

**Table 1:** Patient baseline characteristics by atrial fibrillation status.

	All	AF*	Non-AF*	p†
Number, n(%)	2379	807 (34.8)	1,509 (65.2)	-
Age, mean (SD)	75 (13.7)	79.9 (11)	72.5 (14.2)	<0.0001
Sex, female, n (%)	1,160 (48.8)	392 (48.6)	733 (48.6)	1.0
Ethnicity, n (%)				
European	1823 (76.6)	638 (79.2)	1,144 (75.8)	<0.0001
Māori	273 (11.5)	107 (13.3)	149 (9.9)	
Pacific	114 (4.8)	7 (5.0)	86 (5.7)	
Asian	115 (4.8)	6 (4.3)	90 (6.0)	
Other	54 (2.3)	12 (1.5)	40 (2.7)	
Primary diagnosis, n (%)				
Ischaemic stroke	1,937 (81.5)	696 (86.3)	1,191 (78.9)	<0.0001
Haemorrhagic stroke	292 (12.3)	67 (8.3)	218 (14.5)	
Stroke not specified	116 (4.9)	35 (4.3)	77 (5.1)	
Other/unknown	32 (1.4)	6 (1.1)	23 (1.5)	
Ischaemic stroke location, n (%)				
Anterior circulation	1,276 (68.8)	521(74.9)	763 (65.7)	<0.0001
Posterior circulation	459 (24.7)	144 (20.1)	311 (26.8)	
Other/unknown	120 (9.5)	31 (4.5)	88 (7.6)	
Ischaemic stroke cause, n (%)				
Cardioembolic—AF	627 (32.4)	575 (80.8)	68 (5.6)	<0.0001
Cardioembolic—non-AF	277 (14.3)	2 (0.3)	27 (2.2)	
Carotid stenosis	96 (5)	11 (1.5)	68 (5.6)	
Vertebrobasilar stenosis	25 (1.3)	4 (0.6)	21 (1.7)	
Small vessel	33 (1.7)	21 (3.0)	254 (20.8)	
Intracranial stenosis	30 (1.6)	6 (0.8)	26 (2.1)	
Dissection	9 (0.5)	1 (0.1)	8 (0.7)	
Other/unknown	838 (43.3)	92 (12.9)	732 (60.1)	
Haemorrhagic stroke location, n (%)				
Lobar	136 (49.1)	33 (54.1)	100 (47.4)	0.8
Deep	114 (42.2)	23 (37.7)	89 (42.2)	
Other/unknown	27 (9.7)	5 (8.2)	22 (10.4)	

