SUPPLEMENTARY MATERIAL

# Supplementary Table . Results of multivariable analysis for occurrence of atrial fibrillation

|  |  |  |  |
| --- | --- | --- | --- |
| Group | Adjusted HR (95% CI) | p-value | p for trend |
| **Age, years** | 1.08 (1.08, 1.08) | <0.001 | 　 |
| **Sex** | 　 | 　 | 　 |
| Men | 1 (reference) | 　 | 　 |
| Women | 0.66 (0.64, 0.68) | <0.001 | 　 |
| **BMI (kg/m2)** | 1.00 (1.00, 1.01) | <0.001 |  |
| **Household income** | 　 | 　 | <0.001 |
| Q1, lowest | 1 (reference) | 　 | 　 |
| Q2 | 0.99 (0.94, 1.02) | 0.353 | 　 |
| Q3 | 1.03 (0.99, 1.07) | 0.187 | 　 |
| Q4, highest | 1.07 (1.03, 1.12) | 0.002 | 　 |
| **Smoking status** | 　 | 　 | <0.001 |
| None | 1 (reference) | 　 | 　 |
| Former | 1.08 (1.04, 1.12) | <0.001 | 　 |
| Current | 1.10 (1.06, 1.16) | <0.001 | 　 |
| **Alcohol consumption****(days/week)** | 　 | 　 | <0.001 |
| <1 | 1 (reference) | 　 | 　 |
| 1-2 | 0.93 (0.79, 1.09) | 0.378 | 　 |
| ≥3 | 1.05 (0.89, 1.23) | 0.593 | 　 |
| **Regular physical activity****(days/week)** | 　 | 　 | 　 |
| <3 | 1 (reference) | 　 | 　 |
| ≥3 | 0.94 (0.92, 0.97) | 0.008 | 　 |
| **Comorbidities** | 　 | 　 | 　 |
| Hypertension | 1.50 (1.46, 1.54) | <0.001 | 　 |
| Diabetes mellitus | 1.07 (1.03, 1.10) | <0.001 | 　 |
| Dyslipidemia | 1.01 (0.98, 1.03) | 0.646 | 　 |
| Cancer | 1.03 (0.96, 1.10) | 0.453 | 　 |
| Renal disease | 1.21 (1.11, 1.31) | <0.001 | 　 |
| **Charlson Comorbidity Index** | 　 | 　 | <0.001 |
| 0 | 1 (reference) | 　 | 　 |
| 1 | 1.25 (1.21, 1.29) | <0.001 | 　 |
| ≥2 | 1.53 (1.48, 1.59) | <0.001 | 　 |
| **Study group** | 　 | 　 | 0.032 |
| Periodontal disease-free | 1 (reference) | 　 | 　 |
| Periodontal disease-recovered | 1.00 (0.97, 1.04) | 0.998 | 　 |
| Periodontal disease-developed | 1.03 (1.01, 1.06) | 0.041 | 　 |
| Periodontal disease-chronic | 1.04 (1.01, 1.07) | 0.019 | 　 |

\* Adjusted for age, sex, body mass index, household income, smoking status, alcohol consumption, regular physical activity, hypertension, diabetes mellitus, dyslipidemia, cancer, renal disease, and Charlson Comorbidity Index. HR, hazard ratio; CI, confidence interval;

# Supplementary Table 2. Results of pairwise comparison of the association between change in periodontal disease status and risk of incident atrial fibrillation

|  |  |  |  |
| --- | --- | --- | --- |
| Group1 | Group2 | p-value(Raw) | p-value(Bonferroni) |
| Periodontal disease-free | Periodontal disease-recovered | <0.001 | <0.001 |
| Periodontal disease-free | Periodontal disease-developed | <0.001 | <0.001 |
| Periodontal disease-free | Periodontal disease-chronic | <0.001 | <0.001 |
| Periodontal disease-recovered | Periodontal disease-developed | 0.138 | 0.825 |
| Periodontal disease-recovered | Periodontal disease-chronic | <0.001 | <0.001 |
| Periodontal disease-developed | Periodontal disease-chronic | <0.001 | <0.001 |

# Supplementary Table 3. The association between change in periodontal disease status and incident atrial fibrillation risk (landmark analysis)

|  |  |  |  |
| --- | --- | --- | --- |
| Group | Adjusted HR (95% CI) | p-value | p for trend |
|  | 　 |  | 0.016 |
| Periodontal disease-free | 1 (reference) |  |  |
| Periodontal disease-recovered | 1.00 (0.97, 1.04) | 0.872 |  |
| Periodontal disease-developed | 1.04 (1.01, 1.06) | 0.022 |  |
| Periodontal disease-chronic | 1.04 (1.01, 1.08) | 0.010 |  |

\* Adjusted for age, sex, body mass index, household income, smoking status, alcohol consumption, regular physical activity, hypertension, diabetes mellitus, dyslipidemia, cancer, renal disease, and Charlson Comorbidity Index. HR, hazard ratio; CI, confidence interval;