Supplementary Data

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Table S1

Sex	eGFRcys category (mL/min/1.73m^2)	N	Ischaemic stroke (N=)	Haemorrhagic strokes (N=)	Major bleed (N=)	All-cause mortality (N=)
Male	>105	25,289	140	33	1,457	1,239
	>90-105	95,467	953	174	5,720	7,003
	>75-90	60,675	724	150	3,882	5,321
	>60-75	20,757	334	66	1,561	2,427
	>45-60	3,660	115	23	387	777
	>30-45	641	31	5	102	242
	<=30	170	6	2	30	74
Female	>105	32,494	78	22	1,484	755
	>90-105	115,472	558	154	5,967	5,222
	>75-90	67,433	432	91	3,491	3,351
	>60-75	25,522	254	59	1,551	1,738
	>45-60	4,572	65	15	322	498
	>30-45	608	10	1	57	144
	<=30	119	6	0	14	47

Number of events by estimated glomerular filtration rate based on serum creatinine (eGFRcys) category.

Table S2

Sex	eGFRcrcys category (mL/min/1.73m^2)	N	Ischaemic stroke (N=)	Haemorrhagic strokes (N=)	Major bleed (N=)	All-cause mortality (N=)
Male	>105	25,289	140	33	1,457	1,239
	>90-105	95,467	953	174	5,720	7,003
	>75-90	60,675	724	150	3,882	5,321
	>60-75	20,757	334	66	1,561	2,427
	>45-60	3,660	115	23	387	777
	>30-45	6,41	31	5	102	242
	<=30	170	6	2	30	74
Female	>105	32,494	78	22	1,484	755
	>90-105	115,472	558	154	5,967	5,222
	>75-90	67,433	432	91	3,491	3,351
	>60-75	25,522	254	59	1,551	1,738
	>45-60	4,572	65	15	322	498
	>30-45	608	10	1	57	144
	<=30	119	6	0	14	47

Number of events by estimated glomerular filtration rate based on serum creatinine (eGFRcrcys) category.

Table S3

Cause-specific Cox proportional hazards model outputs in male participants for ischaemic stroke outcome

		eGFRcr		eGFRcys		eGFRcrcys	
Model	**eGFR category (mL/min/1.73m^2)**	**HR (95% CI)**	**P value**	**HR (95% CI)**	**P value**	**HR (95% CI)**	**P value**
Model 1	>105	1.25 (1.03-1.51)	0.025	0.85 (0.71-1.02)	0.089	0.94 (0.77-1.15)	0.55
	>90-105	1 (Ref)	NA	1 (Ref)	NA	1 (Ref)	NA
	>75-90	0.94 (0.85-1.04)	0.226	1.09 (0.97-1.22)	0.163	1.15 (1.04-1.28)	0.008
	>60-75	1.06 (0.93-1.2)	0.389	1.34 (1.18-1.52)	<0.001	1.22 (1.07-1.39)	0.003
	>45-60	1.64 (1.34-2)	<0.001	1.6 (1.35-1.9)	<0.001	1.98 (1.63-2.4)	<0.001
	>30-45	2.05 (1.43-2.96)	<0.001	2.5 (1.92-3.25)	<0.001	2.25 (1.61-3.13)	<0.001
	<=30	2.01 (0.9-4.5)	0.089	2.71 (1.58-4.65)	<0.001	3.12 (1.71-5.7)	<0.001
Model 2	>105	1.24 (1.03-1.51)	0.026	0.85 (0.71-1.02)	0.088	0.94 (0.77-1.15)	0.546
	>90-105	1 (Ref)	NA	1 (Ref)	NA	1 (Ref)	NA
	>75-90	0.94 (0.85-1.04)	0.231	1.09 (0.97-1.22)	0.16	1.15 (1.04-1.28)	0.008
	>60-75	1.06 (0.93-1.2)	0.38	1.34 (1.18-1.52)	<0.001	1.22 (1.07-1.39)	0.003
	>45-60	1.63 (1.34-1.99)	<0.001	1.6 (1.34-1.9)	<0.001	1.98 (1.63-2.39)	<0.001
	>30-45	2.06 (1.43-2.97)	<0.001	2.5 (1.92-3.26)	<0.001	2.25 (1.62-3.14)	<0.001
	<=30	2.01 (0.9-4.5)	0.089	2.74 (1.6-4.7)	<0.001	3.15 (1.72-5.75)	<0.001
Model 3	>105	1.23 (1.02-1.5)	0.034	0.85 (0.71-1.02)	0.088	0.94 (0.77-1.14)	0.52
	>90-105	1 (Ref)	NA	1 (Ref)	NA	1 (Ref)	NA
	>75-90	0.94 (0.85-1.04)	0.243	1.08 (0.96-1.21)	0.202	1.14 (1.03-1.27)	0.012
	>60-75	1.06 (0.93-1.2)	0.405	1.32 (1.16-1.5)	<0.001	1.2 (1.05-1.37)	0.007

	>45-60	1.63 (1.33-1.99)	<0.001	1.57 (1.32-1.87)	<0.001	1.94 (1.6-2.35)	<0.001
	>30-45	1.97 (1.36-2.86)	<0.001	2.44 (1.87-3.18)	<0.001	2.17 (1.55-3.04)	<0.001
	<=30	1.97 (0.88-4.42)	0.099	2.72 (1.58-4.67)	<0.001	3.07 (1.68-5.61)	<0.001

eGFR: estimated glomerular filtration rate. Model 1: for accepted age, smoking, systolic and diastolic blood pressure, medications for blood pressure or cholesterol, baseline total, LDL and HDL cholesterol, pre-existing heart failure, atrial fibrillation/flutter or other atherosclerotic cardiovascular disease (including myocardial infarction and peripheral vascular disease). Model 2 was adjusted for variables included in Model 1, plus prescription of an anticoagulant (warfarin or low-molecular weight heparin) or an antiplatelet agent (aspirin, clopidogrel, prasugrel or dipyridamole) at baseline. Model 3 was adjusted for variables included in Model 2, plus ethnicity, body mass index and hip to waist ratio.

