose vs. high dose 11.0% vs. 8.3%Bleedinglow dose vs. high dose 6.6% vs. 2.1%Stent thrombosislow dose vs. high dose 2.2% vs. 2.6% |
|  | Patients with DESMACElow dose vs. high dose 6.3% vs. 6.7%NACElow dose vs. high dose 9.2% 7.5%Death/MIlow dose vs. high dose 4.66 vs. 5.3%Bleedinglow dose vs. high dose 3.5% vs. 1.3%Stent thrombosislow dose vs. high dose1.7% vs. 1.8% |
| Ho, 200754 | ObservationalTotal N: 1455Timing of clopidogrelFair | Type of stent | BMSTotal mortalityContinuing vs. discontinuing clopidogrel therapy: discontinuation associated with higher mortality riskHR (95% CI): 2.65 (1.59 - 4.42)Nonfatal MIContinuing vs. discontinuing clopidogrel therapy: discontinuation associated with higher risk for subsequent AMIHR (95% CI): 1.26 (0.58 - 2.74) |
| DESTotal mortalityContinuing vs. discontinuing clopidogrel therapy: discontinuation associated with higher mortality riskHR (95% CI): 2.0 (1.06 - 3.75)Nonfatal MIContinuing vs. discontinuing clopidogrel therapy: discontinuation associated with higher risk for subsequent AMIHR (95% CI): 3.57 (1.13 - 11.3) |
| Ho, 200955 | ObservationalTotal N: 8790PPI vs. no PPIGood | PPI use | PPI vs. no PPI at dischargeComposite outcome (death or rehospitalization)Adjusted HR (95% CI): 1.27 (1.1-1.46) |
| PPI typeComposite outcome (death or rehospitalization)OmeprazoleAdjusted OR (95% CI): 1.24 (1.08-1.41)Rabeprazole Adjusted OR (95% CI): 2.83 (1.96-4.09) |
| Juurlink, 200956 | ObservationalTotal N: 2791Timing of clopidogrelGood | PPI use | Previous vs. remote PPI useNonfatal MIPrevious use HR (95% CI): 0.86 (0.63-1.19)Remote use HR (95% CI): 0.81 (0.46-1.41) |
| Pantoprazole vs. other PPINonfatal MIPantoprazole HR (95% CI): 1.02 (0.70-1.47)Other PPIHR (95% CI): 1.40 (1.10-1.77) |
| Kreutz, 201057 | ObservationalTotal N: 16,690PPI vs. no PPIGood | PPI use | Prior PPI use (N=12,194)Major adverse cardiovascular eventNo PPI: 17.9%PPI: 27.8%HR (95% CI): 1.57 (1.44–1.71)p<0.0001 |
| No prior PPI use (N=4,499)Major adverse cardiovascular eventNo PPI: 19.2%PPI: 23.2%HR (95% CI): 1.24 (0.98–1.71)p=0.0688 |
| O’Donoghue, 200958TRITON-TIMI 38 | ObservationalTotal N: 13,608PPI vs. no PPIGood | PPI type | PPI vs. no PPI (clopidogrel arm)Composite outcome (CV death, nonfatal MI, stroke)Pantoprazole: Adj HR 0.94 (95% CI, 0.74-1.18)Omeprazole: Adj HR 0.91 (95% CI, 0.72-1.15)Lansoprazole: Adj HR 1.00 (95% CI, 0.63-1.59)Esomeprazole: Adj HR 1.07 (95% CI, 0.75-1.52)MIPantoprazole: Adj HR 0.97 (95% CI, 0.75-1.24)Omeprazole: Adj HR 0.95 (95% CI, 0.73-1.23)Lansoprazole: Adj HR 0.86 (95% CI, 0.51-1.46)Esomeprazole: Adj HR 1.18 (95% CI, 0.81-1.73) |
| PPI vs. no PPI (prasugrel arm)Composite outcome (CV death, nonfatal MI, stroke)Pantoprazole: Adj HR 1.09 (95% CI, 0.86-1.39)Omeprazole: Adj HR 1.04 (95% CI, 0.81-1.34)Lansoprazole: Adj HR 0.98 (95% CI, 0.61-1.57)Esomeprazole: Adj HR 0.86 (95% CI, 0.55-1.33)MIPantoprazole: Adj HR 1.09 (95% CI, 0.83-1.43)Omeprazole: Adj HR 1.02 (95% CI, 0.76-1.36)Lansoprazole: Adj HR 1.08 (95% CI, 0.66-1.79)Esomeprazole: Adj HR 0.92 (95% CI, 0.57-1.48) |
