

SUPPLEMENTARY DATA

Supplementary Table I. Confounding co-morbidities and corresponding International Classification of Disease-10 (*ICD10*) codes.

Coronary Heart Disease	I20 - I25
Peripheral Vascular Disease	I73.9
Transient Ischaemic attack	G45
Hypertension	I10 - I15
Diabetes	E10 - E14
Chronic Kidney Disease	N18
Asthma	J45
Chronic Obstructive Pulmonary Disease	J40 - J44, J47
Cancers	C00 - C97
Liver disease	K70 - K77
Haemorrhagic Stroke	I60 – I61
Recurrent Ischaemic Stroke	I63

Supplementary Table II. Frequency and percentage of missing data in each of the recorded variables.

Variable	Missing		Total
	N	%	
Glucose on admission	2,606	24	10,816
Creatinine on admission	298	3	10,816
Sodium on admission	310	3	10,816
Albumin on admission	468	4	10,816
Cholesterol on admission	3,849	36	10,816
INR on admission	1,556	14	10,816
CRP on admission	1,875	17	10,816
Haemoglobin on admission	557	5	10,816
WBC on admission	269	2	10,816
Platelet count on admission	284	3	10,816
mRS before stroke	607	6	10,816
mRS after stroke	3,160	29	10,816
OCSP classification	1,086	10	10,816
NIHSS	9,294	86	10,816

Supplementary Table III. Patient characteristics stratified by whether the data for **Random Plasma Glucose** levels were missing.

	Total	Missing	Non-missing	P Value
Age, mean (SD)	77.94 (12.05)	77.83 (11.99)	78.26 (12.24)	0.114
Sex (% female)	5624 (52.0)	1392 (53.4)	4232 (51.5)	0.096
Length of stay, median (IQR)	8.0 (3.0-17.0)	8.0 (3.4-17.0)	7.0 (3.0-16.0)	<0.001
Pre-stroke mRS score, median (IQR)	0.0 (0.0-2.0)	0.0 (0.0-1.0)	0.0 (0.0-2.0)	0.071
Post-stroke mRS score, median (IQR)	3.0 (1.0-6.0)	3.0 (1.0-5.0)	3.0 (1.0-6.0)	<0.001
Δ mRS, median (IQR)	2.0 (0.0-3.0)	2.0 (0.0-3.0)	2.0 (1.0-4.0)	0.005
Charlson Score, median (IQR)	3.0 (1.0-4.0)	3.0 (1.0-4.0)	2.0 (1.0-4.0)	<0.001
In-hospital death (%)	2035 (18.8)	629 (24.1)	1406 (17.1)	<0.001
Death (%)	5110 (47.2)	1311 (50.3)	3799 (46.3)	<0.001
Anti-platelets on admission, (%)	3873 (35.8)	1019 (39.1)	2854 (34.8)	<0.001
Anti-platelets on discharge, (%)	7203 (66.6)	1647 (63.2)	5556 (67.7)	<0.001
Anti-coagulants on admission, (%)	150 (1.4)	32 (1.2)	118 (1.4)	0.426
Anti-coagulants on discharge (%)	285 (2.6)	56 (2.1)	229 (2.8)	0.075
Coronary Heart Disease (%)	2933 (27.1)	708 (27.2)	2225 (27.1)	0.947
Peripheral Vascular Disease (%)	430 (4.0)	107 (4.1)	323 (3.9)	0.696
Transient Ischaemic Attack (%)	530 (4.9)	112 (4.3)	418 (5.1)	0.102
Hypertension (%)	6405 (59.2)	1471 (56.4)	4934 (60.1)	<0.001
Diabetes (%)	1901 (17.6)	383 (14.7)	1518 (18.5)	<0.001
CKD (%)	693 (6.4)	159 (6.1)	534 (6.5)	0.464
Asthma (%)	987 (9.1)	251 (9.6)	736 (9.0)	0.303

Chronic Obstructive Pulmonary Disease (%)	868 (8.0)	219 (8.4)	649 (7.9)	0.414
Cancers (%)	1683 (15.6)	401 (15.4)	1282 (15.6)	0.78
Liver Disease (%)	167 (1.5)	39 (1.5)	128 (1.6)	0.822
Glucose, mmol/L median (IQR)	-	-	-	-
Urea, mmol/L median (IQR)	6.6 (5.2-8.9)	6.6 (5.2-8.8)	6.7 (5.2-9.2)	0.129
Creatinine, μ mol/L median (IQR)	86.0 (71.0-108.0)	86.0 (71.0-108.0)	87.0 (72.0-110.0)	0.044
HDL, mmol/L median (IQR)	1.2 (1.0-1.5)	1.2 (1.0-1.5)	1.2 (0.9-1.4)	0.006
INR, median (IQR)	1.0 (1.0-1.1)	1.0 (1.0-1.1)	1.0 (1.0-1.1)	0.337
CRP, g/L median (IQR)	11.0 (5.0-36.0)	11.0 (5.0-33.0)	14.0 (5.0-44.0)	<0.001
Total white cell count, $\times 10^9$ /L median (IQR)	8.8 (7.1-11.3)	8.8 (7.1-11.2)	8.9 (7.1-11.9)	0.003
Na, mean (SD)	138.30 (4.23)	138.26 (4.18)	138.45 (4.40)	0.053
Albumin, g/L mean (SD)	36.63 (5.43)	36.82 (5.20)	35.96 (6.13)	<0.001
Cholesterol, mmol/L mean (SD)	4.85 (1.31)	4.85 (1.31)	4.84 (1.29)	0.661
LDL, mmol/L mean (SD)	3.00 (1.12)	3.01 (1.13)	2.94 (1.11)	0.284
Haemoglobin, g/L mean (SD)	134.61 (19.57)	135.19 (19.20)	132.55 (20.73)	<0.001
PLT, $\times 10^9$ /L mean (SD)	260.08 (93.45)	259.14 (92.38)	263.36 (97.03)	0.054

Supplementary Table IV. Patient characteristics stratified by whether the data for **Creatinine** levels were missing.

	Total	Missing	Non-missing	P Value
Age, mean (SD)	77.94 (12.05)	77.96 (12.03)	77.11 (12.58)	0.227
Sex (% female)	5624 (52.0)	137 (46.0%)	5487 (52.2%)	0.035
Length of stay, median (IQR)	8.0 (3.0-17.0)	8.0 (3.2-17.0)	5.0 (2.0-12.0)	<0.001
Pre-stroke mRS score, median (IQR)	0.0 (0.0-2.0)	0.0 (0.0-2.0)	0.0 (0.0-1.0)	0.11
Post-stroke mRS score, median (IQR)	3.0 (1.0-6.0)	3.0 (1.0-6.0)	2.0 (0.0-6.0)	<0.001
Δ mRS, median (IQR)	2.0 (0.0-3.0)	2.0 (0.0-3.0)	1.0 (0.0-3.0)	0.001
Charlson Score, median (IQR)	3.0 (1.0-4.0)	3.0 (1.0-4.0)	2.0 (1.0-3.0)	<0.001
In-hospital death (%)	2035 (18.8)	59 (19.8)	1976 (18.8)	0.659
Death (%)	5110 (47.2)	101 (33.9)	5009 (47.6)	<0.001
Anti-platelets on admission, (%)	3873 (35.8)	89 (29.9)	3784 (36.0)	0.03
Anti-platelets on discharge, (%)	7203 (66.6)	162 (54.4)	7041 (66.9)	<0.001
Anti-coagulants on admission, (%)	150 (1.4)	1 (0.3)	149 (1.4)	0.116
Anti-coagulants on discharge (%)	285 (2.6)	1 (0.3)	284 (2.7)	0.012
Coronary Heart Disease (%)	2933 (27.1)	46 (15.4)	2887 (27.4)	<0.001
Peripheral Vascular Disease (%)	430 (4.0)	11 (3.7)	419 (4.0)	0.799
Transient Ischaemic Attack (%)	530 (4.9)	12 (4.0)	518 (4.9)	0.479
Hypertension (%)	6405 (59.2)	131 (44.0)	6274 (59.7)	<0.001
Diabetes (%)	1901 (17.6)	51 (17.1)	1850 (17.6)	0.832
CKD (%)	693 (6.4)	16 (5.4)	677 (6.4)	0.458
Asthma (%)	987 (9.1)	28 (9.4)	959 (9.1)	0.869

