Table 1: Patient characteristics with and without new-onset atrial fibrillation. Figures are mean + standard deviation or number (percentage).

	Total (N=1630)	No AF (N=1165)	AF (N=465)	*p* value
Demographic				
Age, years	63.5+12.8	62.1+13.1	67.2+11.2	**<0.001**
Age categorical				**<0.001**
<60 years	507 (31.1)	413 (35.5)	94 (20.2)	
60–69 years	536 (32.9)	383 (32.9)	153 (32.9)	
70–79 years	490 (30.1)	315 (27.0)	175 (37.6)	
>80 years	97 (6.0)	54 (4.6)	43 (9.2)	
Gender				**0.61**
Male	1227 (75.3)	873 (74.9)	354 (76.1)	
Female	403 (24.7)	292 (25.1)	111 (23.9)	
Ethnicity				**<0.001**
NZ and Other European	841 (51.6)	572 (49.1)	269 (57.8)	
Māori	174 (10.7)	113 (9.7)	61 (13.1)	
Pasifika	285 (17.5)	214 (18.4)	71 (15.3)	
Indian	166 (10.2)	134 (11.5)	32 (6.9)	
Other Asian	134 (8.2)	109 (9.5)	25 (5.4)	
All other	30 (1.8)	23 (2.0)	7 (1.5)	
Clinical characteristics				
Weight, kg	86.6+19.8	85.7+19.6	88.9+20.1	**0.03**
Body mass index, kg/m^2	29.6+5.9	29.4+5.8)	30.2+6.2	**0.01**
Obesity (BMI >29.9 kg/m2 or >31.9 Māori/Pasifika)	617 (37.9)	416 (35.7)	195 (41.9)	**0.02**
Smoking				0.08
Never smoked	911 (55.9)	659 (56.6)	252 (54.2)	
Ex-smoker	522 (32.0)	356 (30.6)	166 (35.7)	
Current smoker	197 (12.1)	150 (12.9)	47 (10.1)	
Hypertension	1132 (69.4)	788 (67.6)	344 (74.0)	**0.01**
Hypercholesterolaemia	1162 (71.3)	827 (71.0)	335 (72.0)	0.72

Table 1 (continued): Patient characteristics with and without new-onset atrial fibrillation. Figures are mean + standard deviation or number (percentage).

	Total (N=1630)	No AF (N=1165)	AF (N=465)	p value
Peripheral vascular disease/arteriopathy	67 (4.1)	48 (4.1)	19 (4.1)	1.00
Pre-existing respiratory disease	104 (6.4)	72 (6.2)	32 (6.9)	0.65
LVEF (%)	54.1+10.6	54.25+10.5	53.85+11.0	0.50
History of CHF	180 (11.0)	104 (8.9)	76 (16.3)	**<0.001**
CHF with normal LVEF (>50%)	98 (6.0)	58 (5.0)	40 (8.6)	**0.01**
CHF on operative admission	101 (6.2)	62 (59.6)	39 (51.3)	0.29
CHA2DS2-VASc score	2.5+1.4	2.4+1.4	2.7+1.4	**0.002**
Cerebrovascular disease	103 (6.3)	72 (6.2)	31 (6.7)	0.74
Diabetes	539 (33.1)	402 (34.5)	137 (29.5)	0.051
Renal impairment				**<0.001**
Moderate	595 (36.5)	390 (33.5)	205 (44.1)	
Severe	143 (8.8)	100 (8.6)	43 (9.2)	
Previous myocardial infarction	572 (35.1)	427 (36.7)	145 (31.2)	**0.04**
Rheumatic heart disease	67 (4.1)	52 (4.5)	15 (3.2)	0.34
Preoperative arrhythmia (not AF)	63 (3.9)	43 (3.7)	20 (4.3)	0.57
Surgical characteristics				
Previous surgery with CPB	86 (5.3)	63 (5.4)	23 (5.0)	0.72
Cardiopulmonary bypass time, minutes*	99.0 (78.0–126.0)	99 (79–125)	100 (77–132)	0.37
Cross clamp time, minutes	75.88+36.3	75.11+35.0	77.8+29.2	0.20
EuroSCORE II*	1.69 (1.07–2.97)	1.63 (1.04–2.74)	1.96 (1.13–3.50)	**<0.001**
Type of surgery				**<0.001**
CABG	973 (59.7)	728 (62.5)	245 (52.7)	
Valve surgery	498 (30.6)	345 (29.6)	153 (32.9)	
CABG + valve	159 (9.8)	92 (7.9)	67 (14.4)	
Any aortic valve surgery	462 (28.3)	297 (25.5)	165 (35.5)	**<0.001**

Table 1 (continued): Patient characteristics with and without new-onset atrial fibrillation. Figures are mean + standard deviation or number (percentage).

	Total (N=1630)	No AF (N=1165)	AF (N=465)	p value
Any mitral valve surgery	219 (13.4)	159 (13.6)	60 (12.9)	0.75
Multi-valve surgery	78 (4.8)	59 (5.1)	19 (4.1)	0.44

LVEF—left ventricular ejection fraction
CHF—congestive heart failure
CABG—coronary artery bypass grafting.
* Median and interquartile range.

Table 2: Univariate and multivariate logistic regression of factors associated with new-onset atrial fibrillation after CABG and/or valve surgery.

