



Outcome of Patients Who Refuse Catheter Ablation or Cardioversion for Drug-Refractory Atrial Fibrillation



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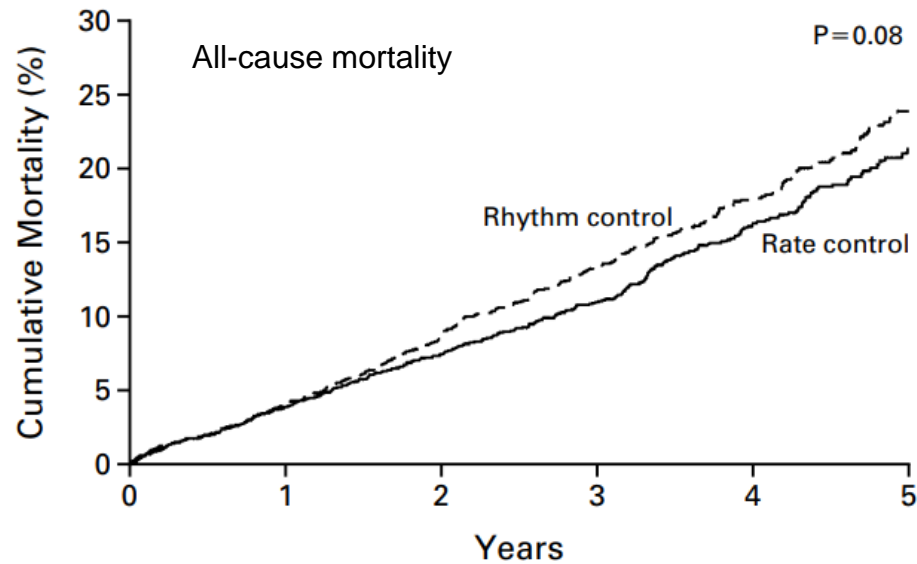
Disclosure

