

**Supplementary Table 2.** Univariate model of early hospital arrival for the entire study population and for each hospital in patients arrived within 24 hours

	Total (n= 1,631)			YUHS (n=810)			NCVC (n=821)		
	Early arrival group (n=875)	Late arrival group (n= 756)	<i>P</i>	Early arrival group (n=423)	Late arrival group (n=387)	<i>P</i>	Early arrival group (n=452)	Late arrival group (n=369)	<i>P</i>
<b>Demographics</b>									
Sex (male)	520 (59.4)	445 (59)	0.867	243 (57.4)	240 (62.3)	0.157	277 (61.3)	205 (55.6)	0.097
Age (year)	71.1 ± 12.7	69.4 ± 13.5	0.010	68.2 ± 12.2	65.8 ± 12.9	0.007	73.9 ± 12.6	73.2 ± 13.2	0.471
BMI (kg/m <sup>2</sup> )	23.1 ± 3.7	23.1 ± 3.5	0.996	23.8 ± 3.5	23.9 ± 3.1	0.821	22.4 ± 3.7	22.3 ± 3.7	0.635
AC (cm)	82.8 ± 10.3	83.3 ± 10.1	0.434	85.6 ± 9.5	86.2 ± 9.3	0.307	79.0 ± 10.2	78.6 ± 9.5	0.678
<b>Past history</b>									
Hypertension	653 (74.8)	544 (72.2)	0.244	312 (73.8)	268 (69.6)	0.191	341 (75.8)	276 (75.0)	0.797
Diabetes mellitus	227 (26.0)	199 (26.4)	0.846	134 (31.7)	122 (31.7)	0.998	93 (20.7)	77 (20.9)	0.928
Hypercholesterolemia	284 (32.5)	258 (34.3)	0.460	78 (18.4)	92 (23.9)	0.057	206 (45.8)	166 (45.1)	0.848
Current smoker	161 (18.5)	156 (20.7)	0.253	74 (17.5)	80 (20.8)	0.235	87 (19.4)	76 (20.7)	0.650
Atrial fibrillation	294 (33.7)	166 (22.0)	<0.001	130 (30.7)	60 (15.6)	<0.001	164 (36.4)	106 (28.8)	0.021
Old CVA	239 (27.4)	209 (27.8)	0.865	96 (22.7)	82 (21.2)	0.605	143 (31.8)	127 (34.7)	0.378
<b>Previous medication</b>									
Antiplatelet	315 (42.0)	266 (41.9)	0.967	170 (40.2)	146 (37.9)	0.510	145 (32.2)	120 (48.0)	0.382
Anticoagulant	116 (13.3)	79 (10.5)	0.085	39 (9.2)	27 (7.0)	0.253	77 (17.1)	52 (14.1)	0.250
Lipid lowering agent	224 (25.6)	190 (25.2)	0.855	121 (28.6)	112 (29.1)	0.879	103 (22.8)	78 (21.2)	0.573
<b>Stroke symptom</b>									
Total NIHSS score	6 [2-15]	3 [2-8]	<0.001	5 [2-14]	3 [1-6]	<0.001	7 [3-17]	4 [2-13]	0.001
LOC responsiveness	203 (23.2)	99 (13.1)	<0.001	65 (15.4)	23 (5.9)	<0.001	138 (30.5)	76 (20.6)	0.001
LOC questions	301 (34.4)	169 (22.4)	<0.001	116 (27.4)	47 (12.1)	<0.001	185 (40.9)	122 (33.1)	0.020
LOC commands	220 (25.1)	114 (15.1)	<0.001	98 (23.2)	39 (10.1)	<0.001	122 (27.0)	75 (20.3)	0.026
Visual field defect	229 (26.2)	115 (15.2)	<0.001	124 (29.3)	55 (14.2)	<0.001	105 (23.2)	60 (16.3)	0.013
Horizontal eye movement	304 (34.7)	125 (16.5)	<0.001	132 (31.2)	42 (10.9)	<0.001	172 (38.1)	83 (22.5)	<0.001
Facial weakness	509 (58.2)	383 (50.7)	0.002	220 (52.0)	164 (42.4)	0.006	289 (63.9)	219 (59.3)	0.178
Arm weakness	523 (59.8)	381 (50.4)	<0.001	236 (55.8)	160 (41.3)	<0.001	287 (63.5)	221 (59.9)	0.290
Leg weakness	524 (59.9)	392 (51.9)	0.001	227 (53.7)	159 (41.1)	<0.001	297 (65.7)	233 (63.1)	0.445
Sensory deficit	427 (48.8)	281 (37.2)	<0.001	172 (40.7)	102 (26.4)	<0.001	255 (56.4)	179 (48.5)	0.024
Limb ataxia	75 (8.6)	75 (9.9)	0.347	44 (10.4)	56 (14.5)	0.079	31 (6.9)	19 (5.1)	0.308
Aphasia	261 (29.8)	149 (19.7)	<0.001	115 (27.2)	54 (14.0)	<0.001	146 (32.3)	95 (25.7)	0.040
Hemineglect	256 (29.3)	135 (17.9)	<0.001	71 (16.8)	35 (9.0)	0.001	185 (40.9)	100 (27.1)	<0.001
Dysarthria	628 (71.8)	503 (66.5)	0.022	313 (74.0)	237 (61.2)	<0.001	315 (69.7)	266 (72.1)	0.453
<b>Onset time</b>									
Weekday	596 (68.1)	512 (67.7)	0.867	292 (69.0)	272 (70.3)	0.698	304 (67.3)	240 (65.0)	0.504
Daytime	764 (87.3)	522 (69.0)	<0.001	369 (87.2)	282 (72.9)	<0.001	395 (87.4)	240 (65.0)	<0.001
<b>Transfer mode</b>									
EMS	604 (69.0)	369 (48.8)	<0.001	199 (47)	89 (23.0)	<0.001	405 (89.6)	280 (75.9)	<0.001
Transfer from another hospital	59 (6.7)	94 (12.4)	<0.001	29 (6.9)	41 (10.6)	0.059	30 (6.6)	53 (14.4)	<0.001

Data are presented with number (%), mean ± standard deviation, or median [interquartile range].

YUHS, Yonsei University Health System; NCVC, National Cerebral and Cardiovascular Center; BMI, body mass index; AC, abdominal circumference; CVA, cerebrovascular accident; NIHSS, National Institutes of Health Stroke Scale; LOC, level of consciousness; EMS, emergency medical service.