

**Supplementary table 1** Association between gender and efficacy of randomised treatment – clinical outcomes

| Outcomes   | Gender | Pre-hospital ticagrelor (n=906) |                               | In-hospital ticagrelor (n=952) |                               | Model , n | Adjusted hazard ratio ≠ (95% CI) | P-value (interaction) ≠ |
|--|--------|---------------------------------|-------------------------------|--------------------------------|-------------------------------|-----------|----------------------------------|-------------------------|
|  |        | N                               | Patients with endpoint, n (%) | N                              | Patients with endpoint, n (%) |           |                                  |                         |
| Composite of Death/MI/Stroke/Urgent Revasc/Definite Acute Stent Thrombosis | Female | 173                             | 13 (7.5)                      | 196                            | 12 (6.1)                      | 1613      | 0.98 (0.42-2.27)                 | 0.87                    |
|  | Male   | 733                             | 28 (3.8)                      | 756                            | 30 (4.0)                      |           | 0.90 (0.51-1.59)                 |                         |
| Composite of Death/MI/Urgent Revasc  | Female | 173                             | 13 (7.5)                      | 196                            | 10 (5.1)                      | 1613      | 1.32 (0.55-3.20)                 | 0.55                    |
|  | Male   | 733                             | 26 (3.5)                      | 756                            | 24 (3.2)                      |           | 0.95 (0.52-1.76)                 |                         |
| All-cause mortality  | Female | 173                             | 13 (7.5)                      | 196                            | 8 (4.1)                       | 1613      | 1.59 (0.61-4.12)                 | 0.93                    |
|  | Male   | 733                             | 17 (2.3)                      | 756                            | 11 (1.5)                      |           | 1.50 (0.60-3.74)                 |                         |
| Myocardial infarction  | Female | 173                             | 1 (0.6)                       | 196                            | 2 (1.0)                       | 1613      | 0.44 (0.04-4.95)                 | 0.72                    |
|  | Male   | 733                             | 6 (0.8)                       | 756                            | 8 (1.1)                       |           | 0.72 (0.25-2.09)                 |                         |
| Stroke   | Female | 173                             | 1 (0.6)                       | 196                            | 2 (1.0)                       | 1613      | 0.54 (0.05-5.90)                 | 0.99                    |
|  | Male   | 733                             | 3 (0.4)                       | 756                            | 0 (0.0)                       |           | Nt estimated                     |                         |
| Urgent revascularization   | Female | 173                             | 1 (0.6)                       | 196                            | 1 (0.5)                       | 1613      | 0.86 (0.05-14.07)                | 0.76                    |
|  | Male   | 733                             | 4 (0.5)                       | 756                            | 7 (0.9)                       |           | 0.54 (0.15-1.87)                 |                         |
| Definite Acute Stent Thrombosis  | Female | 173                             | 1 (0.6)                       | 196                            | 2 (1.0)                       | 1613      | 0.37 (0.03-4.27)                 | 0.49                    |
|  | Male   | 733                             | 1 (0.1)                       | 756                            | 9 (1.2)                       |           | 0.12 (0.01-1.02)                 |                         |
| Acute Stent Thrombosis (definite or probable)                              | Female | 173                             | 7 (4.0)                       | 196                            | 4 (2.0)                       | 1613      | 1.31 (0.37-4.69)                 | 0.52                    |
|  | Male   | 733                             | 14 (1.9)                      | 756                            | 16 (2.1)                      |           | 0.80 (0.35-1.80)                 |                         |

≠ Adjusted hazard (for female versus male) and p-values for interaction was calculated from Cox proportional hazard model including gender, age, weight, prior myocardial infarction, prior percutaneous coronary intervention, diabetes, hypertension, non-hemorrhagic stroke, gastrointestinal bleeding, time from symptom onset to pre-hospital ECG, admission Killip class, baseline hemoglobin, estimated glomerular filtration rate, glycoprotein IIb/IIIa inhibitor use during index procedure, location of myocardial infarction

**Supplementary table 2** Association between gender and efficacy of randomised treatment – primary and secondary outcomes

