Table S1. Association between various characteristics of the patients and status of survival at the end of follow-up using Chi-Square test

	Covariates	Number (Percentage)			P
		Total	Alive	Deceased	
Demographic variables	Gender				
	Male	1438 (52.4)	704 (53.7)	734 (51.2)	---
	Female	1306 (47.6)	607 (46.3)	699 (48.8)	0.194
	Age				
	18-54 years	384 (14.1)	293 (22.5)	91 (6.4)	< 0.001
	55-64 years	499 (18.4)	318 (24.5)	181 (12.8)	
	65-74 years	651 (24.0)	331 (25.5)	320 (22.6)	
	75-84 years	803 (29.5)	272 (21.0)	531 (37.4)	
	≥ 85 years	379 (14.0)	84 (6.5)	295 (20.8)	
	Education				
	Illiterate	1603 (69.0)	680 (62.6)	923 (74.7)	< 0.001
	Under Diploma	391 (16.8)	214 (19.7)	177 (14.3)	
	Diploma	246 (10.6)	135 (12.4)	111 (9.0)	
	University degree	83 (3.6)	58 (5.3)	25 (2.0)	
	Job				
	Housekeeping	931 (50.8)	410 (48.5)	521 (52.8)	0.029
	Employee	31 (1.7)	19 (2.2)	12 (1.2)	
	Worker	45 (2.5)	19 (2.2)	26 (2.6)	
	Farmer	221 (12.1)	96 (11.3)	125 (12.7)	
	Self-employed	288 (15.7)	157 (18.6)	131 (13.3)	
	Retired	197 (10.8)	85 (10.0)	112 (11.4)	
	Other	119 (6.5)	60 (7.1)	59 (6.0)	
	Residence				
	City	1796 (66.3)	857 (66.1)	939 (66.6)	0.775
	Village	911 (33.7)	440 (33.9)	471 (33.4)	
	Marriage Status				
	Single	244 (8.9)	113 (8.6)	131 (9.2)	0.608
	Married	2488 (91.1)	1195 (91.4)	1293 (90.8)	
	Smoking				
	Yes	488 (21.3)	246 (22.1)	242 (20.5)	0.351
	No	1803 (78.7)	866 (77.9)	937 (79.5)	
	Opiate				
	Yes	407 (17.8)	204 (18.4)	203 (17.1)	0.422
	No	1884 (82.2)	903 (81.6)	981 (82.9)	
Clinical history	Type				
	Ischemic	1973 (76.6)	972 (78.9)	1001 (74.5)	0.009
	Hemorrhagic	602 (23.4)	260 (21.1)	342 (25.5)	
	Treatment				
	Medical	2625 (97.5)	1261 (98.2)	1364 (96.9)	0.027
	Surgical	67 (2.5)	23 (1.8)	44 (3.1)	
	Gastrointestinal diseases				

	No	2652 (96.6)	1277 (97.4)	1375 (96.0)	0.035
	Yes	92 (3.4)	34 (2.6)	58 (4.0)	
	Respiratory failure				
	No	2582 (94.1)	1259 (96.0)	1323 (92.3)	< 0.001
	Yes	162 (5.9)	52 (4.0)	110 (7.7)	
	Acute kidney injury				
	No	2592 (94.5)	1259 (96.0)	1333 (93.0)	0.001
	Yes	152 (5.5)	52 (4.0)	100 (7.0)	
	Obesity				
	No	2497 (91.0)	1186 (90.5)	1311 (91.5)	0.351
	Yes	247 (9.0)	125 (9.5)	122 (8.5)	
	Diabetes				
	No	2153 (78.5)	1053 (80.3)	1100 (76.8)	0.024
	Yes	591 (21.5)	258 (19.7)	333 (23.2)	
	High blood pressure				
	No	1022 (37.2)	539 (41.1)	483 (33.7)	< 0.001
	Yes	1722 (62.8)	772 (58.9)	950 (66.3)	
	Heart diseases				
	No	2014 (73.4)	1015 (77.4)	999 (69.7)	< 0.001
	Yes	730 (26.6)	296 (22.6)	434 (30.3)	
	Neurological diseases				
	No	2332 (85.0)	1143 (87.2)	1189 (83.0)	0.002
	Yes	412 (15.0)	168 (12.8)	244 (17.0)	
	Surgery				
	No	2002 (73.0)	988 (75.4)	1014 (70.8)	0.007
	Yes	742 (27.0)	323 (24.6)	419 (29.2)	
	Diabetes mellitus				
	No	2700 (98.4)	1284 (97.9)	1416 (98.8)	0.069
	Yes	44 (1.6)	27 (2.1)	17 (1.2)	
Vital Signs on Admission	History of blood transfusion				
	No	2348 (95.3)	1174 (97.8)	1174 (93.0)	< 0.001
	Yes	115 (4.7)	26 (2.2)	89 (7.0)	
	Recurrent stroke				
	No	1631 (78.2)	819 (83.1)	812 (73.8)	< 0.001
	Yes	454 (21.8)	166 (16.9)	288 (26.2)	
	Fever				
	No	2232 (88.1)	1093 (89.9)	1139 (86.4)	0.007
	Yes	302 (11.9)	123 (10.1)	179 (13.6)	
	High Blood Pressure				
	Normal	398 (15.1)	190 (15.1)	208 (15.1)	0.034
	Elevated	106 (4.0)	56 (4.4)	50 (3.6)	
	Stage1 (hypertension)	721 (27.3)	365 (28.9)	356 (25.9)	
	Stage2 (hypertension)	1191 (45.2)	565 (44.8)	626 (45.5)	

