**Supplementary Table 6.** Baseline characteristics by $PM_{2.5}$ quartiles (n=26,340)

| Variable | 1st quartile | 2nd quartile | 3rd quartile | 4th quartile | *P* |
|---|---|---|---|---|---|
| Age (yr) | 67.0±12.8 | 66.7±13.1 | 66.6±12.8 | 66.7±12.8 | 0.213 |
| Male sex | 4,254 (64.6) | 4,211 (63.9) | 4,153 (63.1) | 4,136 (62.8) | 0.123 |
| Hypertension | 4,255 (64.6) | 4,207 (63.9) | 4,122 (62.6) | 4,229 (64.2) | 0.088 |
| Diabetes mellitus | 2,099 (31.9) | 2,069 (31.4) | 1,983 (30.1) | 2,028 (30.8) | 0.144 |
| Dyslipidemia | 2,143 (32.5) | 2,053 (31.2) | 1,919 (29.1) | 1,901 (28.9) | <0.001 |
| Atrial fibrillation | 1,043 (15.8) | 1,058 (16.1) | 1,143 (17.4) | 1,095 (16.6) | 0.087 |
| Coronary heart disease | 585 (8.9) | 586 (8.9) | 506 (7.7) | 520 (7.9) | 0.014 |
| Current smoker | 1,806 (27.4) | 1,742 (26.5) | 1,683 (25.6) | 1,646 (25.0) | 0.009 |
| Previous stroke or TIA | 1,022 (15.5) | 998 (15.2) | 1,095 (16.6) | 1,098 (16.7) | 0.032 |
| Onset-to-arrival (hr) | 9.4 (2.3–34.2) | 9.5 (2.3–35.9) | 10.1 (2.3–38.0) | 9.6 (2.3–35.5) | 0.612 |
| NIHSS at admission | 2.0 (1.0–5.0) | 2.0 (1.0–5.0) | 2.0 (1.0–5.0) | 2.0 (1.0–5.0) | 0.148 |
| Stroke subtype (TOAST) | | | | | 0.035 |
| Large artery atherosclerosis | 2,314 (35.1) | 2,291 (34.8) | 2,267 (34.4) | 2,206 (33.5) | |
| Small vessel occlusion | 1,490 (22.6) | 1,535 (23.3) | 1,518 (23.1) | 1,567 (23.8) | |
| Cardioembolism | 1,073 (16.3) | 1,105 (16.8) | 1,146 (17.4) | 1,220 (18.5) | |
| Other determined | 216 (3.3) | 214 (3.2) | 204 (3.1) | 225 (3.4) | |
| Undetermined | 1,492 (22.7) | 1,440 (21.9) | 1,450 (22.0) | 1,367 (20.8) | |
| Symptomatic steno-occlusion of the relevant artery | 2,462 (37.4) | 2,479 (37.6) | 2,575 (39.1) | 2,499 (37.9) | 0.187 |
| Discharge antiplatelet | 5,525 (83.9) | 5,429 (82.4) | 5,359 (81.4) | 5,390 (81.9) | <0.001 |
| Discharge anticoagulant | 1,167 (17.7) | 1,190 (18.1) | 1,267 (19.2) | 1,232 (18.7) | 0.113 |
| Statin at discharge | 6,242 (94.8) | 6,052 (91.9) | 6,061 (92.0) | 6,050 (91.9) | <0.001 |
| IVT | 708 (10.8) | 744 (11.3) | 731 (11.1) | 745 (11.3) | 0.713 |
| EVT | 419 (6.4) | 442 (6.7) | 436 (6.6) | 384 (5.8) | 0.159 |
| Initial fasting glucose (mg/dL) | 144.3±62.1 | 143.7±62.2 | 143.2±62.6 | 143.0±61.4 | 0.651 |
| Initial SBP (mm Hg) | 148.3±27.1 | 148.4±27.3 | 149.0±27.3 | 148.1±27.0 | 0.254 |
| GRDP per capita (thousands KRW) | 36,374±31,732 | 35,353±32,551 | 35,759±33,075 | 33,792±28,090 | <0.001 |
| Marriage rate (%) | 56.4±3.5 | 56.2±3.4 | 56.4±3.5 | 56.4±3.5 | 0.013 |
| High education rate (%) | 47.7±10.6 | 48.2±10.7 | 48.3±10.9 | 48.2±11.2 | 0.008 |
| Working population rate (%) | 58.1±3.6 | 58.1±3.5 | 58.3±3.4 | 58.4±3.3 | <0.001 |
| Green area proportion (%) | 67.2±18.9 | 66.6±18.8 | 67.4±18.5 | 68.1±18.5 | <0.001 |
| Mean temperature (°C) | 20.6±4.6 | 16.0±6.8 | 10.6±7.2 | 5.3±4.6 | <0.001 |
| Mean relative humidity (%) | 75.5±5.7 | 69.8±5.8 | 66.1±5.6 | 61.5±4.4 | <0.001 |
| Mean atmospheric pressure (hPa) | 1,000.9±4.6 | 1,004.0±5.9 | 1,007.0±5.5 | 1,009.6±3.6 | <0.001 |
| mRS at discharge | 1.0 (1.0–2.0) | 1.0 (1.0–2.0) | 1.0 (1.0–2.0) | 1.0 (1.0–2.0) | 0.035 |
| Discharge mRS 0–1 | 3,639 (55.3) | 3,787 (57.5) | 3,613 (54.9) | 3,623 (55.0) | 0.006 |

Values are mean±SD, n (%), or median (IQR). *P*-values from chi-squared test for categorical variables and ANOVA or Kruskal-Wallis test for continuous variables.

PM, particulate matter; TIA, transient ischemic attack; NIHSS, National Institutes of Health Stroke Scale; TOAST, Trial of Org 10172 in Acute Stroke Treatment; IVT, intravenous thrombolysis; EVT, endovascular thrombectomy; SBP, systolic blood pressure; GRDP, gross regional domestic product; KRW, Korean won; mRS, modified Rankin Scale; SD, standard deviation; IQR, interquartile range; ANOVA, analysis of variance.


https://doi.org/10.5853/jos.2026.03265