Table S4

Cause-specific Cox proportional hazards model outputs in female participants for ischaemic stroke outcome

		eGFRcr		eGFRcys		eGFRcrcys	
Model	**eGFR category (mL/min/1.73m^2)**	**HR (95% CI)**	**P value**	**HR (95% CI)**	**P value**	**HR (95% CI)**	**P value**
Model 1	>105	1.39 (1.07-1.8)	0.012	0.91 (0.68-1.22)	0.527	1.1 (0.86-1.4)	0.471
	>90-105	1 (Ref)	NA	1 (Ref)	NA	1 (Ref)	NA
	>75-90	1.1 (0.97-1.25)	0.147	1.09 (0.93-1.27)	0.283	1.2 (1.04-1.38)	0.012
	>60-75	1.34 (1.15-1.56)	<0.001	1.56 (1.33-1.83)	<0.001	1.72 (1.47-2.01)	<0.001
	>45-60	1.42 (1.09-1.84)	0.009	2.18 (1.79-2.67)	<0.001	2.02 (1.58-2.56)	<0.001
	>30-45	1.26 (0.67-2.37)	0.469	2.89 (2.08-4.01)	<0.001	2.7 (1.74-4.17)	<0.001
	<=30	4.57 (2.02-10.35)	<0.001	2.94 (1.37-6.32)	0.006	3.06 (1.25-7.49)	0.014
Model 2	>105	1.39 (1.07-1.8)	0.013	0.91 (0.68-1.22)	0.526	1.09 (0.85-1.4)	0.476
	>90-105	1 (Ref)	NA	1 (Ref)	NA	1 (Ref)	NA
	>75-90	1.1 (0.97-1.25)	0.147	1.09 (0.93-1.26)	0.287	1.2 (1.04-1.38)	0.012
	>60-75	1.34 (1.15-1.56)	<0.001	1.56 (1.33-1.83)	<0.001	1.72 (1.46-2.01)	<0.001
	>45-60	1.41 (1.08-1.83)	0.011	2.18 (1.78-2.66)	<0.001	2 (1.57-2.55)	<0.001
	>30-45	1.26 (0.67-2.37)	0.472	2.87 (2.07-3.98)	<0.001	2.68 (1.73-4.16)	<0.001
	<=30	4.52 (2-10.24)	<0.001	2.95 (1.38-6.32)	0.005	3.06 (1.25-7.48)	0.014
Model 3	>105	1.36 (1.04-1.76)	0.023	0.89 (0.66-1.21)	0.465	1.1 (0.86-1.41)	0.464
	>90-105	1 (Ref)	NA	1 (Ref)	NA	1 (Ref)	NA
	>75-90	1.08 (0.95-1.23)	0.217	1.08 (0.93-1.26)	0.319	1.19 (1.03-1.37)	0.017
	>60-75	1.31 (1.12-1.52)	0.001	1.54 (1.31-1.81)	<0.001	1.68 (1.43-1.97)	<0.001

	>45-60	1.37 (1.05-1.78)	0.019	2.13 (1.73-2.62)	<0.001	1.92 (1.5-2.45)	<0.001
	>30-45	1.22 (0.65-2.3)	0.535	2.78 (1.99-3.89)	<0.001	2.62 (1.69-4.06)	<0.001
	<=30	4.29 (1.89-9.72)	<0.001	2.9 (1.35-6.24)	0.006	2.97 (1.21-7.28)	0.017

eGFR: estimated glomerular filtration rate. Model 1: for accepted age, smoking, systolic and diastolic blood pressure, medications for blood pressure or cholesterol, baseline total, LDL and HDL cholesterol, pre-existing heart failure, atrial fibrillation/flutter or other atherosclerotic cardiovascular disease (including myocardial infarction and peripheral vascular disease). Model 2 was adjusted for variables included in Model 1, plus prescription of an anticoagulant (warfarin or low-molecular weight heparin) or an antiplatelet agent (aspirin, clopidogrel, prasugrel or dipyridamole) at baseline. Model 3 was adjusted for variables included in Model 2, plus ethnicity, body mass index and hip to waist ratio.

Table S5

Cause-specific Cox proportional hazards model outputs in male participants for haemorrhagic stroke outcome

		eGFRcr		eGFRcys		eGFRcrcys	
Model	**eGFR category (mL/min/1.73m^2)**	**HR (95% CI)**	**P value**	**HR (95% CI)**	**P value**	**HR (95% CI)**	**P value**
Model 1	>105	1.77 (1.18-2.65)	0.006	0.78 (0.53-1.14)	0.197	0.97 (0.64-1.47)	0.889
	>90-105	1 (Ref)	NA	1 (Ref)	NA	1 (Ref)	NA
	>75-90	1.04 (0.83-1.3)	0.71	0.85 (0.67-1.1)	0.22	0.93 (0.74-1.17)	0.523
	>60-75	1.16 (0.87-1.55)	0.306	1.15 (0.88-1.51)	0.298	1.26 (0.95-1.67)	0.107
	>45-60	2.01 (1.29-3.13)	0.002	1.32 (0.89-1.97)	0.168	1.89 (1.21-2.95)	0.005
	>30-45	2.43 (0.99-5.97)	0.053	2.55 (1.39-4.67)	0.003	2.53 (1.17-5.47)	0.019
	<=30	3.97 (0.97-16.23)	0.055	4.58 (1.66-12.63)	0.003	3.11 (0.76-12.74)	0.115
Model 2	>105	1.71 (1.14-2.58)	0.009	0.77 (0.52-1.14)	0.188	0.96 (0.64-1.45)	0.857
	>90-105	1 (Ref)	NA	1 (Ref)	NA	1 (Ref)	NA
	>75-90	1.04 (0.83-1.3)	0.742	0.85 (0.66-1.09)	0.208	0.92 (0.73-1.16)	0.492
	>60-75	1.13 (0.84-1.51)	0.415	1.12 (0.85-1.46)	0.423	1.2 (0.91-1.59)	0.195
	>45-60	1.82 (1.17-2.84)	0.008	1.21 (0.81-1.8)	0.359	1.67 (1.07-2.62)	0.024
	>30-45	2.16 (0.88-5.3)	0.094	2.17 (1.18-3.99)	0.013	2.17 (1-4.7)	0.05
	<=30	3.61 (0.88-14.78)	0.074	4.17 (1.51-11.51)	0.006	2.83 (0.69-11.6)	0.148
Model 3	>105	1.73 (1.14-2.6)	0.009	0.77 (0.52-1.13)	0.181	0.96 (0.63-1.45)	0.843
	>90-105	1 (Ref)	NA	1 (Ref)	NA	1 (Ref)	NA
	>75-90	1.04 (0.83-1.3)	0.751	0.85 (0.66-1.09)	0.207	0.92 (0.73-1.16)	0.469
	>60-75	1.12 (0.84-1.5)	0.44	1.11 (0.84-1.46)	0.458	1.19 (0.9-1.58)	0.23