	Hypertensive Crisis	221 (8.4)	86 (6.8)	135 (9.8)	
	Heart Rate				
	Normal	2114 (92.8)	1025 (94.6)	1089 (91.1)	0.004
	Bradycardia (<60 bpm)	51 (2.2)	18 (1.7)	33 (2.8)	
	Tachycardia (≥100 bpm)	114 (5.0)	40 (3.7)	74 (6.2)	
	Respiratory Rate				
	12-20	2007 (94.7)	995 (96.5)	1012 (92.9)	< 0.001
	>20	113 (5.3)	36 (3.5)	77 (7.1)	
	Consciousness				
	Full Consciousness	1679 (72.7)	989 (83.1)	690 (61.7)	< 0.001
	Lethargy	372 (16.1)	118 (9.9)	254 (22.7)	
	Obtundation	258 (11.2)	83 (7.0)	175 (15.6)	
	GCS				
	13-15	1460 (70.7)	844 (86.3)	616 (56.7)	< 0.001
	9-12	405 (19.6)	106 (10.8)	299 (27.5)	
	≤8	199 (9.7)	28 (2.9)	171 (15.8)	
	Orientation to Place				
	Yes	1643 (59.9)	941 (71.9)	702 (49)	< 0.001
	No	1098 (40.1)	367 (28.1)	731 (51)	
	Orientation to Time				
	Yes	1652 (60.2)	944 (72.1)	708 (49.4)	< 0.001
	No	1091 (39.8)	366 (27.9)	725 (50.6)	
	Orientation to person				
	Yes	1442 (52.6)	858 (65.4)	584 (40.8)	< 0.001
	No	1302 (47.4)	453 (34.6)	849 (59.2)	
	Ambulatory status at admission				
	Ambulatory	335 (13.7)	229 (19.6)	106 (8.3)	<0.001
	Wheelchair	993 (40.4)	580 (49.5)	413 (32.2)	
	Stretcher	1127 (45.9)	362 (30.8)	765 (59.6)	
Post Stroke Complication	Seizure				
	No	2645 (96.4)	1267 (96.6)	1378 (96.2)	0.499
	Yes	99 (3.6)	44 (3.4)	55 (3.8)	
	Pneumonia				
	No	2600 (94.8)	1291 (98.5)	1309 (91.4)	<0.001
	Yes	143 (5.2)	20 (1.5)	123 (8.6)	
	Blunted affect				
	No	2686 (97.9)	1291 (98.5)	1395 (97.3)	0.040
	Yes	58 (2.1)	20 (1.5)	38 (2.7)	
	Respiratory failure				
	No	2402 (87.5)	1244 (94.9)	1158 (80.8)	<0.001
	Yes	342 (12.5)	67 (5.1)	275 (19.2)	
	Heart diseases				
	No	1829 (66.7)	890 (67.9)	939 (65.5)	0.190

