**SUPPLEMENTARY MATERIAL**

**All analyses reported in the manuscript were rerun excluding all participants with recognized MI that did not meet electrocardiography criteria for prior Q-wave MI.**

**Table S1. Baseline characteristics of the study population (N=3940).**

|  |  |
| --- | --- |
|  | **History of myocardial infarction** |
|  | **Men (N=1823)** | **Women (N=2214)** |
|  | **No MI**(N=1488) | **Recognized MI**(N=144) | **Unrecognized MI** (N=115) |  **No MI**(N=2057) | **Recognized MI**(N=32) | **Unrecognized MI**(N=104) |
| **Age, years, mean (SD)** | 67.6 (6.9) | 70.2 (6.7) | 70.1 (7.2) |  | 68.2 (7.6) | 73.4 (8.9) | 71.8(7.9) |
| **Depressive symptoms at baseline, score, mean (SD)\*** | 4.3 (4.7) | 4.8 (5.4) | 4.3 (5.6) |  | 5.4 (5.9) | 7.3 (5.2) | 6.1 (5.9) |
| **Smoking status,** |  |  |  |  |  |  |  |
|  | Never smoker, N % | 132 (8.9) | 9 (6.4) | 7 (6.4) |  | 944 (48) | 16 (50) | 58 (56.9) |
|  | Past smoker, N % | 1041 (70.6) | 106 (71.6) | 78 (71.6) |  | 658 (33.5) | 13 (40.6) | 28 (27.5) |
|  | Current smoker, N % | 302 (20.5) | 28 (22) | 24 (22) |  | 363 (18.5) | 3 (9.4) | 16 (15.7) |
| **Alcohol consumption,** |  |  |  |  |  |  |  |
|  | Never consumer, N % | 82 (5.5) | 19 (13.2) | 3 (2.6) |  | 293 (14.5) | 10 (32.3) | 19 (19) |
|  | Past consumer, N % | 100 (6.8) | 16 (11.1) | 11 (9.6) |  | 345 (17.1) | 5 (16.1) | 24 (24) |
|  | Current consumer, N % | 1299 (87.7) | 109 (75.5) | 101 (87.8) |  | 1378 (68.4) | 16 (51.6) | 57 (57) |
| **MMSE, score, mean (SD)**  | 28.2 (1.2) | 28.2 (1.2) | 28.1 (1.4) |  | 28.1 (1.3) | 27.9 (1.1) | 28.2 (1.3) |
| **BMI, kg/m2, mean (SD)** | 25.8 (2.9) | 26.2 (3.1) | 26.3 (3.2) |  | 26.6 (3.9) | 27.8 (4.2) | 27.6 (4.5) |
| **Systolic blood pressure, mmHg, mean (SD)** | 139.8 (21.6) | 137.6 (21.3) | 146.3 (21) |  | 140 (21.9) | 132.4 (16.6) | 146.3 (23.4) |
| **Blood pressure lowering medication, N %** | 274 (19.4) | 50 (37.9) | 22 (20.2) |  | 521 (26.4) | 9 (33.3) | 30 (30.3) |
| **History of cardiovascular diseases, N %** | 80 (5.4) | 133 (92.4) | 99 (86.1) |  | 61 (3) | 31 (96.9) | 86 (82.7) |
| **History of Stroke, N %**  | 39 (2.6) | 7 (4.9) | 7 (6.1) |  | 32 (1.6) | 2 (6.2) | 3 (2.9) |
| **History of CABG , N %**  | 36 (2.5) | 38 (27.5) | 0 (0) |  | 9 (0.4)) | 5 (15.6) | 0 (0) |
| **History of PCI, N %** | 10 (0.7) | 7 (5) | 0 (0) |  | 6 (0.3) | 2 (6.2) | 1 (1) |
| **Diabetes mellitus, N %** | 121 (8.1) | 24 (16.7) | 17 (16.5) |  | 162 (7.9) | 4 (12.5) | 11 (10.6) |
| **Highest education attained,** |  |  |  |  |  |  |  |
|  | Low education, N % | 282 (19) | 36 (25) | 26 (23.2) |  | 729 (35.5) | 16 (50) | 35 (34) |
|  | Intermediate education, N % | 935 (63) | 87 (60.4) | 67 (59.8) |  | 1209 (58.9) | 18 (46.2) | 61 (59.2) |
|  | High education, N % | 268 (18) | 21 (14.6) | 19 (17) |  | 113 (5.5) | 0 (0) | 7 (6.8) |
| **Marital status,** |  |  |  |  |  |  |  |
|  | Never married or divorced, N % | 57 (4.6) | 6 (5.7) | 6 (7) |  | 249 (14.3) | 3 (12.5) | 7 (8.1) |
|  | Married or living together, N % | 1055 (84.7) | 89 (84.8) | 66 (76.7) |  | 970 (55.7) | 7 (29.2) | 41 (47.7) |
|  | Widowed, N % | 133 (10.7) | 10 (9.5) | 14 (16.3) |  | 522 (30) | 14 (58.3) | 38 (44.2) |

Table presents complete data, missing values are not imputed here.

\*CES-D/HADS-D z-score.

