**Supplemental table 1. Patient characteristics before and after propensity score matching by smoking status (current smoking vs. nonsmoking)**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Characteristics** | **Before matching** | | | **After matching** | | |
| Nonsmoking  (n=5226) | Current smoking (n=1046) | SMD | Nonsmoking  (n=538) | Current smoking (n=538) | SMD |
| Demographics |  |  |  |  |  |  |
| Age, year, mean (SD) | 56.1 (12.4) | 51.8 (10.5) | 0.368 | 51.6 (13.8) | 52.5 (11.1) | 0.073 |
| Female, n (%) | 4204 (80.4) | 65 (6.2) | 2.260 | 56 (10.4) | 65 (12.1) | 0.053 |
| Alcohol abuse, n (%) | 308 (5.9) | 721 (69.0) | 1.718 | 202 (37.5) | 214 (39.8) | 0.046 |
| Medical history, n (%) |  |  |  |  |  |  |
| Hypertension | 1521 (29.1) | 232 (22.2) | 0.159 | 125 (23.2) | 119 (22.1) | 0.027 |
| Diabetes | 316 (6.0) | 32 (3.1) | 0.144 | 15 (2.8) | 13 (2.4) | 0.023 |
| COPD | 303 (5.8) | 77 (7.4) | 0.063 | 41 (7.6) | 39 (7.2) | 0.014 |
| Coronary heart disease | 169 (3.2) | 27 (2.6) | 0.039 | 15 (2.8) | 19 (3.5) | 0.043 |
| Chronic renal failure | 23 (0.4) | 5 (0.5) | 0.006 | 4 (0.7) | 3 (0.6) | 0.023 |
| Aneurysm characteristics |  |  |  |  |  |  |
| Anterior location, n (%) | 4361 (83.4) | 877 (83.8) | 0.121 | 451 (83.8) | 467 (86.8) | 0.094 |
| Size of aneurysm, cm, mean (SD) | 0.40 (0.60) | 0.41 (0.61) | 0.018 | 0.42 (0.69) | 0.36 (0.59) | 0.093 |
| Hunt & Hess grade, n (%) |  |  |  |  |  |  |
| I | 607 (11.6) | 157 (15.0) | 0.144 | 78 (14.5) | 78 (14.5) | 0.089 |
| II | 2468 (47.2) | 482 (46.1) | 255 (47.4) | 250 (46.5) |
| III | 1391 (26.6) | 233 (22.3) | 112 (20.8) | 129 (24.0) |
| IV | 637 (12.2) | 144 (13.8) | 77 (14.3) | 68 (12.6) |
| V | 121 (2.3) | 30 (2.9) | 16 (3.0) | 13 (2.4) |
| Fisher grade, n (%) |  |  |  |  |  |  |
| I | 177 (4.8) | 38 (5.5) | 0.115 | 19 (3.5) | 16 (3.0) | 0.084 |
| II | 707 (19.2) | 134 (19.4) | 76 (14.1) | 75 (13.9) |
| III | 550 (15.0) | 119 (17.3) | 61 (11.3) | 62 (11.5) |
| IV | 2241 (61.0) | 398 (57.8) | 212 (39.4) | 196 (36.4) |
| External ventricular drain, n (%) | 120 (2.3) | 14 (1.3) | 0.052 | 11 (2.0) | 10 (1.9) | 0.013 |
| Treatment of aneurysms, n (%) |  |  |  |  |  |  |
| clip | 3213 (61.5) | 632 (60.4) | 0.025 | 334 (62.1) | 346 (64.3) | 0.055 |
| coil | 806 (15.4) | 162 (15.5) | 79 (14.7) | 79 (14.7) |
| No treatment | 1207 (23.1) | 252 (24.1) | 125 (23.2) | 113 (21.0) |

SMD: standardized mean difference; COPD: chronic obstructive pulmonary disease; EVD: external ventricular drainage