Chronic Obstructive Pulmonary Disease (%)	868 (8.0)	12 (4.0)	856 (8.1)	0.01
Cancers (%)	1683 (15.6)	37 (12.4)	1646 (15.6)	0.129
Liver Disease (%)	167 (1.5)	2 (0.7)	165 (1.6)	0.215
Glucose, mmol/L median (IQR)	6.3 (5.5-7.8)	6.3 (5.5-7.8)	5.8 (5.5-6.1)	0.26
Urea, mmol/L median (IQR)	6.6 (5.2-8.9)	6.6 (5.2-8.9)	6.4 (5.0-9.4)	0.944
Creatinine, μ mol/L median (IQR)	-	-	-	-
HDL, mmol/L median (IQR)	1.2 (1.0-1.5)	1.2 (1.0-1.5)	1.1 (0.9-1.2)	0.041
INR, median (IQR)	1.0 (1.0-1.1)	1.0 (1.0-1.1)	1.0 (0.9-1.0)	<0.001
CRP, g/L median (IQR)	11.0 (5.0-36.0)	11.0 (5.0-36.0)	4.0 (3.0-9.0)	<0.001
Total white cell count, $\times 10^9$ /L median (IQR)	8.8 (7.1-11.3)	8.8 (7.1-11.3)	8.2 (6.8-9.9)	0.037
Na, mean (SD)	138.30 (4.23)	138.30 (4.23)	132.67 (2.52)	0.021
Albumin, g/L mean (SD)	36.63 (5.43)	36.62 (5.44)	37.94 (2.84)	0.084
Cholesterol, mmol/L mean (SD)	4.85 (1.31)	4.85 (1.31)	5.23 (1.26)	0.064
LDL, mmol/L mean (SD)	3.00 (1.12)	2.99 (1.12)	3.72 (1.22)	0.067
Haemoglobin, g/L mean (SD)	134.61 (19.57)	134.60 (19.58)	138.03 (17.57)	0.337
PLT, $\times 10^9$ /L mean (SD)	260.08 (93.45)	260.02 (93.54)	271.09 (73.09)	0.39

Supplementary Table V. Patient characteristics stratified by whether the data for **Sodium** levels were missing.

	Total	Missing	Non-missing	P Value
Age, mean (SD)	77.94 (12.05)	77.96 (12.03)	77.02 (12.63)	0.175
Sex (% female)	5624 (52.0)	143 (46.1%)	5481 (52.2%)	0.036
Length of stay, median (IQR)	8.0 (3.0-17.0)	8.0 (3.2-17.0)	5.0 (2.0-11.0)	<0.001
Pre-stroke mRS score, median (IQR)	0.0 (0.0-2.0)	0.0 (0.0-2.0)	0.0 (0.0-1.0)	0.102
Post-stroke mRS score, median (IQR)	3.0 (1.0-6.0)	3.0 (1.0-6.0)	2.0 (0.0-6.0)	0.004
Δ mRS, median (IQR)	2.0 (0.0-3.0)	2.0 (0.0-3.0)	1.0 (0.0-3.0)	0.009
Charlson Score, median (IQR)	3.0 (1.0-4.0)	3.0 (1.0-4.0)	2.0 (1.0-3.0)	<0.001
In-hospital death (%)	2035 (18.8)	66 (21.3)	1969 (18.7)	0.258
Death (%)	5110 (47.2)	109 (35.2)	5001 (47.6)	<0.001
Anti-platelets on admission, (%)	3873 (35.8)	93 (30.0)	3780 (36.0)	0.03
Anti-platelets on discharge, (%)	7203 (66.6)	164 (52.9)	7039 (67.0)	<0.001
Anti-coagulants on admission, (%)	150 (1.4)	1 (0.3)	149 (1.4)	0.104
Anti-coagulants on discharge (%)	285 (2.6)	1 (0.3)	284 (2.7)	0.01
Coronary Heart Disease (%)	2933 (27.1)	48 (15.5)	2885 (27.5)	<0.001
Peripheral Vascular Disease (%)	430 (4.0)	11 (3.5)	419 (4.0)	0.696
Transient Ischaemic Attack (%)	530 (4.9)	13 (4.2)	517 (4.9)	0.559
Hypertension (%)	6405 (59.2)	136 (43.9)	6269 (59.7)	<0.001
Diabetes (%)	1901 (17.6)	51 (16.5)	1850 (17.6)	0.598
CKD (%)	693 (6.4)	17 (5.5)	676 (6.4)	0.501
Asthma (%)	987 (9.1)	29 (9.4)	958 (9.1)	0.887

Chronic Obstructive Pulmonary Disease (%)	868 (8.0)	12 (3.9)	856 (8.1)	0.006
Cancers (%)	1683 (15.6)	37 (11.9)	1646 (15.7)	0.074
Liver Disease (%)	167 (1.5)	2 (0.6)	165 (1.6)	0.193
Glucose, mmol/L median (IQR)	6.3 (5.5-7.8)	6.3 (5.5-7.8)	6.2 (5.3-10.1)	0.765
Urea, mmol/L median (IQR)	6.6 (5.2-8.9)	6.6 (5.2-8.9)	6.4 (4.4-13.0)	0.896
Creatinine, µmol/L median (IQR)	86.0 (71.0-108.0)	86.0 (71.0-108.0)	75.0 (53.0-94.0)	0.081
HDL, mmol/L median (IQR)	1.2 (1.0-1.5)	1.2 (1.0-1.5)	1.1 (0.9-1.2)	0.186
INR, median (IQR)	1.0 (1.0-1.1)	1.0 (1.0-1.1)	1.0 (0.9-1.0)	<0.001
CRP, g/L median (IQR)	11.0 (5.0-36.0)	11.0 (5.0-36.0)	4.0 (3.0-9.0)	<0.001
Total white cell count, x10 ⁹ /L median (IQR)	8.8 (7.1-11.3)	8.8 (7.1-11.3)	8.3 (6.8-10.9)	0.125
Na, mean (SD)	-	-	-	-
Albumin, g/L mean (SD)	36.63 (5.43)	36.62 (5.43)	38.31 (3.38)	0.026
Cholesterol, mmol/L mean (SD)	4.85 (1.31)	4.85 (1.31)	5.24 (1.21)	0.041
LDL, mmol/L mean (SD)	3.00 (1.12)	2.99 (1.12)	3.73 (1.04)	0.023
Haemoglobin, g/L mean (SD)	134.61 (19.57)	134.58 (19.58)	140.79 (15.85)	0.04
PLT, x10 ⁹ /L mean (SD)	260.08 (93.45)	260.05 (93.57)	264.00 (71.49)	0.734

Supplementary Table VI. Patient characteristics stratified by whether the data for **Albumin** levels were missing.

