	Overall	No POAF	POAF	p
	(n=296)	(n=264)	(n=32)	
Female/Male	48/248 (16.2/83.8)	41/223 (15.5/84.5)	7/25 (21.9/78.1)	0.506
Age	0.50 [0.37, 0.61]	0.48 [0.36, 0.61]	0.54 [0.46, 0.66]	0.006
BSA (m²)	0.53 [0.40, 0.64]	0.52 [0.40, 0.64]	0.55 [0.42, 0.65]	0.553
Hypertension	198 (67)	177 (67)	21 (66)	0.845
Type II DM	125 (42)	111 (42)	14 (44)	0.852
Hyperlipidemia	146 (49)	132 (50)	14 (44)	0.576
COPD	29 (10)	26 (10)	3 (9)	1
CKD	68 (23)	61 (23)	7 (22)	1
TIA/Stroke	12 (4)	10 (4)	2 (6)	0.626
PVD	42 (14)	38 (14)	4 (12)	1
Year				
2010	9 (3.0)	8 (3.0)	1 (3.1)	1
2011	6 (2.0)	6 (2.3)	0 (0.0)	0.843
2012	13 (4.4)	11 (4.2)	2 (6.2)	0.931
2013	49 (16.6)	48 (18.2)	1 (3.1)	0.056
2014	78 (26.4)	69 (26.1)	9 (28.1)	0.977
2015	52 (17.6)	43 (16.3)	9 (28.1)	0.157
2016	57 (19.3)	51 (19.3)	6 (18.8)	1
2017	32 (10.8)	28 (10.6)	4 (12.5)	0.981
Pre-operative Creatinine*	0.19 [0.15, 0.23]	0.19 [0.15, 0.23]	0.21 [0.16, 0.24]	0.361
EuroScore (Log)	0.02 [0.01, 0.05]	0.02 [0.00, 0.05]	0.02 [0.01, 0.07]	0.17
Status				
Elective	116 (39.2)	102 (38.6)	14 (43.8)	0.713
Emergency	10 (3.4)	8 (3.0)	2 (6.2)	0.664
Urgency	170 (57.4)	154 (58.3)	16 (50.0)	0.477
OR Risk				
high	28 (9.5)	21 (8.0)	7 (21.9)	0.026
low	230 (77.7)	209 (79.2)	21 (65.6)	0.13
medium	38 (12.8)	34 (12.9)	4 (12.5)	1
CABG	281 (94.9)	251 (95.1)	30 (93.8)	1
OPCAB	15 (5.1)	13 (4.9)	2 (6.2)	1
Proximal Anastomoses				0.777
1	57 (19.3)	50 (18.9)	7 (21.9)	
2	13 (4.4)	11 (4.2)	2 (6.2)	
Distal Anastomoses				0.29
2	65 (22.0)	55 (20.8)	10 (31.2)	
3	134 (45.3)	118 (44.7)	16 (50.0)	
4	79 (26.7)	74 (28.0)	5 (15.6)	
5	18 (6.1)	17 (6.4)	1 (3.1)	
ECC Time (min)	0.37 [0.29, 0.45]	0.37 [0.29, 0.45]	0.34 [0.28, 0.40]	0.4
Clamping Time	0.44 [0.31, 0.55]	0.44 [0.31, 0.56]	0.41 [0.36, 0.48]	0.498
Complications				0.685
1	28 (9.5)	26 (9.8)	2 (6.2)	
2	4 (1.4)	3 (1.1)	1 (3.1)	
3	2 (0.7)	2 (0.8)	0 (0.0)	
EC	-	-	1 (3.1)	

Table S1. Training dataset descriptive characteristics.

FC	-	-	9 (28.1)
EC + FC	-	-	21 (65.6)

Values are expressed as n (%) with categorical variables or median [Q1, Q3] with continuous variables. Abbreviations: POAF: Postoperative Atrial Fibrillation; BSA: Body Surface Area; DM: Diabetes Mellitus; COPD: Chronic Obstructive Pulmonary Disease; CKD: Chronic Kidney Disease; TIA: Transient Ischemic Attack; PVD: Peripheral Vascular Disease; CABG: Coronary Artery Bypass Graft; OPCAB: Off-Pump Coronary Artery Bypass; BIMA: Bilateral Internal Mammary Artery; OR: Operative Risk Score; ECC: Extra Corporeal Circulation; EC: Electric Cardioversion; FC: Pharmacological Cardioversion. *Micromoles/L.

