

Supplemental Table S1. Baseline characteristics of patients according to modified Rankin scale (mRS).

	mRS 0-2 n=231	mRS 3-6 n=121	P - value	mRS 0-1 n=206	mRS 2-6 n=146	P - value
Age (years)	70 (59-79)	78 (69-83)	<0.001	69.5 (59-78)	77 (68-83)	<0.001
Sex (female)	101 (43.7)	72 (59.5)	0.005	90 (43.7)	83 (56.9)	0.015
BMI (kg/m ²)	26.6 (24.1-29.3)	26.9 (24.5-30.5)	0.312	26.4 (24.1-29.3)	27.2 (24.3-30.5)	0.162
Hypertension, n (%)	179 (77.5)	115 (95.0)	<0.001	157 (76.2)	137 (93.8)	<0.001
Ischemic heart disease, n (%)	49 (21.1)	33 (27.2)	0.201	45 (21.8)	37 (25.3)	0.445
Atrial fibrillation, n (%)	58 (25.1)	45 (37.2)	0.179	52 (25.2)	51 (34.9)	0.049
Hipercholesterolemia, n (%)	79 (34.2)	31 (25.6)	0.099	69 (33.5)	41 (28.1)	0.280
Smoking, n (%)	40 (17.3)	14 (11.6)	0.155	35 (17.0)	19 (13.0)	0.307
Previous stroke, n (%)	35 (15.2)	28 (23.1)	0.063	31 (15.1)	32 (21.9)	0.098
Stroke etiology, n (%)						
- large-vessel disease	33 (14.3)	14 (11.6)	0.301	26 (12.6)	21 (14.4)	0.411
- small-vessel disease	3 (1.3)	0 (0.0)		2 (1.0)	1 (0.7)	
- cardioembolic	69 (29.9)	48 (39.7)		61 (29.6)	56 (38.4)	
- other etiology	12 (5.2)	5 (4.1)		11 (5.3)	6 (4.1)	
- undetermined etiology	114 (49.3)	54 (44.6)		106 (51.5)	(62 (42.5)	
Mechanical thrombectomy, n (%)	62 (26.8)	43 (35.5)	0.090	50 (24.3)	55 (37.7)	0.007
Time from stroke onset to thrombolysis (min)	130 (95-183)	135 (95-180)	0.977	131 (95-185)	135 (93-180)	0.775
NIHSS score on admission	9.7±6.0	16.3±6.0	<0.001	9.1±5.7	16.0±6.0	<0.001
NIHSS score after r-tPA	4.5±4.3	16.0±7.6	<0.001	3.9±3.8	14.8±7.6	<0.001
Post-MT hemorrhagic brain complications, n (%)						
- no complication	208 (90.0)	71 (58.7)	<0.001	187 (90.8)	92 (63.0)	<0.001
- HI type 1	10 (4.3)	14 (11.6)		9 (4.4)	15 (10.3)	
- HI type 2	8 (3.5)	15 (12.4)		8 (3.9)	15 (10.3)	
- PH type 1	5 (2.2)	9 (7.4)		2 (1.0)	12 (8.2)	
- PH type 2	0 (0.0)	12 (9.9)		0 (0.0)	12 (8.2)	
Maximal SBP within 24 hours after r-tPA (mmHg)	145 (126-160)	146 (137-165)	0.048	145 (126-159)	146.5 (136-166)	0.019
Maximal DBP within 24 hours after r-tPA (mmHg)	80 (70-85)	80 (72-90)	0.107	80 (71-85)	80 (70-90)	0.278
Fasting glucose (mmol/L)	6.4 (5.5-7.9)	6.9 (6.1-8.6)	0.004	6.3 (5.5-7.7)	7.0 (6.1-8.8)	<0.001
Fasting glucose < 5.5 mmol/L	56 (24.2)	8 (6.6)	<0.001	53 (25.7)	11 (7.5)	0.001
Death (mRS=6)	0 (0.0)	54 (44.6)	<0.001	0 (0.0)	54 (37.0)	<0.001

Values are presented as n (%), mean \pm standard deviation, or median and interquartile range. Abbreviations: BMI – body mass index, DBP – diastolic blood pressure, HI – hemorrhagic infarction, mRS – modified Rankin scale, MT – mechanical thrombectomy, NIHSS – National Institutes of Health Stroke Scale, PH – parenchymal hematoma, r-tPA – recombinant tissue plasminogen activator, SBP – systolic blood pressure.