	Total	Missing	Non-missing	P Value
Age, mean (SD)	77.94 (12.05)	77.96 (12.03)	77.02 (12.63)	0.175
Sex (% female)	5624 (52.0)	143 (46.1%)	5481 (52.2%)	0.036
Length of stay, median (IQR)	8.0 (3.0-17.0)	8.0 (3.2-17.0)	5.0 (2.0-11.0)	<0.001
Pre-stroke mRS score, median (IQR)	0.0 (0.0-2.0)	0.0 (0.0-2.0)	0.0 (0.0-1.0)	0.102
Post-stroke mRS score, median (IQR)	3.0 (1.0-6.0)	3.0 (1.0-6.0)	2.0 (0.0-6.0)	0.004
Δ mRS, median (IQR)	2.0 (0.0-3.0)	2.0 (0.0-3.0)	1.0 (0.0-3.0)	0.009
Charlson Score, median (IQR)	3.0 (1.0-4.0)	3.0 (1.0-4.0)	2.0 (1.0-3.0)	<0.001
In-hospital death (%)	2035 (18.8)	66 (21.3)	1969 (18.7)	0.258
Death (%)	5110 (47.2)	109 (35.2)	5001 (47.6)	<0.001
Anti-platelets on admission, (%)	3873 (35.8)	93 (30.0)	3780 (36.0)	0.03
Anti-platelets on discharge, (%)	7203 (66.6)	164 (52.9)	7039 (67.0)	<0.001
Anti-coagulants on admission, (%)	150 (1.4)	1 (0.3)	149 (1.4)	0.104
Anti-coagulants on discharge (%)	285 (2.6)	1 (0.3)	284 (2.7)	0.01
Coronary Heart Disease (%)	2933 (27.1)	48 (15.5)	2885 (27.5)	<0.001
Peripheral Vascular Disease (%)	430 (4.0)	11 (3.5)	419 (4.0)	0.696
Transient Ischaemic Attack (%)	530 (4.9)	13 (4.2)	517 (4.9)	0.559
Hypertension (%)	6405 (59.2)	136 (43.9)	6269 (59.7)	<0.001
Diabetes (%)	1901 (17.6)	51 (16.5)	1850 (17.6)	0.598
CKD (%)	693 (6.4)	17 (5.5)	676 (6.4)	0.501
Asthma (%)	987 (9.1)	29 (9.4)	958 (9.1)	0.887

Chronic Obstructive Pulmonary Disease (%)	868 (8.0)	12 (3.9)	856 (8.1)	0.006
Cancers (%)	1683 (15.6)	37 (11.9)	1646 (15.7)	0.074
Liver Disease (%)	167 (1.5)	2 (0.6)	165 (1.6)	0.193
Glucose, mmol/L median (IQR)	6.3 (5.5-7.8)	6.3 (5.5-7.8)	6.2 (5.3-10.1)	0.765
Urea, mmol/L median (IQR)	6.6 (5.2-8.9)	6.6 (5.2-8.9)	6.4 (4.4-13.0)	0.896
Creatinine, μ mol/L median (IQR)	86.0 (71.0-108.0)	86.0 (71.0-108.0)	75.0 (53.0-94.0)	0.081
HDL, mmol/L median (IQR)	1.2 (1.0-1.5)	1.2 (1.0-1.5)	1.1 (0.9-1.2)	0.186
INR, median (IQR)	1.0 (1.0-1.1)	1.0 (1.0-1.1)	1.0 (0.9-1.0)	<0.001
CRP, g/L median (IQR)	11.0 (5.0-36.0)	11.0 (5.0-36.0)	4.0 (3.0-9.0)	<0.001
Total white cell count, $\times 10^9$ /L median (IQR)	8.8 (7.1-11.3)	8.8 (7.1-11.3)	8.3 (6.8-10.9)	0.125
Na, mean (SD)				
Albumin, g/L mean (SD)	36.63 (5.43)	36.62 (5.43)	38.31 (3.38)	0.026
Cholesterol, mmol/L mean (SD)	4.85 (1.31)	4.85 (1.31)	5.24 (1.21)	0.041
LDL, mmol/L mean (SD)	3.00 (1.12)	2.99 (1.12)	3.73 (1.04)	0.023
Haemoglobin, g/L mean (SD)	134.61 (19.57)	134.58 (19.58)	140.79 (15.85)	0.04
PLT, $\times 10^9$ /L mean (SD)	260.08 (93.45)	260.05 (93.57)	264.00 (71.49)	0.734

Supplementary Table VII. Patient characteristics stratified by whether the data for **Cholesterol** levels were missing.

	Total	Missing	Non-missing	P Value
Age, mean (SD)	77.94 (12.05)	76.88 (12.12)	79.85 (11.68)	<0.001
Sex (% female)	5624 (52.0)	2128 (55.3%)	3496 (50.2%)	<0.001
Length of stay, median (IQR)	8.0 (3.0-17.0)	8.0 (4.0-18.0)	7.0 (3.0-16.0)	<0.001
Pre-stroke mRS score, median (IQR)	0.0 (0.0-2.0)	0.0 (0.0-1.0)	0.0 (0.0-2.0)	<0.001
Post-stroke mRS score, median (IQR)	3.0 (1.0-6.0)	3.0 (1.0-4.0)	4.0 (2.0-6.0)	<0.001
ΔmRS, median (IQR)	2.0 (0.0-3.0)	2.0 (0.0-3.0)	2.0 (1.0-4.0)	<0.001
Charlson Score, median (IQR)	3.0 (1.0-4.0)	3.0 (1.0-4.0)	3.0 (1.0-4.0)	0.87
In-hospital death (%)	2035 (18.8)	1217 (31.6)	818 (11.7)	<0.001
Death (%)	5110 (47.2)	2257 (58.6)	2853 (41.0)	<0.001
Anti-platelets on admission, (%)	3873 (35.8)	1576 (40.9)	2297 (33.0)	<0.001
Anti-platelets on discharge, (%)	7203 (66.6)	2102 (54.6)	5101 (73.2)	<0.001
Anti-coagulants on admission, (%)	150 (1.4)	23 (0.6)	127 (1.8)	<0.001
Anti-coagulants on discharge (%)	285 (2.6)	47 (1.2)	238 (3.4)	<0.001
Coronary Heart Disease (%)	2933 (27.1)	1118 (29.0)	1815 (26.1)	<0.001
Peripheral Vascular Disease (%)	430 (4.0)	171 (4.4)	259 (3.7)	0.065
Transient Ischaemic Attack (%)	530 (4.9)	169 (4.4)	361 (5.2)	0.068
Hypertension (%)	6405 (59.2)	2240 (58.2)	4165 (59.8)	0.108
Diabetes (%)	1901 (17.6)	703 (18.3)	1198 (17.2)	0.162
CKD (%)	693 (6.4)	228 (5.9)	465 (6.7)	0.127
Asthma (%)	987 (9.1)	358 (9.3)	629 (9.0)	0.637

Chronic Obstructive Pulmonary Disease (%)	868 (8.0)	332 (8.6)	536 (7.7)	0.088
Cancers (%)	1683 (15.6)	659 (17.1)	1024 (14.7)	<0.001
Liver Disease (%)	167 (1.5)	60 (1.6)	107 (1.5)	0.926
Glucose, mmol/L median (IQR)	6.3 (5.5-7.8)	6.3 (5.5-7.7)	6.5 (5.6-8.3)	<0.001
Urea, mmol/L median (IQR)	6.6 (5.2-8.9)	6.4 (5.1-8.5)	7.1 (5.4-10.0)	<0.001
Creatinine, µmol/L median (IQR)	86.0 (71.0-108.0)	85.0 (71.0-106.0)	87.0 (71.0-114.0)	<0.001
HDL, mmol/L median (IQR)	1.2 (1.0-1.5)	1.2 (1.0-1.5)	1.1 (1.1-1.1)	0.848
INR, median (IQR)	1.0 (1.0-1.1)	1.0 (1.0-1.1)	1.1 (1.0-1.2)	<0.001
CRP, g/L median (IQR)	11.0 (5.0-36.0)	10.0 (4.0-28.0)	18.0 (6.0-53.0)	<0.001
Total white cell count, x10 ⁹ /L median (IQR)	8.8 (7.1-11.3)	8.7 (7.1-11.0)	9.1 (7.3-12.1)	<0.001
Na, mean (SD)	138.30 (4.23)	138.37 (3.87)	138.17 (4.86)	0.018
Albumin, g/L mean (SD)	36.63 (5.43)	37.22 (4.93)	35.46 (6.13)	<0.001
Cholesterol, mmol/L mean (SD)	-	-	-	-
LDL, mmol/L mean (SD)	3.00 (1.12)	3.00 (1.12)	. (.)	
Haemoglobin, g/L mean (SD)	134.61 (19.57)	136.16 (18.92)	131.63 (20.45)	<0.001
PLT, x10 ⁹ /L mean (SD)	260.08 (93.45)	258.49 (89.66)	263.15 (100.31)	0.015

Supplementary Table VIII. Patient characteristics stratified by whether the data for **INR** levels were missing.