	Yes	915 (33.3)	421 (32.1)	494 (34.5)	
	Peripheral edema				
	No	2725 (99.3)	1306 (99.6)	1419 (99.0)	0.060
	Yes	19 (0.7)	5 (0.4)	14 (1.0)	
	Bedsores				
	No	2703 (98.5)	1302 (99.3)	1401 (97.8)	0.128
	Yes	41 (1.5)	9 (0.7)	32 (2.2)	
	Hematologic disorder				
	No	2674 (97.4)	1288 (98.2)	1386 (96.7)	0.011
	Yes	70 (2.6)	23 (1.8)	47 (3.3)	
Severity of Stroke	Aphasia				
	No	1850 (67.4)	941 (71.8)	909 (63.4)	<0.001
	Yes	894 (32.6)	370 (28.2)	524 (36.6)	
	Dysarthria				
	No	2292 (83.5)	1064 (81.2)	1228 (85.7)	0.001
	Yes	452 (16.5)	247 (18.8)	205 (14.3)	
	Hemianopia				
	No	2586 (94.2)	1224 (93.4)	1362 (95.1)	0.024
	Yes	158 (5.8)	87 (6.6)	71 (4.9)	
	Vertigo				
	No	1200 (43.7)	551 (42.0)	649 (45.3)	0.085
	Yes	1544 (56.3)	760 (58.0)	784 (54.7)	
	Consciousness				
	No	2037 (74.2)	1133 (86.4)	904 (63.1)	<0.001
	Yes	707 (25.8)	178 (13.6)	529 (36.9)	
	Hemianesthesia				
	No	2420 (88.2)	1118 (85.3)	1302 (90.9)	<0.001
	Yes	324 (11.8)	193 (14.7)	131 (9.1)	
	Facial nerve				
	No	2106 (76.7)	1013 (77.3)	1093 (79.3)	0.166
	Yes	638 (23.3)	298 (22.7)	340 (23.7)	
	Hemiplegia				
	No	2244 (81.8)	1087 (82.9)	1157 (80.7)	0.141
	Yes	500 (18.2)	224 (17.1)	276 (19.3)	
	Paresis				
	No	2468 (89.9)	1201 (91.6)	1267 (88.4)	0.005
	Yes	276 (10.1)	110 (8.4)	166 (11.6)	
	Lack of balance				
	No	2533 (92.3)	1190 (90.8)	1343 (93.7)	0.004
	Yes	211 (7.7)	121 (9.2)	90 (6.3)	
	Urinary incontinence				
	No	2509 (91.5)	1245 (95.0)	1264 (88.3)	<0.001

Yes	234 (8.5)	66 (5.0)	168 (11.7)	
Delusional				
No	2698 (98.3)	1287 (98.2)	1411 (98.5)	0.547
Yes	46 (1.7)	24 (1.8)	22 (1.5)	
Memory impairment				
No	2724 (99.3)	1304 (99.5)	1420 (99.1)	0.251
Yes	20 (0.7)	7 (0.5)	13 (0.9)	
Gastrointestinal symptoms (nausea/ vomit/swell/digestive)				
No	2125 (77.4)	1040 (79.3)	1085 (75.7)	0.024
Yes	619 (22.56)	271 (20.7)	348 (24.3)	

Table S2. Unadjusted hazard ratios (HRs) of death by individual and various characteristics of the patients using Cox proportional hazards model