	>45-60	1.79 (1.15-2.8)	0.011	1.19 (0.79-1.79)	0.397	1.64 (1.04-2.58)	0.032
	>30-45	2.11 (0.86-5.2)	0.104	2.14 (1.15-3.96)	0.016	2.11 (0.97-4.6)	0.06
	<=30	3.49 (0.85-14.29)	0.082	4.09 (1.48-11.33)	0.007	2.71 (0.66-11.13)	0.167

eGFR: estimated glomerular filtration rate. Model 1 was adjusted for age, history of or medication for hypertension, systolic or diastolic blood pressure, haemoglobin and haematocrit. Model 2 was adjusted for variables included in Model 1, plus prescription of an anticoagulant (warfarin or low-molecular weight heparin) or an antiplatelet agent (aspirin, clopidogrel, prasugrel or dipyridamole) at baseline. Model 3 was adjusted for variables included in Model 2, plus ethnicity, body mass index and hip to waist ratio.

Table S6

Cause-specific Cox proportional hazards model outputs in female participants for haemorrhagic stroke outcome

		eGFRcr		eGFRcys		eGFRcrcys	
Model	**eGFR category (mL/min/1.73m^2)**	**HR (95% CI)**	**P value**	**HR (95% CI)**	**P value**	**HR (95% CI)**	**P value**
Model 1	>105	1.49 (0.91-2.44)	0.113	1.28 (0.8-2.05)	0.307	1.33 (0.88-2)	0.172
	>90-105	1 (Ref)	NA	1 (Ref)	NA	1 (Ref)	NA
	>75-90	0.83 (0.64-1.08)	0.17	0.79 (0.59-1.05)	0.099	0.72 (0.55-0.94)	0.015
	>60-75	1.17 (0.86-1.58)	0.326	1.06 (0.78-1.43)	0.712	1.02 (0.75-1.4)	0.891
	>45-60	1.32 (0.77-2.27)	0.306	1.24 (0.81-1.89)	0.332	1.48 (0.91-2.41)	0.119
	>30-45	0.57 (0.08-4.08)	0.574	1.2 (0.48-2.98)	0.694	1.32 (0.42-4.2)	0.638
	<=30	0 (0-Inf)	0.986	0 (0-Inf)	0.987	0 (0-Inf)	0.99
Model 2	>105	1.47 (0.9-2.41)	0.126	1.27 (0.79-2.04)	0.319	1.32 (0.88-1.98)	0.182
	>90-105	1 (Ref)	NA	1 (Ref)	NA	1 (Ref)	NA
	>75-90	0.83 (0.64-1.08)	0.162	0.78 (0.59-1.04)	0.093	0.71 (0.54-0.93)	0.013
	>60-75	1.14 (0.84-1.55)	0.409	1.04 (0.77-1.4)	0.809	1 (0.73-1.37)	0.992
	>45-60	1.26 (0.74-2.17)	0.399	1.17 (0.76-1.8)	0.473	1.38 (0.84-2.25)	0.203
	>30-45	0.52 (0.07-3.73)	0.515	1.07 (0.43-2.66)	0.89	1.17 (0.37-3.73)	0.792
	<=30	0 (0-Inf)	0.987	0 (0-Inf)	0.989	0 (0-Inf)	0.986
Model 3	>105	1.43 (0.86-2.38)	0.173	1.21 (0.75-1.95)	0.427	1.28 (0.85-1.93)	0.242
	>90-105	1 (Ref)	NA	1 (Ref)	NA	1 (Ref)	NA
	>75-90	0.86 (0.66-1.12)	0.252	0.84 (0.63-1.12)	0.245	0.77 (0.58-1.01)	0.058

	>60-75	1.2 (0.88-1.63)	0.25	1.19 (0.87-1.62)	0.283	1.13 (0.82-1.57)	0.444
	>45-60	1.36 (0.79-2.34)	0.263	1.44 (0.92-2.24)	0.109	1.63 (0.98-2.68)	0.057
	>30-45	0.56 (0.08-4.02)	0.564	1.38 (0.55-3.48)	0.491	1.41 (0.44-4.52)	0.563
	<=30	0 (0-Inf)	0.995	0 (0-Inf)	0.993	0 (0-Inf)	0.994

eGFR: estimated glomerular filtration rate. Model 1 was adjusted for age, history of or medication for hypertension, systolic or diastolic blood pressure, haemoglobin and haematocrit. Model 2 was adjusted for variables included in Model 1, plus prescription of an anticoagulant (warfarin or low-molecular weight heparin) or an antiplatelet agent (aspirin, clopidogrel, prasugrel or dipyridamole) at baseline. Model 3 was adjusted for variables included in Model 2, plus ethnicity, body mass index and hip to waist ratio.