	Total	Missing	Non-missing	P Value
Age, mean (SD)	77.94 (12.05)	77.78 (12.06)	78.89 (11.98)	<0.001
Sex (% female)	5624 (52.0)	875 (56.2%)	4749 (51.3%)	<0.001
Length of stay, median (IQR)	8.0 (3.0-17.0)	8.0 (3.2-18.0)	7.0 (3.0-15.0)	<0.001
Pre-stroke mRS score, median (IQR)	0.0 (0.0-2.0)	0.0 (0.0-1.0)	0.0 (0.0-2.0)	0.025
Post-stroke mRS score, median (IQR)	3.0 (1.0-6.0)	3.0 (1.0-5.0)	4.0 (1.0-6.0)	<0.001
Δ mRS, median (IQR)	2.0 (0.0-3.0)	2.0 (0.0-3.0)	2.0 (0.5-4.0)	0.091
Charlson Score, median (IQR)	3.0 (1.0-4.0)	3.0 (1.0-4.0)	2.0 (1.0-4.0)	<0.001
In-hospital death (%)	2035 (18.8)	403 (25.9)	1632 (17.6)	<0.001
Death (%)	5110 (47.2)	820 (52.7)	4290 (46.3)	<0.001
Anti-platelets on admission, (%)	3873 (35.8)	515 (33.1)	3358 (36.3)	0.016
Anti-platelets on discharge, (%)	7203 (66.6)	901 (57.9)	6302 (68.1)	<0.001
Anti-coagulants on admission, (%)	150 (1.4)	10 (0.6)	140 (1.5)	0.007
Anti-coagulants on discharge (%)	285 (2.6)	21 (1.3)	264 (2.9)	<0.001
Coronary Heart Disease (%)	2933 (27.1)	370 (23.8)	2563 (27.7)	0.001
Peripheral Vascular Disease (%)	430 (4.0)	50 (3.2)	380 (4.1)	0.096
Transient Ischaemic Attack (%)	530 (4.9)	71 (4.6)	459 (5.0)	0.506
Hypertension (%)	6405 (59.2)	809 (52.0)	5596 (60.4)	<0.001
Diabetes (%)	1901 (17.6)	239 (15.4)	1662 (17.9)	0.013
CKD (%)	693 (6.4)	62 (4.0)	631 (6.8)	<0.001
Asthma (%)	987 (9.1)	99 (6.4)	888 (9.6)	<0.001

Chronic Obstructive Pulmonary Disease (%)	868 (8.0)	96 (6.2)	772 (8.3)	0.004
Cancers (%)	1683 (15.6)	206 (13.2)	1477 (16.0)	0.006
Liver Disease (%)	167 (1.5)	14 (0.9)	153 (1.7)	0.026
Glucose, mmol/L median (IQR)	6.3 (5.5-7.8)	6.3 (5.5-7.8)	6.4 (5.5-7.9)	0.553
Urea, mmol/L median (IQR)	6.6 (5.2-8.9)	6.6 (5.2-8.9)	6.6 (5.1-9.0)	0.754
Creatinine, μ mol/L median (IQR)	86.0 (71.0-108.0)	86.0 (71.0-108.0)	85.0 (71.0-107.0)	0.521
HDL, mmol/L median (IQR)	1.2 (1.0-1.5)	1.2 (1.0-1.5)	1.2 (1.0-1.5)	0.805
INR, median (IQR)	-	-	-	
CRP, g/L median (IQR)	11.0 (5.0-36.0)	11.0 (5.0-35.0)	17.0 (6.0-49.0)	<0.001
Total white cell count, $\times 10^9$ /L median (IQR)	8.8 (7.1-11.3)	8.8 (7.1-11.2)	9.4 (7.4-11.9)	<0.001
Na, mean (SD)	138.30 (4.23)	138.30 (4.21)	138.32 (4.43)	0.9
Albumin, g/L mean (SD)	36.63 (5.43)	36.64 (5.37)	36.58 (5.81)	0.734
Cholesterol, mmol/L mean (SD)	4.85 (1.31)	4.85 (1.32)	4.89 (1.22)	0.389
LDL, mmol/L mean (SD)	3.00 (1.12)	2.99 (1.12)	3.04 (1.16)	0.5
Haemoglobin, g/L mean (SD)	134.61 (19.57)	134.74 (19.57)	133.69 (19.61)	0.071
PLT, $\times 10^9$ /L mean (SD)	260.08 (93.45)	258.90 (93.56)	268.47 (92.29)	<0.001

Supplementary Table IX. Patient characteristics stratified by whether the data for **CRP** levels were missing.

	Total	Missing	Non-missing	P Value
Age, mean (SD)	77.94 (12.05)	78.57 (11.71)	74.90 (13.13)	<0.001
Sex (% female)	5624 (52.0)	919 (49.0%)	4705 (52.6%)	0.004
Length of stay, median (IQR)	8.0 (3.0-17.0)	9.0 (4.0-19.0)	5.0 (2.0-9.0)	<0.001
Pre-stroke mRS score, median (IQR)	0.0 (0.0-2.0)	0.0 (0.0-2.0)	0.0 (0.0-0.0)	<0.001
Post-stroke mRS score, median (IQR)	3.0 (1.0-6.0)	3.0 (1.0-6.0)	2.0 (1.0-6.0)	<0.001
ΔmRS, median (IQR)	2.0 (0.0-3.0)	2.0 (1.0-3.0)	1.0 (0.0-3.0)	<0.001
Charlson Score, median (IQR)	3.0 (1.0-4.0)	3.0 (1.0-4.0)	2.0 (1.0-4.0)	<0.001
In-hospital death (%)	2035 (18.8)	281 (15.0)	1754 (19.6)	<0.001
Death (%)	5110 (47.2)	664 (35.4)	4446 (49.7)	<0.001
Anti-platelets on admission, (%)	3873 (35.8)	648 (34.6)	3225 (36.1)	0.215
Anti-platelets on discharge, (%)	7203 (66.6)	1267 (67.6)	5936 (66.4)	0.324
Anti-coagulants on admission, (%)	150 (1.4)	12 (0.6)	138 (1.5)	0.002
Anti-coagulants on discharge (%)	285 (2.6)	20 (1.1)	265 (3.0)	<0.001
Coronary Heart Disease (%)	2933 (27.1)	398 (21.2)	2535 (28.4)	<0.001
Peripheral Vascular Disease (%)	430 (4.0)	42 (2.2)	388 (4.3)	<0.001
Transient Ischaemic Attack (%)	530 (4.9)	92 (4.9)	438 (4.9)	0.989
Hypertension (%)	6405 (59.2)	975 (52.0)	5430 (60.7)	<0.001
Diabetes (%)	1901 (17.6)	253 (13.5)	1648 (18.4)	<0.001
CKD (%)	693 (6.4)	57 (3.0)	636 (7.1)	<0.001
Asthma (%)	987 (9.1)	151 (8.1)	836 (9.4)	0.076