| Persson, 201159(RIKS-HIA) and (SCAAR) | ObservationalTotal N: 27,972Warfarin vs. placeboGood | Clopidogrel use | Oral anticoagulants vs. oral anticoagulants + clopidogrelComposite outcome (death or MI)OR (95% CI): 0.93 (0.65-1.3)BleedingOR (95% CI): 1.53 (0.57-4.11)Total mortality OR (95% CI): 0.98 (0.50-1.9) |
| Rassen, 200960 | ObservationalTotal N: 18,565PPI vs. no PPIGood | PPI type | Composite outcome (MI or death)Omeprazole HR (95% CI): 1.17 (0.68-2.01)Pantoprazole HR (95% CI): 1.26 (0.93-1.71) |
| Ray, 201061 | ObservationalTotal N: 20,596PPI vs. no PPIGood | PPI dose | Composite CV eventsLow dose HR (95% CI): 1.0 (0.81-1.22)High dose HR (95% CI): 0.94 (0.75-1.17)Gastroduodenal bleedingLow dose HR (95% CI): 0.48 (0.36-0.64)High dose HR (95% CI): 0.53 (0.32-0.89) |
| PPI type | Composite CV eventsEsomeprazole HR (95% CI): 0.71 (0.48-1.06)Omeprazole HR (95% CI): 0.79 (0.54-1.15)Pantoprazole HR (95% CI): 1.08 (0.88-1.32)Rabeprazole HR (95% CI): 0.54 (0.30-0.97)Lansoprazole HR (95% CI): 1.06 (0.77-1.45)Gastroduodenal bleedingEsomeprazole HR (95% CI): 0.43 (0.18-1.07)Omeprazole HR (95% CI): 0.43 (0.16-1.13)Pantoprazole HR (95% CI): 0.46 (0.33-0.63)Rabeprazole HR (95% CI): 0.25 (0.03-2.01)Lansoprazole HR (95% CI): 0.71 (0.43-1.18) |
| New clopidogrel user | Composite CV eventsAll PPIHR (95% CI): 0.91 (0.70-1.19)Pantoprazole HR (95% CI): 1.02 (0.71-1.46)Omeprazole HR (95% CI): 0.79 (0.46-1.36) |
| PCI | Composite CV eventsHR (95% CI): 1.01 (0.76-1.34)Composite outcome (MI or SCD)HR (95% CI): 1.00 (0.77-1.30)StrokeHR (95% CI): 0.97 (0.50-1.90)CV mortalityHR (95% CI): 1.22 (0.57-2.58) |
| Rossini, 201162 | ObservationalTotal N: 1346PPI vs. no PPIGood | Diabetes | PPI useComposite outcome (death, MI, rehospitalization, stroke at 1 year)Diabetes OR (95% CI): 1.31 (0.379-4.530) No diabetesOR (95% CI): 1.723(0.608-4.879) p interaction 0.368 |
| Age | Age >75 yrs vs. ≤ 75 yrsComposite outcome (death, MI, rehospitalization, stroke at 1 year)Age >75 OR (95% CI): 1.609 (0.352-7.369)Age ≤75OR (95% CI): 1.46 (0.617-3.459)p=0.809 |
| ACS and stable CAD | ACS vs. stable CADComposite outcome (death, MI, rehospitalization, stroke at 1 year)ACS OR (95% CI): 1.454 (0.649-3.26)Stable CAD OR (95% CI): 2.106 (0.271-16.37)p interaction 0.998 |
| CKD | CKD vs. no CKDComposite outcome (death, MI, rehospitalization, stroke at 1 year)CKD OR (95% CI): 0.647 (0.178-2.358)No CKD OR (95% CI): 2.48 (0.763-8.056) |
| PPI type | LansoprazoleMACE in-hospital: 2.2%MACE at 1 yr: 7.8%Major bleeding: 1.3%Minor bleeding: 2.9%Total mortality at 1 yr: 2.1%Stent thrombosis: 2.1% |
| OmeprazoleMACE in-hospital: 2.5%MACE at 1 yr: 4.2%Major bleeding: 1.6%Minor bleeding: 7.1%Total mortality: 0.8%Stent thrombosis: 1.7% |
