

The Impact of Diabetes Mellitus and Admission Hyperglycemia on Clinical Outcomes after Recanalization Therapies for Acute Ischemic Stroke: STAY ALIVE National Prospective Registry

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Table S1. Clinical characteristics of IVT subgroup.

	Overall Population (<i>n</i> = 565)	DM Present (<i>n</i> = 149)	DM Absent (<i>n</i> = 416)	<i>p</i> -Value
Age, years, median (IQR)	69 (60–77)	72 (64–78)	67 (59–76)	<0.001
Genders, female, % (<i>n</i>)	43.2 (244)	43.0 (64)	43.3 (180)	0.947
Hypertension, % (<i>n</i>)	78.7 (444)	91.9 (136)	74.0 (308)	<0.001
Hyperlipidaemia, % (<i>n</i>)	62.5 (340)	69.9 (102)	59.8 (238)	0.032
Atrial fibrillation, % (<i>n</i>),	12.2 (68)	16.1 (23)	10.9 (45)	0.101

Coronary artery disease, % (n)	21.2 (117)	37.8 (54)	15.4 (63)	<0.001
Previous stroke/TIA, % (n)	22.2 (124)	28.0 (40)	20.2 (84)	0.053
Antiplatelet therapy on admission, % (n)	38.9 (213)	58.2 (85)	31.9 (128)	<0.001
Anticoagulant therapy on admission, % (n)	7.4 (40)	12.1 (17)	5.7 (23)	0.013
NIHSS score on admission, median (IQR)	6 (4–10)	7 (4–10)	6 (4–10)	0.783
BMI, kg/m ² , median (IQR)	26.4 (23.2–30.8)	27.5 (25.6–32.9)	25.7 (22.8–29.4)	<0.001
NIHSS score 24 hours, median (IQR)	3 (1–7)	4 (2–8)	3 (1–7)	0.226
NIHSS score 72 hours, median (IQR)	3 (1–7)	3 (1–7)	3 (1–7)	0.148
ASPECTS, median (IQR)	10 (9–10)	10 (9–10)	10 (9–10)	0.470
mCTA score, median (IQR)	5 (4–5)	5 (4–5)	5 (4–5)	0.630
Blood glucose, mmol/L, median (IQR)	6.6 (5.7–8.3)	8.8 (6.8–11.5)	6.4 (5.6–7.3)	<0.001
Admission hyperglycemia, % (n)	29.8 (163)	60.8 (87)	18.8 (76)	<0.001

Leucocyte, G/L, median (IQR)	8.1 (6.6–9.8)	8.3 (6.8–10.4)	7.9 (6.5–9.6)	0.142
C-reactive protein, mg/L, median (IQR)	3.1 (1.4–6.7)	2.9 (1.4–7.9)	3.1 (1.4–6.3)	0.947
Creatinine level, mg/dL, median (IQR)	83 (69–100)	90 (74–108)	80 (67–97)	<0.001
Onset-to-door time, min, median (IQR)	87 (59–130)	90 (58–148)	86 (60–127)	0.168
Door-to-needle time, min, median (IQR)	52 (36–72)	51 (35–73)	52 (36–71)	0.853
sICH, % (n)	2.3 (13)	5.4 (8)	1.2 (5)	0.004
90-day mRS ≤ 2 , % (n)	65.8 (372)	53.0 (79)	70.4 (293)	<0.001
90-day mRS > 2 , % (n)	34.2 (193)	47.0 (70)	29.6 (123)	<0.001
90-day mortality, % (n)	11.2 (63)	17.4 (26)	8.9 (37)	0.004

Abbreviations: IQR, interquartile range; DM, Diabetes mellitus; TIA, transient ischemic attack; NIHSS, National Institutes of Health Stroke Scale; SBP, systolic blood pressure; DBP, diastolic blood pressure; BMI, body mass index; ASPECTS, Alberta Stroke Program Early CT Score; mCTA, multiphase CT-angiography; MT, mechanical thrombectomy; IVT, intravenous thrombolysis; sICH, symptomatic intracranial hemorrhage; mRS, modified Rankin scale

Table S2. Association of diabetes mellitus and admission hyperglycemia with clinical outcomes in IVT subgroup

	Diabetes Mellitus				Admission Hyperglycemia			
	Non-Adjusted OR (95% CI)	<i>p</i> Value	Adjusted* OR (95% CI)	<i>p</i> Value	Non-Adjusted OR (95% CI)	<i>p</i> Value	Adjusted* OR (95% CI)	<i>p</i> Value
90-day favorable outcome (mRS 0–2)	0.47 (0.32–0.70)	<0.001	0.50 (0.32–0.79)	0.003	0.51 (0.35–0.74)	<0.001	0.58 (0.37–0.90)	0.014
90-day poor outcome (mRS > 2)	2.11 (1.43–3.10)	<0.001	1.99 (1.27–3.14)	0.003	1.97 (1.35–2.88)	<0.001	1.73 (1.12–2.69)	0.014
90-day mortality	2.17 (1.26–3.72)	0.005	2.15 (1.10–4.19)	0.025	2.46 (1.43–4.25)	0.001	2.00 (1.05–3.80)	0.035
Hemorrhagic transformation	4.65 (1.50–14.45)	0.008	4.27 (1.22–14.91)	0.023	4.83 (1.43–16.28)	0.011	4.88 (1.24–19.18)	0.023

Abbreviations: OR, odds ratio; CI, confidence interval; mRS, modified Rankin Scale; sICH, symptomatic intracranial hemorrhage; *Adjusted: age, gender, NIHSS on admission, coronary artery disease, C-reactive protein, intravenous thrombolysis, stroke onset-to-door time.