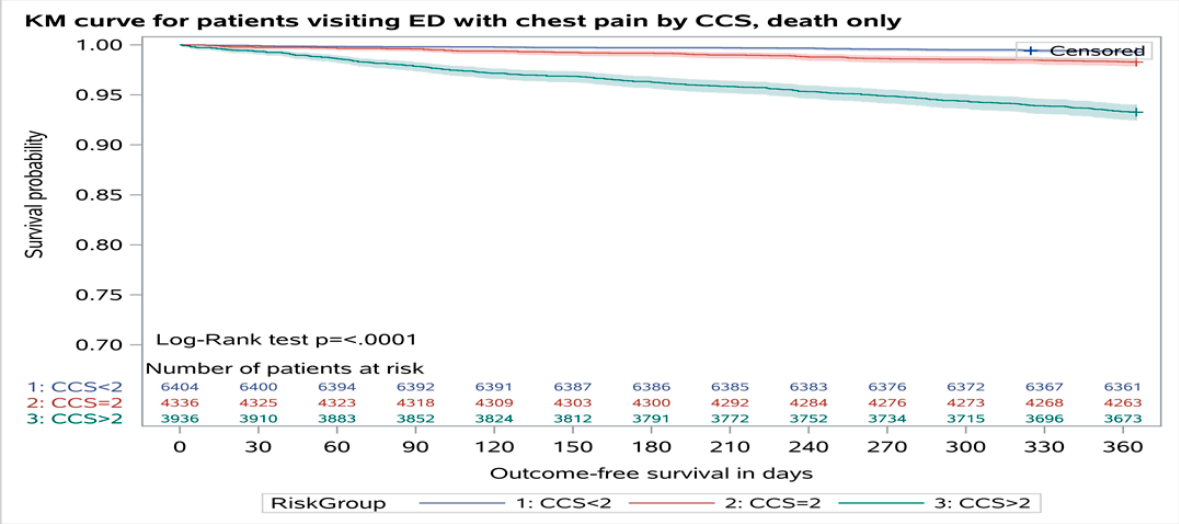


**Figure S1.** Kaplan Meier survival curves for all-cause death over 365 days stratified by CCS < 2, CCS = 2, and CCS >2.