| PantoprazoleMACE in-hospital: 4.1%MACE at 1 yr: 8.1%Major bleeding: 1.1%Minor bleeding: 1.1%Total mortality: 3.1%Stent thrombosis: 3.1% |
| Ruiz-Nodar, 201263 | ObservationalTotal N: 604Warfarin vs. non-OACFair | Risk of bleeding | low risk of bleeding (HAS-BLED 0-2)BleedingOAC 7.8% vs. non-OAC1.6%; P=0.13 |
| high risk of bleeding (HAS-BLED =>3)BleedingOAC vs. non-OAC11.8% vs. 4.0%HR 3.03, 95%CI 1.24-7.38)Total mortalityOAC vs. non-OAC9.3% vs. 20.1%HR 0.45, 95%CI 0.26-0.78)MACEOAC vs. non-OAC13.0% vs. 26.4%HR 0.48, 95%CI 0.29-0.77) |
| Schmidt, 201264 | ObservationalTotal N: 13,001ClopidogrelPoor | PPI Type | Esomeprazole (Clop+ Eso vs. Clop alone)Primary composite endpointClop+ Eso vs. Clop alone153 vs. 108Nonfatal MIno PPI no Clop vs. no PPI +clop HR 95% CI 0.22 (0.19-0.26)PPI no Clop vs. PPI + ClopHR 95%CI 0.40 (0.19-0.82)Revascularizationno PPI no Clop vs. no PPI +clop HR 95% CI 0.50 (0.43-0.58PPI no Clop vs. PPI + ClopHR 95%CI 0.61 (0.31-1.20)Cardiovascular mortalityno PPI no Clop vs. no PPI +clop HR 95% CI 0.12 (0.09-0.15)PPI no Clop vs. PPI + ClopHR 95%CI 0.27 (0.11-0.69) |
| lansoprazole (Clop+lanso vs. Clop alone)Primary composite endpointClop+lanso vs. Clop alone138 vs. 109Nonfatal MIno PPI no Clop vs. no PPI +clop HR 95% CI 0.23 (0.19-0.27)PPI no Clop vs. PPI + ClopHR 95%CI 0.28 (0.12-0.67)Revascularizationno PPI no Clop vs. no PPI +clop HR 95% CI 0.51 (0.44-0.59)PPI no Clop vs. PPI + ClopHR 95%CI 0.28 (0.10-0.82)Cardiovascular mortalityno PPI no Clop vs. no PPI +clop HR 95% CI 0.12 (0.09-0.16)PPI no Clop vs. PPI + ClopHR 95%CI 0.22 (0.06-0.78) |
| omeprazole (clop +omep vs. clop alone)Primary composite endpointclop +omep vs. clop alone145 vs110Nonfatal MIno PPI no Clop vs. no PPI +clop HR 95% CI 0.23 (0.19-0.27)PPI no Clop vs. PPI + ClopHR 95%CI 0.18 (0.05-0.60)Revascularizationno PPI no Clop vs. no PPI +clop HR 95% CI 0.51 (0.44-0.59)PPI no Clop vs. PPI + ClopHR 95%CI 0.49 (0.19-1.32)Cardiovascular mortalityno PPI no Clop vs. no PPI +clop HR 95% CI 0.12 (0.09-0.16)PPI no Clop vs. PPI + ClopHR 95%CI 0.27 (0.06-1.20) |
| pantoprazole (clop+panto vs. clop alone)Primary composite endpointclop+panto vs. clop alone154 vs. 109Nonfatal MIno PPI no Clop vs. no PPI +clop HR 95% CI 0.22 (0.19-0.26)PPI no Clop vs. PPI + ClopHR 95%CI 0.80 (0.25-2.51)Revascularizationno PPI no Clop vs. no PPI +clop HR 95% CI 0.50 (0.43-0.58)PPI no Clop vs. PPI + ClopHR 95%CI 1.26 (0.42-3.77)Cardiovascular mortalityno PPI no Clop vs. no PPI +clop HR 95% CI 0.12 (0.09-0.16)PPI no Clop vs. PPI + ClopHR 95%CI 0.16 (0.05-0.54) |
| Simon, 201165FAST-MI | ObservationalTotal N: 2744PPI vs. No PPIGood | PPI type | Omeprazole (N=993)Composite outcome (death, MI, or stroke in-hospital)Adjusted OR (95% CI): 0.92 (0.59-1.43)Composite outcome (death, MI, or stroke at 1 yr)Adjusted OR (95% CI): 0.82 (0.54-1.24)Total mortalityAdjusted OR (95% CI): 1.16 (0.66-2.05)Nonfatal MIAdjusted OR (95% CI): 1.18 (0.55-2.52)StrokeAdjusted OR (95% CI): 1.18 (0.55-2.52)BleedingAdjusted OR (95% CI): 0.94 (0.44-1.98) |