	Covariates	Number (Percentage)			HR (95% CI)	P
		Total	Alive	Deceased		
Demographic Variables	Gender					
	Male	1438 (52.4)	704 (53.7)	734 (51.2)	---	---
	Female	1306 (47.6)	607 (46.3)	699 (48.8)	1.08 (0.97- 1.20)	0.143
	Age					
	18-54 years	384 (14.1)	293 (22.5)	91 (6.4)	---	---
	55-64 years	499 (18.4)	318 (24.5)	181 (12.8)	1.59 (1.23- 2.04)	< 0.001
	65-74 years	651 (24.0)	331 (25.5)	320 (22.6)	2.37 (1.88- 2.99)	< 0.001
	75-84 years	803 (29.5)	272 (21.0)	531 (37.4)	3.60 (2.88- 4.50)	< 0.001
	≥ 85 years	379 (14.0)	84 (6.5)	295 (20.8)	5.37 (4.24- 6.79)	< 0.001
	Education					
	Illiterate	1603 (69.0)	680 (62.6)	923 (74.7)	---	---
	Under Diploma	391 (16.8)	214 (19.7)	177 (14.3)	0.70 (0.59- 0.82)	< 0.001
	Diploma	246 (10.6)	135 (12.4)	111 (9.0)	0.81 (0.66- 0.98)	0.033
	University degree	83 (3.6)	58 (5.3)	25 (2.0)	0.48 (0.32- 0.70)	< 0.001
	Job					
	Housekeeping	931 (50.8)	410 (48.5)	521 (52.8)	1.19 (0.91- 1.56)	0.215
	Employee	31 (1.7)	19 (2.2)	12 (1.2)	0.71 (0.38- 1.33)	0.291
	Worker	45 (2.5)	19 (2.2)	26 (2.6)	1.16 (0.73- 1.84)	0.534
	Farmer	221 (12.1)	96 (11.3)	125 (12.7)	1.12 (0.82- 1.53)	0.466
	Self-employed	288 (15.7)	157 (18.6)	131 (13.3)	0.88 (0.65- 1.20)	0.418
	Retired	197 (10.8)	85 (10.0)	112 (11.4)	1.25 (0.91- 1.72)	0.164
	Other	119 (6.5)	60 (7.1)	59 (6.0)	---	---
	Residence					
	City	1796 (66.3)	857 (66.1)	939 (66.6)	---	---
	Village	911 (33.7)	440 (33.9)	471 (33.4)	0.96 (0.86- 1.08)	0.504
	Marriage Status					
	Single	244 (8.9)	113 (8.6)	131 (9.2)	---	---
	Married	2488 (91.1)	1195 (91.4)	1293 (90.8)	0.85 (0.71- 1.02)	0.081
	Smoking					
	Yes	488 (21.3)	246 (22.1)	242 (20.5)	---	---
	No	1803 (78.7)	866 (77.9)	937 (79.5)	1.13 (0.98- 1.30)	0.091
	Opiate					
	Yes	407 (17.8)	204 (18.4)	203 (17.1)	---	---
	No	1884 (82.2)	903 (81.6)	981 (82.9)	1.07 (0.92- 1.25)	0.384
Clinical history	Type					
	Ischemic	1973 (76.6)	972 (78.9)	1001 (74.5)	---	---
	Hemorrhagic	602 (23.4)	260 (21.1)	342 (25.5)	1.28 (1.14- 1.45)	< 0.001
	Treatment					
	Medical	2625 (97.5)	1261 (98.2)	1364 (96.9)	---	---