Supplemental Table S2. Baseline characteristics of patients treated only with intravenous thrombolysis (without mechanical thrombectomy) according to modified Rankin scale (mRS).

	mRS 0-2 n=168	mRS 3-6 n=79	P - value	mRS 0-1 n=156	mRS 2-6 n=91	P - value
Age (years)	71 (62-80)	80 (72-84)	<0.001	71 (62-80)	79 (71-84)	<0.001
Sex (female)	78 (46.4)	45 (57.0)	0.122	73 (46.8)	50 (55.0)	0.216
BMI (kg/m ²)	26.5 (23.8-29.4)	26.5 (24.2-30.1)	0.562	26.4 (23.8-29.3)	26.4 (24.2-30.9)	0.447
Hypertension, n (%)	131 (78.0)	76 (96.2)	<0.001	120 (76.9)	87 (95.6)	<0.001
Ischemic heart disease, n (%)	37 (22.0)	25 (31.7)	0.104	35 (22.4)	27 (29.7)	0.205
Atrial fibrillation, n (%)	37 (22.0)	33 (41.8)	0.001	36 (23.1)	34 (37.4)	0.017
Hipercholesterolemia, n (%)	65 (38.7)	25 (31.7)	0.283	58 (37.2)	32 (35.2)	0.751
Smoking, n (%)	28 (16.7)	8 (10.1)	0.174	26 (16.7)	10 (11.0)	0.222
Previous stroke, n (%)	31 (18.5)	22 (27.9)	0.093	29 (18.6)	24 (26.4)	0.151
Stroke etiology, n (%)						
- large-vessel disease	26 (15.5)	7 (8.9)	0.071	21 (13.5)	12 (13.2)	0.219
- small-vessel disease	2 (1.2)	1 (1.3)		2 (1.3)	1 (1.1)	
- cardioembolic	44 (26.2)	35 (44.3)		42 (26.9)	37 (40.7)	
- other etiology	5 (3.0)	2 (2.5)		4 (2.6)	3 (3.3)	
- undetermined etiology	91 (54.2)	34 (43.0)		87 (55.8)	38 (41.8)	
Time from stroke onset to thrombolysis (min)	145 (100-200)	148 (95-195)	0.784	142 (100-191)	150 (95-205)	0.821
NIHSS score on admission	7.8 \pm 5.1	15.3 \pm 5.7	<0.001	7.5 \pm 4.8	14.8 \pm 5.9	<0.001
NIHSS score after r-tPA	3.6 \pm 3.6	14.8 \pm 6.6	<0.001	3.2 \pm 3.3	13.9 \pm 6.8	<0.001
Post-MT hemorrhagic brain complications, n (%)						
- no complication	158 (94.1)	56 (70.9)	<0.001	146 (93.6)	68 (74.7)	<0.001
- HI type 1	5 (3.0)	8 (10.1)		5 (3.2)	8 (8.8)	
- HI type 2	4 (2.4)	4 (5.1)		4 (2.6)	4 (4.4)	
- PH type 1	1 (0.6)	5 (6.3)		1 (0.6)	5 (5.5)	

- PH type 2	0 (0.0)	6 (7.6)		0 (0.0)	6 (6.6)	
Maximal SBP within 24 hours after r-tPA (mmHg)	145 (128-160)	147 (130-166)	0.247	145 (128-160)	148 (130-166)	0.152
Maximal DBP within 24 hours after r-tPA (mmHg)	80 (70-85)	80 (70-90)	0.320	80 (72-85)	80 (70-90)	0.671
Fasting glucose (mmol/L)	6.4 (5.5-7.8)	7.1 (6.1-8.9)	0.002	6.3 (5.5-7.7)	7.1 (6.2-9.1)	<0.001
Fasting glucose < 5.5 mmol/L	16 (21.4)	4 (5.1)	<0.001	35 (22.4)	5 (5.5)	0.001
Death (mRS=6)	0 (0.0)	35 (44.3)	<0.001	0 (0.0)	35 (38.5)	<0.001

For abbreviations, see Supplemental Table 1.

Supplemental Table S3. Multivariable logistic regression model for favorable (mRS 0-2) and excellent (mRS 0-1) 3-month clinical outcome in patients treated only with intravenous thrombolysis (without mechanical thrombectomy).

