

# **Supplemental Material**

**Table S1.** Characteristics and outcomes of high-risk patients by presence of left ventricular thrombus

|  | All high-risk STEMI        |                                | P-value |
|--|----------------------------|--------------------------------|---------|
|  | With LV thrombus<br>(n=19) | Without LV<br>thrombus (n=417) |         |
| Age (years), mean (SD)   | 61.4 (12.7)                | 60.8 (13.8)                    | 0.85    |
| Female, %  | 4 (21.1)                   | 105 (25.2)                     | 0.68    |
| GRACE risk score median (IQR)                                  | 172 (157, 194)             | 167 (148, 199)                 | 0.42    |
| Medical History, %   |                            |                                |         |
| Hypertension   | 7 (36.8)                   | 199 (47.7)                     | 0.35    |
| Diabetes mellitus  | 2 (10.5)                   | 78 (18.7)                      | 0.37    |
| Dyslipidemia   | 8 (42.1)                   | 170 (40.8)                     | 0.91    |
| Prior MI   | 2 (10.5)                   | 72 (17.3)                      | 0.44    |
| Family history premature CAD                                   | 3 (15.8)                   | 82 (19.7)                      | 0.68    |
| Symptom onset to first medical contact (mins),<br>median (IQR) | 132 (79, 1526)             | 137 (68, 478)                  | 0.47    |
| Reperfusion modality, %  |                            |                                | 0.32    |
| Primary PCI  | 13 (68.4)                  | 212 (50.8)                     |         |
| Fibrinolysis   | 4 (21.1)                   | 143 (34.3)                     |         |
| None   | 2 (10.5)                   | 62 (14.9)                      |         |
| Length of hospital stay (days), median (IQR)                   | 7 (6, 9)                   | 6 (5, 10)                      | 0.52    |
| In-hospital events, %  |                            |                                |         |
| Death  | 2 (10.5)                   | 19 (4.6)                       | 0.23    |
| Re-MI  | 0 (0.0)                    | 4 (1.0)                        | 0.67    |
| Cardiogenic shock or heart failure                             | 5 (26.3)                   | 97 (23.3)                      | 0.76    |
| Non-ICH major bleeding   | 0 (0.0)                    | 28 (6.7)                       | 0.24    |
| ICH  | 0 (0.0)                    | 1 (0.2)                        | 0.83    |

|   |            |            |        |
|---|------------|------------|--------|
| Ischemic stroke                             | 1 (5.3)    | 0 (0.0)    | <0.001 |
| In-hospital medications, %                  |            |            |        |
| Dual anti-platelet therapy                  | 19 (100.0) | 398 (95.4) | 0.34   |
| ACE-I / ARB                                 | 17 (89.5)  | 395 (94.7) | 0.33   |
| Beta-blocker                                | 17 (89.5)  | 408 (97.8) | 0.023  |
| Cholesterol lowering                        | 18 (94.7)  | 396 (95.0) | 0.96   |
| One year outcomes among discharged alive, % |            |            |        |
| Ischemic event or stroke/TIA/SE or death    | 1 (5.9)    | 96 (24.1)  | 0.082  |
| Ischemic event                              | 1 (5.9)    | 77 (19.3)  | 0.16   |
| Stroke/TIA/SE                               | 0 (0.0)    | 7 (1.8)    | 0.58   |
| Death                                       | 0 (0.0)    | 20 (5.0)   | 0.34   |
| Bleeding requiring hospitalization          | 0 (0.0)    | 8 (2.0)    | 0.56   |

ACE- I indicates angiotensin converting enzyme inhibitor, ARB angiotensin receptor blocker, CAD coronary artery disease, GRACE Global Registry of Acute Coronary Events, ICH intracranial hemorrhage, LV left ventricle, MI myocardial infarction, PCI, percutaneous coronary intervention, SE systemic embolism, TIA transient ischemic attack