**Table S2. Recognized and unrecognized MI and all-cause mortality risk with**

**Cox regression (N=3940).**

|  |  |
| --- | --- |
|  | **All-cause mortality** |
|  | **HR (95% CI)** | **p-value** |
| **Men (n=1747)** |  |  |
| **Recognized MI (n=144)** |  |  |
| Multivariate adjusted\* | 1.99 (1.64;2.42) | <0.001 |
| **Unrecognized MI (n=115)** |  |  |
| Multivariate adjusted\* | 1.59 (1.27;1.98) | <0.001 |
|  |  |  |
| **Women (n=2193)** |  |  |
| **Recognized MI (n=32)** |  |  |
| Multivariate adjusted\* | 1.97 (1.32;2.94) | 0.001 |
| **Unrecognized MI (n=104)** |  |  |
| Multivariate adjusted\* | 1.00 (0.77;1.30) | 0.97 |

2148 (1087 men) of 3940 persons died during 55,170 person-years of follow-up.

\*Multivariate adjusted: additionally adjusted for age, level of education,

smoking status, alcohol consumption, history of stroke, diabetes mellitus and systolic blood pressure.

**Table S3. The longitudinal association of recognized or unrecognized MI with depressive symptoms in men (N=1747).**

|  |  |  |
| --- | --- | --- |
|  |  | **Depressive symptoms** |
|  |  | **First assessment**§(n=1228) |  | **Second assessment**§(n=1073) | **Combined analysis**(n=x, with 2486 observations) |
| **Exposure** | **n** | **B (95% CI)** | **p-value** | **n** | **B (95% CI)** | **p-value** | **B (95% CI)** | **p-value** |
| **Recognized MI**  |  |  |  |  |  |
| Adjusted for age and baseline depressive symptoms\* | 102 | 1.25 (0.16;2.34) | 0.024 | 61 | 1.18 (-0.35;2.7) | 0.13 | 1.17 (-0.23;2.56) | 0.10 |
| Multivariate adjusted\*\* | 102 | 1.38 (0.30;2.47) | 0.013 | 61 | 1.11 (-0.41;2.63) | 0.15 | 1.23 (-0.16;2.61) | 0.08 |
|  |  |  |  |  |  |  |  |  |
| **Unrecognized MI**  |  |  |  |  |  |
| Adjusted for age and baseline depressive symptoms\* | 84 | 0.85 (-0.33;2.04) | 0.16 | 51 | 0.50 (-1.18;2.18) | 0.56 | 0.62 (-0.44;1.67) | 0.25 |
| Multivariate adjusted\*\* | 84 | 0.79 (-0.40;1.97) | 0.19 | 51 | 0.54 (-1.14;2.21) | 0.53 | 0.55 (-0.51;1.62) | 0.31 |

Analysis were performed with linear regression and generalized estimating equations.

§ CES-D mean score (SD); **First assessment**: Recognized MI 4.6 (8.9), Unrecognized MI 3.8 (6.5) and No MI 2.9 (5.3); **Second assessment:** Recognized MI 6.2 (7.7), Unrecognized MI 5.4 (5.9) and No MI 5.1 (6.3)

\*Model adjusted for age and baseline depression (corrected for baseline depressive symptoms);

\*\*Multivariate adjusted: additionally adjusted for level of education, marital status, body mass index, smoking status, alcohol consumption, and history of stroke, diabetes mellitus and systolic blood pressure.

**Table S4. The longitudinal association of recognized or unrecognized MI with depressive symptoms in women (N=2193).**

|  |  |  |
| --- | --- | --- |
|  |  | **Depressive symptoms** |
|  |  | **First assessment**§(n=1819) |  | **Second assessment**§(n=1498) | **Combined analysis**(n=x, with 3317 observations) |
| **Exposure** | **n** | **B (95% CI)** | **p-value** | **n** | **B (95% CI)** | **p-value** | **B (95% CI)** | **p-value** |
| **Recognized MI**  |  |  |  |  |  |
| Adjusted for age and baseline depressive symptoms\* | 24 | 0.15 (-2.61;2.91) | 0.92 | 11 | 3.28 (-1.21;7.78) | 0.15 | 0.45 (-2.55;3.44) | 0.77 |
| Multivariate adjusted\*\* | 24 | -0.18 (-2.95;2.58) | 0.90 | 11 | 3.80 (-0.78;8.38) | 0.10 | 0.37 (-2.60;3.34) | 0.81 |
|  |  |  |  |  |  |  |  |  |
| **Unrecognized MI**  |  |  |  |  |  |
| Adjusted for age and baseline depressive symptoms\* | 84 | 0.12 (-1.38;1.62) | 0.88 | 62 | 0.57 (-1.37;2.50) | 0.57 | 0.23 (-1.18;1.64) | 0.75 |
| Multivariate adjusted\*\* | 84 | -0.02 (-1.52;1.48) | 0.98 | 62 | 0.44 (-1.48;2.63) | 0.65 | 0.14 (-1.28;1.55) | 0.85 |

Analysis were performed with linear regression and generalized estimating equations.

§ CES-D mean score (SD); **First assessment**: Recognized MI 6.8 (9.6), Unrecognized MI 5.9 (8.2) and No MI 4.9 (7.2); **Second assessment:** Recognized MI 11.2 (8.7),

 Unrecognized MI 9.1 (8.4) and No MI 7.6 (8.3)

\*Model adjusted for age and baseline depression (corrected for baseline depressive symptoms);

\*\*Multivariate adjusted: additionally adjusted for level of education, marital status, body mass index, smoking status, alcohol consumption, and history of stroke, diabetes

 mellitus and systolic blood pressure.