Favorable outcome (mRS 0-2)						
	Univariable			Multivariable		
90-day favorable clinical outcome, diabetic + non-diabetic patients	HR	95% CI	P-value	HR	95% CI	P-value
Age (per 1 year)	0.93	0.91-0.96	<0.001	0.94	0.90-0.98	0.005
Sex (female)	0.66	0.38 -1.12	0.123	-	-	-
BMI (per 1 unit)	0.97	0.91-1.03	0.299	-	-	-
Atrial fibrillation	0.39	0.22-0.70	0.002	-	-	-
Hypertension	0.14	0.04-0.47	0.001			
NIHSS score after r-tPA (per 1 point)	0.71	0.65-0.77	<0.001	0.71	0.65-0.77	<0.001
Hemorrhagic brain complications (ECASS 1-3)	0.15	0.07-0.34	<0.001	-	-	-
Fasting glucose <5.5 mmol/l	5.11	1.75-14.93	0.003	3.87	0.89-16.77	0.071
90-day favorable clinical outcome, diabetic patients						
Age (per 1 year)	0.93	0.88-0.99	0.023	0.83	0.73-0.95	0.006
Sex (female)	1.45	0.57-3.97	0.421	-	-	-
BMI (per 1 unit)	0.88	0.78-0.98	0.025	0.77	0.61-0.95	0.017
Atrial fibrillation	0.29	0.10-0.80	0.017	-	-	-
Previous stroke	0.30	0.10-0.90	0.032	-	-	-
NIHSS score after r-tPA (per 1 point)	0.70	0.60-0.82	<0.001	0.61	0.48-0.79	<0.001
Hemorrhagic brain complications (ECASS 1-3)	0.40	0.08-1.96	0.260	-	-	-
Creatinine (per 1 µmol/l)	0.98	0.97-0.99	0.023	-	-	-
Fasting glucose <5.5 mmol/l	1.45	0.34-6.18	0.615	-	-	-
90-day favorable clinical outcome, non-diabetic patients						

Age (per 1 year)	0.94	0.91-0.97	<0.001	0.92	0.87-0.98	0.005
Sex (female)	0.45	0.23-0.87	0.017	-	-	-
BMI (per 1 unit)	1.03	0.95-1.12	0.507	-	-	-
Atrial fibrillation	0.48	0.23-0.96	0.039	-	-	-
Hypertension	0.17	0.05-0.57	0.004	-	-	-
Maximal SBP within 24 hours after r-tPA (per 1 mmHg)	0.99	0.98-0.99	0.035	1.04	1.01-1.07	0.004
NIHSS score after r-tPA (per 1 point)	0.70	0.63-0.77	<0.001	0.65	0.56-0.75	<0.001
Hemorrhagic brain complications (ECASS 1-3)	0.11	0.04-0.28	<0.001	-	-	-
Fasting glucose <5.5 mmol/l	15.87	2.10-119.9	0.007	28.61	1.19-436.2	0.036

Excellent outcome (mRS 0-1)						
	Univariable			Multivariable		
90-day excellent clinical outcome, diabetic + non-diabetic patients	HR	95% CI	p-value	HR	95% CI	p-value
Age (per 1 year)	0.94	0.92-0.97	<0.001	0.95	0.92-0.98	0.003
Sex (female)	0.72	0.43-1.21	0.217	-	-	-
BMI (per 1 unit)	0.97	0.91-1.03	0.267	-	-	-
Hypertension	0.15	0.05-0.45	<0.001	-	-	-
Atrial fibrillation	0.50	0.29-0.89	0.017	-	-	-
NIHSS score after r-tPA (per 1 point)	0.70	0.64-0.76	<0.001	0.70	0.63-0.76	<0.001
Hemorrhagic brain complications (ECASS 1-3)	0.20	0.09-0.45	<0.001	-	-	-
Fasting glucose <5.5 mmol/l	4.98	1.87-13.21	0.001	4.79	1.17-19.20	0.027
90-day excellent clinical outcome, diabetic patients						
Age (per 1 year)	0.95	0.91-1.01	0.078	-	-	-
Sex (female)	1.81	0.70-4.68	0.223	-	-	-
BMI (per 1 unit)	0.87	0.77-0.98	0.017	0.77	0.61-0.97	0.025
Atrial fibrillation	0.41	0.15-1.10	0.077	-	-	-
NIHSS score after r-tPA (per 1 point)	0.63	0.51-0.78	<0.001	0.55	0.41-0.75	<0.001
Hemorrhagic brain complications (ECASS 1-3)	0.60	0.12-2.91	0.525	-	-	-
Creatinine (per 1 µmol/l)	0.98	0.96-0.99	0.010	0.96	0.93-0.99	0.019
Fasting glucose <5.5 mmol/l	2.18	0.51-9.25	0.289	-	-	-
90-day excellent clinical outcome, non-diabetic patients						
Age (per 1 year)	0.94	0.91-0.97	<0.001	0.96	0.92-0.99	0.034
Sex (female)	0.47	0.25-0.89	0.020	-	-	-