Nothing to declare

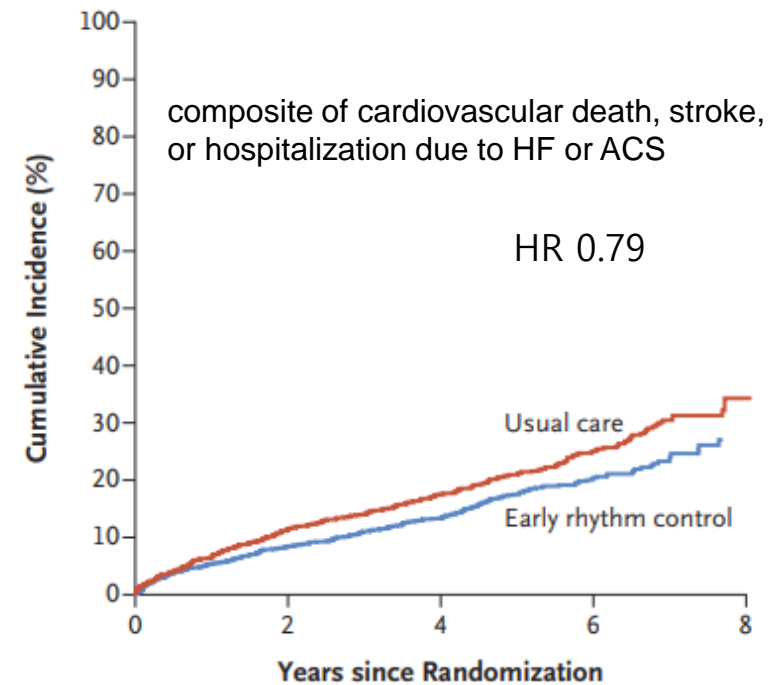


Background

- Rhythm control for AF has been emerged for promising outcomes



AFFIRM trial



EAST-AFNET4 trial



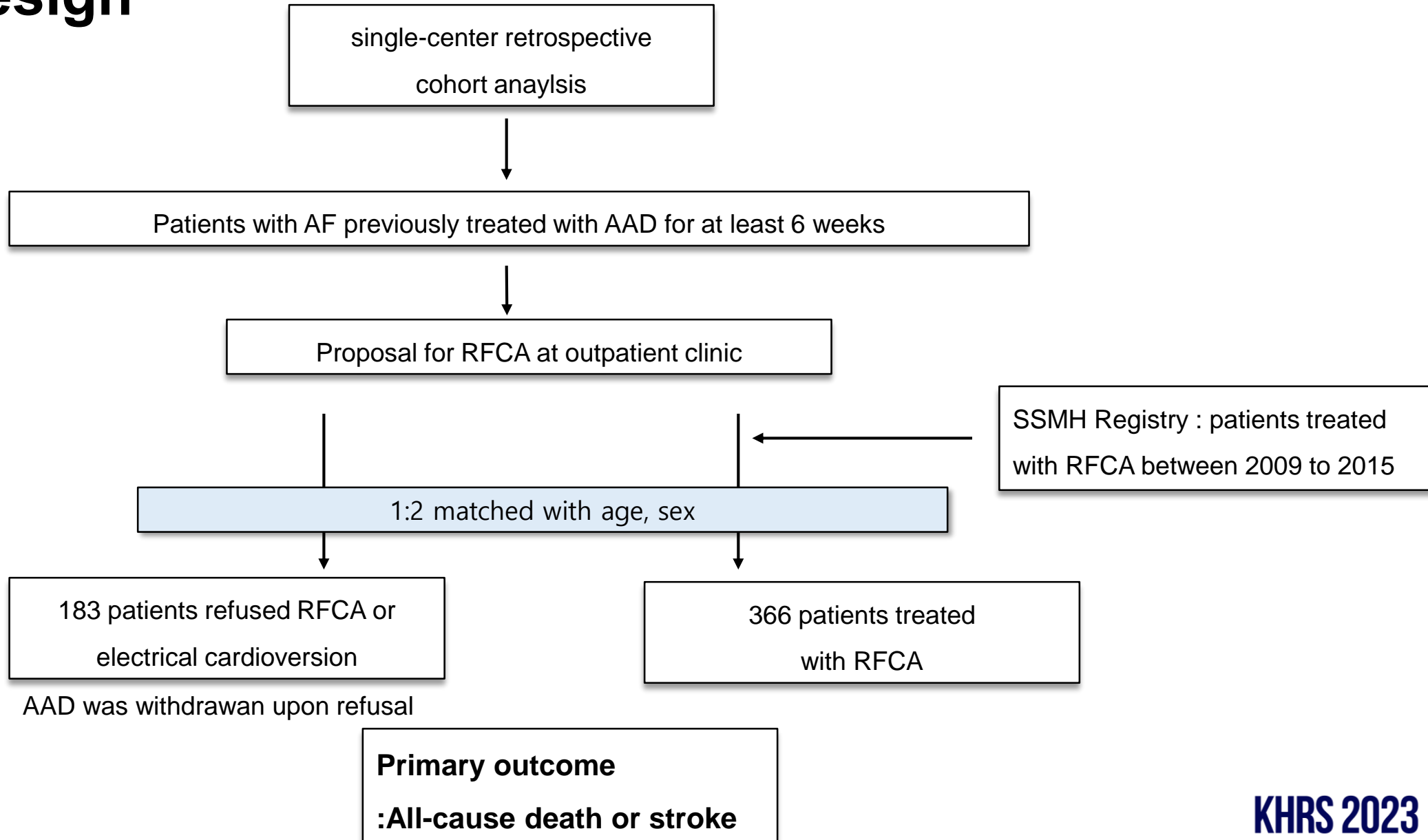
Background

	AFFIRM	EAST-AFNET 4
FU duration (mean)	3.5 years	5.1 years
Time from diagnosis of AF	-	36 days
Patients in sinus rhythm	62.6% - rhythm control 34.6 - rate control	82.1% - rhythm control 60.5% - usual care

- Proportions of sinus rhythm in 'rate control group' were high in AFFIRM and EAST-AFNET4
- Maintaining sinus rhythm is presumed to be associated with better outcomes
- There is lack of study for outcomes of AF patients who refused further rhythm control



Study design



Baseline characteristics

	Refuse group (n=183)	RFCA group (n=366)	P-value
Age, years	69.0 [62.5-74.0]	68.0 [62.0-73.0]	0.184
Follow up duration, years	3.3 [1.3-5.3]	4.4 [2.4-8.0]	<0.001
Female, n (%)	64 (35.0%)	139 (38.3%)	0.51
Age≥75, n (%)	37 (20.2%)	62 (17.2%)	0.46
CHA ₂ -DS ₂ -VASc score	3.0 [1.0-4.0]	2.0 [1.0-3.0]	0.192
Type of AF			<0.001
Paroxysmal, n (%)	43 (23.5%)	184 (50.3%)	
Persistent, n (%)	91 (49.7%)	114 (31.1%)	
Long standing persistent, n (%)	59 (26.8%)	68 (18.6%)	
Prior history of stroke, n (%)	47 (25.7%)	51 (13.9%)	<0.001
DM, n (%)	37 (20.2%)	74 (20.2%)	1.00
Hypertension, n (%)	95 (51.9%)	205 (56.0%)	0.41
Heart failure (LVEF<45%)	27(14.8%)	15 (4.1%)	<0.001
Left atrial diameter (mm)	44.4 [40.4-48.0]	43.0 [38.4-47.1]	0.108