Chronic Obstructive Pulmonary Disease (%)	868 (8.0)	92 (4.9)	776 (8.7)	<0.001
Cancers (%)	1683 (15.6)	231 (12.3)	1452 (16.2)	<0.001
Liver Disease (%)	167 (1.5)	11 (0.6)	156 (1.7)	<0.001
Glucose, mmol/L median (IQR)	6.3 (5.5-7.8)	6.4 (5.5-7.9)	6.0 (5.3-7.3)	<0.001
Urea, mmol/L median (IQR)	6.6 (5.2-8.9)	6.8 (5.3-9.1)	6.0 (4.8-7.7)	<0.001
Creatinine, μ mol/L median (IQR)	86.0 (71.0-108.0)	87.0 (71.0-110.0)	83.0 (70.0-100.0)	<0.001
HDL, mmol/L median (IQR)	1.2 (1.0-1.5)	1.2 (0.9-1.5)	1.3 (1.1-1.6)	<0.001
INR, median (IQR)	1.0 (1.0-1.1)	1.0 (1.0-1.1)	1.0 (1.0-1.1)	<0.001
CRP, g/L median (IQR)	-	-	-	-
Total white cell count, $\times 10^9$ /L median (IQR)	8.8 (7.1-11.3)	9.0 (7.3-11.5)	8.0 (6.6-9.9)	<0.001
Na, mean (SD)	138.30 (4.23)	138.19 (4.33)	138.91 (3.60)	<0.001
Albumin, g/L mean (SD)	36.63 (5.43)	36.15 (5.48)	39.44 (4.10)	<0.001
Cholesterol, mmol/L mean (SD)	4.85 (1.31)	4.80 (1.31)	5.18 (1.27)	<0.001
LDL, mmol/L mean (SD)	3.00 (1.12)	2.96 (1.13)	3.14 (1.09)	0.007
Haemoglobin, g/L mean (SD)	134.61 (19.57)	133.73 (20.02)	139.39 (16.10)	<0.001
PLT, $\times 10^9$ /L mean (SD)	260.08 (93.45)	261.80 (96.09)	250.51 (76.50)	<0.001

Supplementary Table X. Patient characteristics stratified by whether the data for **Haemoglobin** levels were missing.

	Total	Missing	Non-missing	P Value
Age, mean (SD)	77.94 (12.05)	77.98 (11.99)	77.04 (13.17)	0.071
Sex (% female)	5624 (52.0)	278 (49.9%)	5346 (52.1%)	0.311
Length of stay, median (IQR)	8.0 (3.0-17.0)	8.0 (3.2-17.0)	6.0 (2.2-13.0)	<0.001
Pre-stroke mRS score, median (IQR)	0.0 (0.0-2.0)	0.0 (0.0-2.0)	0.0 (0.0-1.0)	0.126
Post-stroke mRS score, median (IQR)	3.0 (1.0-6.0)	3.0 (1.0-6.0)	2.0 (1.0-4.0)	<0.001
Δ mRS, median (IQR)	2.0 (0.0-3.0)	2.0 (0.0-3.0)	1.0 (0.0-3.0)	<0.001
Charlson Score, median (IQR)	3.0 (1.0-4.0)	3.0 (1.0-4.0)	2.0 (1.0-4.0)	<0.001
In-hospital death (%)	2035 (18.8)	103 (18.5)	1932 (18.8)	0.841
Death (%)	5110 (47.2)	166 (29.8)	4944 (48.2)	<0.001
Anti-platelets on admission, (%)	3873 (35.8)	112 (20.1)	3761 (36.7)	<0.001
Anti-platelets on discharge, (%)	7203 (66.6)	362 (65.0)	6841 (66.7)	0.41
Anti-coagulants on admission, (%)	150 (1.4)	1 (0.2)	149 (1.5)	0.012
Anti-coagulants on discharge (%)	285 (2.6)	1 (0.2)	284 (2.8)	<0.001
Coronary Heart Disease (%)	2933 (27.1)	129 (23.2)	2804 (27.3)	0.031
Peripheral Vascular Disease (%)	430 (4.0)	19 (3.4)	411 (4.0)	0.484
Transient Ischaemic Attack (%)	530 (4.9)	31 (5.6)	499 (4.9)	0.455
Hypertension (%)	6405 (59.2)	304 (54.6)	6101 (59.5)	0.022
Diabetes (%)	1901 (17.6)	112 (20.1)	1789 (17.4)	0.107
CKD (%)	693 (6.4)	39 (7.0)	654 (6.4)	0.556
Asthma (%)	987 (9.1)	50 (9.0)	937 (9.1)	0.9

Chronic Obstructive Pulmonary Disease (%)	868 (8.0)	33 (5.9)	835 (8.1)	0.061
Cancers (%)	1683 (15.6)	85 (15.3)	1598 (15.6)	0.841
Liver Disease (%)	167 (1.5)	9 (1.6)	158 (1.5)	0.888
Glucose, mmol/L median (IQR)	6.3 (5.5-7.8)	6.3 (5.5-7.8)	6.4 (5.6-8.3)	0.393
Urea, mmol/L median (IQR)	6.6 (5.2-8.9)	6.6 (5.2-8.9)	6.2 (4.9-7.8)	0.007
Creatinine, μ mol/L median (IQR)	86.0 (71.0-108.0)	86.0 (71.0-108.0)	83.0 (71.0-99.0)	0.033
HDL, mmol/L median (IQR)	1.2 (1.0-1.5)	1.2 (1.0-1.5)	1.2 (0.9-1.5)	0.584
INR, median (IQR)	1.0 (1.0-1.1)	1.0 (1.0-1.1)	1.0 (1.0-1.1)	<0.001
CRP, g/L median (IQR)	11.0 (5.0-36.0)	12.0 (5.0-37.0)	5.0 (3.0-17.0)	<0.001
Total white cell count, $\times 10^9$ /L median (IQR)	8.8 (7.1-11.3)	8.8 (7.1-11.3)	8.2 (6.6-10.3)	<0.001
Na, mean (SD)	138.30 (4.23)	138.30 (4.25)	138.38 (3.71)	0.761
Albumin, g/L mean (SD)	36.63 (5.43)	36.63 (5.44)	36.65 (4.96)	0.953
Cholesterol, mmol/L mean (SD)	4.85 (1.31)	4.85 (1.31)	5.01 (1.18)	0.077
LDL, mmol/L mean (SD)	3.00 (1.12)	2.99 (1.12)	3.09 (1.10)	0.556
Haemoglobin, g/L mean (SD)				
PLT, $\times 10^9$ /L mean (SD)	260.08 (93.45)	260.24 (93.85)	254.37 (77.84)	0.293

Supplementary Table XI. Patient characteristics stratified by whether the data for **White Blood Count** levels were missing.

	Total	Missing	Non-missing	P Value
Age, mean (SD)	77.94 (12.05)	77.93 (12.04)	78.18 (12.32)	0.736

Sex (% female)	5624 (52.0)	130 (48.3%)	5494 (52.1%)	0.222
Length of stay, median (IQR)	8.0 (3.0-17.0)	8.0 (3.1-17.0)	5.0 (2.0-13.0)	<0.001
Pre-stroke mRS score, median (IQR)	0.0 (0.0-2.0)	0.0 (0.0-2.0)	0.0 (0.0-1.0)	0.411
Post-stroke mRS score, median (IQR)	3.0 (1.0-6.0)	3.0 (1.0-6.0)	3.0 (1.0-6.0)	0.312
ΔmRS, median (IQR)	2.0 (0.0-3.0)	2.0 (0.0-3.0)	1.0 (0.0-3.0)	0.183
Charlson Score, median (IQR)	3.0 (1.0-4.0)	3.0 (1.0-4.0)	2.0 (1.0-3.0)	<0.001
In-hospital death (%)	2035 (18.8)	63 (23.4)	1972 (18.7)	0.05
Death (%)	5110 (47.2)	103 (38.3)	5007 (47.5)	0.003
Anti-platelets on admission, (%)	3873 (35.8)	88 (32.7)	3785 (35.9)	0.284
Anti-platelets on discharge, (%)	7203 (66.6)	127 (47.2)	7076 (67.1)	<0.001
Anti-coagulants on admission, (%)	150 (1.4)	1 (0.4)	149 (1.4)	0.149
Anti-coagulants on discharge (%)	285 (2.6)	1 (0.4)	284 (2.7)	0.019
Coronary Heart Disease (%)	2933 (27.1)	42 (15.6)	2891 (27.4)	<0.001
Peripheral Vascular Disease (%)	430 (4.0)	7 (2.6)	423 (4.0)	0.243
Transient Ischaemic Attack (%)	530 (4.9)	13 (4.8)	517 (4.9)	0.959
Hypertension (%)	6405 (59.2)	117 (43.5)	6288 (59.6)	<0.001
Diabetes (%)	1901 (17.6)	46 (17.1)	1855 (17.6)	0.836
CKD (%)	693 (6.4)	10 (3.7)	683 (6.5)	0.068
Asthma (%)	987 (9.1)	23 (8.6)	964 (9.1)	0.74
Chronic Obstructive Pulmonary Disease (%)	868 (8.0)	11 (4.1)	857 (8.1)	0.016
Cancers (%)	1683 (15.6)	39 (14.5)	1644 (15.6)	0.626
Liver Disease (%)	167 (1.5)	2 (0.7)	165 (1.6)	0.281