	Surgical	67 (2.5)	23 (1.8)	44 (3.1)	1.48 (1.09- 1.99)	0.011
	Gastrointestinal diseases					
	No	2652 (96.6)	1277 (97.4)	1375 (96.0)	---	---
	Yes	92 (3.4)	34 (2.6)	58 (4.0)	1.41 (1.08- 1.83)	0.011
	Respiratory failure					
	No	2582 (94.1)	1259 (96.0)	1323 (92.3)	---	---
	Yes	162 (5.9)	52 (4.0)	110 (7.7)	1.65 (1.35- 2.0)	< 0.001
	Acute kidney injury					
	No	2592 (94.5)	1259 (96.0)	1333 (93.0)	---	---
	Yes	152 (5.5)	52 (4.0)	100 (7.0)	1.66 (1.36- 2.04)	< 0.001
	Obesity					
	No	2497 (91.0)	1186 (90.5)	1311 (91.5)	---	---
	Yes	247 (9.0)	125 (9.5)	122 (8.5)	0.84 (0.7- 1.02)	0.072
	Diabetes					
	No	2153 (78.5)	1053 (80.3)	1100 (76.8)	---	---
	Yes	591 (21.5)	258 (19.7)	333 (23.2)	1.13 (1.0- 1.28)	0.051
	High blood pressure					
	No	1022 (37.2)	539 (41.1)	483 (33.7)	---	---
	Yes	1722 (62.8)	772 (58.9)	950 (66.3)	1.22 (1.1- 1.37)	< 0.001
	Heart diseases					
	No	2014 (73.4)	1015 (77.4)	999 (69.7)	---	---
	Yes	730 (26.6)	296 (22.6)	434 (30.3)	1.27 (1.14- 1.43)	< 0.001
	Neurological diseases					
	No	2332 (85.0)	1143 (87.2)	1189 (83.0)	---	---
	Yes	412 (15.0)	168 (12.8)	244 (17.0)	1.24 (1.08- 1.43)	0.002
	Surgery					
	No	2002 (73.0)	988 (75.4)	1014 (70.8)	---	---
	Yes	742 (27.0)	323 (24.6)	419 (29.2)	1.10 (0.98- 1.23)	0.110
	Diabetes mellitus					
	No	2700 (98.4)	1284 (97.9)	1416 (98.8)	---	---
	Yes	44 (1.6)	27 (2.1)	17 (1.2)	0.72 (0.44- 1.16)	0.174
Vital Signs at Admission	History of blood transfusion					
	No	2348 (95.3)	1174 (97.8)	1174 (93.0)	---	---
	Yes	115 (4.7)	26 (2.2)	89 (7.0)	2.29 (1.84- 2.84)	< 0.001
	Fever					
	No	2232 (88.1)	1093 (89.9)	1139 (86.4)	---	---
	Yes	302 (11.9)	123 (10.1)	179 (13.6)	1.35 (1.15- 1.58)	< 0.001
	High Blood Pressure					
	Normal	398 (15.1)	190 (15.1)	208 (15.1)	0.82 (0.66- 1.01)	0.065
	Elevated	106 (4.0)	56 (4.4)	50 (3.6)	0.60 (0.44- 0.83)	0.002
	Stage1 (hypertension)	721 (27.3)	365 (28.9)	356 (25.9)	0.67 (0.55- 0.82)	< 0.001
	Stage2 (hypertension)	1191 (45.2)	565 (44.8)	626 (45.5)	0.76 (0.63- 0.91)	0.003
	Hypertensive Crisis	221 (8.4)	86 (6.8)	135 (9.8)	---	---

	Heart Rate					
	Normal	2114 (92.8)	1025 (94.6)	1089 (91.1)	---	---
	Bradycardia (<60 bpm)	51 (2.2)	18 (1.7)	33 (2.8)	1.37 (0.96- 1.96)	0.083
	Tachycardia (≥100 bpm)	114 (5.0)	40 (3.7)	74 (6.2)	1.61 (1.26- 2.03)	< 0.001
	Respiratory Rate					
	12-20	2007 (94.7)	995 (96.5)	1012 (92.9)	---	---
	>20	113 (5.3)	36 (3.5)	77 (7.1)	1.67 (1.33- 2.11)	< 0.001
	Consciousness					
	Full Consciousness	1679 (72.7)	989 (83.1)	690 (61.7)	---	---
	Lethargy	372 (16.1)	118 (9.9)	254 (22.7)	2.48 (2.14- 2.86)	< 0.001
	Obtundation	258 (11.2)	83 (7.0)	175 (15.6)	2.60 (2.2- 3.08)	< 0.001
	GCS					
	13-15	1460 (70.7)	844 (86.3)	616 (56.7)	---	---
	9-12	405 (19.6)	106 (10.8)	299 (27.5)	2.76 (2.40- 3.17)	< 0.001
	≤8	199 (9.7)	28 (2.9)	171 (15.8)	5.49 (4.62- 6.53)	< 0.001
	Orientation to Place					
	Yes	1643 (59.9)	941 (71.9)	702 (49)	---	---
	No	1098 (40.1)	367 (28.1)	731 (51)	2.28 (2.05- 2.52)	< 0.001
	Orientation to Time					
	Yes	1652 (60.2)	944 (72.1)	708 (49.4)	---	---
	No	1091 (39.8)	366 (27.9)	725 (50.6)	2.28 (2.05- 2.53)	< 0.001
	Orientation to Person					
	Yes	1442 (52.6)	858 (65.4)	584 (40.8)	---	---
	No	1302 (47.4)	453 (34.6)	849 (59.2)	2.14 (1.92- 2.38)	< 0.001
	Ambulatory status at admission					
	Ambulatory	335 (13.7)	229 (19.6)	106 (8.3)	---	---
	Wheelchair	993 (40.4)	580 (49.5)	413 (32.2)	1.56 (1.26- 1.93)	< 0.001
	Stretcher	1127 (45.9)	362 (30.8)	765 (59.6)	3.73 (3.04- 4.57)	< 0.001
Post-stroke complication	Seizure					
	No	2645 (96.4)	1267 (96.6)	1378 (96.2)	---	---
	Yes	99 (3.6)	44 (3.4)	55 (3.8)	1.24 (0.95- 1.63)	0.119
	Pneumonia					
	No	2600 (94.8)	1291 (98.5)	1309 (91.4)	---	---
	Yes	143 (5.2)	20 (1.5)	123 (8.6)	2.89 (2.39- 3.48)	< 0.001
	Blunted affect					
	No	2686 (97.9)	1291 (98.5)	1395 (97.3)	---	---
	Yes	58 (2.1)	20 (1.5)	38 (2.7)	1.35 (0.97- 1.86)	0.071
	Respiratory failure					
	No	2402 (87.5)	1244 (94.9)	1158 (80.8)	---	---
	Yes	342 (12.5)	67 (5.1)	275 (19.2)	2.83 (2.48- 3.23)	< 0.001
	Heart diseases					
	No	1829 (66.7)	890 (67.9)	939 (65.5)	---	---
	Yes	915 (33.3)	421 (32.1)	494 (34.5)	1.12 (1.01- 1.25)	0.035

