**Supplementary Table 1:** Missing data for include variables

|  |  |  |  |
| --- | --- | --- | --- |
| Variable | Data available | Missing data | % missing |
| Mean age | 260,616 | 110 | 0.04 |
| Male sex | 260,169 | 557 | 0.2 |
| Smoking status | 240,140 | 20,586 | 8 |
| Hypertension | 255,900 | 4,826 | 2 |
| Hypercholesterolemia | 255,900 | 4,826 | 2 |
| Family history of CAD | 234,701 | 26,025 | 10 |
| Previous MI | 238,989 | 21,737 | 8 |
| Renal disease | 259,698 | 1,028 | 0.4 |
| Previous PCI | 255,427 | 5,299 | 2 |
| Previous CABG | 254,470 | 6,256 | 2 |
| Intra-aortic balloon pump use | 249,217 | 11,509 | 4 |
| Receipt of ventilation | 229,942 | 30,784 | 12 |
| Cardiogenic shock | 243,987 | 16,739 | 6 |
| Thrombolysis use | 141,172 | 119,554 | 46 |
| Radial access | 252,083 | 8,643 | 3 |
| Diagnosis | 250,844 | 9,882 | 4 |
| Vessel attempted | 254,855 | 5,871 | 2 |
| Three vessel disease | 255,111 | 5,615 | 2 |
| Bare metal stent | 249,153 | 11,573 | 4 |
| No. of stents | 252,065 | 8,661 | 3 |

CAD=coronary artery disease, MI=myocardial infarction, PCI=percutaneous coronary intervention, CABG=Coronary artery bypass graft

**Supplementary Table 2:** Missing data for include variables according to availability of ejection fraction

|  |  |  |  |
| --- | --- | --- | --- |
| Variable | Data available for ejection fraction | Data missing for ejection fraction | p-value |
| Mean age | 65±12 | 64±12 | <0.001 |
| Male sex | 192,343 (74%) | 191,327 (74%) | 0.91 |
| Smoking status  Never  Ex-smoker  Current smoker | 85,512 (36%)  103,702 (43%)  50,926 (21%) | 81,701 (36%)  84,047 (37%)  61,404 (27%) | <0.001 |
| Hypertension | 147,701 (58%) | 124,737 (49%) | <0.001 |
| Hypercholesterolemia | 161,092 (63%) | 127,193 (50%) | <0.001 |
| Family history of CAD | 111,479 (48%) | 95,423 (44%) | <0.001 |
| Previous MI | 73,967 (31%) | 60,094 (25%) | <0.001 |
| Renal disease | 7,274 (3%) | 5,947 (2%) | <0.001 |
| Previous PCI | 62,178 (24%) | 50,368 (20%) | <0.001 |
| Previous CABG | 22,646 (9%) | 19,685 (8%) | <0.001 |
| Intra-aortic balloon pump use | 3,968 (2%) | 3,707 (2%) | 0.54 |
| Receipt of ventilation | 2,723 (1%) | 3,042 (1%) | <0.001 |
| Cardiogenic shock | 4,842 (2%) | 4,882 (2%) | 0.71 |
| Thrombolysis use | 9,765 (7%) | 10,527 (7%) | 0.04 |
| Radial access | 123,975 (49%) | 112,206 (45%) | <0.001 |
| Diagnosis  Stable angina  NSTEMI  STEMI | 119,232 (48%)  101,067 (40%)  30,545 (12%) | 85,444 (35%)  91,690 (38%)  64,693 (27%) | <0.001 |
| Vessel attempted  LAD  Left main  Circumflex  RCA  Graft | 125,527 (49%)  10,363 (4%)  65,651 (26%)  91,876 (36%)  9,517 (4%) | 114,155 (46%)  6,906 (3%)  57,582 (23%)  93,523 (38%)  11,659 (5%) | <0.001  <0.001  <0.001  <0.001  <0.001 |
| Three vessel disease | 22,784 (9%) | 16,354 (7%) | <0.001 |
| Bare metal stent | 53,539 (21%) | 61,856 (25%) | <0.001 |
| No. of stents | 1.48±1.00 | 1.45±0.93 | <0.001 |
| 30-day mortality | 4,787 (2%) | 5,585 (2%) | <0.001 |
| In-hospital MACE | 5,200 (2%) | 5,085 (2%) | 0.38 |
| In-hospital bleeding | 1,101 (0.4%) | 897 (0.4%) | <0.001 |

