Supplementary Table 5. Age-stratified annual trends in secondary prevention indicator attainment among recurrent ischemic stroke patients, Korean Stroke Registry 2018–2023

Characteristics	2018	2019	2020	2021	2022	2023	*P* for trend
Total	2,950	3,449	3,414	3,915	4,955	5,500	
19–49 yr	127	146	113	129	180	178	
50–64 yr	599	690	700	744	918	1,001	
≥65 yr	2,224	2,613	2,601	3,042	3,857	4,321	
HbA1c <7.0% (DM patients only*)							
19–49 yr (n=294)	67.4 (52.5–79.5)	79.2 (65.7–88.3)	78.6 (60.5–89.8)	69.0 (54.0–80.9)	66.2 (54.0–76.5)	54.4 (42.7–65.7)	0.480
50–64 yr (n=2,276)	64.6 (58.8–70.0)	59.7 (54.4–64.8)	54.4 (49.2–59.5)	55.3 (50.1–60.4)	57.5 (52.8–62.1)	59.0 (54.8–63.2)	0.316
≥65 yr (n=8,417)	62.7 (59.6–65.8)	60.6 (57.7–63.5)	64.9 (62.2–67.6)	63.2 (60.6–65.6)	62.8 (60.5–65.0)	63.2 (61.1–65.3)	0.704
LDL-C <70 mg/dL							
19–49 yr (n=873)	33.1 (25.5–41.6)	32.9 (25.8–40.9)	31.9 (24.0–40.9)	26.4 (19.5–34.6)	38.3 (31.5–45.6)	30.9 (24.6–38.0)	0.929
50–64 yr (n=4,652)	31.2 (27.6–35.0)	32.3 (28.9–35.9)	34.6 (31.1–38.2)	34.9 (31.6–38.4)	34.2 (31.2–37.3)	37.6 (34.6–40.6)	0.002
≥65 yr (n=18,658)	33.0 (31.1–35.0)	33.8 (32.0–35.6)	37.2 (35.3–39.1)	39.7 (38.0–41.5)	40.1 (38.5–41.6)	43.3 (41.8–44.8)	<0.001
Non-current smoking							
19–49 yr (n=873)	52.0 (43.3–60.5)	54.1 (46.0–62.0)	65.5 (56.3–73.6)	55.8 (47.2–64.1)	56.1 (48.8–63.2)	60.1 (52.8–67.0)	0.115
50–64 yr (n=4,652)	51.9 (47.9–55.9)	49.7 (46.0–53.4)	54.3 (50.6–57.9)	51.1 (47.5–54.7)	51.3 (48.1–54.5)	54.9 (51.8–58.0)	0.430
≥65 yr (n=18,658)	75.2 (73.3–76.9)	77.1 (75.4–78.6)	76.1 (74.4–77.7)	77.1 (75.6–78.5)	77.3 (76.0–78.6)	78.0 (76.8–79.2)	0.329
Obesity							
19–49 yr (n=873)	36.2 (27.9–44.6)	46.6 (38.5–54.7)	41.6 (32.9–50.8)	48.8 (40.2–57.5)	48.3 (41.0–55.6)	56.2 (48.8–63.3)	0.001
50–64 yr (n=4,652)	36.6 (32.7–40.4)	38.3 (34.6–41.9)	36.1 (32.6–39.7)	37.9 (34.4–41.4)	35.8 (32.7–38.9)	37.9 (34.9–40.9)	0.945
≥65 yr (n=18,658)	29.8 (27.9–31.7)	29.0 (27.3–30.7)	31.7 (29.9–33.5)	30.8 (29.1–32.4)	30.5 (29.1–32.0)	30.3 (29.0–31.7)	0.656
Normal weight							
19–49 yr (n=873)	61.4 (52.7–69.4)	50.0 (42.0–58.0)	46.9 (38.0–56.1)	47.3 (38.9–55.9)	44.4 (37.4–51.7)	41.6 (34.6–48.9)	<0.001
50–64 yr (n=4,652)	60.4 (56.5–64.3)	59.6 (55.9–63.2)	60.7 (57.0–64.3)	59.3 (55.7–62.7)	60.5 (57.3–63.6)	60.0 (57.0–63.0)	0.990
≥65 yr (n=18,658)	62.5 (60.5–64.5)	64.6 (62.7–66.4)	62.6 (60.7–64.4)	63.2 (61.5–64.9)	63.6 (62.0–65.1)	62.9 (61.5–64.4)	0.949
Underweight							