| Outcomes   | Gender | Pre-hospital ticagrelor (n=906) |                               | In-hospital ticagrelor (n=952) |                               | Model N ≠ | Adjusted odds ratio ≠ (95% CI) | P-value (interaction) ≠ |
|--|--------|---------------------------------|-------------------------------|--------------------------------|-------------------------------|-----------|--------------------------------|-------------------------|
|  |        | N                               | Patients with endpoint, n (%) | N                              | Patients with endpoint, n (%) |           |                                |                         |
| Absence of ST segment elevation resolution ≥ 70% pre-PCI   | Female | 142                             | 122 (85.9)                    | 168                            | 147 (87.5)                    | 1419      | 0.75 (0.37-1.53)               | 0.71                    |
|  | Male   | 632                             | 550 (87.0)                    | 656                            | 575 (87.7)                    |           | 0.85 (0.59-1.23)               |                         |
| Absence of TIMI flow grade 3 in infarct related artery at initial angiography                              | Female | 155                             | 127 (81.9)                    | 175                            | 135 (77.1)                    | 1478      | 1.36 (0.76-2.41)               | 0.19                    |
|  | Male   | 669                             | 554 (82.8)                    | 681                            | 576 (84.6)                    |           | 0.88 (0.64-1.20)               |                         |
| Absence of ST segment resolution ≥ 70% AND absence of TIMI flow grade 3 in infarct related artery pre-PCI  | Female | 129                             | 120 (93.0)                    | 153                            | 142 (92.8)                    | 1304      | 1.07 (0.41-2.81)               | 0.84                    |
|  | Male   | 590                             | 557 (94.4)                    | 598                            | 568 (95.0)                    |           | 0.96 (0.57-1.62)               |                         |
| Absence of ST-segment resolution ≥70% after PCI  | Female | 144                             | 61 (42.4)                     | 163                            | 80 (49.1)                     | 1409      | 0.76 (0.47-1.25)               | 0.51                    |
|  | Male   | 629                             | 291 (46.3)                    | 650                            | 326 (50.2)                    |           | 0.92 (0.72-1.17)               |                         |
| Absence of TIMI flow grade 3 in infarct related artery after PCI   | Female | 144                             | 30 (20.8)                     | 154                            | 37 (24.0)                     | 1368      | 0.93 (0.51-1.71)               | 0.98                    |
|  | Male   | 621                             | 107 (17.2)                    | 631                            | 117 (18.5)                    |           | 0.92 (0.68-1.26)               |                         |
| Absence of ST segment resolution ≥70% AND absence of TIMI flow grade 3 in infarct related artery after PCI | Female | 125                             | 60 (48.0)                     | 138                            | 81 (58.7)                     | 1235      | 0.64 (0.38-1.10)               | 0.13                    |
|  | Male   | 562                             | 282 (50.2)                    | 565                            | 290 (51.3)                    |           | 1.01 (0.78-1.32)               |                         |

≠ Adjusted odds ratio (for female versus male) and p-values for interaction was calculated from logistic regression model including gender, age, weight, prior myocardial infarction, prior percutaneous coronary intervention, diabetes, hypertension, non-hemorrhagic stroke, gastrointestinal bleeding, time from symptom onset to pre-hospital ECG, admission Killip class, baseline hemoglobin, estimated glomerular filtration rate, glycoprotein IIb/IIIa inhibitor use during index procedure, location of myocardial infarction

**Supplementary table 3** Association between gender and safety of randomised treatment (safety outcomes)

| End point                                | Gender | Pre-hospital ticagrelor (n=906) |                               | In-hospital ticagrelor (n=952) |                               | Model N ≠ | Adjusted hazard ratio ≠ (95% CI) | P-value (interaction) ≠ |
|--|--------|---------------------------------|-------------------------------|--------------------------------|-------------------------------|-----------|----------------------------------|-------------------------|
|  |        | N                               | Patients with endpoint, n (%) | N                              | Patients with endpoint, n (%) |           |                                  |                         |
| PLATO major bleeding                     | Female | 173                             | 6 (3.5)                       | 196                            | 11 (5.6)                      | 1613      | 0.61 (0.21-1.83)                 | 0.23                    |
|  | Male   | 733                             | 19 (2.6)                      | 756                            | 14 (1.9)                      |           | 1.39 (0.66-2.93)                 |                         |
| PLATO major and minor bleeding           | Female | 173                             | 7 (4.0)                       | 196                            | 13 (6.6)                      | 1613      | 0.59 (0.22-1.61)                 | 0.19                    |
|  | Male   | 733                             | 33 (4.5)                      | 756                            | 26 (3.4)                      |           | 1.27 (0.73-2.21)                 |                         |
| TIMI major bleeding                      | Female | 173                             | 3 (1.7)                       | 196                            | 7 (3.6)                       | 1613      | 0.60 (0.14-2.54)                 | 0.28                    |
|  | Male   | 733                             | 9 (1.2)                       | 756                            | 5 (0.7)                       |           | 1.62 (0.53-4.98)                 |                         |
| TIMI major and minor bleeding            | Female | 173                             | 6 (3.5)                       | 196                            | 12 (6.1)                      | 1613      | 0.55 (0.19-1.60)                 | 0.24                    |
|  | Male   | 733                             | 29 (4.0)                      | 756                            | 25 (3.3)                      |           | 1.14 (0.64-2.03)                 |                         |
| BARC type 3-5 (major) bleeding           | Female | 173                             | 6 (3.5)                       | 196                            | 10 (5.1)                      | 1613      | 0.69 (0.23-2.11)                 | 0.26                    |
|  | Male   | 733                             | 18 (2.5)                      | 756                            | 13 (1.7)                      |           | 1.51 (0.70-3.26)                 |                         |
| BARC type 2-5 (major and minor) bleeding | Female | 173                             | 7 (4.0)                       | 196                            | 13 (6.6)                      | 1613      | 0.59 (0.22-1.60)                 | 0.21                    |
|  | Male   | 733                             | 31 (4.2)                      | 756                            | 25 (3.3)                      |           | 1.23 (0.70-2.17)                 |                         |

≠Adjusted hazard (for female versus male) and p-values for interaction was calculated from Cox proportional hazard model including gender, age, weight, prior myocardial infarction, prior percutaneous coronary intervention, diabetes, hypertension, non-hemorrhagic stroke, gastrointestinal bleeding, time from symptom onset to pre-hospital ECG, admission Killip class, baseline hemoglobin, estimated glomerular filtration rate, glycoprotein IIb/IIIa inhibitor use during index procedure, location of myocardial infarction