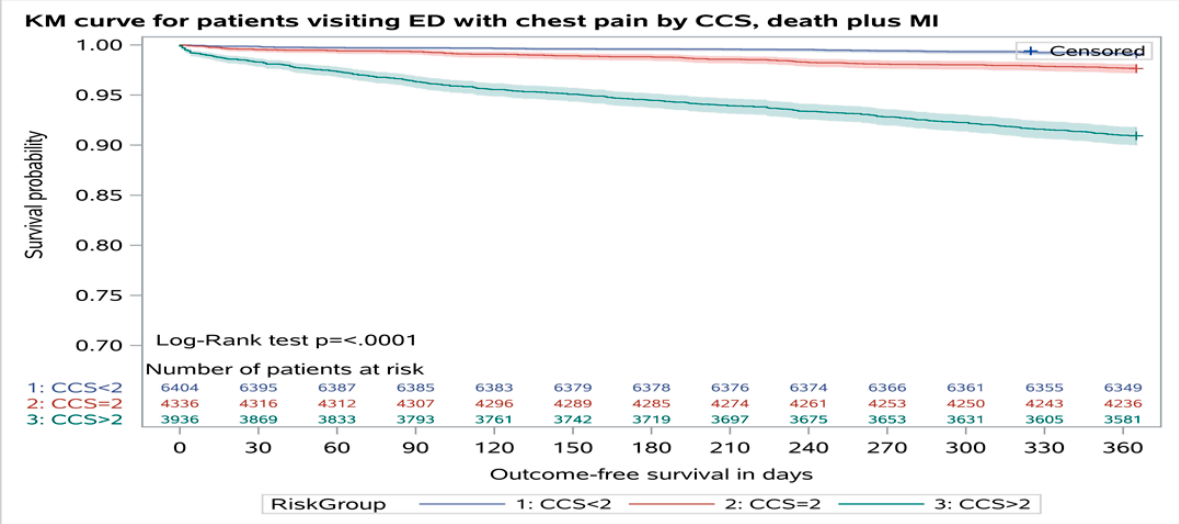


**Figure S2.** Kaplan Meier survival curves for death/MI over 365 days stratified by CCS < 2, CCS = 2, and CCS >2.

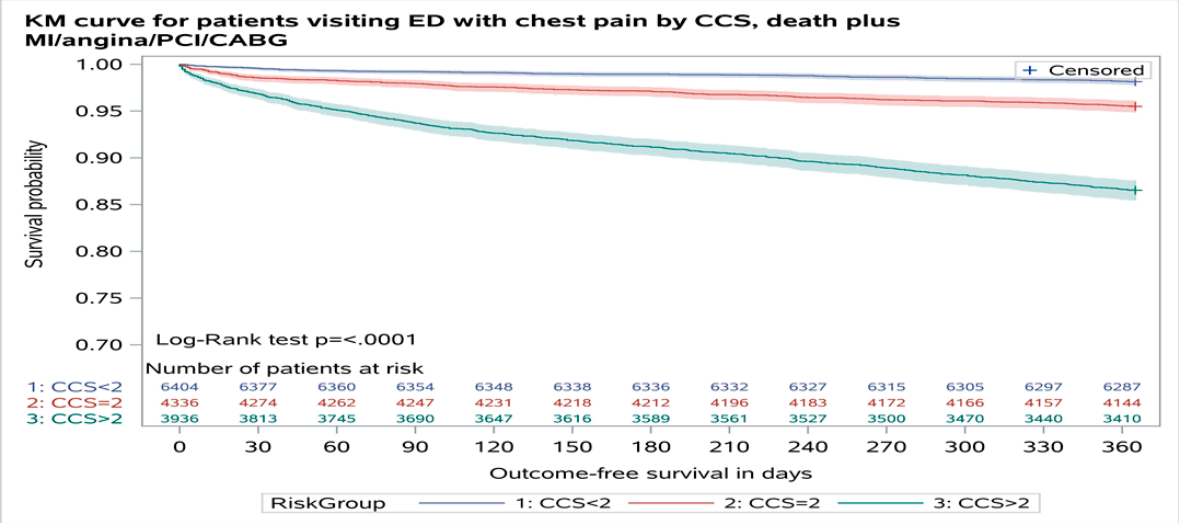

**Figure S3.** Kaplan Meier survival curves for MACE over 365 days stratified by CCS < 2, CCS = 2, and CCS >2.

**Table S1.** Comparison of baseline characteristics and crude outcomes by CCS (< 2, 2, > 2) for patients with a diagnosis of chest pain discharged home from the ED from Cohort1.

| Variable | CCS<2 | CCS=2 | CCS>2 | P-Value |
|---|---|---|---|---|
| | N=456 | N=457 | N=454 | |
| Age, Median (IQR) | 53 (48-62) | 65 (54-76) | 76 (66-82) | <.001 |
| Sex (F) | 260 (57.0%) | 285 (62.4%) | 232 (51.1%) | 0.003 |
| **Past medical history, n (%)** | | | | |
| Arrhythmia | 16 (3.5%) | 43 (9.4%) | 101 (22.2%) | <.001 |
| Congestive heart failure | 24 (5.3%) | 41 (9.0%) | 123 (27.1%) | <.001 |
| Chronic obstructive pulmonary disorder | 89 (19.5%) | 104 (22.8%) | 126 (27.8%) | 0.013 |
| Diabetes | 64 (14.0%) | 129 (28.2%) | 190 (41.9%) | <.001 |
| Hypertension | 192 (42.1%) | 309 (67.6%) | 365 (80.4%) | <.001 |
| Myocardial infarction | 20 (4.4%) | 28 (6.1%) | 66 (14.5%) | <.001 |
| Peripheral vascular disease | 8 (1.8%) | 25 (5.5%) | 69 (15.2%) | <.001 |
| Renal disease | <=5 | 7 (1.5%) | 25 (5.5%) | <.001 |
| Stroke | 9 (2.0%) | 6 (1.3%) | 17 (3.7%) | 0.043 |
| Unstable angina | 11 (2.4%) | 26 (5.7%) | 24 (5.3%) | 0.033 |
| Percutaneous coronary intervention | 10 (2.2%) | 20 (4.4%) | 23 (5.1%) | 0.064 |
| Coronary artery bypass grafting | <=5 | 11 (2.4%) | 15 (3.3%) | 0.008 |
| Echocardiography | 168 (36.8%) | 233 (51.0%) | 311 (68.5%) | <.001 |
| Cardiac catheterization | 32 (7.0%) | 62 (13.6%) | 89 (19.6%) | <.001 |
| Permanent pacemaker | <=5 | <=5 | 16 (3.5%) | <.001 |
| Implantable cardioverter-defibrillator | <=5 | <=5 | 8 (1.8%) | 0.005 |
| Stress testing | 137 (30.0%) | 165 (36.1%) | 159 (35.0%) | 0.119 |
| **Physician follow-up 30 days following ED discharge, n (%)** | | | | |
| Cardiology | 29 (6.4%) | 45 (9.8%) | 63 (13.9%) | 0.001 |
| General/Family physician | 224 (49.1%) | 234 (51.2%) | 230 (50.7%) | |
| None | 203 (44.5%) | 178 (38.9%) | 161 (35.5%) | |
| **All- cause mortality or hospitalization for MI/angina, n (%)** | | | | |
| 30 days | <=5 | <=5 | 8 (1.8%) | 0.055 |
| 90 days | <=5 | <=5 | 21 (4.6%) | <.001 |
| 1 year | 11 (2.4%) | 26 (5.7%) | 60 (13.2%) | <.001 |
| **Laboratory Values** | | | | |
| Serum creatinine, umol/L, Median (IQR) | 70 (64-77) | 76 (69-89) | 90 (75-114) | <.001 |
| Glucose, mmol/L, Mean ± SD | 5.74 ± 1.80 | 6.92 ± 2.84 | 7.56 ± 2.74 | <.001 |
| hs-cTnI, ng/L, Median (IQR) | 2 (1-3) | 3 (2-5) | 9 (6-16) | <.001 |
| Estimated glomerular filtration rate, mL/min/1.73 $m^2$, Median (IQR) | 94 (86-101) | 78 (66-86) | 64 (47-78) | <.001 |