**Supplemental table 2. Patient characteristics before and after propensity score matching by smoking status (former smoking vs. nonsmoking)**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Characteristics** | **Before matching** | | | **After matching** | | |
| Nonsmoking  (n=5226) | Former smoking (n=306) | SMD | Nonsmoking  (n=304) | Former smoking (n=304) | SMD |
| Demographics |  |  |  |  |  |  |
| Age, year, mean (SD) | 56.05 (12.41) | 56.58 (12.59) | 0.042 | 56.62 (11.70) | 56.42 (12.48) | 0.017 |
| Female, n (%) | 4204 (80.4) | 109 (35.6) | 1.018 | 115 (37.8) | 109 (35.9) | 0.041 |
| Alcohol abuse, n (%) | 308 (5.9) | 116 (37.9) | 0.767 | 119 (39.1) | 114 (37.5) | 0.034 |
| Medical history, n (%) |  |  |  |  |  |  |
| Hypertension | 1521 (29.1) | 92 (30.1) | 0.021 | 83 (27.3) | 91 (29.9) | 0.058 |
| Diabetes | 316 (6.0) | 19 (6.2) | 0.007 | 18 (5.9) | 19 (6.2) | 0.014 |
| COPD | 303 (5.8) | 29 (9.5) | 0.139 | 27 (8.9) | 29 (9.5) | 0.023 |
| Coronary heart disease | 169 (3.2) | 10 (3.3) | 0.002 | 9 (3.0) | 10 (3.3) | 0.019 |
| Chronic renal failure | 23 (0.4) | 23 (0.4) | 0.094 | 0 (0.0) | 0 (0.0) | <0.001 |
| Aneurysm characteristics |  |  |  |  |  |  |
| Anterior location, n (%) | 4361 (83.4) | 245 (80.1) | 0.059 | 247 (81.2) | 244 (80.3) | 0.035 |
| Size of aneurysm, cm, mean (SD) | 0.40 (0.60) | 0.42 (0.66) | 0.030 | 0.40 (0.72) | 0.42 (0.65) | 0.025 |
| Hunt & Hess grade, n (%) |  |  |  |  |  |  |
| I | 607 (11.6) | 40 (13.1) | 0.104 | 38 (12.5) | 40 (13.2) | 0.094 |
| II | 2468 (47.2) | 158 (51.6) | 162 (53.3) | 157 (51.6) |
| III | 1391 (26.6) | 73 (23.9) | 77 (25.3) | 72 (23.7) |
| IV | 637 (12.2) | 25 (8.2) | 19 (6.2) | 25 (8.2) |
| V | 121 (2.3) | 10 (3.3) | 8 (2.6) | 10 (3.3) |
| Fisher grade, n (%) |  |  |  |  |  |  |
| I | 177 (4.8) | 6 (3.1) | 0.142 | 10 (3.3) | 6 (2.0) | 0.095 |
| II | 707 (19.2) | 42 (21.8) | 38 (12.5) | 42 (13.8) |
| III | 550 (15.0) | 34 (17.6) | 37 (12.2) | 34 (11.2) |
| IV | 2241 (61.0) | 111 (57.5) | 111 (36.5) | 111 (36.5) |
| External ventricular drain, n (%) | 120 (2.3) | 6 (2.0) | 0.023 | 6 (2.0) | 6 (2.0) | <0.001 |
| Treatment of aneurysms, n (%) |  |  |  |  |  |  |
| clip | 3213 (61.5) | 185 (60.5) | 0.013 | 180 (59.2) | 184 (60.5) | 0.028 |
| coil | 806 (15.4) | 50 (16.3) | 51 (16.8) | 50 (16.4) |
| No treatment | 1207 (23.1) | 71 (23.2) | 73 (24.0) | 70 (23.0) |

SMD: standardized mean difference; COPD: chronic obstructive pulmonary disease; EVD: external ventricular drainage