	Peripheral edema					
	No	2725 (99.3)	1306 (99.6)	1419 (99.0)	---	---
	Yes	19 (0.7)	5 (0.4)	14 (1.0)	1.99 (1.18-3.38)	0.010
	Bedsores					
	No	2703 (98.5)	1302 (99.3)	1401 (97.8)	---	---
	Yes	41 (1.5)	9 (0.7)	32 (2.2)	2.29 (1.61- 3.28)	< 0.001
	Hematologic disorder					
	No	2674 (97.4)	1288 (98.2)	1386 (96.7)	---	---
	Yes	70 (2.6)	23 (1.8)	47 (3.3)	1.68 (1.25- 2.25)	0.001
	Recurrent stroke					
	No	1631 (78.2)	819 (83.1)	812 (73.8)	---	---
	Yes	454 (21.8)	166 (16.9)	288 (26.2)	1.39 (1.22- 1.59)	< 0.001
Stroke Severity	Aphasia					
	No	1850 (67.4)	941 (71.8)	909 (63.4)	---	---
	Yes	894 (32.6)	370 (28.2)	524 (36.6)	1.24 (1.11- 1.38)	< 0.001
	Dysarthria					
	No	2292 (83.5)	1064 (81.2)	1228 (85.7)	---	---
	Yes	452 (16.5)	247 (18.8)	205 (14.3)	0.81 (0.70- 0.94)	0.005
	Hemianopia					
	No	2586 (94.2)	1224 (93.4)	1362 (95.1)	---	---
	Yes	158 (5.8)	87 (6.6)	71 (4.9)	0.76 (0.60- 0.97)	0.027
	Vertigo					
	No	1200 (43.7)	551 (42.0)	649 (45.3)	---	---
	Yes	1544 (56.3)	760 (58.0)	784 (54.7)	0.91 (0.82- 1.01)	0.063
	Consciousness					
	No	2037 (74.2)	1133 (86.4)	904 (63.1)	---	---
	Yes	707 (25.8)	178 (13.6)	529 (36.9)	2.74 (2.46- 3.05)	< 0.001
	Hemianesthesia					
	No	2420 (88.2)	1118 (85.3)	1302 (90.9)	---	---
	Yes	324 (11.8)	193 (14.7)	131 (9.1)	0.63 (0.53- 0.75)	< 0.001
	Facial nerve					
	No	2106 (76.7)	1013 (77.3)	1093 (79.3)	---	---
	Yes	638 (23.3)	298 (22.7)	340 (23.7)	1.00 (0.89- 1.13)	0.965
	Hemiplegia					
	No	2244 (81.8)	1087 (82.9)	1157 (80.7)	---	---
	Yes	500 (18.2)	224 (17.1)	276 (19.3)	1.24 (1.08- 1.41)	0.002
	Paresis					
	No	2468 (89.9)	1201 (91.6)	1267 (88.4)	---	---
	Yes	276 (10.1)	110 (8.4)	166 (11.6)	1.09 (0.93- 1.28)	0.291
	Lack of balance					
	No	2533 (92.3)	1190 (90.8)	1343 (93.7)	---	---
	Yes	211 (7.7)	121 (9.2)	90 (6.3)	0.73 (0.59- 0.91)	0.004