**Table S2.** Comparison of baseline characteristics and crude outcomes by CCS (< 2, 2, > 2) for patients with a diagnosis of chest pain discharged home from the ED from Cohort2.

| Variable | CCS<2 | CCS=2 | CCS>2 | P-Value |
|---|---|---|---|---|
| | N=5,948 | N=3,879 | N=3,482 | |
| Age, Median (IQR) | 52 (46-59) | 61 (52-71) | 74 (63-82) | <.001 |
| Sex (F) | 3,545 (59.6%) | 2,111 (54.4%) | 1,658 (47.6%) | <.001 |
| **Past medical history, n (%)** | | | | |
| Arrhythmia | 84 (1.4%) | 178 (4.6%) | 477 (13.7%) | <.001 |
| Congestive heart failure | 105 (1.8%) | 185 (4.8%) | 718 (20.6%) | <.001 |
| Chronic obstructive pulmonary disorder | 664 (11.2%) | 668 (17.2%) | 916 (26.3%) | <.001 |
| Diabetes | 755 (12.7%) | 838 (21.6%) | 1,369 (39.3%) | <.001 |
| Hypertension | 2,116 (35.6%) | 2,163 (55.8%) | 2,773 (79.6%) | <.001 |
| Myocardial infarction | 151 (2.5%) | 181 (4.7%) | 425 (12.2%) | <.001 |
| Peripheral vascular disease | 62 (1.0%) | 104 (2.7%) | 446 (12.8%) | <.001 |
| Renal disease | <=5 | 8 (0.2%) | 146 (4.2%) | <.001 |
| Stroke | 26 (0.4%) | 25 (0.6%) | 71 (2.0%) | <.001 |
| Unstable angina | 68 (1.1%) | 128 (3.3%) | 262 (7.5%) | <.001 |
| Percutaneous coronary intervention | 180 (3.0%) | 223 (5.7%) | 352 (10.1%) | <.001 |
| Coronary artery bypass grafting | 26 (0.4%) | 50 (1.3%) | 100 (2.9%) | <.001 |
| Echocardiography | 2,083 (35.0%) | 1,810 (46.7%) | 2,266 (65.1%) | <.001 |
| Cardiac catheterization | 363 (6.1%) | 442 (11.4%) | 730 (21.0%) | <.001 |
| Permanent pacemaker | <=5 | 24 (0.6%) | 54 (1.6%) | <.001 |
| Implantable cardioverter-defibrillator | <=5 | 6 (0.2%) | 12 (0.3%) | <.001 |
| Stress testing | 1,871 (31.5%) | 1,623 (41.8%) | 1,663 (47.8%) | <.001 |
| **Physician follow-up 30 days following ED discharge, n (%)** | | | | |
| Cardiology | 1,738 (29.2%) | 1,480 (38.2%) | 1,535 (44.1%) | <.001 |
| General/Family physician | 2,134 (35.9%) | 1,318 (34.0%) | 1,244 (35.7%) | |
| None | 2,076 (34.9%) | 1,081 (27.9%) | 703 (20.2%) | |
| **All- cause mortality or hospitalization for MI/angina, n (%)** | | | | |
| 30 days | 17 (0.3%) | 33 (0.9%) | 84 (2.4%) | <.001 |
| 90 days | 23 (0.4%) | 43 (1.1%) | 161 (4.6%) | <.001 |
| 365 days | 71 (1.2%) | 120 (3.1%) | 377 (10.8%) | <.001 |
| **Laboratory Values** | | | | |
| Creatinine, umol/L, Median (IQR) | 66 (58-77) | 77 (68-89) | 89 (75-107) | <.001 |
| Glucose, mmol/L, Mean ± SD | 5.88 ± 1.84 | 6.68 ± 2.35 | 7.49 ± 2.94 | <.001 |
| hs-cTnT, ng/L, Median (IQR) | 5 (3-6) | 7 (5-13) | 14 (12-24) | <.001 |
| Estimated glomerular filtration rate, mL/min/1.73 $m^2$, Median (IQR) | 97 (91-104) | 81 (71-89) | 67 (51-80) | <.001 |