**Supplemental table 3. Unadjusted and risk-adjusted analysis for mortality within the longest follow-up (current smoking vs. nonsmoking).**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Characteristics | Unadjusted | | Multivariable Regression Adjustment | |
| OR (95% CI) | p value | OR (95% CI) | p value |
| Demographics |  |  |  |  |
| Age, year, mean (SD) | **1.04 (1.03, 1.05)** | **<0.001** | 1.02 (1.01, 1.03) | **<0.001** |
| Female, n (%) | 0.87 (0.71, 1.05) | 0.142 |  |  |
| Alcohol abuse, n (%) | 1.03 (0.81, 1.32) | 0.818 |  |  |
| Medical history, n (%) |  |  |  |  |
| Hypertension | **1.02 (1.00, 1.51)** | **0.046** | 0.99 (0.77, 1.29) | 0.961 |
| Diabetes | **1.50 (1.05, 2.14)** | **0.026** | 1.15 (0.73, 1.81) | 0.539 |
| COPD | **1.97 (1.44, 2.69)** | **<0.001** | 1.50 (1.00, 2.24) | **0.051** |
| Coronary heart disease | 1.28 (0.73, 2.24) | 0.395 |  |  |
| Chronic renal failure | **5.46 (2.22, 13.42)** | **<0.001** | 4.04 (1.08, 15.14) | **0.039** |
| Aneurysm characteristics |  |  |  |  |
| Anterior location | 0.91 (0.74, 1.12) | 0.379 |  |  |
| Size of aneurysm | **1.50 (1.31, 1.71)** | **<0.001** | 1.51 (1.26, 1.80) | **<0.001** |
| Radiographic characteristics |  |  |  |  |
| Hunt & Hess grade 4-5 | **7.46 (5.89, 9.45)** | **<0.001** | 4.68 (3.53, 6.21) | **<0.001** |
| Fisher grade 3-4 | **1.83 (1.42, 2.35)** | **<0.001** | 1.40 (1.05, 1.85) | **0.021** |
| EVD | **4.66 (2.70, 8.04)** | **<0.001** | 4.56 (2.38, 8.75) | **<0.001** |
| Treatment (clip or coil) | **0.22 (0.18, 0.26)** | **<0.001** | 0.21 (0.16, 0.26) | **<0.001** |
| Current smoking | 0.99 (0.77, 1.26) | 0.910 | 0.95 (0.69, 1.30) | 0.726 |

COPD: chronic obstructive pulmonary disease; EVD: External ventricular drain

**Supplemental table 4. Unadjusted and risk-adjusted analysis for mortality within the longest follow-up (former smoking vs. nonsmoking).**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Characteristics | Unadjusted | | Multivariable Regression Adjustment | |
| OR (95% CI) | p value | OR (95% CI) | p value |
| Demographics |  |  |  |  |
| Age, year, mean (SD) | 1.03 (1.02, 1.04) | **<0.001** | 1.02 (1.01, 1.03) | **0.001** |
| Female, n (%) | 0.86 (0.68, 1.08) | 0.194 |  |  |
| Alcohol abuse, n (%) | 0.92 (0.64, 1.32) | 0.634 |  |  |
| Medical history, n (%) |  |  |  |  |
| Hypertension | 1.26 (1.01, 1.55) | **0.037** | 1.00 (0.76, 1.31) | 0.996 |
| Diabetes | 1.43 (0.98, 2.08) | **0.062** | 1.14 (0.71, 1.84) | 0.580 |
| COPD | 1.83 (1.31, 2.56) | **<0.001** | 1.51 (0.97, 2.34) | 0.068 |
| Coronary heart disease | 1.17 (0.65, 2.10) | 0.610 |  |  |
| Chronic renal failure | 4.74 (1.76, 12.80) | **0.002** | 2.99 (0.74, 12.09) | 0.125 |
| Aneurysm characteristics |  |  |  |  |
| Anterior location | 0.87 (0.69, 1.08) | 0.195 |  |  |
| Size of aneurysm | 1.55 (1.34, 1.80) | **<0.001** | 1.53 (1.26, 1.86) | **<0.001** |
| Radiographic characteristics |  |  |  |  |
| Hunt & Hess grade 4-5 | 8.32 (6.43, 10.77) | **<0.001** | 5.10 (3.75, 6.95) | **<0.001** |
| Fisher grade 3-4 | 1.72 (1.32, 2.24) | **<0.001** | 1.33 (0.99, 1.80) | 0.059 |
| EVD | 4.40 (2.58, 7.50) | **<0.001** | 4.73 (2.47, 9.03) | **<0.001** |
| Treatment (clip or coil) | 0.21 (0.17, 0.26) | **<0.001** | 0.20 (0.16, 0.26) | **<0.001** |
| Former smoking | 0.74 (0.48, 1.13) | 0.159 | 0.66 (0.38, 1.15) | 0.139 |