Table S7

Cause-specific Cox proportional hazards model outputs in male participants for major bleeding outcome

		eGFRcr		eGFRcys		eGFRcrcys	
Model	**eGFR category (mL/min/1.73m^2)**	**HR (95% CI)**	**P value**	**HR (95% CI)**	**P value**	**HR (95% CI)**	**P value**
Model 1	>105	1.34 (1.26-1.42)	<0.001	0.92 (0.87-0.98)	0.009	1 (0.94-1.07)	0.949
	>90-105	1 (Ref)	NA	1 (Ref)	NA	1 (Ref)	NA
	>75-90	0.97 (0.93-1.01)	0.111	1.03 (0.98-1.08)	0.227	1.04 (0.99-1.08)	0.107
	>60-75	1.06 (1-1.12)	0.049	1.22 (1.16-1.29)	<0.001	1.2 (1.14-1.27)	<0.001
	>45-60	1.36 (1.22-1.51)	<0.001	1.6 (1.48-1.73)	<0.001	1.6 (1.45-1.77)	<0.001
	>30-45	1.94 (1.59-2.36)	<0.001	2.03 (1.77-2.34)	<0.001	2.07 (1.74-2.46)	<0.001
	<=30	2.11 (1.47-3.03)	<0.001	2.62 (2.02-3.39)	<0.001	2.23 (1.62-3.06)	<0.001
Model 2	>105	1.32 (1.23-1.4)	<0.001	0.92 (0.87-0.98)	0.007	1 (0.94-1.06)	0.902
	>90-105	1 (Ref)	NA	1 (Ref)	NA	1 (Ref)	NA
	>75-90	0.96 (0.92-1)	0.08	1.02 (0.98-1.07)	0.303	1.03 (0.99-1.07)	0.173
	>60-75	1.04 (0.98-1.1)	0.209	1.19 (1.13-1.26)	<0.001	1.17 (1.1-1.23)	<0.001
	>45-60	1.27 (1.14-1.41)	<0.001	1.5 (1.39-1.62)	<0.001	1.48 (1.34-1.63)	<0.001
	>30-45	1.76 (1.44-2.14)	<0.001	1.83 (1.59-2.11)	<0.001	1.85 (1.56-2.2)	<0.001
	<=30	1.94 (1.35-2.78)	<0.001	2.38 (1.83-3.08)	<0.001	2.03 (1.47-2.78)	<0.001
Model 3	>105	1.29 (1.21-1.37)	<0.001	0.93 (0.88-0.99)	0.028	1 (0.94-1.06)	0.969
	>90-105	1 (Ref)	NA	1 (Ref)	NA	1 (Ref)	NA
	>75-90	0.96 (0.92-1)	0.07	1.01 (0.96-1.06)	0.744	1.01 (0.97-1.05)	0.619
	>60-75	1.02 (0.97-1.09)	0.413	1.15 (1.09-1.21)	<0.001	1.12 (1.06-1.19)	<0.001

	>45-60	1.22 (1.1-1.36)	<0.001	1.41 (1.3-1.52)	<0.001	1.38 (1.25-1.52)	<0.001
	>30-45	1.62 (1.32-1.98)	<0.001	1.66 (1.44-1.91)	<0.001	1.68 (1.41-2)	<0.001
	<=30	1.77 (1.23-2.54)	0.002	2.16 (1.66-2.79)	<0.001	1.81 (1.32-2.49)	<0.001

eGFR: estimated glomerular filtration rate. Model 1 was adjusted for age, history of or medication for hypertension, systolic or diastolic blood pressure, haemoglobin and haematocrit. Model 2 was adjusted for variables included in Model 1, plus prescription of an anticoagulant (warfarin or low-molecular weight heparin) or an antiplatelet agent (aspirin, clopidogrel, prasugrel or dipyridamole) at baseline. Model 3 was adjusted for variables included in Model 2, plus ethnicity, body mass index and hip to waist ratio.

Table S8

Cause-specific Cox proportional hazards model outputs in female participants for major bleeding outcome

		eGFRcr		eGFRcys		eGFRcrcys	
Model	**eGFR category (mL/min/1.73m^2)**	**HR (95% CI)**	**P value**	**HR (95% CI)**	**P value**	**HR (95% CI)**	**P value**
Model 1	>105	1.14 (1.07-1.21)	<0.001	0.99 (0.93-1.06)	0.78	1.05 (0.99-1.11)	0.086
	>90-105	1 (Ref)	NA	1 (Ref)	NA	1 (Ref)	NA
	>75-90	0.96 (0.92-1)	0.034	1.1 (1.05-1.15)	<0.001	1.04 (1-1.09)	0.046
	>60-75	1.06 (1-1.12)	0.062	1.25 (1.18-1.32)	<0.001	1.19 (1.13-1.26)	<0.001
	>45-60	1.13 (1.01-1.27)	0.03	1.63 (1.5-1.76)	<0.001	1.53 (1.38-1.7)	<0.001
	>30-45	1.42 (1.09-1.84)	0.009	1.98 (1.68-2.32)	<0.001	1.69 (1.35-2.13)	<0.001
	<=30	1.81 (1.07-3.07)	0.026	2.1 (1.45-3.03)	<0.001	2.14 (1.39-3.29)	0.001
Model 2	>105	1.12 (1.05-1.2)	<0.001	0.99 (0.93-1.05)	0.696	1.05 (0.99-1.11)	0.118
	>90-105	1 (Ref)	NA	1 (Ref)	NA	1 (Ref)	NA
	>75-90	0.95 (0.91-0.99)	0.025	1.09 (1.04-1.14)	<0.001	1.04 (1-1.09)	0.072
	>60-75	1.04 (0.98-1.1)	0.187	1.23 (1.16-1.29)	<0.001	1.17 (1.1-1.24)	<0.001
	>45-60	1.08 (0.97-1.21)	0.177	1.55 (1.44-1.68)	<0.001	1.44 (1.3-1.59)	<0.001
	>30-45	1.29 (0.99-1.67)	0.06	1.78 (1.51-2.1)	<0.001	1.5 (1.19-1.89)	0.001
	<=30	1.65 (0.97-2.78)	0.063	1.88 (1.3-2.71)	0.001	1.93 (1.26-2.97)	0.003
Model 3	>105	1.11 (1.04-1.18)	0.002	1 (0.94-1.06)	0.967	1.05 (0.99-1.12)	0.088
	>90-105	1 (Ref)	NA	1 (Ref)	NA	1 (Ref)	NA
	>75-90	0.95 (0.91-0.99)	0.025	1.07 (1.03-1.12)	0.002	1.02 (0.98-1.07)	0.353
	>60-75	1.03 (0.97-1.09)	0.335	1.19 (1.12-1.25)	<0.001	1.12 (1.06-1.19)	<0.001