Glucose, mmol/L median (IQR)	6.3 (5.5-7.8)	6.3 (5.5-7.8)	6.0 (5.1-7.4)	0.435
Urea, mmol/L median (IQR)	6.6 (5.2-8.9)	6.6 (5.2-8.9)	6.0 (4.8-7.2)	0.094
Creatinine, μ mol/L median (IQR)	86.0 (71.0-108.0)	86.0 (71.0-108.0)	82.0 (71.0-99.0)	0.402
HDL, mmol/L median (IQR)	1.2 (1.0-1.5)	1.2 (1.0-1.5)	1.1 (0.8-1.3)	0.245
INR, median (IQR)	1.0 (1.0-1.1)	1.0 (1.0-1.1)	1.0 (1.0-1.0)	0.299
CRP, g/L median (IQR)	11.0 (5.0-36.0)	11.0 (5.0-36.0)	5.0 (2.0-6.0)	0.004
Total white cell count, $\times 10^9$ /L median (IQR)				
Na, mean (SD)	138.30 (4.23)	138.30 (4.24)	138.00 (2.69)	0.726
Albumin, g/L mean (SD)	36.63 (5.43)	36.63 (5.43)	39.09 (4.58)	0.033
Cholesterol, mmol/L mean (SD)	4.85 (1.31)	4.85 (1.31)	4.96 (1.18)	0.723
LDL, mmol/L mean (SD)	3.00 (1.12)	3.00 (1.12)	3.20 (1.01)	0.638
Haemoglobin, g/L mean (SD)	134.61 (19.57)	134.61 (19.57)	-	
PLT, $\times 10^9$ /L mean (SD)	260.08 (93.45)	260.08 (93.45)	-	

Supplementary Table XII. Patient characteristics stratified by whether the data for **Platelet Count** levels were missing.

	Total	Missing	Non-missing	P Value
Age, mean (SD)	77.94 (12.05)	77.93 (12.04)	78.03 (12.35)	0.894
Sex (% female)	5624 (52.0)	138 (48.6%)	5486 (52.1%)	0.244
Length of stay, median (IQR)	8.0 (3.0-17.0)	8.0 (3.1-17.0)	5.0 (2.0-13.0)	<0.001
Pre-stroke mRS score, median (IQR)	0.0 (0.0-2.0)	0.0 (0.0-2.0)	0.0 (0.0-1.0)	0.41
Post-stroke mRS score, median (IQR)	3.0 (1.0-6.0)	3.0 (1.0-6.0)	3.0 (1.0-6.0)	0.414
ΔmRS, median (IQR)	2.0 (0.0-3.0)	2.0 (0.0-3.0)	1.0 (0.0-3.0)	0.171
Charlson Score, median (IQR)	3.0 (1.0-4.0)	3.0 (1.0-4.0)	2.0 (1.0-3.0)	<0.001
In-hospital death (%)	2035 (18.8)	69 (24.3)	1966 (18.7)	0.017
Death (%)	5110 (47.2)	111 (39.1)	4999 (47.5)	0.005
Anti-platelets on admission, (%)	3873 (35.8)	92 (32.4)	3781 (35.9)	0.224
Anti-platelets on discharge, (%)	7203 (66.6)	133 (46.8)	7070 (67.1)	<0.001
Anti-coagulants on admission, (%)	150 (1.4)	1 (0.4)	149 (1.4)	0.131
Anti-coagulants on discharge (%)	285 (2.6)	1 (0.4)	284 (2.7)	0.015
Coronary Heart Disease (%)	2933 (27.1)	43 (15.1)	2890 (27.4)	<0.001
Peripheral Vascular Disease (%)	430 (4.0)	9 (3.2)	421 (4.0)	0.481
Transient Ischaemic Attack (%)	530 (4.9)	13 (4.6)	517 (4.9)	0.799
Hypertension (%)	6405 (59.2)	123 (43.3)	6282 (59.6)	<0.001
Diabetes (%)	1901 (17.6)	48 (16.9)	1853 (17.6)	0.762
CKD (%)	693 (6.4)	12 (4.2)	681 (6.5)	0.128
Asthma (%)	987 (9.1)	23 (8.1)	964 (9.2)	0.543

Chronic Obstructive Pulmonary Disease (%)	868 (8.0)	12 (4.2)	856 (8.1)	0.017
Cancers (%)	1683 (15.6)	40 (14.1)	1643 (15.6)	0.487
Liver Disease (%)	167 (1.5)	3 (1.1)	164 (1.6)	0.499
Glucose, mmol/L median (IQR)	6.3 (5.5-7.8)	6.3 (5.5-7.8)	6.0 (5.3-7.4)	0.509
Urea, mmol/L median (IQR)	6.6 (5.2-8.9)	6.6 (5.2-8.9)	6.2 (4.9-7.3)	0.205
Creatinine, μ mol/L median (IQR)	86.0 (71.0-108.0)	86.0 (71.0-108.0)	87.0 (69.0-100.0)	0.612
HDL, mmol/L median (IQR)	1.2 (1.0-1.5)	1.2 (1.0-1.5)	1.1 (1.0-1.3)	0.171
INR, median (IQR)	1.0 (1.0-1.1)	1.0 (1.0-1.1)	1.0 (1.0-1.1)	0.614
CRP, g/L median (IQR)	11.0 (5.0-36.0)	11.0 (5.0-36.0)	5.5 (5.0-11.0)	0.083
Total white cell count, $\times 10^9$ /L median (IQR)	8.8 (7.1-11.3)	8.8 (7.1-11.3)	10.4 (7.0-11.7)	0.683
Na, mean (SD)	138.30 (4.23)	138.30 (4.24)	138.00 (3.17)	0.655
Albumin, g/L mean (SD)	36.63 (5.43)	36.63 (5.42)	37.76 (6.56)	0.206
Cholesterol, mmol/L mean (SD)	4.85 (1.31)	4.85 (1.31)	5.00 (1.03)	0.556
LDL, mmol/L mean (SD)	3.00 (1.12)	2.99 (1.12)	3.29 (1.01)	0.412
Haemoglobin, g/L mean (SD)	134.61 (19.57)	134.61 (19.57)	130.93 (23.83)	0.467
PLT, $\times 10^9$ /L mean (SD)	-	-	-	-

Supplementary Table XIII. Patient characteristics stratified by whether the data for **Pre-Stroke mRS scores** were missing.