| Esomeprazole (N=311)Composite outcome (death, MI, or stroke in-hospital)Adjusted OR (95% CI): 0.77 (0.41-1.46)Total mortalityAdjusted OR (95% CI): 0.72 (0.30-1.7)Nonfatal MIAdjusted OR (95% CI): 1.20 (0.44-3.30)StrokeAdjusted OR (95% CI): 0.54 (0.14-2.16)BleedingAdjusted OR (95% CI): 0.97 (0.33-2.86)Composite outcome (death, MI, or stroke at 1 yr)Adjusted OR (95% CI): 1.05 (0.62-1.77) |
| Lansoprazole (N=46)Composite outcome (death, MI, or stroke in-hospital)Adjusted OR (95% CI): 0.59 (0.07-4.72)Total mortalityAdjusted OR (95% CI): 1.30 (0.15-11.5)Nonfatal MI0Stroke0BleedingAdjusted OR (95% CI): 1.82 (0.22-15.3)Composite outcome (death, MI, or stroke at 1 yr)Adjusted OR (95% CI): 0.40 (0.05-2.95) |
| Pantoprazole (N=99)Composite outcome (death, MI, or stroke in-hospital)Adjusted OR (95% CI): 1.31 (0.54-3.17)Total mortalityAdjusted OR (95% CI): 1.00 (0.27-3.68)Nonfatal MIAdjusted OR (95% CI): 1.22 (0.26-5.77)StrokeAdjusted OR (95% CI): 1.78 (0.36-8.83)Bleeding0Composite outcome (death, MI, or stroke at 1 yr)Adjusted OR (95% CI): 1.79(0.95-3.37) |
| So, 200966 | ObservationalTotal N: 1840ASA doseFair | Diabetes | Composite outcome (death or MI)Low dose ASA (81mg/d):log OR = -0.0103324 |
| Multivessel disease | Composite outcome (death or MI)Low dose ASA (81mg/d):p-value=0.07, compared with diabetes group |
| Type of stent | BMSComposite outcome (death or MI)ASA 81 mg/d (N=1120): 5.65%ASA 325mg/d (N=1120): 3.73%OR (95% CI): 1.25 (0.67 - 2.33)Composite outcome (death, MI, or revascularization)ASA 81 mg/d (N=1120): 12.67%ASA 325mg/d (N=1120): 8.96%OR (95% CI): 1.38 (0.92 - 2.06) |
| DESComposite outcome (death or MI)ASA 81 mg/d (N=720): 5.21%ASA 325mg/d (N=720): 4.82%OR (95% CI): 1.12 (0.53 - 2.34)Composite outcome (death, MI, or revascularization)ASA 81 mg/d (N=720): 9.51%ASA 325mg/d (N=720): 13.20%OR (95% CI): 0.75 (0.46 - 1.25) |
| Steinhubl, 200228 | RCTTotal N: 2116Clopidogrel vs. placeboGood | Diabetes | MACERRR 11.2 (46.2 to -46.8) |
| Sex | Men vs. womenMACEMenRRR 24.5 (45.5 to -4.6)WomenRRR 32.1 (58.9 to -12.1) |
| CrCl < 60 ml/min | MACE at 28 daysRRR -57%clop 11.0% vs. placebo 7.1%MACE at 1 yearRRR -41%clop 17.8% vs. placebo 13.1% |
| ACS | MACERRR 27.5 (47.8 to -0.6) |
| Stenestrand, 200567RIKS-HIA | ObservationalTotal N: 6275Aspirin vs. OACGood | Age | Age ≤75 yrs vs. age >75 yrsTotal mortalityAge ≤75 yrs RR (95% CI): 0.61 (0.40-0.93)Age >75 RR (95% CI): 0.71 (0.53-0.96) |
| Sex | Male vs. femaleTotal mortalityMale RR (95% CI): 0.60 (0.43-0.82)FemaleRR (95% CI): 0.93 (0.64-1.36) |
| Diabetes | Diabetes vs. no diabetesTotal mortalityDiabetesRR (95% CI): 0.85 (0.56-1.30)No diabetes RR (95% CI): 0.64 (0.47-0.86) |