	Univariate analysis			Multivariate analysis		
	OR	95% CI	p value	OR	95% CI	p value
Age, per year	1.04	1.06–1.21	**<0.001**	1.05	1.04–1.06	**<0.001**
Body mass index, kg/m²	1.02	1.0–1.94	**0.01**	1.04	1.02–1.06	**0.003**
History of CHF	1.99	1.45–2.74	**<0.001**	2.08	1.47–2.95	**<0.001**
Type of surgery—CABG (ref)			**<0.001**			**0.01**
Valve only	1.32	1.04–1.67	**0.02**	1.51	1.16–1.95	**0.002**
CABG + valve	2.16	1.53–3.06	**<0.001**	1.59	1.11–2.28	**0.01**
Ethnicity—NZ and Other European (ref)			**<0.001**			0.06
Māori	1.15	0.81–1.62	0.43	1.46	0.99–2.14	0.053
Pasifika	0.71	0.52–0.96	**0.03**	0.98	0.69–1.39	0.91
Indian	0.51	0.34–0.77	**0.01**	0.70	0.46–1.08	0.11
Other Asian	0.49	0.31–0.77	**0.01**	0.66	0.41–1.07	0.10
Other	0.65	0.27–1.53	0.32	0.76	0.32–1.83	0.54
Hypertension	1.36	1.07–1.73	**0.01**	1.21	0.92–1.58	0.17
Renal impairment—none (ref)			**<0.001**			0.16
Moderate	1.64	1.30–2.05	**<0.001**	1.30	0.99–1.70	0.06

Table 2 (continued): Univariate and multivariate logistic regression of factors associated with new-onset atrial fibrillation after CABG and/or valve surgery.

	Univariate analysis			Multivariate analysis		
	OR	95% CI	*p* value	OR	95% CI	*p* value
Renal impairment—none (ref)			**<0.001**			0.16
Severe	1.34	0.91–2.0	0.14	1.10	0.69–1.65	0.69
Previous myocardial infarction	0.78	0.62–0.99	**0.04**	0.90	0.68–1.12	0.48
EuroSCORE II	1.04	1.01–1.07	**<0.001**	1.02	0.99–1.05	0.16

CHF—congestive heart failure
CABG—coronary artery bypass grafting

Table 3: Comparison of atrial fibrillation incidence and descriptive statistics between ethnic subgroups. Figures are mean + standard deviation or number (percentage) unless otherwise stated.

	NZ/Other European	Māori	Pasifika	Indian	Other Asian	Other
n (%)	841 (51.6)	174 (10.7)	285 (17.5)	166 (10.2)	134 (8.2)	30 (1.8)
POAF incidence % (95% CI)	32.0 (28.8–35.3)	35.1 (28.0–42.6)	24.9 (20.0–30.4)	19.3 (13.6–26.1)	18.7 (12.5–26.3)	23.3 (9.9–42.3)
Type of surgery						
Isolated CABG	463 (55.1)	86 (49.4)	170 (59.6)	137 (82.5)	97 (73.5)	20 (66.7)
Isolated valve	267 (31.7)	71 (40.8)	101 (35.4)	23 (13.9)	30 (22.7)	6 (20.0)
CABG + valve	111 (13.2)	17 (9.8)	14 (4.9)	6 (3.6)	5 (3.8)	4 (13.3)
Age, years	67.7+10.3	56.9+13.5	55.4+15.1	63.6+9.9	63.3+12.5	64.3+11.8
Age categorical						
< 60 years	160 (19.0)	89 (51.1)	156 (54.7)	49 (29.5)	42 (31.3)	11 (36.7)
60–69 years	272 (32.3)	59 (33.9)	79 (27.7)	74 (44.6)	45 (33.6)	7 (23.3)
70–79 years	336 (40.0)	23 (13.2)	49 (17.2)	34 (20.5)	37 (27.6)	11 (36.7)
> 80 years	73 (8.7)	3 (1.7)	1 (0.4)	9 (5.4)	10 (7.5)	1 (3.3)
BMI	28.8+5.3	33.7+6.0	33.2+6.6	26.8+3.9	25.4+3.3	28.6+4.6
LVEF	55.8+9.5	50.4+12.5	50.8+10.9	54+10.8	56.7+10.4	52.1+11.8

Table 3 (continued): Comparison of atrial fibrillation incidence and descriptive statistics between ethnic subgroups. Figures are mean + standard deviation or number (percentage) unless otherwise stated.

	NZ/Other European	Māori	Pasifika	Indian	Other Asian	Other
CHA2DS2-VASc	2.5+1.4	2.2+1.4	2.4+1.4	2.9+1.3	2.7+1.6	2.4+1.4
CHF	69 (8.2)	35 (20.1)	48 (16.8)	14 (8.4)	11 (8.2)	3 (10.0)
Diabetes	182 (21.6)	57 (32.8)	122 (42.8)	118 (71.1)	50 (37.3)	10 (33.3)
RHD	6 (0.7)	18 (10.3)	39 (13.7)	2 (1.2)	2 (1.5)	0
eGFR, mL/min/1.73m^2	76+17	76+24	74+29	76+21	79+21	71+22
EuroSCORE II *	1.7 (1.1–2.9)	1.9 (1.2–3.6)	1.9 (1.2–3.7)	1.5 (0.9–2.5)	1.7 (1.0–2.8)	1.7 (0.9–4.3)

* Median and interquartile range.
POAF—post-operative atrial fibrillation
CABG—coronary artery bypass grafting
BMI—Body Mass Index
LVEF—left ventricular ejection fraction
CHF—congestive heart failure
RHD—rheumatic heart disease
eGFR—estimated glomerular filtration rate.