BMI (per 1 unit)	1.03	0.96-1.20	0.408	-	-	-
Atrial fibrillation	0.60	0.30-1.20	0.145	-	-	-
Hypertension	0.20	0.07-0.58	0.003	-	-	-
Maximal SBP within 24 hours after r-tPA (per 1 mmHg)	0.98	0.97-0.99	0.003	-	-	-
NIHSS score after r-tPA (per 1 point)	0.71	0.64-0.78	<0.001	0.71	0.65-0.79	<0.001
Hemorrhagic brain complications (ECASS 1-3)	0.13	0.05-0.34	<0.001	-	-	-
Fasting glucose <5.5 mmol/l	8.87	2.03-38.66	0.004	6.47	0.87-48.15	0.068

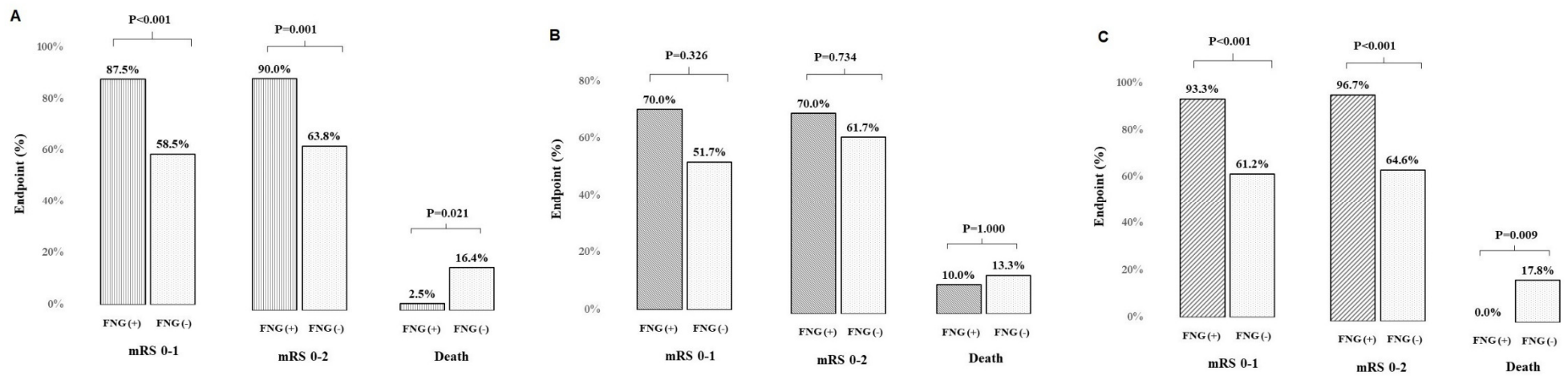
For abbreviations, see Supplemental Table 1; ECASS – The European Cooperative Acute Stroke Study.

Supplemental Table S4. Multivariable logistic regression model for the risk of death in patients treated only with intravenous thrombolysis (without mechanical thrombectomy).

90-day risk of death, diabetic + non-diabetic patients	Univariable			Multivariable		
	HR	95% CI	p-value	HR	95% CI	p-value
Age (per 1 year)	1.07	1.03-1.12	<0.001	1.07	1.02-1.11	0.009
Sex (female)	1.41	0.69-2.90	0.350	-	-	-
BMI (per 1 unit)	0.99	0.91-1.08	0.784	-	-	-
Atrial fibrillation	2.83	1.36-5.89	0.005	-	-	-
Hypertension	3.60	0.82-15.70	0.087	-	-	-
Maximal SBP within 24 hours after r-tPA (per 1 mmHg)	1.01	1.00-1.03	0.065	-	-	-
NIHSS score after r-tPA (per 1 point)	1.25	1.17-1.33	<0.001	1.24	1.16-1.32	<0.001
Hemorrhagic brain complications (ECASS 1-3)	6.77	2.97-15.44	<0.001	-	-	-
Fasting glucose <5.5 mmol/l	1.13	0.02-0.98	0.048	-	-	-

For abbreviations, see Supplemental Table 1 and 2.

Supplemental Figure S1



Patients treated only with intravenous thrombolysis (without mechanical thrombectomy) with favorable (mRS 0-2) or excellent (mRS 0-1) outcome and those who died according to the presence of fasting normoglycemia in the whole group (A), in the subgroup with (B), and without diabetes mellitus (C).