**Table 1 (continued):** Patient baseline characteristics by atrial fibrillation status.

	All	AF	Non-AF	p
Haemorrhagic stroke cause, n (%)				
Hypertensive	147 (53.3)	23 (36.5)	119 (57.5)	
Anticoagulation	13 (4.7)	9 (14.3)	4 (1.9)	
Haemorrhagic transformation	36 (13)	17 (27.0)	19 (9.2)	<0.001
Amyloid Angiopathy	15 (5.4)	3 (4.8)	8 (3.7)	
Underlying SOL/AVM/aneurysm	6 (2.2)	0 (0)	6 (2.9)	
Other	10 (3.7)	10 (15.9)	40 (19.3)	
Unknown	49 (17.8)	3 (4.8)	6 (2.9)	
Risk factors, n (%)				
Prior stroke	515 (21.9)	211 (26.1)	287 (19.0)	0.0001
Prior TIA	303 (12.9)	104 (12.9)	192 (12.7)	0.89
Carotid stenosis	180 (7.8)	56 (6.9)	119 (7.9)	0.39
Hypertension	1,695 (71.7)	596 (73.9)	1,057 (70)	0.048
Diabetes	571 (24.2)	175 (21.7)	379 (25.1)	0.07
Dyslipidaemia	998 (42.6)	310 (38.4)	661 (43.8)	0.01
Atrial fibrillation	807 (34.3)	807 (100)	0 (0)	-
Smoker	287 (12.2)	52 (6.4)	227 (15)	<0.0001
Ischaemic heart disease	575 (24.5)	270 (33.5)	295 (19.5)	<0.0001
Rheumatic heart disease	40 (1.7)	23 (2.9)	17 (1.1)	0.056
Family history of stroke	161 (6.9)	41 (5.1)	116 (7.7)	0.018
Pre-stroke situation, n (%)				
Pre-stroke independent (mRS<3)				
Employed	2,040 (86.7)	678 (83.8)	1,322 (87.6)	
Living situation				
Home alone	465 (19.7)	82 (10.2)	374 (25)	0.01
Home with others	681 (28.7)	274 (34)	392 (26)	<0.0001
Residential care	1,491 (62.8)	448 (55.5)	1,003 (66.5)	<0.0001
Other	178 (7.5)	78 (9.7)	96 (6.4)	
Other	26 (1.1)	7 (0.9)	18 (1.2)	
ED arrival <4 hours n (%)	1,020 (43.8)	376 (47.5)	615 (41.6)	0.007
ED arrival <24 hours n (%)	1,784 (76.8)	626 (79.4)	1,111 (75.5)	0.03
Level of disability on arrival n (%)				
GCS verbal <5	858 (36.1)	368 (45.7)	465 (30.8)	<0.0001
Requires assistance to walk	1,332 (56.2)	508 (63.2)	787 (52.2)	<0.0001
Upper limbs MRC <3/5	871 (36.7)	342 (42.5)	506 (33.6)	<0.0001

\*64 missing values for AF status

†Compares patients with versus without AF diagnosed at any time—either pre- or post-stroke SOL = space-occupying lesion; AVM = arteriovenous malformation; for other abbreviations see Table 2.

**Table 2:** Patient baseline characteristics by timing of atrial fibrillation diagnosis and anticoagulant treatment.

	Known AF before stroke			New AF diagnosis at time of stroke	
Number, n/N (%)	666/807 (82.5)			141/807 (17.5)	
	Known AF on anticoagulant	Known AF not on anticoagulant	p*		p†
	442/666 (66.3)	224/666 (33.6)			
Age, mean (SD)	79.4 (11.1)	82.6 (10.4)	<0.0001	77 (10.8)	<0.0001
Sex, male, n (%)	206 (46.6)	116 (51.8)	0.20	70 (49.7)	0.27
Urban, n (%)	191 (43.2)	87 (38.8)	0.28	51 (36.2)	0.22
Ethnicity, n (%)			0.09		0.49
European	350 (79.2)	182 (81.3)		106 (75.2)	
Māori	66 (14.9)	22 (9.8)		19 (13.5)	
Pacific	14 (3.2)	7 (3.1)		7 (5.0)	
Asian	9 (2.0)	7 (3.1)		6 (4.3)	
Other	3 (0.7)	6 (2.7)		3 (2.8)	
Primary diagnosis, n (%)			0.12		0.51
Ischaemic stroke	373 (84.4)	199 (88.8)		124 (87.9)	
Haemorrhagic stroke	36 (8.1)	19 (8.5)		12 (8.5)	
Other/unknown	33 (7.5)	6 (2.7)		5 (3.6)	
Risk factors, n (%)					
Prior stroke or TIA	179 (45.0)	88 (39.3)	0.17	28 (19.9)	<0.001
Hypertension	337 (76.2)	154 (68.8)	0.041	105 (74.5)	0.84
Diabetes	112 (25.3)	34 (15.2)	0.003	29 (20.6)	0.73
Dyslipidaemia	177 (40.0)	74 (33.0)	0.08	59 (41.8)	0.36
Current smoker	28 (6.3)	9 (4.0)	0.22	15 (10.6)	0.03
Ischaemic heart disease	170 (38.5)	70 (31.3)	0.07	30 (21.3)	<0.001
Rheumatic heart disease	18 (4.1)	3 (1.3)	0.05	2 (1.4)	0.27

**Table 2 (continued):** Patient baseline characteristics by timing of atrial fibrillation diagnosis and anticoagulant treatment.

