

Supplementary Tables and Figures

Supplementary Table 1. Adjusted Table showing the relationship between IMD quintiles and ethnicities with anticoagulation and DOAC prescribing.

	Anticoagulation OR (95% CI)	p-value	DOAC OR (95% CI)	p-value
IMD quintile (ref = 1)				
2	1.06 (1.02,1.09)	0.187	1.05 (0.93, 1.19)	< 0.001
3	1.06 (1.01, 1.17)	0.034	1.16 (0.03, 1.31)	0.017
4	1.09 (1.00, 1.16)	0.038	1.09 (0.97, 1.22)	0.166
5	1.14 (1.04, 1.20)	< 0.001	1.09 (0.97, 1.23)	< 0.001
Ethnicity (ref = Asian)				
White	1.58 (0.83, 1.22)	0.930	1.03 (0.77, 1.37)	0.821
Black/mixed/other	1.14 (0.82, 1.41)	0.579	1.12 (0.75, 1.69)	0.572
Unknown	0.98 (0.79, 1.20)	0.813	1.05 (0.77, 1.43)	0.757

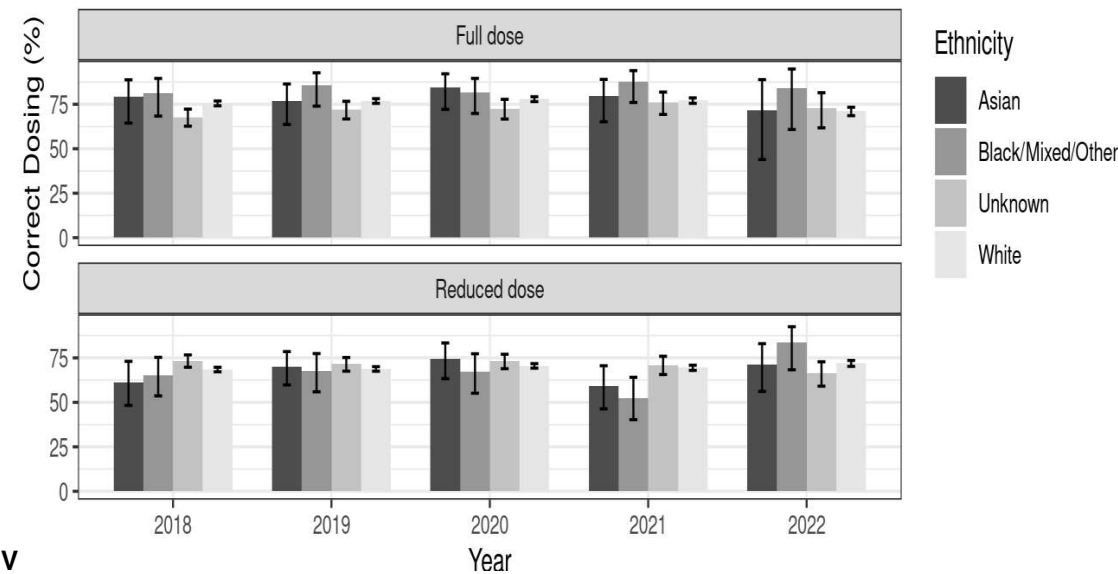
IMD = Index of Multiple Deprivation; DOAC = Direct Oral Anticoagulant.

Supplementary Table 2. Baseline characteristics according to ethnicities in Chronic Kidney Disease 3 and 4.