| Stockl, 201068 | ObservationalTotal N: 2066PPI vs. No PPIGood | Clopidogrel use | Clopidogrel + Pantoprazole vs. clopidogrel aloneRehospitalization for MIAdjusted HR (95% CI): 21.8 (0.88-5.39)Rehospitalization for MI and coronary stent procedureAdjusted HR (95% CI): 1.91 (1.19-3.06) |
| Valgimigli, 201269PRODIGY | RCTTotal N: 2013Clopidogrel doseGood | Age | Age ≥65 yrs vs. age <65 yrsComposite outcome (total mortality, nonfatal MI, or stroke)Age ≥65 yrsHR (95% CI): 1.12 (0.82-1.51)Age <65 yrsHR (95% CI): 0.57 (0.28-1.16) |
| Sex | Male vs. femaleComposite outcome (total mortality, nonfatal MI, or stroke)Male HR (95% CI): 1.09 (0.77-1.29)Female HR (95% CI): 1.00 (0.60-1.68) |
| Diabetes | Diabetes vs. no diabetesComposite outcome (total mortality, nonfatal MI, or stroke)Diabetes HR (95% CI): 0.85 (0.53-1.38)No diabetes HR (95% CI): 1.06 (0.76-1.50) |
| Stent type | BMS vs. DESComposite outcome (total mortality, nonfatal MI, or stroke)BMSHR (95% CI): 1.13 (0.68-1.86)DESHR (95% CI): 0.93 (0.67-1.30) |
| Renal function | Creatinine clearance >60 mL/min vs. Creatinine clearance ≤60 mL/minComposite outcome (total mortality, nonfatal MI, or stroke)CrCl >60 mL/min HR (95% CI): 0.90 (0.58-1.38)CrCl ≤60 mL/min HR (95% CI): 1.14 (0.78-1.65) |
| Valkhoff, 201170 | ObservationalTotal N: 23,655PPI vs. No PPIPoor | PPI timing | Current PPI use vs. past PPI useNonfatal MIOR (95% CI): 0.95 (0.38-2.41) |
| Van Boxel, 201071 | ObservationalTotal N: 18,139Clopidogrel doseFair | PPI type | Composite outcome (total mortality, nonfatal MI, stroke)OmeprazoleHR (95% CI): 1.622 (1.379-1.907)PantoprazoleHR (95% CI): 1.827 (1.606-2.079)EsomeprazoleHR (95% CI): 1.833 (1.518-2.214)RabeprazoleHR (95% CI): 1.758 (1.073-2.881) |
| Yusuf, 200172CURE Study | RCTTotal N: 12,562Clopidogrel vs. placeboGood | Diabetes | Diabetes (N=2840)Composite outcome (CV death, nonfatal MI or stroke at 9 months)Clopidogrel: 14.2%Placebo: 16.7% |
| Age | Age ≤65 yrs (N=6354)Composite outcome (CV death, nonfatal MI or stroke at 9 months)Clopidogrel: 5.4% Placebo: 7.6% |
| Age >65 yrs (N=6208)Composite outcome (CV death, nonfatal MI or stroke at 9 months)Clopidogrel: 13.3% Placebo: 15.3% |
| Sex | Male (N=7726)Composite outcome (CV death, nonfatal MI or stroke at 9 months)Clopidogrel: 9.1%Placebo: 11.9% |
| Female (N=4836)Composite outcome (CV death, nonfatal MI or stroke at 9 months)Clopidogrel: 9.5%Placebo: 10.7% |
| NSTEMI | Associated MI (NSTEMI patients) (N=3283)Composite outcome (CV death, nonfatal MI or stroke at 9 months)Clopidogrel: 11.3% Placebo: 13.7% |
| No associated MI (UA patients) (N=9279)Composite outcome (CV death, nonfatal MI or stroke at 9 months)Clopidogrel: 8.6Placebo: 10.6% |
| Revascularization | Revascularization after randomization (N=4577)Composite outcome (CV death, nonfatal MI or stroke at 9 months)Clopidogrel: 11.5%Placebo: 13.9% |