Pre-stroke situation, n (%)					
Independent (mRS<3)	381 (86.2)	162 (72.3)	<0.0001	125 (88.6)	0.04
Employed	50 (11.3)	15 (6.7)	0.06	17 (12.2)	0.39
Living situation	142 (32.1)	80 (35.7)	0.09	52 (34)	0.02
Home alone	257 (58.1)	109 (48.7)		82 (58.2)	
Home with others	41 (9.2)	33 (14.7)		4 (2.8)	
Residential care	2 (0.5)	2 (0.9)		3 (2.1)	
Other					
Level of disability on arrival n (%)					
GCS verbal <5	187 (42.4)	110 (49.3)	0.34	368 (47.7)	0.55
Requires assistance to walk	274 (62.3)	142 (63.7)	0.72	92 (63.2)	0.88
Upper limbs MRC <3/5	186 (42.2)	92 (41.3)	0.82	64 (45.4)	0.42

\*Compares patients diagnosed with AF pre-stroke on anticoagulant versus not on anticoagulant

<sup>†</sup>Compares all patients diagnosed with AF pre-stroke to those newly diagnosed at time of stroke.

TIA = transient ischaemic attack; mRS = modified Rankin score (0–6); GCS = Glasgow coma scale (0–15); MRC = Medical Research Council motor strength scale (0–5).

**Table 3:** Oral anticoagulation in stroke patients with atrial fibrillation for all patients and for Māori and by non-urban hospitals.

	All	Māori	Non-Māori	P-value	Urban	Non-Urban	P-value
<b>Overall AF prevalence*</b>	807/2,352 (34.9)	107/273 (39.2)	700/2,079 (33.7)	0.07	478/1,420 (33.7)	329/932 (35.3)	0.42
<b>Known AF on anticoagulant</b>	442/666 (66.3)	66/88 (75.0)	376/578 (65.0)	0.06	251/388 (64.7)	191/278 (68.7)	0.28
<b>New AF diagnosis at time of stroke</b> (not on anticoagulant at time of stroke)	141/807 (17.5)	19/107 (17.8)	122/700 (17.4)	0.92	90/478 (18.8)	51/329 (15.5)	0.23
<b>Known AF but not on anticoagulant</b>	224/666 (33.6)	22/88 (25.0)	202/578 (34.9)	0.07	137/388 (35.3)	87/278 (31.3)	0.28
<b>Reason for no anticoagulation</b>							
Falls	14/205 (6.8)	2/20 (10)	12/185 (6.5)	0.56	9/123 (7.3)	5/82 (6.1)	0.74
ICH, GI bleed, other bleed	42/205 (20.5)	3/20 (15)	39/185 (21.1)	0.52	26/123 (21.1)	16/82 (19.5)	0.78
Frailty, comorbidities, side effects	27/205 (13.2)	1/20 (5)	26/185 (14.1)	0.25	12/123 (9.8)	15/82 (18.3)	0.79
Pre-/peri-procedure	7/205 (3.4)	1/20 (5)	6/185 (3.2)	0.67	6/123 (4.9)	1/82 (1.2)	0.15
Patient preference/non-compliant	37/205 (18.1)	5/20 (25)	32/185 (17.3)	0.40	22/123 (17.0)	15/82 (18.3)	0.81
Stopped for procedure and never restarted	7/205 (3.4)	1/20 (5)	6/185 (3.2)	0.67	3/123 (2.4)	4/82 (4.9)	0.33
AF duration felt not significant	5/205 (2.4)	0/20 (0)	5/185 (2.7)	0.46	4/123 (3.3)	1/82 (1.2)	0.34
Unknown	66/205 (32.2)	7/20 (35)	59/185 (31.9)	0.78	41/123 (33.3)	25/82 (20.5)	0.05

Data are number of patients (% of group)

\*Missing values/unknown: n=63

#Missing values=19