	Total	Missing	Non-missing	P Value
Age, mean (SD)	77.94 (12.05)	77.78 (12.07)	80.50 (11.43)	<0.001
Sex (% female)	5624 (52.0)	334 (55.0%)	5290 (51.8%)	0.124
Length of stay, median (IQR)	8.0 (3.0-17.0)	8.0 (3.0-17.0)	11.0 (4.0-24.0)	<0.001
Pre-stroke mRS score, median (IQR)	-	-	-	
Post-stroke mRS score, median (IQR)	3.0 (1.0-6.0)	3.0 (1.0-5.0)	6.0 (0.0-6.0)	<0.001
Δ mRS, median (IQR)	2.0 (0.0-3.0)	2.0 (0.0-3.0)	-	
Charlson Score, median (IQR)	3.0 (1.0-4.0)	3.0 (1.0-4.0)	3.0 (1.0-4.0)	0.492
In-hospital death (%)	2035 (18.8)	252 (41.5)	1783 (17.5)	<0.001
Death (%)	5110 (47.2)	445 (73.3)	4665 (45.7)	<0.001
Anti-platelets on admission, (%)	3873 (35.8)	148 (24.4)	3725 (36.5)	<0.001
Anti-platelets on discharge, (%)	7203 (66.6)	161 (26.5)	7042 (69.0)	<0.001
Anti-coagulants on admission, (%)	150 (1.4)	0 (0.0)	150 (1.5)	0.003
Anti-coagulants on discharge (%)	285 (2.6)	2 (0.3)	283 (2.8)	<0.001
Coronary Heart Disease (%)	2933 (27.1)	158 (26.0)	2775 (27.2)	0.535
Peripheral Vascular Disease (%)	430 (4.0)	30 (4.9)	400 (3.9)	0.21
Transient Ischaemic Attack (%)	530 (4.9)	27 (4.4)	503 (4.9)	0.595
Hypertension (%)	6405 (59.2)	288 (47.4)	6117 (59.9)	<0.001
Diabetes (%)	1901 (17.6)	101 (16.6)	1800 (17.6)	0.533
CKD (%)	693 (6.4)	43 (7.1)	650 (6.4)	0.483
Asthma (%)	987 (9.1)	55 (9.1)	932 (9.1)	0.955

Chronic Obstructive Pulmonary Disease (%)	868 (8.0)	60 (9.9)	808 (7.9)	0.083
Cancers (%)	1683 (15.6)	110 (18.1)	1573 (15.4)	0.073
Liver Disease (%)	167 (1.5)	10 (1.6)	157 (1.5)	0.832
Glucose, mmol/L median (IQR)	6.3 (5.5-7.8)	6.3 (5.5-7.8)	6.7 (5.6-8.4)	0.015
Urea, mmol/L median (IQR)	6.6 (5.2-8.9)	6.6 (5.2-8.8)	7.8 (5.6-11.2)	<0.001
Creatinine, μ mol/L median (IQR)	86.0 (71.0-108.0)	86.0 (71.0-107.0)	92.0 (73.0-120.0)	<0.001
HDL, mmol/L median (IQR)	1.2 (1.0-1.5)	1.2 (1.0-1.5)	1.2 (1.0-1.5)	0.155
INR, median (IQR)	1.0 (1.0-1.1)	1.0 (1.0-1.1)	1.1 (1.0-1.2)	<0.001
CRP, g/L median (IQR)	11.0 (5.0-36.0)	11.0 (5.0-34.0)	29.0 (11.0-75.0)	<0.001
Total white cell count, $\times 10^9$ /L median (IQR)	8.8 (7.1-11.3)	8.8 (7.1-11.2)	10.1 (7.6-13.3)	<0.001
Na, mean (SD)	138.30 (4.23)	138.31 (4.20)	138.25 (4.76)	0.777
Albumin, g/L mean (SD)	36.63 (5.43)	36.74 (5.32)	34.57 (6.83)	<0.001
Cholesterol, mmol/L mean (SD)	4.85 (1.31)	4.86 (1.31)	4.64 (1.18)	0.01
LDL, mmol/L mean (SD)	3.00 (1.12)	3.00 (1.12)	2.82 (1.09)	0.146
Haemoglobin, g/L mean (SD)	134.61 (19.57)	134.97 (19.44)	128.08 (20.81)	<0.001
PLT, $\times 10^9$ /L mean (SD)	260.08 (93.45)	259.53 (92.54)	269.86 (107.99)	0.011

Supplementary Table XIV. Patient characteristics stratified by whether the data for **Post-Stroke mRS scores** were missing.

	Total	Missing	Non-missing	P Value
Age, mean (SD)	77.94 (12.05)	78.44 (12.08)	76.71 (11.89)	<0.001
Sex (% female)	5624 (52.0)	1649 (52.2%)	3975 (51.9%)	0.803
Length of stay, median (IQR)	8.0 (3.0-17.0)	6.0 (3.0-15.0)	12.0 (6.0-23.0)	<0.001
Pre-stroke mRS score, median (IQR)	0.0 (0.0-2.0)	0.0 (0.0-2.0)	0.0 (0.0-1.0)	<0.001
Post-stroke mRS score, median (IQR)	-	-	-	
Δ mRS, median (IQR)	2.0 (0.0-3.0)	2.0 (0.0-3.0)	-	
Charlson Score, median (IQR)	3.0 (1.0-4.0)	2.0 (1.0-4.0)	3.0 (1.0-4.0)	<0.001
In-hospital death (%)	2035 (18.8)	0 (0.0)	2035 (26.6)	<0.001
Death (%)	5110 (47.2)	1832 (58.0)	3278 (42.8)	<0.001
Anti-platelets on admission, (%)	3873 (35.8)	1217 (38.5)	2656 (34.7)	<0.001
Anti-platelets on discharge, (%)	7203 (66.6)	2401 (76.0)	4802 (62.7)	<0.001
Anti-coagulants on admission, (%)	150 (1.4)	0 (0.0)	150 (2.0)	<0.001
Anti-coagulants on discharge (%)	285 (2.6)	1 (0.0)	284 (3.7)	<0.001
Coronary Heart Disease (%)	2933 (27.1)	729 (23.1)	2204 (28.8)	<0.001
Peripheral Vascular Disease (%)	430 (4.0)	112 (3.5)	318 (4.2)	0.14
Transient Ischaemic Attack (%)	530 (4.9)	139 (4.4)	391 (5.1)	0.121
Hypertension (%)	6405 (59.2)	1558 (49.3)	4847 (63.3)	<0.001
Diabetes (%)	1901 (17.6)	436 (13.8)	1465 (19.1)	<0.001
CKD (%)	693 (6.4)	90 (2.8)	603 (7.9)	<0.001
Asthma (%)	987 (9.1)	223 (7.1)	764 (10.0)	<0.001

Chronic Obstructive Pulmonary Disease (%)	868 (8.0)	168 (5.3)	700 (9.1)	<0.001
Cancers (%)	1683 (15.6)	402 (12.7)	1281 (16.7)	<0.001
Liver Disease (%)	167 (1.5)	29 (0.9)	138 (1.8)	<0.001
Glucose, mmol/L median (IQR)	6.3 (5.5-7.8)	6.4 (5.6-8.0)	6.1 (5.4-7.5)	<0.001
Urea, mmol/L median (IQR)	6.6 (5.2-8.9)	6.7 (5.2-9.1)	6.5 (5.1-8.6)	<0.001
Creatinine, μ mol/L median (IQR)	86.0 (71.0-108.0)	84.0 (70.0-107.0)	89.0 (75.0-110.0)	<0.001
HDL, mmol/L median (IQR)	1.2 (1.0-1.5)	1.2 (0.9-1.5)	1.2 (1.0-1.5)	0.002
INR, median (IQR)	1.0 (1.0-1.1)	1.0 (1.0-1.1)	1.0 (1.0-1.1)	<0.001
CRP, g/L median (IQR)	11.0 (5.0-36.0)	9.0 (4.0-33.0)	17.0 (8.0-42.0)	<0.001
Total white cell count, $\times 10^9$ /L median (IQR)	8.8 (7.1-11.3)	8.8 (7.1-11.3)	9.0 (7.3-11.3)	0.006
Na, mean (SD)	138.30 (4.23)	138.00 (4.27)	139.04 (4.04)	<0.001
Albumin, g/L mean (SD)	36.63 (5.43)	35.86 (5.26)	38.53 (5.35)	<0.001
Cholesterol, mmol/L mean (SD)	4.85 (1.31)	4.82 (1.30)	4.92 (1.32)	0.003
LDL, mmol/L mean (SD)	3.00 (1.12)	3.01 (1.13)	2.97 (1.11)	0.437
Haemoglobin, g/L mean (SD)	134.61 (19.57)	134.13 (19.89)	135.73 (18.77)	<0.001
PLT, $\times 10^9$ /L mean (SD)	260.08 (93.45)	258.21 (94.53)	264.60 (90.64)	0.001

Supplementary Table XV. Patient characteristics stratified by whether the data for **the OCSP classification** were missing.

