SUPPLEMENTARY FILE

Pre-stroke Selective Serotonin Reuptake Inhibitor Use and Functional Outcomes After Ischemic Stroke

SUPPLEMENTARY TABLE 1: Univariate analysis of baseline characteristics, in-hospital treatments, medical complications and discharge outcomes among patients with pre-stroke Antidepressant use

	Antidepressant use N=920	No Antidepressant use N=3778	p-value
Demographics			
Age, y, mean (SD)	67.75 (14.49)	68.53 (15.46)	0.16
Female gender (%)	53.7	42.7	**<0.001**
Length of stay, days, mean (SD)	6.26 (5.91)	6.12 (6.75)	0.57
Location at Stroke Onset (%)			**0.001**
Not in a healthcare setting	86.2	85.6	
Acute care facility	5.4	8.6	
Chronic healthcare facility	3.3	1.9	
Outpatient setting	0.4	0.6	
After hospital arrival	2.4	1.8	
ND	2.3	2.3	
Race (%)			**0.001**
White	88.5	83.7	

African American	3.9	6.1	
Asian	2.0	4.1	
Other	5.7	6.1	
Hispanic ethnicity (%)	5.2	5.4	0.82
Insurance (%)			0.08
Medicare	55.8	54.3	
Medicaid	2.2	1.3	
Private	40.2	41.3	
Self Pay	1.7	2.9	
Medical History (%)			
No medical history	7.8	11.8	**0.004**
Atrial fibrillation	19.6	20.7	0.46
Coronary artery disease	22.3	20.9	0.35
Carotid stenosis	3.5	3.7	0.74
Depression	3.9	0.7	**<0.001**
Diabetes mellitus	29.8	23.2	**<0.001**
Drugs/Alcohol	2.2	1.3	0.06
Dyslipidemia	48.2	42.9	**0.004**
Family history of stroke	3.0	1.3	**<0.001**
Heart failure	7.1	6.3	0.38
Hypertension	72.3	69.0	0.05
Previous stroke	19.5	12.8	**<0.001**
Previous TIA	6.8	4.1	**<0.0001**

Renal insufficiency	3.7	3.4	0.62
Smoker	14.9	12.8	0.09
Clinical Characteristics			
Ambulate at admission (%)	84.2	86.9	0.05
Heart Rate, bpm, mean (SD)	79.10 (17.37)	79.22 (17.60)	0.87
NIHSS, median (IQR)	4 (2, 10)	4 (1, 11)	0.39
Initial Exam Finding (%)			
Weakness	54.9	47.5	**<0.001**
Aphasia	28.9	24.8	**0.01**
Altered mental status	12.1	12.2	0.89
Other neurological symptoms	15.0	14.1	0.5
Admission Laboratory Data, mean (SD)			
Cholesterol, mg/dL	166.0 (47.57)	165.41 (48.31)	0.74
Triglyceride, mg/dL	133.79 (83.1)	121.94 (74.39)	**<0.001**
HDL, mg/dL	44.9 (15.5)	46.1 (15.20)	0.05
LDL, mg/dL	93.84 (35.95)	94.62 (37.44)	0.59
HBA1c, %	6.27 (1.29)	6.12 (1.21)	**0.002**
Fasting blood glucose, mg/dL	134.32 (23.72)	131.47 (49.12)	0.18
INR	1.2 (0.57)	1.18 (0.64)	0.62
Treatments and Complications (%)			
IV tPA (at our hospital)	5.7	6.4	0.63
IV tPA (at outside hospital)	16.1	14.2	0.35
IA Therapy	4.3	4.7	0.69

sICH	0.7	1.3	0.08
Pneumonia	6.8	5.8	**<0.001**
UTI	7.1	7.8	0.06
Ambulatory Status at Discharge (%)			**0.01**
Ambulate independently	43.8	50.3	
Ambulate with assistance	39.2	31.1	
Unable to ambulate	10.2	11.6	
ND	6.7	7.0	
Discharge Destination (%)			**<0.001**
Home	39.7	48.5	
Rehabilitation facility	44.0	36.1	
Skilled nursing facility	6.4	4.0	
Expired/Hospice	7.4	8.8	
Other	2.5	2.6	

Abbreviations: bpm – beats per minute; HBA1c – Hemoglobin A1c; HDL – high density lipoprotein; IA – intra-arterial; INR – International Normalized Ratio; IQR – Interquartile Range; IV – intravenous; LDL – low density lipoprotein; ND – not determined; NIHSS – National Institutes of Health Stroke Scale; sICH – symptomatic intracranial hemorrhage; tPA – tissue plasminogen activator; TIA – transient ischemic attack; UTI – urinary tract infection.

