

Table 8. Predictors of thrombus development and severe spontaneous echocardiography or periprocedural thromboembolic events without any pre-repeat ablation imaging

Parameters	Major adverse events		Univariate analysis		Multivariate analysis	
	Yes (n = 16)	No (n = 599)	OR (95% CI)	p-value	OR (95% CI)	p-value
Age, year	63.9 ± 11.6	62.7 ± 10.8	1.011 (0.964–1.060)	0.666		
Female sex	3 (19%)	167 (28%)	0.597 (0.168–2.121)	0.425		
Body mass index, kg/m ²	24.9 ± 4.0	24.1 ± 3.7	1.056 (0.931–1.198)	0.394		
Duration of AF, years	6.0 ± 9.4	3.5 ± 4.5	1.074 (1.002–1.152)	0.042*		
Non-paroxysmal AF	12 (75%)	215 (36%)	5.358 (1.707–16.818)	0.004*		
Antiplatelet drug use at repeat ablation	4 (25%)	74 (12%)	0.403 (0.053–3.092)	0.382		
DOAC use at repeat ablation	22 (55%)	164 (58%)	3.147 (0.887–11.159)	0.076		
Heart failure	6 (38%)	89 (15%)	3.438 (1.219–9.697)	0.020*		
Stroke	0 (0%)	45 (7.5%)	0.369 (0.037–3.703)	0.472		
Left atrial diameter at repeat ablation, mm	45.7 ± 6.7	40.0 ± 7.1	1.106 (1.037–1.179)	0.002*		
Left ventricular ejection fraction at repeat ablation, %	53.8 ± 15.0	61.2 ± 8.6	0.934 (0.895–0.975)	0.002*	0.943 (0.901–0.987)	0.012
CHADS2 score at repeat ablation	1.7 ± 1.1	1.2 ± 1.1	1.425 (0.935–2.174)	0.100		
CHA2DS2-VASc score at repeat ablation	2.6 ± 1.9	2.1 ± 1.5	1.192 (0.879–1.619)	0.259		
Detection of thrombus before initial ablation	2 (13%)	10 (1.7%)	8.414 (1.685–42.013)	0.009*		
D-dimer levels at repeat ablation > 1.0 µg/mL	1 (6.3%)	44 (7.3%)	0.841 (0.109–6.515)	0.868		
Interruption of oral anticoagulants before repeat ablation	4 (25%)	114 (19%)	1.418 (0.449–4.478)	0.552		

Repeat ablation >180 days after first ablation	15 (94%)	345 (58%)	11.042 (1.449–84.146)	0.020*	13.013 (1.677–100.952)	0.014
Non-paroxysmal status of atrial arrhythmia after the first ablation	9 (53%)	133 (22%)	4.505 (1.647–12.323)	0.003*	3.889 (1.358–11.140)	0.011
Inappropriately reduced dose or under therapeutic dose	2 (13%)	14 (14%)	0.876 (0.196–3.923)	0.862		
Days from first recurrence to repeat ablation	169 (85–672)	25.0 (0–205)	1.000 (1.000–1.001)	0.237		
Adverse event after the first ablation	8 (50%)	134 (22%)	3.470 (1.278–9.420)	0.015*		

*Variables included in the multivariate model using forward stepwise method. AF, atrial fibrillation; CI, confidence interval; DOAC, direct oral anticoagulant; OR, odds ratio.