CAD=coronary artery disease, MI=myocardial infarction, PCI=percutaneous coronary intervention, CABG=Coronary artery bypass graft

**Supplementary Table 3:** Sensitivity analysis excluding cardiogenic shock, ventilatory support and receipt of intra-aortic balloon pump

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Outcome/adjustment | No diabetes | | | Diabetes | | |
| Good LV | Moderate LV | Poor LV | Good LV | Moderate LV | Poor LV |
| Unadjusted 30-day mortality  Adjusted 30-day mortality | 1.00 (ref)  1.00 (ref) | 3.84 (3.45-4.28)  2.15 (1.92-2.41) | 8.99 (7.96-10.17)  4.70 (4.12-5.36) | 1.00 (ref)  1.00 (ref) | 3.34 (2.81-3.98)  2.03 (1.69-2.44) | 8.14 (6.78-9.78)  4.65 (3.82-5.65) |
| Unadjusted in-hospital MACE  Adjusted in-hospital MACE | 1.00 (ref)  1.00 (ref) | 1.74 (1.59-1.90)  1.36 (1.24-1.50) | 2.72 (2.40-3.08)  2.02 (1.78-2.30) | 1.00 (ref)  1.00 (ref) | 1.63 (1.37-1.93)  1.17 (0.97-1.40) | 2.73 (2.22-3.35)  1.86 (1.49-2.31) |
| Unadjusted in-hospital bleeding  Adjusted in-hospital bleeding | 1.00 (ref)  1.00 (ref) | 1.72 (1.43-2.06)  1.27 (1.04-1.54) | 2.43 (1.87-3.15)  1.73 (1.32-2.27) | 1.00 (ref)  1.00 (ref) | 1.87 (1.35-2.59)  1.30 (0.92-1.83) | 1.93 (1.21-3.06)  1.22 (0.75-1.97) |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Outcome/adjustment | Good LV | | Moderate LV | | Poor LV | |
| No diabetes | Diabetes | No diabetes | Diabetes | No diabetes | Diabetes |
| Unadjusted 30-day mortality  Adjusted 30-day mortality | 1.00 (ref)  1.00 (ref) | 1.59 (1.37-1.84)  1.62 (1.39-1.89) | 1.00 (ref)  1.00 (ref) | 1.38 (1.19-1.60)  1.41 (1.21-1.65) | 1.00 (ref)  1.00 (ref) | 1.44 (1.22-1.69)  1.55 (1.29-1.86) |
| Unadjusted in-hospital MACE  Adjusted in-hospital MACE | 1.00 (ref)  1.00 (ref) | 1.05 (0.94-1.17)  0.99 (0.88-1.11) | 1.00 (ref)  1.00 (ref) | 0.98 (0.84-1.15)  0.94 (0.80-1.11) | 1.00 (ref)  1.00 (ref) | 1.05 (0.85-1.30)  1.13 (0.90-1.42) |
| Unadjusted in-hospital bleeding  Adjusted in-hospital bleeding | 1.00 (ref)  1.00 (ref) | 1.11 (0.89-1.39)  1.04 (0.83-1.31) | 1.00 (ref)  1.00 (ref) | 1.21 (0.90-1.63)  1.26 (0.92-1.72) | 1.00 (ref)  1.00 (ref) | 0.88 (0.54-1.43)  0.86 (0.52-1.43) |

