Supplementary Table 9. Continuous LOS analyses: log-linear and negative binomial regression

Variable	Binary aOR (main)	log-LOS exp(β) (LOS ratio)	NB IRR
Age (per 10 years)	1	1.010[a]	1.013[a]
Sex, male	1.08	1.030[a]	1.045[a]
Initial NIHSS	1.10[a]	1.023[a]	1.028[a]
Hypertension	0.98	1	0.99
Diabetes mellitus	0.98	1.015	1.014
Atrial fibrillation	0.82[a]	1.001	1.012
Previous stroke	1.21[a]	1.029[a]	1.039[a]
Coronary heart disease	1.36[a]	1.046[a]	1.042[a]
Current smoker	0.94	1	0.998
Premorbid mRS	1.08[a]	1.016[a]	1.019[a]
Systolic BP (per 10 mmHg)	1.03[a]	1.010[a]	1.009[a]
Diastolic BP (per 10 mmHg)	0.99	0.995	0.997
Initial glucose (per 10 mg/dL)	1.01[a]	1.004[a]	1.005[a]
Triglycerides (per 10 mg/dL)	0.99[a]	0.999	0.999
HDL cholesterol (mg/dL)	1	1.001	1
LDL cholesterol (per 10 mg/dL)	1.01	1.004[a]	1.003
Hemoglobin (g/dL)	0.95[a]	0.984[a]	0.981[a]
Platelets (per 10 $\times 10^3$/μL)	1	0.999[a]	0.998[a]
Creatinine (mg/dL)	1.05	1.007	1.006
WBC ($\times 10^3$/μL)	1.06[a]	1.015[a]	1.020[a]
PT (INR)	1.18	1.035	1.050[a]
IV thrombolysis	0.79[a]	0.972	0.962
IA thrombectomy	0.97	1.012	1.031
Relevant large artery steno-occlusion	1.29[a]	1.026[a]	1.025
TOAST: LAA (vs. SVO)	1.85[a]	1.137[a]	1.164[a]
TOAST: CE (vs. SVO)	2.22[a]	1.189[a]	1.227[a]
TOAST: Other determined (vs. SVO)	2.67[a]	1.193[a]	1.272[a]
TOAST: Undetermined (vs. SVO)	1.78[a]	1.118[a]	1.141[a]

Comparison of effect estimates across three modeling frameworks, each using the same covariate set as the main analysis: the binary main model (aOR for prolonged LOS ≥8 days), linear regression on log-transformed LOS (exp(β) = geometric mean ratio of LOS), and negative binomial regression on integer LOS days (IRR = incidence rate ratio).

LOS, length of stay; aOR, adjusted odds ratio; NB, negative binomial; IRR, incidence rate ratio; NIHSS, National Institutes of Health Stroke Scale; mRS, modified Rankin Scale; BP, blood pressure; HDL, high-density lipoprotein; LDL, low-density lipoprotein; WBC, white blood cell count; PT, prothrombin time; INR, international normalized ratio; IV, intravenous; IA, intra-arterial; TOAST, Trial of Org 10172 in Acute Stroke Treatment; LAA, large artery atherosclerosis; SVO, small vessel occlusion; CE, cardioembolism.

[a] $p<0.05$.