COPD: chronic obstructive pulmonary disease; EVD: External ventricular drain

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Outcomes | Unadjusted |  | Multivariable Regression Adjustment |  |
| OR (95% CI) | p value | OR (95% CI) | p value |
| Mortality in hospital | 1.00 (0.99, 1.01) | 0.353 | 1.00 (0.99, 1.01) | 0.644 |
| Mortality at 1 year | 1.00 (0.99, 1.01) | 0.892 | 1.00 (0.99, 1.01) | 0.319 |
| Mortality at 2 years | 1.00 (0.99, 1.01) | 0.081 | 1.00 (0.99, 1.01) | 0.678 |
| Mortality at 5 years | 1.00 (0.99, 1.01) | 0.333 | 1.00 (0.99, 1.01) | 0.541 |
| Mortality within the longest follow up | 1.00 (0.99, 1.01) | 0.370 | 1.00 (0.99, 1.01) | 0.382 |

**Supplemental table 5. Comparison of unadjusted and risk-adjusted outcomes by using smoking index as a continuous variable**

**Supplemental table 6A. Patient characteristics before and after propensity score matching by smoking status (mild smoking vs. nonsmoking)**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Characteristics | Before matching | | | After matching | | |
| nonsmoking (n=5226) | mild smoking (n=358) | SMD | nonsmoking  (n=281) | mild smoking (n=281) | SMD |
| Age | 56.05 (12.41) | 48.04 (11.70) | 0.664 | 50.52 (10.85) | 50.43 (10.88) | 0.008 |
| Female | 4204 (80.4) | 36 (10.1) | 2.000 | 38 (13.5) | 36 (12.8) | 0.021 |
| Alcohol abuse | 308 (5.9) | 234 (65.4) | 1.591 | 163 (58.0) | 161 (57.3) | 0.014 |
| Hypertension | 1521 (29.1) | 79 (22.1) | 0.162 | 64 (22.8) | 62 (22.1) | 0.017 |
| Diabetes | 316 (6.0) | 9 (2.5) | 0.175 | 6 (2.1) | 6 (2.1) | <0.001 |
| COPD | 303 (5.8) | 17 (4.7) | 0.047 | 14 (5.0) | 15 (5.3) | 0.016 |
| Coronary heart disease | 169 (3.2) | 9 (2.5) | 0.043 | 5 (1.8) | 5 (1.8) | <0.001 |
| Chronic renal failure | 23 (0.4) | 3 (0.8) | 0.050 | 0 (0.0) | 0 (0.0) | <0.001 |
| ACA | 4361 (83.4) | 300 (83.8) | 0.057 | 243 (86.5) | 243 (86.5) | <0.001 |
| Size of aneurysm | 0.40 (0.60) | 0.41 (0.64) | 0.018 | 0.42 (0.59) | 0.43 (0.66) | 0.029 |
| Hunt & Hess grade |  |  |  |  |  |  |
| I | 607 (11.6) | 50 (14.0) | 0.129 | 29 (10.3) | 34 (12.1) | 0.099 |
| II | 2468 (47.2) | 179 (50.0) | 145 (51.6) | 144 (51.2) |
| III | 1391 (26.6) | 78 (21.8) | 61 (21.7) | 59 (21.0) |
| IV | 637 (12.2) | 42 (11.7) | 35 (12.5) | 37 (13.2) |
| V | 121 (2.3) | 9 (2.5) | 11 (3.9) | 7 (2.5) |
| Fisher grade |  |  |  |  |  |  |
| I | 177 (4.8) | 19 (7.7) | 0.145 | 9 (4.3) | 13 (6.3) | 0.088 |
| II | 707 (19.2) | 49 (198) | 41 (19.7) | 43 (20.9) |
| III | 550 (15.0) | 46 (18.5) | 41 (19.7) | 37 (18.0) |
| IV | 2241 (61.0) | 134 (54.0) | 117 (56.3) | 113 (54.9) |
| EVD | 120 (2.3) | 4 (1.1) | 0.091 | 1 (0.4) | 2 (0.7) | 0.049 |
| Treatment |  |  |  |  |  |  |
| clip | 3213 (61.5) | 226 (63.1) | 0.036 | 187 (66.5) | 187 (66.5) | 0.038 |
| coil | 806 (15.4) | 54 (15.1) | 37 (13.2) | 40 (14.2) |
| No treatment | 1207 (23.1) | 78 (21.8) | 57 (20.3) | 54 (19.2) |