Urinary incontinence					
No	2509 (91.5)	1245 (95.0)	1264 (88.3)	---	---
Yes	234 (8.5)	66 (5.0)	168 (11.7)	1.91 (1.62- 2.24)	< 0.001
Delusional					
No	2698 (98.3)	1287 (98.2)	1411 (98.5)	---	---
Yes	46 (1.7)	24 (1.8)	22 (1.5)	0.84 (0.55- 1.28)	0.410
Memory impairment					
No	2724 (99.3)	1304 (99.5)	1420 (99.1)	---	---
Yes	20 (0.7)	7 (0.5)	13 (0.9)	1.22 (0.70- 2.10)	0.482
Gastrointestinal symptoms (nausea/ vomit/swell/digestive)					
No	2125 (77.4)	1040 (79.3)	1085 (75.7)	---	---
Yes	619 (22.56)	271 (20.7)	348 (24.3)	1.21 (1.07-1.37)	0.002

Table S3. Results of Testing the Assumptions of the Cox Proportional Hazards Model using the Schoenfeld residuals and variance inflation factor (VIF)

Covariates		**Baseline**		**LandMark**	
		PH assumption	**VIF**	**PH assumption**	**VIF**
Demographic Variables	Gender	0.586	1.21	0.668	1.2
	Age				
	18-54 years	_	-		
	55-64 years	0.180	2.17	0.013	2.05
	65-74 years	0.190	2.47	0.017	2.28
	75-84 years	0.351	2.78	0.038	2.62
	≥ 85 years	0.186	2.14	0.042	1.99
	Opiate (No)	0.564	1.19	0.760	1.18
Clinical history	Acute kidney injury (Yes)	0.373	1.06	0.451	1.04
	Obesity (Yes)	0.575	1.14	0.397	1.11
	Diabetes (Yes)	0.124	1.13	0.062	1.15
	High blood Pressure	0.485	1.23	0.949	1.16
	Neurological diseases (Yes)	0.15	1.36	0.556	1.39
	Surgery	0.753	1.07	_	
	Type				
	Ischemic	--	--		
	Hemorrhagic	0.941	1.2	0.750	1.2
Vital Signs at Admission	Blood transfusion (Yes)	0.324	--	_	_
	Fever	0.644	1.10	0.639	1.09
	Blood Pressure			_	_
	Normal	0.926	2.38	_	_
	Elevated	0.133	1.35	_	_
	Stage1 (hypertension)	0.793	3.18	_	_
	Stage2 (hypertension)	0.718	3.42	_	_
	Hypertensive Crisis	--	--	_	_
	Heart Rate				
	Normal	--	--	_	_
	Bradycardia (<60 bpm)	0.367	1.06	0.116	1.05
	Tachycardia (≥100 bpm)	0.408	1.11	0.928	1.08
	Respiratory Rate			.	
	>20	0.812	1.13	0.924	1.08
	GCS				
	13-15	--	--	_	
	9-12	0.239	1.29	0.278	1.31
	≤ 8	0.030	1.16	0.007	1.26
	Ambulatory status at admission				
	Ambulatory	--	--		
	Wheelchair	0.012	2.59	0.0076	2.42
	Stretcher	0.006	2.9	0.0046	2.8
Post Stroke Complication	Recurrent stroke	0.135	1.37	0.977	1.39

	Respiratory failure			0.887	1.64
	Pneumonia			0.380	1.6
Stroke Severity	Dysarthria	0.615	1.09	0.999	1.08
	Hemianesthesia	0.684	1.09		
	Facial nerve	0.726	1.09	0.701	1.07
	Urinary incontinence	0.275	1.09	0.500	1.09
	Gastrointestinal (Yes)	0.566	1.17		
	reduce_strength_limb	0.353	1.05		
Mean		0.058	1.54	0.063	1.44

Table S4. The results of Sensitivity Analysis of Baseline model according to Admission and Symptom time using Cox proportional hazards model.