	>45-60	1.05 (0.94-1.18)	0.402	1.47 (1.35-1.6)	<0.001	1.36 (1.22-1.51)	<0.001
	>30-45	1.22 (0.94-1.59)	0.133	1.66 (1.4-1.96)	<0.001	1.37 (1.08-1.73)	0.009
	<=30	1.46 (0.84-2.52)	0.176	1.7 (1.17-2.47)	0.005	1.72 (1.11-2.68)	0.016

eGFR: estimated glomerular filtration rate. Model 1 was adjusted for age, history of or medication for hypertension, systolic or diastolic blood pressure, haemoglobin and haematocrit. Model 2 was adjusted for variables included in Model 1, plus prescription of an anticoagulant (warfarin or low-molecular weight heparin) or an antiplatelet agent (aspirin, clopidogrel, prasugrel or dipyridamole) at baseline. Model 3 was adjusted for variables included in Model 2, plus ethnicity, body mass index and hip to waist ratio.

Table S9

Cause-specific Cox proportional hazards model outputs in male participants for all-cause mortality

		eGFRcr		eGFRcys		eGFRcrcys	
Model	**eGFR category (mL/min/1.73m^2)**	**HR (95% CI)**	**P value**	**HR (95% CI)**	**P value**	**HR (95% CI)**	**P value**
Model 1	>105	1.71 (1.6-1.82)	<0.001	0.93 (0.87-1)	0.044	1.12 (1.04-1.2)	0.001
	>90-105	1 (Ref)	NA	1 (Ref)	NA	1 (Ref)	NA
	>75-90	0.92 (0.88-0.95)	<0.001	1.14 (1.09-1.19)	<0.001	1.14 (1.09-1.18)	<0.001
	>60-75	1.02 (0.97-1.07)	0.416	1.49 (1.42-1.56)	<0.001	1.41 (1.34-1.48)	<0.001
	>45-60	1.45 (1.35-1.57)	<0.001	2.2 (2.07-2.34)	<0.001	2.05 (1.9-2.2)	<0.001
	>30-45	2.24 (1.96-2.55)	<0.001	3.48 (3.18-3.82)	<0.001	3.05 (2.72-3.41)	<0.001
	<=30	3.54 (2.81-4.46)	<0.001	5.81 (4.97-6.8)	<0.001	5.04 (4.18-6.09)	<0.001
Model 2	>105	1.7 (1.59-1.82)	<0.001	0.93 (0.87-1)	0.041	1.12 (1.04-1.2)	0.002
	>90-105	1 (Ref)	NA	1 (Ref)	NA	1 (Ref)	NA
	>75-90	0.92 (0.88-0.95)	<0.001	1.14 (1.09-1.19)	<0.001	1.14 (1.09-1.18)	<0.001
	>60-75	1.02 (0.97-1.07)	0.403	1.49 (1.42-1.56)	<0.001	1.41 (1.34-1.47)	<0.001
	>45-60	1.44 (1.34-1.56)	<0.001	2.19 (2.06-2.33)	<0.001	2.03 (1.89-2.18)	<0.001
	>30-45	2.25 (1.98-2.57)	<0.001	3.47 (3.17-3.81)	<0.001	3.06 (2.73-3.42)	<0.001
	<=30	3.53 (2.81-4.45)	<0.001	5.89 (5.03-6.89)	<0.001	5.07 (4.2-6.12)	<0.001
Model 3	>105	1.71 (1.6-1.83)	<0.001	0.94 (0.88-1.01)	0.101	1.13 (1.06-1.21)	0.001
	>90-105	1 (Ref)	NA	1 (Ref)	NA	1 (Ref)	NA
	>75-90	0.92 (0.89-0.96)	<0.001	1.12 (1.08-1.17)	<0.001	1.12 (1.08-1.17)	<0.001
	>60-75	1.02 (0.97-1.07)	0.484	1.45 (1.38-1.52)	<0.001	1.37 (1.31-1.44)	<0.001

	>45-60	1.43 (1.32-1.54)	<0.001	2.1 (1.98-2.24)	<0.001	1.95 (1.82-2.1)	<0.001
	>30-45	2.17 (1.9-2.48)	<0.001	3.34 (3.05-3.67)	<0.001	2.94 (2.62-3.29)	<0.001
	<=30	3.5 (2.78-4.41)	<0.001	5.78 (4.94-6.76)	<0.001	4.91 (4.07-5.93)	<0.001

eGFR: estimated glomerular filtration rate. Model 1: for accepted age, smoking, systolic and diastolic blood pressure, medications for blood pressure or cholesterol, baseline total, LDL and HDL cholesterol, pre-existing heart failure, atrial fibrillation/flutter or other atherosclerotic cardiovascular disease (including myocardial infarction and peripheral vascular disease). Model 2 was adjusted for variables included in Model 1, plus prescription of an anticoagulant (warfarin or low-molecular weight heparin) or an antiplatelet agent (aspirin, clopidogrel, prasugrel or dipyridamole) at baseline. Model 3 was adjusted for variables included in Model 2, plus ethnicity, body mass index and hip to waist ratio.