19–49 yr (n=873)	2.4 (0.3–5.0)	3.4 (0.5–6.4)	11.5 (6.8–18.7)	3.9 (0.6–7.2)	7.2 (3.4–11.0)	2.2 (0.9–5.6)	0.869
50–64 yr (n=4,652)	3.0 (1.6–4.4)	2.2 (1.1–3.3)	3.1 (1.9–4.4)	2.8 (1.6–4.0)	3.7 (2.5–4.9)	2.1 (1.4–3.2)	0.874
≥65 yr (n=18,658)	7.8 (6.7–8.9)	6.4 (5.5–7.4)	5.8 (4.9–6.7)	6.0 (5.2–6.9)	5.9 (5.2–6.7)	6.7 (6.0–7.5)	0.175
Any antithrombotic therapy (antiplatelet agent or anticoagulant†)							
19–49 yr (n=873)	69.3 (60.8–76.6)	74.0 (66.3–80.4)	80.5 (72.3–86.8)	77.5 (69.6–83.9)	79.4 (73.0–84.7)	72.5 (65.5–78.5)	0.337
50–64 yr (n=4,652)	74.8 (71.2–78.1)	78.1 (74.9–81.0)	77.7 (74.5–80.6)	76.9 (73.7–79.8)	75.1 (72.2–77.7)	76.9 (74.2–79.4)	0.559
≥65 yr (n=18,658)	74.8 (73.0–76.6)	81.4 (79.9–82.9)	81.1 (79.5–82.5)	82.6 (81.3–83.9)	80.8 (79.5–82.0)	80.2 (79.0–81.4)	0.015
Antiplatelet agent							
19–49 yr (n=873)	63.8 (55.1–71.6)	69.9 (62.0–76.7)	70.8 (61.8–78.4)	70.5 (62.2–77.7)	68.3 (61.2–74.7)	62.9 (55.6–69.7)	0.800
50–64 yr (n=4,652)	66.3 (62.4–69.9)	69.0 (65.4–72.3)	68.1 (64.6–71.5)	67.1 (63.6–70.4)	66.2 (63.1–69.2)	66.8 (63.9–69.7)	0.796
≥65 yr (n=18,658)	62.1 (60.1–64.1)	67.1 (65.3–68.9)	66.9 (65.1–68.7)	67.6 (65.9–69.2)	64.2 (62.7–65.7)	64.6 (63.2–66.0)	0.921
Anticoagulant							
19–49 yr (n=873)	7.9 (4.3–13.9)	6.2 (3.3–11.3)	12.4 (7.5–19.7)	8.5 (4.8–14.6)	11.7 (7.8–17.2)	11.8 (7.8–17.4)	0.051
50–64 yr (n=4,652)	11.2 (8.9–14.0)	12.3 (10.1–15.0)	12.1 (9.9–14.8)	12.1 (9.9–14.6)	11.8 (9.8–14.0)	12.6 (10.7–14.8)	0.438
≥65 yr (n=18,658)	16.9 (15.4–18.5)	17.7 (16.3–19.2)	17.9 (16.5–19.4)	18.5 (17.1–19.9)	20.8 (19.5–22.1)	19.7 (18.5–20.9)	<0.001

Data are presented as n or proportions (%) of patients achieving the prespecified risk-factor control indicators, with 95% confidence intervals shown in parentheses. Values are annual within-age-group proportions; no further age standardization was applied. *P* for trend: *P*-value from GEE logistic models with calendar year as continuous predictor.

HbA1c, glycated hemoglobin; DM, diabetes mellitus; LDL-C, low-density lipoprotein cholesterol; GEE, generalized estimating equation; HIRA, Health Insurance Review and Assessment Service; DUR, Drug Utilization Review.

*DM was defined as prior physician-diagnosed DM or newly identified diabetes at admission (HbA1c ≥6.5%); †Antithrombotic therapy use was ascertained by self-report at admission and cross-referenced against the HIRA DUR system at data entry.

https://doi.org/10.5853/jos.2026.02761