SUPPLEMENTARY TABLE 2: Multivariable analysis of clinical factors associated with home discharge after hospitalization for acute ischemic stroke

	Unadjusted Odds Ratio	p-value	Partially adjusted model		Fully adjusted model	
			Adjusted Odds Ratio	p-value	Adjusted Odds Ratio	p-value
Antidepressant use	0.70(0.60, 0.81)	**<0.001**	0.72 (0.61, 0.86)	**<0.001**	0.71 (0.60, 0.84)	**<0.001**
Demographics						
Female gender	0.68 (0.61, 0.77)	**<0.001**	0.72 (0.63, 0.82)	**<0.001**	0.72 (0.63, 0.83)	**<0.001**
Arrival from acute care facility	0.83 (0.67, 1.02)	0.08	0.61 (0.47, 0.78)	**<0.001**	0.61 (0.47, 0.79)	**<0.001**
White race	0.92 (0.78, 1.07)	0.28	1.01 (0.84, 1.21)	0.92	0.99 (0.82, 1.19)	0.99
Medicare	0.51 (0.45, 0.57)	**<0.001**	0.57 (0.50, 0.65)	**<0.001**	0.59 (0.52, 0.68)	**<0.001**
Clinical Characteristics						

No Medical history	2.07 (1.71, 2.51)	**<0.001**	1.32 (1.02, 1.70)	0.36	1.25 (0.96, 1.63)	0.094
Depression	0.82 (0.49, 1.36)	0.45	1.19 (0.66, 2.11)	0.57	1.22 (0.67, 2.21)	0.52
Diabetes mellitus	0.68 (0.60, 0.78)	**<0.001**	0.81 (0.66, 0.98)	**0.03**	0.80 (0.66, 0.98)	**0.03**
Dyslipidemia	0.88 (0.78, 0.99)	**0.03**	1.19 (1.03, 1.37)	**0.02**	1.16 (1.01, 1.35)	**0.04**
Family history of stroke	2.22 (1.39, 3.55)	**0.001**	2.27 (1.37, 3.78)	**0.002**	2.03 (1.21, 3.40)	**0.007**
Hypertension	0.60 (0.53, 0.68)	**<0.001**	0.79 (0.67, 0.94)	**0.007**	0.79 (0.66, 0.94)	**0.009**
Previous stroke	0.67 (0.56, 0.79)	**<0.001**	0.88 (0.72, 1.07)	0.18	0.87 (0.71, 1.06)	0.87
Previous TIA	1.23 (0.93, 1.61)	0.14	1.61 (1.18, 2.19)	**0.002**	1.62 (1.18, 2.21)	**0.003**
Ambulate at admission	3.57 (2.94, 4.34)	**<0.001**	2.78 (2.24, 3.45)	**<0.001**	2.61 (2.10, 3.25)	**<0.001**
Initial Exam Finding						
Weakness	0.65 (0.58, 0.73)	**<0.001**	0.67 (0.58, 0.77)	**<0.001**	0.66 (0.57, 0.76)	**<0.001**
Aphasia	0.62 (0.54, 0.71)	**<0.001**	0.71 (0.61, 0.83)	**<0.001**	0.75 (0.64, 0.88)	**0.001**
Triglyceride	0.99 (0.98, 1.0)	**<0.001**	1.002 (1.002, 1.003)	**<0.001**	1.002 (1.001, 1.003)	**<0.001**
HDL	0.99 (0.99, 1.0)	**<0.001**	1.014 (1.010, 1.019)	**<0.001**	1.013 (1.01, 1.02)	**<0.001**
HBA1c	1 (0.99, 1.0)	0.40	0.97 (0.91, 1.03)	0.31	0.98 (0.92, 1.04)	0.45

Treatments and Complications

sICH	0.11 (0.04, 0.27)	**<0.001**		0.18 (0.07, 0.47)	**<0.001**
Pneumonia	0.09 (0.06, 0.14)	**<0.001**		0.10 (0.06, 0.16)	**<0.001**
UTI	0.25 (0.19, 0.34)	**<0.001**		0.34 (0.25,0 .46)	**<0.001**

Abbreviations: HBA1c – Hemoglobin A1c; HDL – high density lipoprotein; NIHSS – National Institutes of Health Stroke Scale; sICH – symptomatic intracranial hemorrhage; TIA – transient ischemic attack; UTI – urinary tract infection.