Table S10

Cause-specific Cox proportional hazards model outputs in female participants for all-cause mortality

		eGFRcr		eGFRcys		eGFRcrcys	
Model	**eGFR category (mL/min/1.73m^2)**	**HR (95% CI)**	**P value**	**HR (95% CI)**	**P value**	**HR (95% CI)**	**P value**
Model 1	>105	1.31 (1.2-1.42)	<0.001	0.84 (0.77-0.93)	0.001	0.98 (0.91-1.07)	0.708
	>90-105	1 (Ref)	NA	1 (Ref)	NA	1 (Ref)	NA
	>75-90	0.94 (0.9-0.98)	0.004	1.17 (1.11-1.23)	<0.001	1.13 (1.07-1.18)	<0.001
	>60-75	1.06 (1.01-1.12)	0.028	1.43 (1.35-1.51)	<0.001	1.36 (1.29-1.44)	<0.001
	>45-60	1.35 (1.23-1.48)	<0.001	2.16 (2.01-2.32)	<0.001	1.93 (1.77-2.1)	<0.001
	>30-45	2.52 (2.13-2.99)	<0.001	3.42 (3.04-3.84)	<0.001	3.29 (2.84-3.82)	<0.001
	<=30	5.24 (3.92-7.02)	<0.001	7.75 (6.37-9.43)	<0.001	6.96 (5.49-8.83)	<0.001
Model 2	>105	1.31 (1.2-1.42)	<0.001	0.84 (0.77-0.93)	<0.001	0.98 (0.91-1.07)	0.692
	>90-105	1 (Ref)	NA	1 (Ref)	NA	1 (Ref)	NA
	>75-90	0.94 (0.9-0.98)	0.004	1.17 (1.11-1.23)	<0.001	1.13 (1.07-1.18)	<0.001
	>60-75	1.06 (1-1.12)	0.039	1.43 (1.35-1.51)	<0.001	1.36 (1.28-1.43)	<0.001
	>45-60	1.34 (1.22-1.47)	<0.001	2.15 (2-2.31)	<0.001	1.91 (1.75-2.08)	<0.001
	>30-45	2.47 (2.09-2.93)	<0.001	3.37 (3-3.78)	<0.001	3.24 (2.79-3.76)	<0.001
	<=30	5.23 (3.91-6.99)	<0.001	7.71 (6.34-9.39)	<0.001	6.95 (5.48-8.82)	<0.001
Model 3	>105	1.29 (1.18-1.4)	<0.001	0.85 (0.77-0.93)	0.001	0.99 (0.91-1.07)	0.782
	>90-105	1 (Ref)	NA	1 (Ref)	NA	1 (Ref)	NA
	>75-90	0.94 (0.9-0.98)	0.003	1.16 (1.1-1.22)	<0.001	1.11 (1.06-1.17)	<0.001
	>60-75	1.05 (0.99-1.11)	0.098	1.41 (1.33-1.49)	<0.001	1.33 (1.26-1.41)	<0.001

	>45-60	1.32 (1.2-1.45)	<0.001	2.12 (1.97-2.28)	<0.001	1.86 (1.7-2.03)	<0.001
	>30-45	2.42 (2.05-2.87)	<0.001	3.34 (2.97-3.75)	<0.001	3.17 (2.73-3.69)	<0.001
	<=30	5.04 (3.75-6.76)	<0.001	7.54 (6.17-9.21)	<0.001	6.74 (5.29-8.58)	<0.001

eGFR: estimated glomerular filtration rate. Model 1: for accepted age, smoking, systolic and diastolic blood pressure, medications for blood pressure or cholesterol, baseline total, LDL and HDL cholesterol, pre-existing heart failure, atrial fibrillation/flutter or other atherosclerotic cardiovascular disease (including myocardial infarction and peripheral vascular disease). Model 2 was adjusted for variables included in Model 1, plus prescription of an anticoagulant (warfarin or low-molecular weight heparin) or an antiplatelet agent (aspirin, clopidogrel, prasugrel or dipyridamole) at baseline. Model 3 was adjusted for variables included in Model 2, plus ethnicity, body mass index and hip to waist ratio.

Table S11

Baseline characteristics in the subgroup with atrial fibrillation/flutter at baseline

	Female	**Male**	**p**
N	1,943	4,588	
Age (median [IQR])	64.00 [60.00, 67.00]	63.00 [59.00, 67.00]	0.08
Ethnicity: n (%)			0.051
White	1886 (97.1)	4477 (97.6)	
Mixed	4 (0.2)	11 (0.2)	
Black	21 (1.1)	22 (0.5)	
South Asian	11 (0.6)	40 (0.9)	
Chinese	2 (0.1)	6 (0.1)	
Other	10 (0.5)	11 (0.2)	
Unknown	9 (0.5)	21 (0.5)	
Smoking: n (%)			<0.001
Never	1051 (54.1)	1892 (41.2)	
Previous	784 (40.3)	2315 (50.5)	
Current	91 (4.7)	357 (7.8)	
Unknown	17 (0.9)	24 (0.5)	
Systolic BP (mean (SD))	140.05 (21.32)	140.01 (20.17)	0.933
Diastolic BP (mean (SD))	80.30 (11.94)	83.01 (11.85)	<0.001
Body mass index (mean (SD))	28.92 (6.12)	29.06 (4.91)	0.36
Hip:waist ratio (mean (SD))	1.21 (0.10)	1.06 (0.08)	<0.001
eGFRcr (mL/min/1.73m^2) (mean (SD))	85.36 [72.34, 94.08]	86.59 [74.42, 94.03]	0.137
eGFRcys (median [IQR])	77.46 [65.18, 89.48]	77.99 [66.47, 90.37]	0.006
eGFRcrcys (mL/min/1.73m^2) (mean (SD))	81.19 [69.83, 91.30]	82.17 [72.05, 91.90]	0.02
Urine albumin:creatinine ratio (median [IQR])	0.00 [0.00, 1.18]	0.00 [0.00, 1.30]	<0.001
Total cholesterol (mean (SD))	5.55 (1.19)	4.89 (1.12)	<0.001
LDL cholesterol (mean (SD))	3.40 (0.91)	3.04 (0.84)	<0.001
HDL cholesterol (mean (SD))	1.51 (0.38)	1.22 (0.31)	<0.001
C-reactive protein mg/L (mean (SD))	3.66 (5.42)	3.21 (5.57)	0.003
Haemoglobin (g/dL) (mean (SD))	13.56 (1.04)	14.90 (1.19)	<0.001