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Outcome/adjustment | Diet controlled diabetes | | | Tablet controlled diabetes | | | Insulin controlled diabetes | | |
| Good LV | Moderate LV | Poor LV | Good LV | Moderate LV | Poor LV | Good LV | Moderate LV | Poor LV |
| Adjusted 30-day mortality | 1.00 (ref) | 1.78 (1.14-2.77) | 5.51 (3.53-8.60) | 1.00 (ref) | 2.25 (1.73-2.93) | 5.15 (3.88-6.83) | 1.00 (ref) | 1.78 (1.28-2.48) | 3.48 (2.44-4.97) |
| Adjusted in-hospital MACE | 1.00 (ref) | 0.96 (0.62-1.47) | 1.46 (0.87-2.47) | 1.00 (ref) | 1.17 (0.91-1.51) | 1.65 (1.19-2.28) | 1.00 (ref) | 1.32 (0.93-1.86) | 2.50 (1.70-3.67) |
| Adjusted in-hospital bleeding | 1.00 (ref) | 0.57 (0.20-1.63) | - | 1.00 (ref) | 1.53 (0.92-2.55) | 2.05 (1.08-3.91) | 1.00 (ref) | 1.45 (0.83-2.53) | 1.20 (0.54-2.67) |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Outcome/adjustment | Good LV | | Moderate LV | | Poor LV | |
| No diabetes | Diet controlled diabetes | No diabetes | Diet controlled diabetes | No diabetes | Diet controlled diabetes |
| Adjusted 30-day mortality | 1.00 (ref) | 1.79 (1.34-2.40) | 1.00 (ref) | 1.39 (0.99-1.94) | 1.00 (ref) | 2.01 (1.43-2.84) |
| Adjusted in-hospital MACE | 1.00 (ref) | 1.28 (1.03-1.58) | 1.00 (ref) | 1.03 (0.72-1.48) | 1.00 (ref) | 1.14 (0.70-1.84) |
| Adjusted in-hospital bleeding | 1.00 (ref) | 1.21 (0.77-1.89) | 1.00 (ref) | 0.69 (0.28-1.70) | 1.00 (ref) | - |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Outcome/adjustment | Good LV | | Moderate LV | | Poor LV | |
| No diabetes | Tablet controlled diabetes | No diabetes | Tablet controlled diabetes | No diabetes | Tablet controlled diabetes |
| Adjusted 30-day mortality | 1.00 (ref) | 1.35 (1.10-1.65) | 1.00 (ref) | 1.32 (1.08-1.60) | 1.00 (ref) | 1.43 (1.13-1.79) |
| Adjusted in-hospital MACE | 1.00 (ref) | 0.89 (0.77-1.04) | 1.00 (ref) | 0.85 (0.69-1.05) | 1.00 (ref) | 0.93 (0.69-1.27) |
| Adjusted in-hospital bleeding | 1.00 (ref) | 0.79 (0.57-1.09) | 1.00 (ref) | 1.07 (0.71-1.62) | 1.00 (ref) | 1.03 (0.56-1.88) |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Outcome/adjustment | Good LV | | Moderate LV | | Poor LV | |
| No diabetes | Insulin controlled diabetes | No diabetes | Insulin controlled diabetes | No diabetes | Insulin controlled diabetes |
| Adjusted 30-day mortality | 1.00 (ref) | 2.11 (1.64-2.71) | 1.00 (ref) | 1.64 (1.27-2.12) | 1.00 (ref) | 1.57 (1.17-2.12) |
| Adjusted in-hospital MACE | 1.00 (ref) | 0.99 (0.79-1.23) | 1.00 (ref) | 1.04 (0.79-1.37) | 1.00 (ref) | 1.55 (1.09-2.19) |
| Adjusted in-hospital bleeding | 1.00 (ref) | 1.35 (0.93-1.98) | 1.00 (ref) | 1.90 (1.19-3.02) | 1.00 (ref) | 1.09 (0.50-2.37) |

Adjusted for diagnosis, age, hypertension, hyperlipidaemia, three vessel disease, bare-metal stent, sex, renal disease, previous myocardial infarction, previous PCI, previous CABG, family history of heart disease, smoking status, ventilation, cardiogenic shock, thrombolysis use, intra-aortic balloon pump use, radial access, target vessel and number of stents.