SMD: standardized mean difference; COPD: chronic obstructive pulmonary disease; EVD: external ventricular drainage; ACA: anterior circulation aneurysm

**Supplemental table 6B. Patient characteristics before and after propensity score matching by smoking status (moderate smoking vs. nonsmoking)**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Characteristics | Before matching | | | After matching | | |
| nonsmoking (n=5226) | moderate smoking (n=346) | SMD | nonsmoking  (n=291) | moderate smoking (n=291) | SMD |
| Age | 56.05 (12.41) | 51.01 (9.12) | 0.463 | 52.16 (12.32) | 51.08 (9.50) | 0.098 |
| Female | 4204 (80.4) | 12 (3.5) | 2.492 | 12 (4.1) | 12 (4.1) | <0.001 |
| Alcohol abuse | 308 (5.9) | 241 (69.7) | 1.746 | 185 (63.6) | 186 (63.9) | 0.007 |
| Hypertension | 1521 (29.1) | 70 (20.2) | 0.207 | 65 (22.3) | 58 (19.9) | 0.059 |
| Diabetes | 316 (6.0) | 10 (2.9) | 0.153 | 7 (2.4) | 7 (2.4) | <0.001 |
| COPD | 303 (5.8) | 15 (4.3) | 0.067 | 15 (5.2) | 14 (4.8) | 0.016 |
| Coronary heart disease | 169 (3.2) | 8 (2.3) | 0.056 | 9 (3.1) | 8 (2.7) | 0.020 |
| Chronic renal failure | 23 (0.4) | 2 (0.6) | 0.019 | 2 (0.7) | 1 (0.3) | 0.048 |
| ACA | 4361 (83.4) | 292 (84.4) | 0.191 | 243 (83.5) | 248 (85.2) | 0.079 |
| Size of aneurysm | 0.40 (0.60) | 0.42 (0.67) | 0.031 | 0.43 (0.67) | 0.44 (0.70) | 0.021 |
| Hunt & Hess grade |  |  |  |  |  |  |
| I | 607 (11.6) | 59 (17.1) | 0.187 | 42 (14.4) | 40 (13.7) | 0.048 |
| II | 2468 (47.2) | 156 (45.1) | 134 (46.0) | 134 (46.0) |
| III | 1391 (26.6) | 75 (21.7) | 63 (21.6) | 67 (23.0) |
| IV | 637 (12.2) | 46 (13.3) | 43 (14.8) | 40 (13.7) |
| V | 121 (2.3) | 10 (2.9) | 9 (3.1) | 10 (3.4) |
| Fisher grade |  |  |  |  |  |  |
| I | 177 (4.8) | 12 (5.2) | 0.118 | 8 (4.0) | 8 (3.9) | 0.043 |
| II | 707 (19.2) | 49 (21.3) | 44 (22.1) | 45 (22.1) |
| III | 550 (15.0) | 40 (17.4) | 36 (18.1) | 35 (17.2) |
| IV | 2241 (61.0) | 129 (56.1) | 111 (55.8) | 116 (56.9) |
| EVD | 120 (2.3) | 7 (2.0) | 0.019 | 8 (2.7) | 7 (2.4) | 0.022 |
| Treatment |  |  |  |  |  |  |
| clip | 3213 (61.5) | 204 (59.0) | 0.076 | 173 (59.5) | 173 (59.5) | 0.043 |
| coil | 806 (15.4) | 63 (18.2) | 54 (18.6) | 50 (17.2) |
| No treatment | 1207 (23.1) | 79 (22.8) | 64 (22.0) | 68 (23.4) |

SMD: standardized mean difference; COPD: chronic obstructive pulmonary disease; EVD: external ventricular drainage; ACA: anterior circulation aneurysm