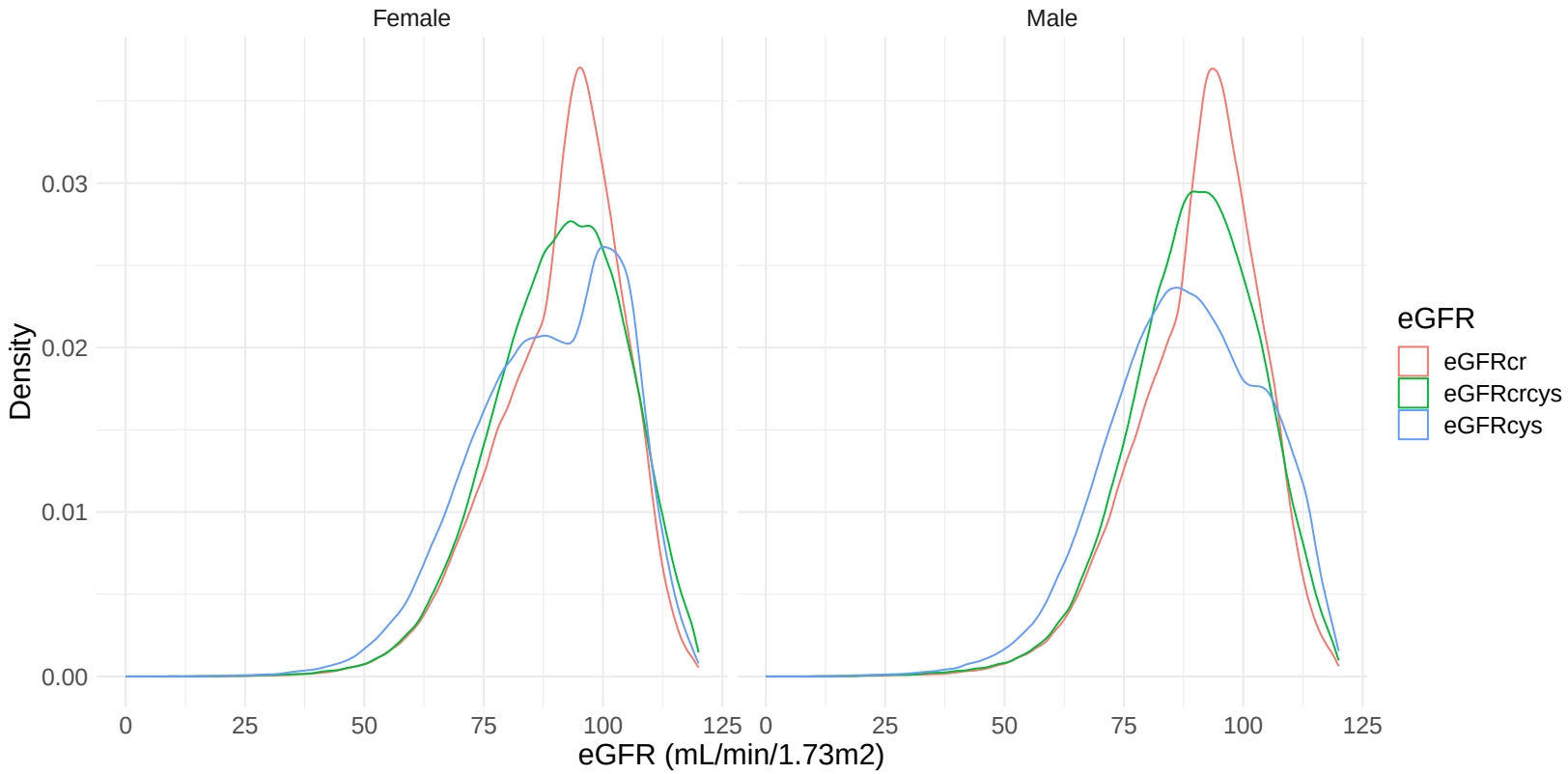
Haematocrit (%) (mean (SD))	39.51 (3.06)	43.17 (3.46)	<0.001
Diabetes: n (%)	175 (9.0)	622 (13.6)	<0.001
Hypertension: n (%)	674 (34.7)	1425 (31.1)	0.004
Cardiovascular disease: n (%)	296 (15.2)	1279 (27.9)	<0.001
Heart failure: n (%)	136 (7.0)	637 (13.9)	<0.001
Medications for blood pressure: n (%)	379 (19.5)	784 (17.1)	0.021
Medications for cholesterol: n (%)	737 (37.9)	2407 (52.5)	<0.001
Anticoagulant: n (%)	608 (31.3)	1719 (37.5)	<0.001
Antiplatelet: n (%)	819 (42.2)	2096 (45.7)	0.009
CHADS-VASC (median [IQR])	2.00 [2.00, 3.00]	1.00 [1.00, 2.00]	<0.001
ORBIT (median [IQR])	2.00 [0.00, 3.00]	1.00 [0.00, 1.00]	<0.001

Table S12

Proportion of people with pre-existing atrial fibrillation/flutter prescribed preventative medications by sex and CHADS-VASC score.