Covariates		Baseline (Symptom time)		Baseline (Admission time)	
		HR (95% CI)	P	HR (95% CI)	P
Demographic Variables	Gender	0.85 (0.67- 1.08)	0.159	0.83 (0.66- 1.05)	0.121
	Age				
	18-54 years	--	--	--	--
	55-64 years	2.78 (1.48- 5.22)	0.001	2.74 (1.46- 5.15)	0.002
	65-74 years	4.60 (2.52- 8.42)	<0.001	4.31 (2.36- 7.87)	<0.001
	75-84 years	6.86 (3.82- 12.42)	<0.001	6.49 (3.58- 11.77)	<0.001
	≥ 85 years	10.25 (5.59- 19.06)	<0.001	9.73 (5.24- 18.06)	<0.001
	Opiate (No)	0.83 (0.61- 1.12)	0.221	0.82 (0.61- 1.12)	0.216
Clinical history	Acute kidney injury (Yes)	1.58 (1.05- 2.39)	0.029	1.54 (1.02- 2.33)	0.040
	Diabetes (Yes)	1.47 (1.11- 1.91)	0.005	1.39 (1.06- 1.83)	0.016
	Obesity (Yes)	0.80 (0.53- 1.21)	0.292	0.83 (0.55- 1.25)	0.375
	Neurological diseases (Yes)	1.31 (0.94- 1.84)	0.114	1.26 (0.90- 1.76)	0.172
	High blood pressure	1.19 (0.94- 1.53)	0.148	1.18 (0.93- 1.52)	0.180
	Surgery	1.13 (0.89- 1.43)	0.316	1.16 (0.92- 1.47)	0.216
	Type				
	Ischemic	--	--	--	--
	Hemorrhagic	1.28 (0.97- 1.7)	0.088	1.23 (0.93- 1.63)	0.150
Vital Signs at Admission	History of blood transfusion	1.63 (1.02- 2.62)	0.040	1.74 (1.08- 2.79)	0.022
	Fever (Yes)	1.18 (0.83- 1.66)	0.356	1.18 (0.83- 1.66)	0.353
	Blood Pressure				
	Normal	1.40 (0.85- 2.29)	0.191	1.34 (0.82- 2.20)	0.239
	Elevated	1.72 (0.89- 3.34)	0.105	1.71 (0.88- 3.30)	0.111
	Stage1 (hypertension)	1.10 (0.72- 1.7)	0.673	1.04 (0.68- 1.59)	0.851
	Stage2 (hypertension)	0.92 (0.62- 1.38)	0.673	0.88 (0.59- 1.32)	0.554
	Hypertensive Crisis	--	--	--	--
	Heart Rate				
	Normal	--		--	
	Bradycardia (<60 bpm)	1.16 (0.52- 2.56)	0.720	1.02 (0.46- 2.25)	0.960
	Tachycardia (≥100 bpm)	0.57 (0.32- 1.01)	0.061	0.59 (0.33- 1.04)	0.073
	Respiratory Rate				
	>20	2.26 (1.39- 3.67)	0.001	2.02 (1.26- 3.24)	0.004
	GCS				
	13-15	--	--	--	--
	9-12	1.44 (1.08- 1.9)	0.010	1.47 (1.11- 1.94)	0.007
	≤ 8	1.74 (1.01- 2.93)	0.041	1.60 (1.01- 2.73)	0.048
	Ambulatory status at admission				
	Ambulatory				
	Wheelchair	1.18 (0.8- 1.77)	0.416	1.18 (0.79- 1.75)	0.424
	Stretcher	2.40 (1.59- 3.65)	<0.001	2.44 (1.61- 3.69)	<0.001
	Recurrent stroke	1.07 (0.78- 1.43)	0.659	1.07 (0.80- 1.44)	0.633

Stroke Severity	Dysarthria	0.82 (0.69- 1.11)	0.170	0.82 (0.61- 1.11)	0.203
	Facial nerve	1.13 (0.87- 1.45)	0.341	1.20 (0.93- 1.54)	0.162
	Urinary incontinence	1.46 (1.01- 2.08)	0.040	1.35 (1.00- 1.94)	0.047
	Gastrointestinal symptoms	1.57 (1.19- 2.08)	0.002	1.30 (1.00- 1.69)	0.049
	Hemianesthesia	0.74 (0.51- 1.07)	0.113	0.76 (0.52- 1.10)	0.152
	Paresis	1.26 (0.9- 1.75)	0.160	1.26 (0.9- 1.75)	0.166