**Table S2.** Baseline characteristics of low-risk group by warfarin status at discharge

|   | Low-risk group      |                         | p      |
|---|---------------------|-------------------------|--------|
|   | Warfarin<br>(n=162) | No warfarin<br>(n=1434) |        |
| Age (years), mean (SD)                                      | 58.8 (13.3)         | 59.7 (12.6)             | 0.36   |
| Female  | 42 (25.9)           | 327 (22.8)              | 0.37   |
| GRACE risk score median (IQR)                               | 160 (129, 190)      | 163 (144, 185)          | 0.56   |
| Creatinine (umol/L), mean (SD)                              | 97.1 (58.7)         | 93.8 (41.0)             | 0.36   |
| Medical History   |                     |                         |        |
| Hypertension  | 80 (49.4)           | 656 (45.7)              | 0.38   |
| Diabetes mellitus   | 31 (19.1)           | 221 (15.4)              | 0.22   |
| Dyslipidemia  | 72 (44.4)           | 602 (42.0)              | 0.55   |
| Prior MI  | 27 (16.7)           | 222 (15.5)              | 0.69   |
| Family history premature CAD                                | 44 (27.2)           | 373 (26.0)              | 0.75   |
| Symptom onset to first medical contact (mins), median (IQR) | 129 (71, 342)       | 115 (62, 299)           | 0.31   |
| Reperfusion modality  |                     |                         | 0.004  |
| Primary PCI   | 89 (54.9)           | 593 (41.4)              |        |
| Fibrinolysis  | 54 (33.3)           | 646 (45.0)              |        |
| None  | 19 (11.7)           | 195 (13.6)              |        |
| Length of hospital stay (days), median (IQR)                | 6 (4, 9)            | 4 (3, 6)                | <0.001 |
| In-hospital medications                                     |                     |                         |        |
| Dual anti-platelet therapy                                  | 156 (96.3)          | 1394 (97.2)             | 0.51   |
| ACE-I / ARB   | 155 (97.6)          | 1351 (94.2)             | 0.44   |

|                      |            |             |      |
|----------------------|------------|-------------|------|
| Beta-blocker         | 159 (98.1) | 1373 (95.7) | 0.14 |
| Cholesterol lowering | 155 (95.7) | 1344 (93.7) | 0.32 |

Numbers are n (%) unless specified otherwise; P-values calculated by chi-square test (proportions), t-test (means) or Wilcoxon-Mann-Whitney test (medians).

ACE -I indicates angiotension converting enzyme-inhibitor, ARB angiotension receptor blocker, CAD coronary artery disease, GRACE Global Registry of Acute Coronary Events, MI myocardial infarction, PCI percutaneous coronary intervention, TIMI Thrombolysis In Myocardial Infarction

**Table S3.** Propensity score matched one year outcomes among high-risk patients who survived index hospitalization stratified by warfarin status

| <b>Outcomes at one year</b>                  | <b>Warfarin</b> | <b>No Warfarin</b> | <b>OR (95% CI)</b>  | <b>P-value</b> |
|--|-----------------|--------------------|---------------------|----------------|
|  | <b>N = 126</b>  | <b>N = 126</b>     |                     |                |
| Recurrent ischemia or stroke/TIA/SE or death | 32 (25.4)       | 28 (22.2)          | 1.21 (0.66 - 2.12)  | 0.54           |
| Recurrent ischemia                           | 27 (21.4)       | 20 (15.9)          | 1.47 (0.76 - 2.83)  | 0.25           |
| Stroke/TIA/SE                                | 3 (2.4)         | 2 (1.6)            | 1.50 (0.25 - 8.98)  | 0.66           |
| Death  | 5 (4.0)         | 6 (4.8)            | 0.83 (0.25 - 2.73)  | 0.76           |
| Bleeding requiring hospitalization           | 4 (3.2)         | 1 (0.8)            | 4.00 (0.45 - 35.79) | 0.21           |

(SE indicates systemic embolism, TIA transient ischemic attack)

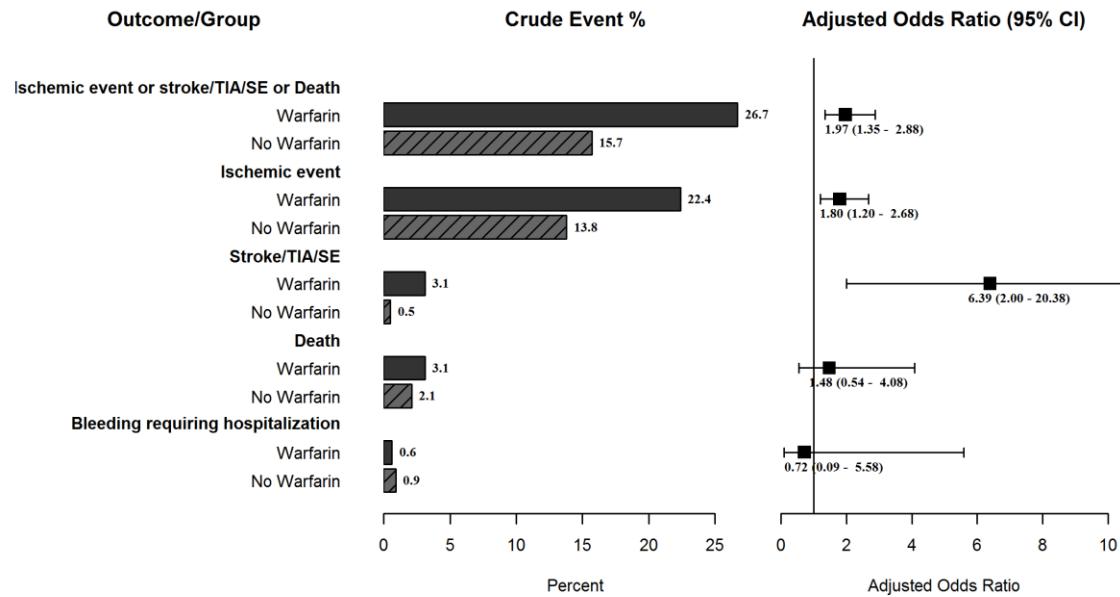
**Table S4.** Six month outcomes by risk group and categorized by warfarin status