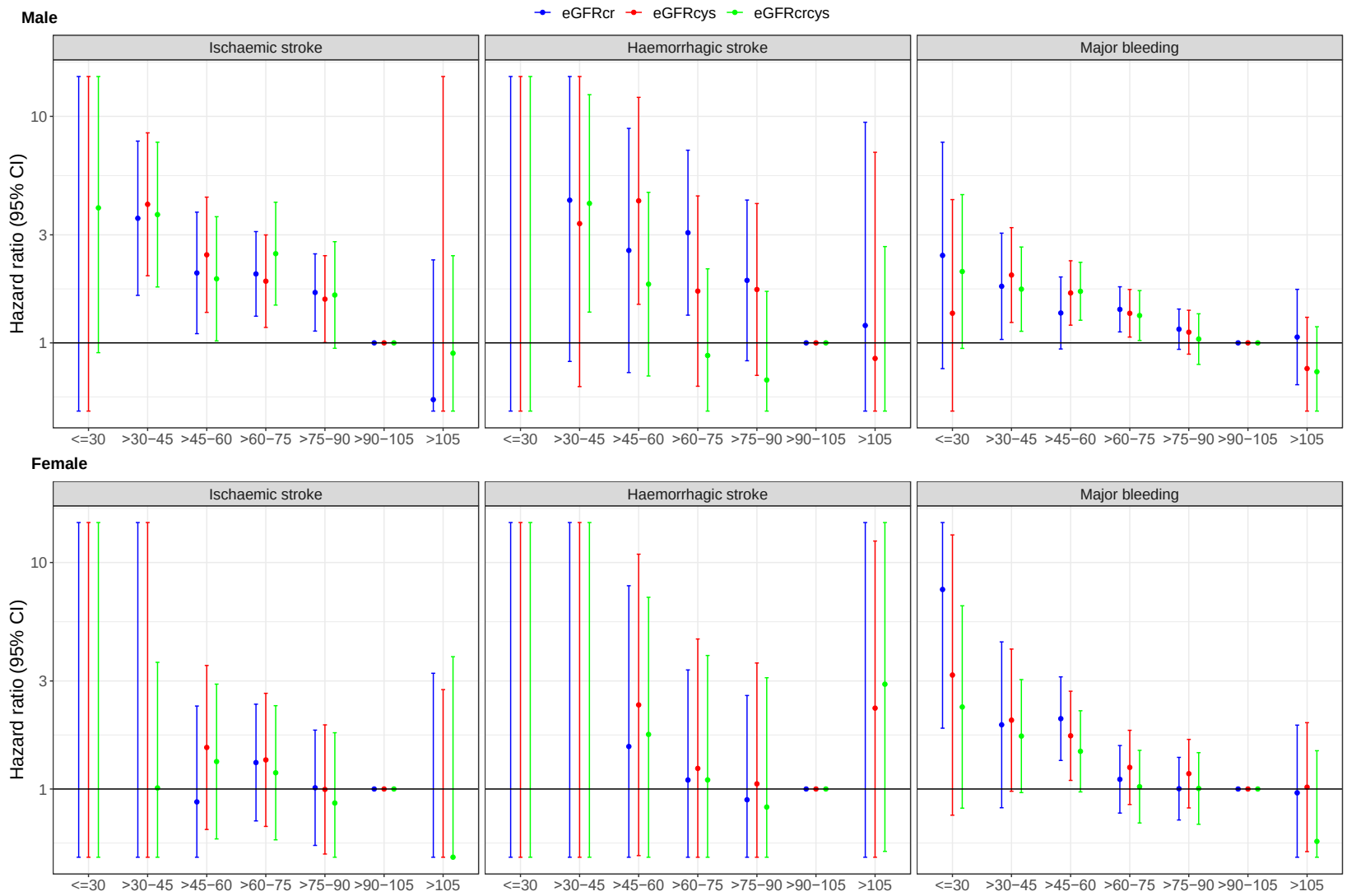
	CHADS-VASC score			
	0	**1**	**2**	**≥3**
Male				
N	841	1,831	1,490	426
Age (years): median [IQR]	59.0 [54.0, 62.0]	62.0 [58.0, 65.0]	66.0 [64.2, 68.0]	67.0 [65.0, 68.0]
eGFRcr (mL/min/1.73m^2): median [IQR]	96.9 [85.5, 101.8]	93.7 [81.0, 99.8]	87.9 [75.4, 95.7]	83.5 [68.9, 95.1]
Hypertension: n(%)	0 (0.0)	615 (33.6)	650 (43.6)	160 (37.6)
Diabetes: n (%)	0 (0.0)	69 (3.8)	278 (18.7)	275 (64.6)
Heart failure: n (%)	0 (0.0)	131 (7.2)	290 (19.5)	216 (50.7)
Statin: n (%)	291 (34.6)	864 (47.2)	919 (61.7)	333 (78.2)
Antiplatelet: n (%)	421 (50.1)	828 (45.2)	672 (45.1)	175 (41.1)
Anticoagulation: n (%)	202 (24.0)	654 (35.7)	633 (42.5)	230 (54.0)
Female				
N	0	414	768	761
Age (years): median [IQR]	-	60.0 [54.0, 62.0]	62.0 [59.0, 65.0]	67.0 [65.0, 68.0]
eGFRcr (mL/min/1.73m^2): median [IQR]	-	94.6 [83.9, 102.0]	91.5 [78.9, 99.6]	84.6 [71.8, 96.3]
Hypertension: n(%)	-	0 (0.0)	289 (37.6)	385 (50.6)
Diabetes: n (%)	-	0 (0.0)	21 (2.7)	154 (20.2)
Heart failure: n (%)	-	0 (0.0)	33 (4.3)	103 (13.5)
Statin: n (%)	-	101 (24.4)	243 (31.6)	393 (51.6)
Antiplatelet: n (%)	-	175 (42.3)	314 (40.9)	330 (43.4)
Anticoagulation: n (%)	-	91 (22.0)	221 (28.8)	296 (38.9)

Figure S1



Density plot showing the differences in eGFRcr, eGFRcys and eGFRcrcys by sex in the UK Biobank population

Figure S2


Male
eGFRcr
eGFRcys
eGFRcrcys
Ischaemic stroke
Haemorrhagic stroke
Major bleeding
Hazard ratio (95% CI)
10
3
1
<=30
>30−45
>45−60
>60−75
>75−90
>90−105
>105
Female

In a sub-population of participants with atrial fibrillation/flutter at baseline, forest plots displaying cause-specific hazard ratio and 95% confidence intervals (95% CI) for ischaemic stroke (left), haemorrhagic stroke (middle) or any major bleeding (right). Results taken from Cox proportional hazards models censored for death not caused by the outcome of interest. Ischaemic stroke models were adjusted for CHADSVASC score. Haemorrhagic stroke and major bleeding models were adjusted for ORBIT score. All models were stratified by sex.