Table S2. Test dataset descriptive characteristics.			
	Overall	No POAF	POAF	p
	(n=98)	(n=88)	(n=10)	
Female/Male	12/86 (12.2/87.8)	12/76 (13.6/86.4)	0/10 (0.0/100.0)	0.461
Age	0.46 [0.38, 0.57]	0.45 [0.36, 0.57]	0.61 [0.52, 0.62]	0.008
BSA (m²)	0.52 [0.42, 0.64]	0.51 [0.41, 0.64]	0.54 [0.51, 0.64]	0.694
Hypertension	67 (68)	60 (68)	7 (70)	1
Type II DM	41 (42)	37 (42)	4 (40)	1
Hyperlipidemia	50 (51)	45 (51)	5 (50)	1
COPD	9 (9)	8 (9)	1 (10)	1
CKD	20 (20)	18 (20)	2 (20)	1
TIA/Stroke	10 (10)	9 (10)	1 (10)	1
PVD	12 (12)	11 (12)	1 (10)	1
Year				
2010	1 (1.0)	1 (1.1)	0 (0.0)	1
2011	2 (2.0)	2 (2.3)	0 (0.0)	1
2012	9 (9.2)	9 (10.2)	0 (0.0)	0.629
2013	18 (18.4)	18 (20.5)	0 (0.0)	0.249
2014	21 (21.4)	18 (20.5)	3 (30.0)	0.771
2015	20 (20.4)	16 (18.2)	4 (40.0)	0.227
2016	19 (19.4)	16 (18.2)	3 (30.0)	0.636
2017	8 (8.2)	8 (9.1)	0 (0.0)	0.7
Pre-operative Creatinine*	0.20 [0.16, 0.24]	0.20 [0.16, 0.24]	0.21 [0.18, 0.25]	0.391
EuroScore (Log)	0.02 [0.01, 0.05]	0.02 [0.01, 0.05]	0.02 [0.02, 0.04]	0.337
Status				
Elective	35 (35.7)	32 (36.4)	3 (30.0)	0.96
Emergency	4 (4.1)	3 (3.4)	1 (10.0)	0.877
Urgency	59 (60.2)	53 (60.2)	6 (60.0)	1
OR Risk				
high	8 (8.2)	6 (6.8)	2 (20.0)	0.405
low	78 (79.6)	70 (79.5)	8 (80.0)	1
medium	12 (12.2)	12 (13.6)	0 (0.0)	0.461
CABG	91 (92.9)	82 (93.2)	9 (90.0)	1
OPCAB	7 (7.1)	6 (6.8)	1 (10.0)	1
Proximal Anastomoses				0.49
1	24 (24.5)	23 (26.1)	1 (10.0)	
2	1 (1.0)	1 (1.1)	0 (0.0)	
Distal Anastomoses				0.322
2	25 (25.5)	22 (25.0)	3 (30.0)	
3	44 (44.9)	40 (45.5)	4 (40.0)	
4	22 (22.4)	21 (23.9)	1 (10.0)	
5	7 (7.1)	5 (5.7)	2 (20.0)	
ECC Time (min)	0.34 [0.27, 0.45]	0.34 [0.28, 0.46]	0.34 [0.26, 0.36]	0.522
Clamping Time	0.40 [0.30, 0.56]	0.39 [0.30, 0.56]	0.44 [0.33, 0.50]	0.869
Complications				0.636
1	11 (11.2)	11 (12.5)	0 (0.0)	
2	1 (1.0)	1 (1.1)	0 (0.0)	
3	1 (1.0)	1 (1.1)	0 (0.0)	
EC	-	-	1 (10.0)	

FC	-	-	3 (30.0)
EC + FC	-	-	6 (60.0)

Values are expressed as n (%) with categorical variables or median [Q1, Q3] with continuous variables. Abbreviations: POAF: Postoperative Atrial Fibrillation; BSA: Body Surface Area; DM: Diabetes Mellitus; COPD: Chronic Obstructive Pulmonary Disease; CKD: Chronic Kidney Disease; TIA: Transient Ischemic Attack; PVD: Peripheral Vascular Disease; CABG: Coronary Artery Bypass Graft; OPCAB: Off-Pump Coronary Artery Bypass; BIMA: Bilateral Internal Mammary Artery; OR: Operative Risk Score; ECC: Extra Corporeal Circulation; EC: Electric Cardioversion; FC: Pharmacological Cardioversion. *Micromoles/L.