| No revascularization after randomization (N=7985)Composite outcome (CV death, nonfatal MI or stroke at 9 months)Clopidogrel: 8.1% Placebo: 10% |
| Chronic kidney disease | Creatinine clearance <64 mL/min (N=4087)Composite outcome (CV death, nonfatal MI or stroke at 9 months)Clopidogrel: 13.4% Placebo: 14.9% RR (95%CI): 0.89 (0.76-1.05)CV mortalityClopidogrel: 8.3% Placebo: 8.7%RR (95%CI): 0.95 (0.77-1.17)Total mortalityClopidogrel: 9.6%Placebo: 10%RR (95%CI): 0.95(0.78-1.16)Major bleedingClopidogrel: 2.3%Placebo: 1.7%RR (95%CI): 1.37 (0.89-2.12)Minor bleedingClopidogrel: 5.2%Placebo: 2.4%RR (95%CI): 1.5(1.21-1.86) |
| PCI | Patients undergoing PCIComposite outcome (CV death or nonfatal MI)Clopidogrel (N= 1313): 79Placebo (N=1345): 108RR (95%CI): 0.75(0.56-1.00)p=0.047Major bleedingClopidogrel (N= 1313): 36 Placebo (N=1345): 32RR (95%CI): 1.12(0.7-1.78) P=0.64Minor bleedingClopidogrel (N= 1313): 46Placebo (N=1345): 28RR (95%CI): 1.68(1.06-2.68) p=0.03 |
| Patients undergoing PCI who received a stent (N= 2172)Composite outcome (CV death or nonfatal MI)Clopidogrel: 8.7%Placebo: 11.7%RR (95%CI): 0.73(0.56-0.95) |
| Aspirin dose | Aspirin dose ≤100 mg/d (N=5320)Composite outcome (CV death, nonfatal MI or stroke)RR (95%CI): 0.81 (0.68-0.97) in favor of clopidogrelMajor bleedingClopidogrel: 3%Placebo: 1.9% |
| Aspirin dose 101-199 mg/d (N=3109)Composite outcome (CV death, nonfatal MI or stroke)RR (95%CI): 0.97 (0.77-1.22) in favor of clopidogrelMajor bleedingClopidogrel: 3.4%Placebo: 2.8% |
| Aspirin dose ≥200 mg/d (N=4110)Composite outcome (CV death, nonfatal MI or stroke)RR (95%CI): 0.71 (0.59-0.85) in favor of clopidogrelMajor bleedingClopidogrel: 4.9%Placebo: 3.7% |
| Zeymer, 200873ACOS Registry | ObservationalTotal N: 4,290ASA + clopidogrel vs. ASAPoor | PCI use | PCITotal mortalityASA vs. ASA + clopidogrelOR (95% CI): 0.51 (0.33-0.77)Composite outcome (death, MI, stroke)ASA vs. ASA + clopidogrelOR (95% CI): 0.55 (0.40-0.75) |
| No PCITotal mortalityASA vs. ASA + clopidogrelOR (95% CI): OR 0.90 (0.73-1.11)  |

Abbreviations: ASA=aspirin; BMS=bare metal stent; c/w=cases with; CAD=coronary artery disease; CI=confidence interval; CKD=chronic kidney disease; clop=Clopidogrel; CV=cardiovascular; d=day/days; DAP=dual antiplatelet; DAPT=dual antiplatelet therapy; DES=drug-eluting stent; Eso=esomeprazole; HR=hazard ratio; IRR=incidence rate ratio; MACE=major adverse cardiac event; mg=milligram/milligrams; MI=myocardial infarction; min=minute/minutes; mL=milliliter/milliliters; N=number of patients; NACE=net adverse clinical events; NSTEMI=non-ST elevation myocardial infarction; OAC=oral anticoagulation; omep=omeprazole; OR=odds ratio; panto=pantoprazole; PPI=proton pump inhibitor; RCT=randomized controlled trial; RR=relative risk; RRR=relative risk reduction; STEMI=ST elevation myocardial infarction; UA/NSTEMI=unstable angina/non-ST elevation myocardial infarction; vs=versus; yr=year/years