	Overall	Asian	Black/Mixed/Other	Unknown	White	P value
N	78276	917	999	8223	68137	
Age (mean (SD))	80.72 (8.52)	76.16 (9.45)	76.75 (10.80)	82.96 (8.31)	80.57 (8.43)	<0.001
Sex M (%)	36301 (46.4)	491 (53.5)	463 (46.3)	3656 (44.5)	31691 (46.5)	<0.001
IMD Quintile (%)						<0.001
1	11259 (14.4)	259 (28.2)	362 (36.2)	771 (9.4)	9867 (14.5)	
2	14634 (18.7)	259 (28.2)	267 (26.7)	1574 (19.1)	12534 (18.4)	
3	16421 (21.0)	155 (16.9)	171 (17.1)	1828 (22.2)	14267 (20.9)	
4	18126 (23.2)	129 (14.1)	100 (10.0)	1981 (24.1)	15916 (23.4)	
5	17836 (22.8)	115 (12.5)	99 (9.9)	2069 (25.2)	15553 (22.8)	
Heart Failure (%)	25954 (33.2)	396 (43.2)	373 (37.3)	2806 (34.1)	22379 (32.8)	<0.001
Hypertension (%)	64906 (82.9)	813 (88.7)	908 (90.9)	6556 (79.7)	56629 (83.1)	<0.001
Diabetes Mellitus (%)	23494 (30.0)	532 (58.0)	523 (52.4)	2126 (25.9)	20313 (29.8)	<0.001
Haemorrhagic Stroke (%)	1449 (1.9)	15 (1.6)	26 (2.6)	183 (2.2)	1225 (1.8)	0.013
Ischaemic Stroke (%)	4487 (5.7)	58 (6.3)	61 (6.1)	504 (6.1)	3864 (5.7)	0.293
Transient Ischaemic Attack (%)	9694 (12.4)	75 (8.2)	90 (9.0)	1038 (12.6)	8491 (12.5)	<0.001
Vascular Disease (%)	1954 (2.5)	15 (1.6)	18 (1.8)	165 (2.0)	1756 (2.6)	0.002
Ischaemic Heart Disease (%)	32918 (42.1)	513 (55.9)	368 (36.8)	3183 (38.7)	28854 (42.3)	<0.001
Heavy Drinking (%)	2330 (3.0)	16 (1.7)	30 (3.0)	226 (2.7)	2058 (3.0)	0.08
Myocardial Infarction (%)	12144 (15.5)	224 (24.4)	120 (12.0)	1182 (14.4)	10618 (15.6)	<0.001
Liver Disease (%)	3790 (4.8)	87 (9.5)	61 (6.1)	303 (3.7)	3339 (4.9)	<0.001
Body Mass Index Obesity (%)	8051 (10.3)	72 (7.9)	120 (12.0)	933 (11.3)	6926 (10.2)	<0.001
Sleep Apnoea (%)	7594 (9.7)	65 (7.1)	102 (10.2)	795 (9.7)	6632 (9.7)	0.057
Asthma (%)	11495 (14.7)	202 (22.0)	178 (17.8)	1016 (12.4)	10099 (14.8)	<0.001
Chronic Obstructive Pulmonary Disease (%)	9529 (12.2)	87 (9.5)	87 (8.7)	827 (10.1)	8528 (12.5)	<0.001
Dementia (%)	9340 (11.9)	92 (10.0)	134 (13.4)	1196 (14.5)	7918 (11.6)	<0.001
Smoking Status (%)						<0.001
Active Smoker	14157 (18.4)	131 (14.5)	171 (17.3)	1395 (17.8)	12460 (18.5)	
Ex-smoker	34708 (45.0)	264 (29.2)	302 (30.6)	3584 (45.7)	30558 (45.4)	
Non-Smoker	28211 (36.6)	509 (56.3)	514 (52.1)	2863 (36.5)	24325 (36.1)	
Gastrointestinal Bleeding (%)	11131 (14.2)	128 (14.0)	143 (14.3)	1063 (12.9)	9797 (14.4)	0.005
CHA ₂ DS ₂ Vasc (%)						<0.001
0-1	1873 (2.8)	25 (3.1)	35 (4.2)	149 (2.2)	1664 (2.9)	
2	6391 (9.6)	65 (8.1)	79 (9.5)	624 (9.1)	5623 (9.6)	
3-4	32298 (48.3)	314 (38.9)	323 (38.8)	3380 (49.5)	28281 (48.4)	
5-9	26275 (39.3)	403 (49.9)	395 (47.5)	2672 (39.2)	22805 (39.1)	
HASBLED 3-8 (%)	3767 (21.9)	65 (26.9)	78 (31.8)	368 (22.7)	3256 (21.6)	<0.001
ORBIT (%)						0.882
0-2	221 (60.9)	1 (100.0)	2 (66.7)	18 (51.4)	200 (61.7)	
3	28 (7.7)	0 (0.0)	0 (0.0)	3 (8.6)	25 (7.7)	
4-7	114 (31.4)	0 (0.0)	1 (33.3)	14 (40.0)	99 (30.6)	
Frailty (%)						<0.001
Fit	991 (1.3)	9 (1.1)	9 (1.0)	136 (1.7)	837 (1.3)	
Mild	13769 (18.2)	113 (13.4)	132 (14.8)	1578 (19.6)	11946 (18.1)	
Moderate	27815 (36.7)	270 (32.1)	337 (37.7)	3153 (39.2)	24055 (36.4)	
Severe	33248 (43.8)	450 (53.4)	416 (46.5)	3186 (39.6)	29196 (44.2)	
Anticoagulated DOAC	40623 (51.9)	448 (48.9)	510 (51.1)	3990 (48.5)	35675 (52.4)	<0.001
Anticoagulated VKA	23505 (30.0)	260 (28.4)	265 (26.5)	2264 (27.5)	20716 (30.4)	<0.001
Not anticoagulated	14148 (18.1)	209 (22.8)	224 (22.4)	1969 (23.9)	11746 (17.2)	<0.001

SD = Standard Deviation; IMD = Index of Multiple Deprivation; CHA₂DS₂VASC = Congenital Heart Failure, Hypertension, Age ≥ 75, Diabetes, Stroke, Vascular Disease, Age 65-75, Sex, Age Category; HASBLED = Hypertension, Abnormal Kidney and Liver Function, Stroke and Bleeding; ORBIT = Outcome Registry Better Informed Treatment; DOAC = Direct Oral Anticoagulant; VKA = Vitamin K Antagonist.

Supplementary Figure 1. Correct doing by ethnicities according to Summary of Product Characteristics(SPC) recommendations



Supplementary Figure 2. Sensitivity Analysis comparing DOAC correct dosing within ethnicities according to Summary of Product Characteristics recommendations with creatinine clearance alone and with eGFR.