**Supplemental table 6C. Patient characteristics before and after propensity score matching by smoking status (severe smoking vs. nonsmoking)**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Characteristics | Before matching | | | After matching | | |
| nonsmoking (n=5226) | severe smoking (n=342) | SMD | nonsmoking  (n=280) | severe smoking (n=280) | SMD |
| Age | 56.05 (12.41) | 56.60 (8.47) | 0.051 | 55.67 (11.88) | 56.30 (8.58) | 0.061 |
| Female | 4204 (80.4) | 17 (5.0) | 2.360 | 14 (5.0) | 17 (6.1) | 0.047 |
| Alcohol abuse | 308 (5.9) | 246 (71.9) | 1.841 | 179 (63.9) | 184 (65.7) | 0.037 |
| Hypertension | 1521 (29.1) | 83 (24.3) | 0.109 | 73 (26.1) | 65 (23.2) | 0.066 |
| Diabetes | 316 (6.0) | 13 (3.8) | 0.104 | 6 (2.1) | 10 (3.6) | 0.086 |
| COPD | 303 (5.8) | 45 (13.2) | 0.253 | 31 (11.1) | 36 (12.9) | 0.055 |
| Coronary heart disease | 169 (3.2) | 10 (2.9) | 0.018 | 10 (3.6) | 9 (3.2) | 0.020 |
| Chronic renal failure | 23 (0.4) | 0 (0.0) | 0.094 | 0 (0.0) | 0 (0.0) | <0.001 |
| ACA | 4361 (83.4) | 285 (83.3) | 0.121 | 242 (86.4) | 237 (84.6) | 0.066 |
| Size of aneurysm | 0.40 (0.60) | 0.40 (0.53) | 0.003 | 0.46 (0.85) | 0.43 (0.54) | 0.040 |
| Hunt & Hess grade |  |  |  |  |  |  |
| I | 607 (11.6) | 48 (14.0) | 0.170 | 38 (13.6) | 34 (12.1) | 0.087 |
| II | 2468 (47.2) | 147 (43.0) | 122 (43.6) | 121 (43.2) |
| III | 1391 (26.6) | 80 (23.4) | 74 (26.4) | 74 (26.4) |
| IV | 637 (12.2) | 56 (16.4) | 36 (12.9) | 43 (15.4) |
| V | 121 (2.3) | 11 (3.2) | 10 (3.6) | 8 (2.9) |
| Fisher grade |  |  |  |  |  |  |
| I | 177 (4.8) | 7 (3.3) | 0.200 | 7 (3.8) | 7 (3.7) | 0.044 |
| II | 707 (19.2) | 36 (17.1) | 37 (19.9) | 35 (18.4) |
| III | 550 (15.0) | 33 (15.6) | 31 (16.7) | 32 (16.8) |
| IV | 2241 (61.0) | 135 (64.0) | 111 (59.7) | 116 (61.1) |
| EVD | 120 (2.3) | 3 (0.9) | 0.114 | 2 (0.7) | 3 (1.1) | 0.038 |
| Treatment |  |  |  |  |  |  |
| clip | 3213 (61.5) | 202 (59.1) | 0.115 | 177 (63.2) | 173 (61.8) | 0.095 |
| coil | 806 (15.4) | 45 (13.2) | 40 (14.3) | 34 (12.1) |
| No treatment | 1207 (23.1) | 95 (27.8) | 63 (22.5) | 73 (26.1) |

SMD: standardized mean difference; COPD: chronic obstructive pulmonary disease; EVD: external ventricular drainage; ACA: anterior circulation aneurysm