	Total	Missing	Non-missing	P Value
Age, mean (SD)	77.94 (12.05)	77.92 (11.96)	78.10 (12.87)	0.647
Sex (% female)	5624 (52.0)	549 (50.6%)	5075 (52.2%)	0.315
Length of stay, median (IQR)	8.0 (3.0-17.0)	8.0 (3.5-17.0)	6.0 (2.0-15.0)	<0.001
Pre-stroke mRS score, median (IQR)	0.0 (0.0-2.0)	0.0 (0.0-1.0)	0.0 (0.0-2.0)	<0.001
Post-stroke mRS score, median (IQR)	3.0 (1.0-6.0)	3.0 (1.0-6.0)	3.0 (1.0-6.0)	0.011
Δ mRS, median (IQR)	2.0 (0.0-3.0)	2.0 (0.0-3.0)	2.0 (1.0-3.0)	0.959
Charlson Score, median (IQR)	3.0 (1.0-4.0)	3.0 (1.0-4.0)	3.0 (1.0-4.0)	0.149
In-hospital death (%)	2035 (18.8)	314 (28.9)	1721 (17.7)	<0.001
Death (%)	5110 (47.2)	502 (46.2)	4608 (47.4)	0.478
Anti-platelets on admission, (%)	3873 (35.8)	394 (36.3)	3479 (35.8)	0.732
Anti-platelets on discharge, (%)	7203 (66.6)	597 (55.0)	6606 (67.9)	<0.001
Anti-coagulants on admission, (%)	150 (1.4)	7 (0.6)	143 (1.5)	0.027
Anti-coagulants on discharge (%)	285 (2.6)	13 (1.2)	272 (2.8)	0.002
Coronary Heart Disease (%)	2933 (27.1)	283 (26.1)	2650 (27.2)	0.408
Peripheral Vascular Disease (%)	430 (4.0)	36 (3.3)	394 (4.0)	0.24
Transient Ischaemic Attack (%)	530 (4.9)	62 (5.7)	468 (4.8)	0.193
Hypertension (%)	6405 (59.2)	624 (57.5)	5781 (59.4)	0.214
Diabetes (%)	1901 (17.6)	184 (16.9)	1717 (17.6)	0.563
CKD (%)	693 (6.4)	94 (8.7)	599 (6.2)	0.001
Asthma (%)	987 (9.1)	99 (9.1)	888 (9.1)	0.991

Chronic Obstructive Pulmonary Disease (%)	868 (8.0)	101 (9.3)	767 (7.9)	0.103
Cancers (%)	1683 (15.6)	203 (18.7)	1480 (15.2)	0.003
Liver Disease (%)	167 (1.5)	24 (2.2)	143 (1.5)	0.061
Glucose, mmol/L median (IQR)	6.3 (5.5-7.8)	6.3 (5.5-7.8)	6.5 (5.6-8.1)	0.027
Urea, mmol/L median (IQR)	6.6 (5.2-8.9)	6.6 (5.2-8.9)	6.7 (5.2-9.2)	0.162
Creatinine, μ mol/L median (IQR)	86.0 (71.0-108.0)	86.0 (71.0-108.0)	86.0 (71.0-112.0)	0.2
HDL, mmol/L median (IQR)	1.2 (1.0-1.5)	1.2 (1.0-1.5)	1.1 (0.9-1.3)	0.011
INR, median (IQR)	1.0 (1.0-1.1)	1.0 (1.0-1.1)	1.1 (1.0-1.2)	<0.001
CRP, g/L median (IQR)	11.0 (5.0-36.0)	12.0 (5.0-36.0)	11.0 (4.0-43.0)	0.966
Total white cell count, $\times 10^9$ /L median (IQR)	8.8 (7.1-11.3)	8.8 (7.1-11.2)	9.2 (7.4-12.0)	<0.001
Na, mean (SD)	138.30 (4.23)	138.30 (4.17)	138.31 (4.81)	0.928
Albumin, g/L mean (SD)	36.63 (5.43)	36.78 (5.33)	35.24 (6.04)	<0.001
Cholesterol, mmol/L mean (SD)	4.85 (1.31)	4.86 (1.31)	4.81 (1.35)	0.423
LDL, mmol/L mean (SD)	3.00 (1.12)	3.00 (1.12)	2.92 (1.18)	0.595
Haemoglobin, g/L mean (SD)	134.61 (19.57)	134.84 (19.42)	132.56 (20.80)	<0.001
PLT, $\times 10^9$ /L mean (SD)	260.08 (93.45)	259.74 (92.59)	263.11 (100.90)	0.269

Supplementary Table XVI. Patient biochemical and haematological parameters on admission, stratified by group membership.

	Total	Neither HF nor AF	AF only	HF only	Both AF and HF	P value*
Admission Biochemistry						
Glucose, mmol/L median (IQR)	6.3(5.5-7.8)	6.2(5.4-7.7)	6.5(5.6-8.0)	6.5(5.5-8.1)	6.6(5.6-8.6)	<0.001
Urea, mmol/L median (IQR)	6.6(5.2-8.9)	6.3(5.0-8.3)	7.0(5.4-9.2)	7.9(5.8-11.6)	8.0(6.0-11.2)	<0.001
Creatinine, μmol/L median (IQR)	86.0(71.0-108.0)	84.0(70.0-103.0)	87.0(72.0-110.0)	99.0(78.0-135.0)	97.0(76.0-132.0)	<0.001
Na, mean (SD)	138.30(4.2)	138.33(4.2)	138.26(4.1)	138.36(4.5)	138.18(4.6)	NS†
Albumin, g/L mean (SD)	36.63(5.4)	37.08(5.3)	36.26(5.4)	35.39(5.7)	35.34(5.6)	<0.001
Cholesterol, mmol/L mean (SD)	4.85(1.3)	5.00(1.3)	4.63(1.2)	4.65(1.4)	4.50(1.3)	<0.001
LDL, mmol/L mean (SD)	3.00(1.1)	3.14(1.2)	2.72(1.0)	2.84(1.1)	2.64(1.0)	<0.001
HDL, mmol/L median (IQR)	1.2(1.0-1.5)	1.2(1.0-1.5)	1.2(1.0-1.5)	1.1(0.9-1.4)	1.2(0.9-1.4)	0.06
INR, median (IQR)	1.0(1.0-1.1)	1.0(1.0-1.1)	1.1(1.0-1.2)	1.0(1.0-1.1)	1.1(1.0-1.3)	<0.001
CRP, g/L median (IQR)	11.0(5.0-36.0)	10.0(4.0-31.0)	13.0(5.0-39.0)	17.0(7.0-48.0)	16.0(6.0-46.0)	<0.001
Admission Haematological data						
Haemoglobin, g/L mean (SD)	134.6(19.6)	135.7(19.4)	134.4(19.4)	130.4(21.2)	130.1(19.2)	<0.001
Total white cell count, x10 ⁹ /L median (IQR)	8.8(11.3-7.1)	8.7(11.2-7)	9.1(11.4-7.3)	9.25(11.9-7.3)	8.9(11.3-7.3)	<0.001
PLT, x10 ⁹ /L mean (SD)	260.08(93.5)	262.99(93.9)	254.07(89.9)	258.93(97.1)	257.11(96.9)	<0.001

Continuous normally distributed variables displayed as mean (standard deviation). Non-normally variables displayed as mean (inter-quartile range). Categorical variables displayed as frequency (percentage).

* One-way ANOVA, the Kruskal-Wallis test and the Chi-squared test were used to test differences across groups for normally distributed, non-normally distributed and categorical variables respectively.

† Not significant