| <b>A) High-risk vs Low-risk groups</b>             |                              |                                     |                |                                |
|--|------------------------------|-------------------------------------|----------------|--------------------------------|
|  | <b>High-Risk<br/>(n=398)</b> | <b>Low-Risk<br/>(n=1565)</b>        | <b>P-value</b> | <b>Adjusted OR<br/>(95%CI)</b> |
| <b>180 day outcomes:</b>                           |                              |                                     |                |                                |
| Recurrent ischemia/Stroke/TIA/SE/Death             | 80 (20.1)                    | 204 (13.0)                          | 0.0003         | 1.60 (1.20 - 2.14)             |
| Recurrent ischemia                                 | 66 (16.6)                    | 185 (11.8)                          | 0.0111         | 1.45 (1.07 - 1.97)             |
| Stroke/TIA/SE                                      | 5 (1.3)                      | 6 (0.4)                             | 0.0373         | 2.97 (0.90 - 9.89)             |
| Death  | 14 (3.5)                     | 18 (1.2)                            | 0.0009         | 2.62 (1.27 - 5.42)             |
| Bleeding requiring hospitalization                 | 8 (2.0)                      | 9 (0.6)                             | 0.0058         | 3.38 (1.29 - 8.87)             |
| <b>B) High-risk group: Warfarin vs No Warfarin</b> |                              |                                     |                |                                |
|  | <b>Warfarin<br/>(n=236)</b>  | <b>No<br/>Warfarin<br/>(n=162)</b>  | <b>P-value</b> | <b>Adjusted OR<br/>(95%CI)</b> |
| <b>180 day outcomes:</b>                           |                              |                                     |                |                                |
| Recurrent ischemia/Stroke/TIA/SE/Death             | 48 (20.3)                    | 32 (19.8)                           | 0.8861         | 1.10 (0.66 - 1.83)             |
| Recurrent ischemia                                 | 41 (17.4)                    | 25 (15.4)                           | 0.609          | 1.20 (0.69 - 2.07)             |
| Stroke/TIA/SE                                      | 4 (1.7)                      | 1 (0.6)                             | 0.343          | 3.20 (0.35 - 29.24)            |
| Death  | 5 (2.1)                      | 9 (5.6)                             | 0.0675         | 0.40 (0.13 - 1.22)             |
| Bleeding requiring hospitalization                 | 6 (2.5)                      | 2 (1.2)                             | 0.3611         | 2.17 (0.43 - 10.96)            |
| <b>C) Low-risk group: Warfarin vs No Warfarin</b>  |                              |                                     |                |                                |
|  | <b>Warfarin<br/>(n=161)</b>  | <b>No<br/>warfarin<br/>(n=1404)</b> | <b>P-value</b> | <b>Adjusted OR<br/>(95%CI)</b> |
| <b>180 day outcomes:</b>                           |                              |                                     |                |                                |

|  |           |            |        |                     |
|--|-----------|------------|--------|---------------------|
| Recurrent ischemia/Stroke/TIA/SE/Death | 33 (20.5) | 171 (12.2) | 0.003  | 1.86 (1.23 - 2.83)  |
| Recurrent ischemia                     | 28 (17.4) | 157 (11.2) | 0.0208 | 1.67 (1.08 - 2.60)  |
| Stroke/TIA/SE                          | 3 (1.9)   | 3 (0.2)    | 0.0013 | 8.85 (1.77 - 44.25) |
| Death                                  | 3 (1.9)   | 15 (1.1)   | 0.3702 | 1.82 (0.49 - 6.74)  |
| Bleeding requiring hospitalization     | 1 (0.6)   | 8 (0.6)    | 0.935  | 1.08 (0.13 - 8.74)  |

(SE indicates systemic embolism, TIA transient ischemic attack)

**Figure S1.** One year outcomes in low-risk STEMI by prophylactic warfarin use



(SE indicates systemic embolism, TIA transient ischemic attack)