**Supplemental table 7. Unadjusted and adjusted associations between smoking index categories and mortality**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Outcomes | Smoking Index  (events/total) | Unadjusted |  | Multivariable Regression Adjustment |  | Propensity Score Adjustment |
| OR (95% CI) | p trend | aOR (95% CI) | p trend | aOR (95% CI) |
| Mortality in hospital | Nonsmoking (428/5226) | 1 [Reference] | 0.393 | 1 [Reference] |  | 1 [Reference] |
|  | 1st Quartile (31/341) | 1.12 (0.77, 1.64) |  | 1.05 (0.66, 1.66) | 0.070 | 1.27 (0.73, 2.22) |
|  | 2nd Quartile (13/189) | 0.83 (0.47, 1.47) |  | 0.61 (0.31, 1.18) |  | 0.59 (0.28, 1.20) |
|  | 3rd Quartile (23/314) | 0.89 (0.57, 1.37) |  | 0.68 (0.41, 1.13) |  | **0.57 (0.32, 0.99)** |
|  | 4th Quartile (14/202) | 0.84 (0.48, 1.45) |  | 0.74 (0.39, 1.38) |  | 0.68 (0.33, 1.37) |
| Mortality at 1 year | Nonsmoking (267/2240) | 1 [Reference] |  | 1 [Reference] |  | 1 [Reference] |
|  | 1st Quartile (20/139) | 1.24 (0.76, 2.03) | 0.505 | 0.90 (0.48, 1.68) | 0.103 | 1.40 (0.67, 2.95) |
|  | 2nd Quartile (13/94) | 1.19 (0.65, 2.16) |  | 0.85 (0.41, 1.77) |  | 0.66 (0.29, 1.53) |
|  | 3rd Quartile (16/134) | 1.00 (0.59, 1.71) |  | 0.55 (0.28, 1.07) |  | 0.62 (0.28, 1.33) |
|  | 4th Quartile (12/86) | 1.20 (0.64, 2.23) |  | 0.70 (0.32, 1.51) |  | 0.90 (0.38, 2.11) |
| Mortality at 2 years | Nonsmoking (391/2240) | 1 [Reference] |  | 1 [Reference] |  | 1 [Reference] |
|  | 1st Quartile (23/139) | 0.94 (0.59, 1.49) | 0.833 | 0.93 (0.54, 1.58) | 0.454 | 0.92 (0.48, 1.75) |
|  | 2nd Quartile (16/94) | 0.97 (0.56, 1.68) |  | 0.99 (0.51, 1.90) |  | 0.72 (0.33, 1.56) |
|  | 3rd Quartile (20/134) | 0.83 (0.51, 1.35) |  | 0.59 (0.34, 1.03) |  | 0.54 (0.26, 1.09) |
|  | 4th Quartile (19/86) | 1.34 (0.80, 2.26) |  | 1.21 (0.66, 2.19) |  | 1.43 (0.67, 3.15) |
| Mortality at 5 years | Nonsmoking (478/2240) | 1 [Reference] |  | 1 [Reference] |  | 1 [Reference] |
|  | 1st Quartile (32/139) | 1.10 (0.73, 1.66) | 0.744 | 1.25 (0.78, 2.01) | 0.249 | 1.16 (0.65, 2.06) |
|  | 2nd Quartile (18/94) | 0.87 (0.52, 1.47) |  | 0.93 (0.50, 1.73) |  | 0.71 (0.34, 1.50) |
|  | 3rd Quartile (23/134) | 0.76 (0.48, 1.21) |  | **0.56 (0.33, 0.95)** |  | 0.60 (0.30, 1.17) |
|  | 4th Quartile (21/86) | 1.19 (0.72, 1.97) |  | 1.04 (0.58, 1.85) |  | 1.29 (0.63, 2.70) |
| Mortality within the longest follow up | Nonsmoking (490/2240) | 1 [Reference] |  | 1 [Reference] |  | 1 [Reference] |
|  | 1st Quartile (33/139) | 1.11 (0.74, 1.66) | 0.841 | 1.30 (0.82, 2.07) | 0.356 | 1.16 (0.65, 2.06) |
|  | 2nd Quartile (19/94) | 0.91 (0.54, 1.51) |  | 0.99 (0.54, 1.83) |  | 0.76 (0.36, 1.59) |
|  | 3rd Quartile (25/134) | 0.82 (0.52, 1.28) |  | 0.63 (0.37, 1.05) |  | 0.65 (0.33, 1.24) |
|  | 4th Quartile (21/86) | 1.15 (0.70, 1.91) |  | 1.00 (0.56, 1.78) |  | 1.20 (0.59, 2.48) |

aOR: adjusted odds ratio

**Supplemental figure 1. Subgroup analysis of association between smoking status and mortality after propensity score matching. A. current smoker versus non-smokers; B. former smokers versus non-smokers. CI: confidence interval.**

