Supplementary Table 7. Sensitivity analysis of temporal trends in obesity after excluding underweight patients, Korean Stroke Registry 2018–2023

Subgroup	n	2018	2019	2020	2021	2022	2023	OR per year (95% CI)	*P* for trend
Overall	22,817	33.6 (31.9–35.4)	33.4 (31.8–35.1)	34.8 (33.2–36.5)	34.6 (33.1–36.1)	34.0 (32.7–35.4)	34.5 (33.2–35.8)	1.01 (0.99–1.03)	0.568
Age									
19–49 yr	830	37.1 (29.1–45.9)	48.2 (40.1–56.4)	47.0 (37.5–56.7)	50.8 (42.1–59.4)	52.1 (44.6–59.5)	57.5 (50.0–64.6)	1.14 (1.06–1.23)	<0.001
50–64 yr	4,521	37.7 (33.8–41.7)	39.1 (35.5–42.8)	37.3 (33.8–41.0)	39.0 (35.5–42.6)	37.2 (34.1–40.5)	38.7 (35.7–41.8)	1.00 (0.96–1.04)	0.962
≥65 yr	17,466	32.3 (30.3–34.3)	31.0 (29.2–32.9)	33.6 (31.8–35.5)	32.7 (31.0–34.5)	32.4 (30.9–34.0)	32.5 (31.1–34.0)	1.00 (0.98–1.03)	0.753
Sex									
Male	13,987	34.0 (31.7–36.3)	35.0 (32.9–37.1)	34.4 (32.3–36.5)	34.9 (33.0–36.9)	33.1 (31.4–34.8)	34.2 (32.6–35.9)	0.99 (0.97–1.02)	0.632
Female	8,830	33.1 (30.4–35.9)	31.0 (28.6–33.6)	35.5 (32.9–38.2)	34.0 (31.6–36.6)	35.5 (33.4–37.8)	35.0 (33.0–37.2)	1.03 (0.99–1.06)	0.059

Values are annual proportions (%) of obesity (BMI ≥25.0 kg/m²) with 95% Wilson score CIs. OR per 1-year increment and *P*-values for trend were derived from population-averaged generalized estimating equation logistic models with hospitals specified as clusters (exchangeable working correlation structure), identical to the primary analysis. The primary normal-weight indicator classifies both underweight (BMI <18.5 kg/m²) and obesity (BMI ≥25.0 kg/m²) as non-attainment. Because these represent opposite deviations and underweight is not a modifiable lifestyle target in the same direction, this analysis excluded patients with underweight from the denominator and examined obesity directly. Patients with underweight (n=1,366; 5.6% of the cohort) were excluded. Annual numbers excluded were 194, 188, 185, 209, 275, and 315 for 2018 through 2023, respectively. The BMI threshold of 25.0 kg/m² follows World Health Organization Asia-Pacific and Korean Society for the Study of Obesity criteria, consistent with the primary analysis. Interaction *P*-values were obtained from joint Wald tests of Year×Age group (2 degrees of freedom) and Year×Sex terms fitted to the full cohort after exclusion of underweight. The corresponding interaction *P*-values were 0.001 (Year×Age group) and 0.032 (Year×Sex).
OR, odds ratio; CI, confidence interval; BMI, body mass index.

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