**Table S3.** Cox proportional hazard model estimates for CCS, all-cause mortality plus hospitalization for MI/UA for Cohort 1 with hs-cTnI.

| Time of outcome assessment | Model* | CCS category | Hazard ratio (95% CI) |
|---|---|---|---|
| 30 days | 1 | CCS < 2 | 0.25 (0.03-2.24) |
| | | CCS > 2 | 2.02 (0.61-6.72) |
| | 2 | CCS < 2 | 0.51 (0.05-4.91) |
| | | CCS > 2 | 1.24 (0.35-4.33) |
| | 3 | CCS < 2 | 0.57 (0.06-5.49) |
| | | CCS > 2 | 1.34 (0.38-4.76) |
| 90 days | 1 | CCS < 2 | 1.00 (0.29-3.45) |
| | | CCS > 2 | 4.29 (1.62-11.38) |
| | 2 | CCS < 2 | 1.85 (0.51-6.73) |
| | | CCS > 2 | 2.82 (1.03-7.71) |
| | 3 | CCS < 2 | 1.96 (0.53-7.21) |
| | | CCS > 2 | 2.48 (0.89-6.86) |
| 365 days | 1 | CCS < 2 | 0.42 (0.21-0.85) |
| | | CCS > 2 | 2.42 (1.53-3.84) |
| | 2 | CCS < 2 | 0.77 (0.37-1.61) |
| | | CCS > 2 | 1.55 (0.96-2.51) |
| | 3 | CCS < 2 | 0.83 (0.39-1.74) |
| | | CCS > 2 | 1.32 (0.81-2.16) |

* Model 1 unadjusted; Model 2 adjusted for age and sex; Model 3 adjusted for age, sex, prior history of arrhythmia, heart failure, diabetes, hypertension, MI, peripheral vascular disease, renal disease, stroke and UA. Reference group is CCS = 2.

**Table S4.** Cox proportional hazard model estimates for CCS, all-cause mortality plus hospitalization for MI/UA for Cohort 2 with hs-cTnT.

| Time of outcome assessment | Model* | CCS category | Hazard ratio (95% CI) |
|---|---|---|---|
| 30 days | 1 | CCS < 2 | 0.34 (0.19-0.60) |
| | | CCS > 2 | 2.86 (1.91-4.28) |
| | 2 | CCS < 2 | 0.37 (0.21-0.68) |
| | | CCS > 2 | 2.49 (1.62-3.84) |
| | 3 | CCS < 2 | 0.40 (0.22-0.72) |
| | | CCS > 2 | 2.14 (1.37-3.34) |
| 90 days | 1 | CCS < 2 | 0.35 (0.21-0.58) |
| | | CCS > 2 | 4.24 (3.03-5.93) |
| | 2 | CCS < 2 | 0.42 (0.25-0.70) |
| | | CCS > 2 | 3.37 (2.36-4.83) |
| | 3 | CCS < 2 | 0.43 (0.26-0.73) |
| | | CCS > 2 | 2.87 (1.99-4.16) |
| 1 year | 1 | CCS < 2 | 0.38 (0.28-0.51) |
| | | CCS > 2 | 3.65 (2.97-4.48) |
| | 2 | CCS < 2 | 0.55 (0.41-0.75) |
| | | CCS > 2 | 2.38 (1.91-2.96) |
| | 3 | CCS < 2 | 0.58 (0.43-0.78) |
| | | CCS > 2 | 1.89 (1.50-2.37) |

* Model 1 unadjusted; Model 2 adjusted for age and sex; Model 3 adjusted for age, sex, prior history of arrhythmia, heart failure, diabetes, hypertension, MI, peripheral vascular disease, renal disease, stroke and UA. Reference group is CCS =2.

**Table S5.** Cox proportional hazard model estimates (model 3) for the secondary outcome of MACE (defined as the composite of death/MI/UA/PCI or CABG) at 30 days, 90 days, and 365 days with CCS < 2 as the reference group for the study population (n=14,676).

| Time of outcome assessment | CCS category | Hazard ratio (95% CI)* |
|---|---|---|
| 30 days | CCS = 2 | 2.83 (1.79-4.47) |
| | CCS > 2 | 4.91 (3.04-7.91) |
| 90 days | CCS = 2 | 2.26 (1.58-3.22) |
| | CCS > 2 | 5.27 (3.69-7.54) |
| 365 days | CCS = 2 | 1.74 (1.38-2.21) |
| | CCS > 2 | 3.19 (2.51-4.07) |

* all p-values are <0.01.