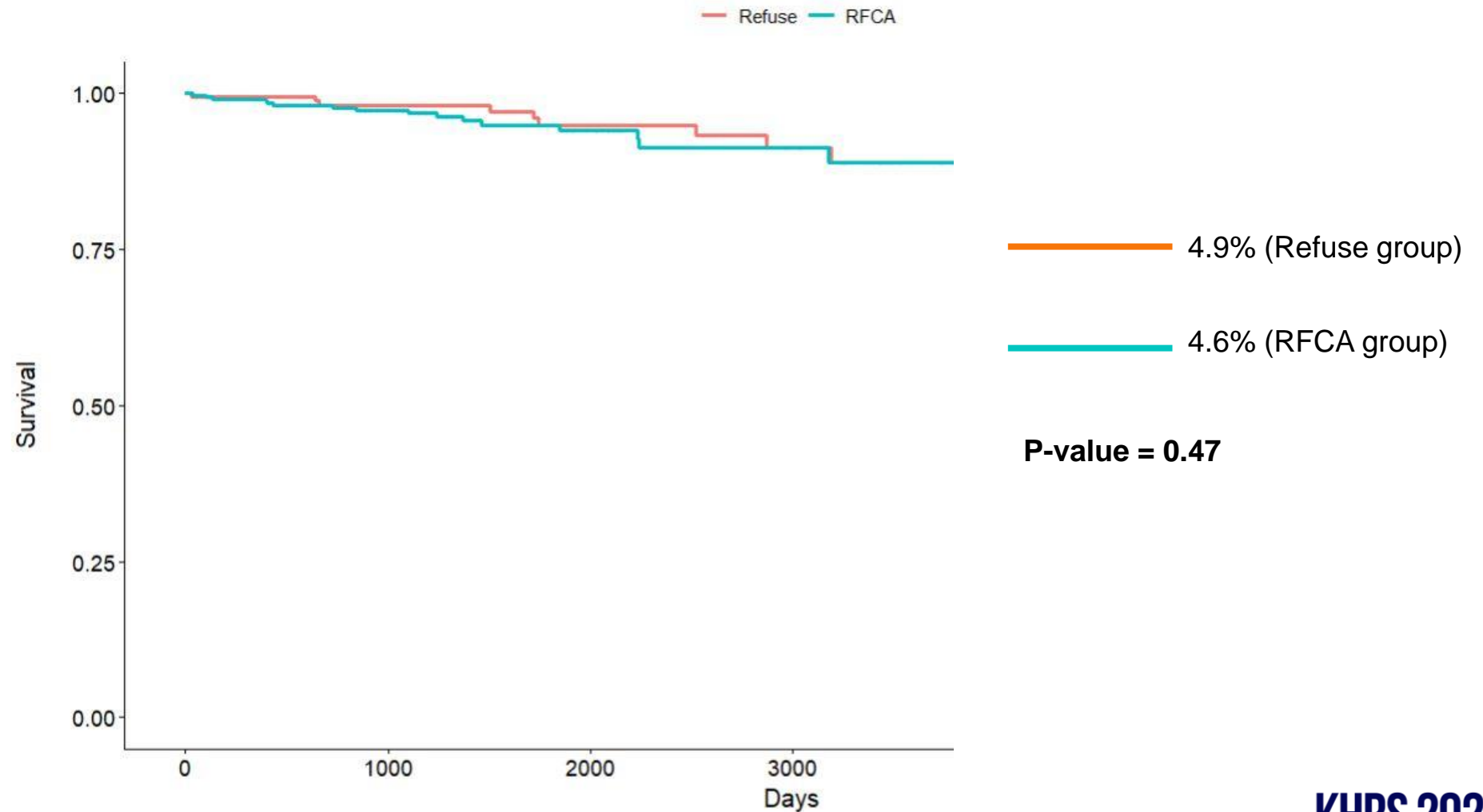


Medications at last follow-up

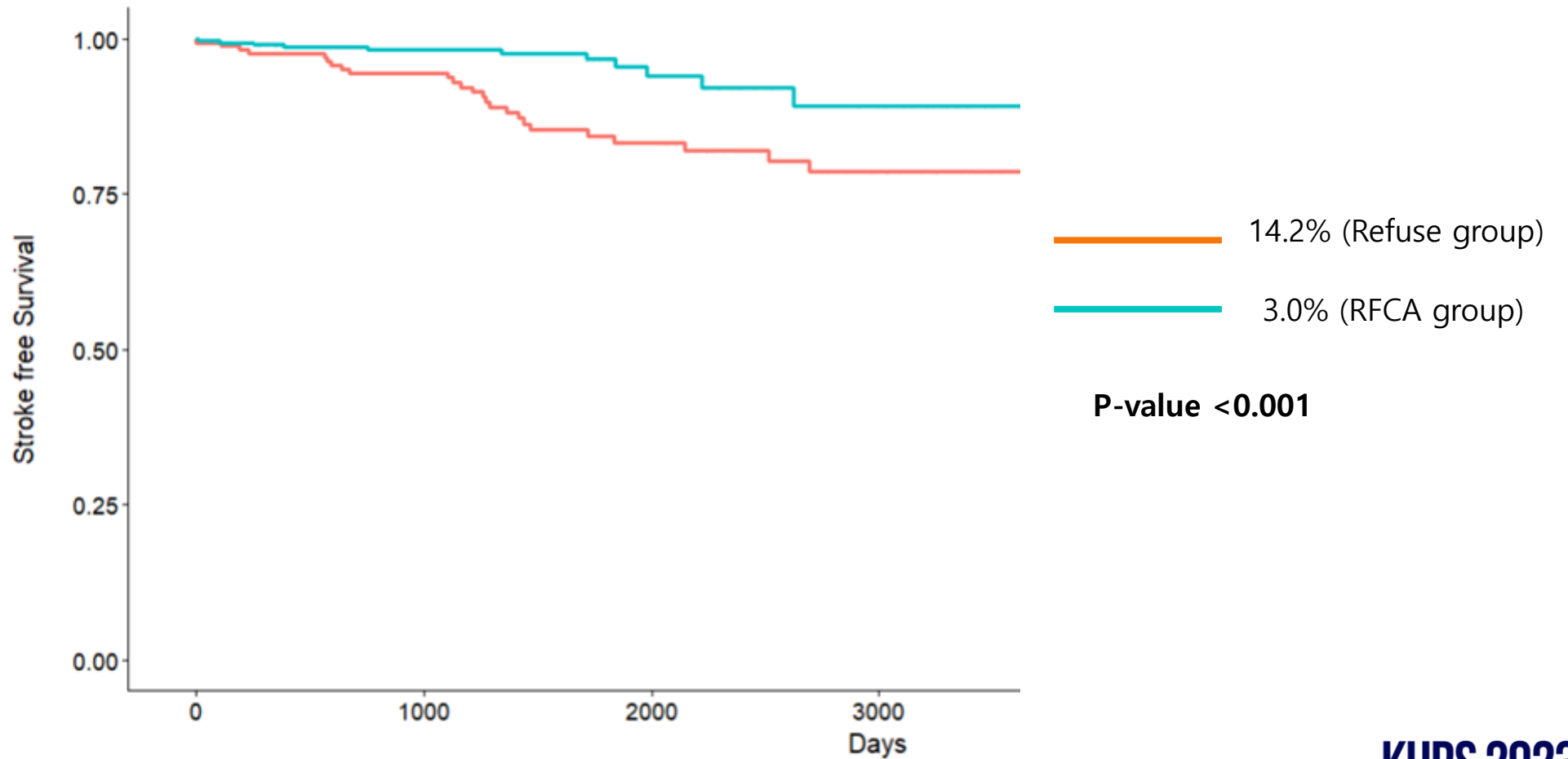
	Refuse group (n=183)	RFCA group (n=366)	P-value
Beta blocker, n (%)	45 (24.6%)	94 (25.7%)	0.86
CCB, n (%)	15 (8.2%)	35 (9.6%)	0.71
Diuretics, n (%)	37 (20.2%)	59 (16.1%)	0.28
Digoxin, n (%)	40 (21.9%)	0	
Antiarrhythmics, n (%)	0	194 (53%)	
Anticoagulants			<0.001
Vitamin K antagonist, n (%)	24 (13.1%)	53 (14.5%)	
DOAC, n (%)	136 (74.3%)	190 (51.9%)	
None, n (%)	23 (12.6%)	120 (32.8%)	
Sinus rhythm at last follow up	7 (3.6%)	291 (79.5%)	<0.001



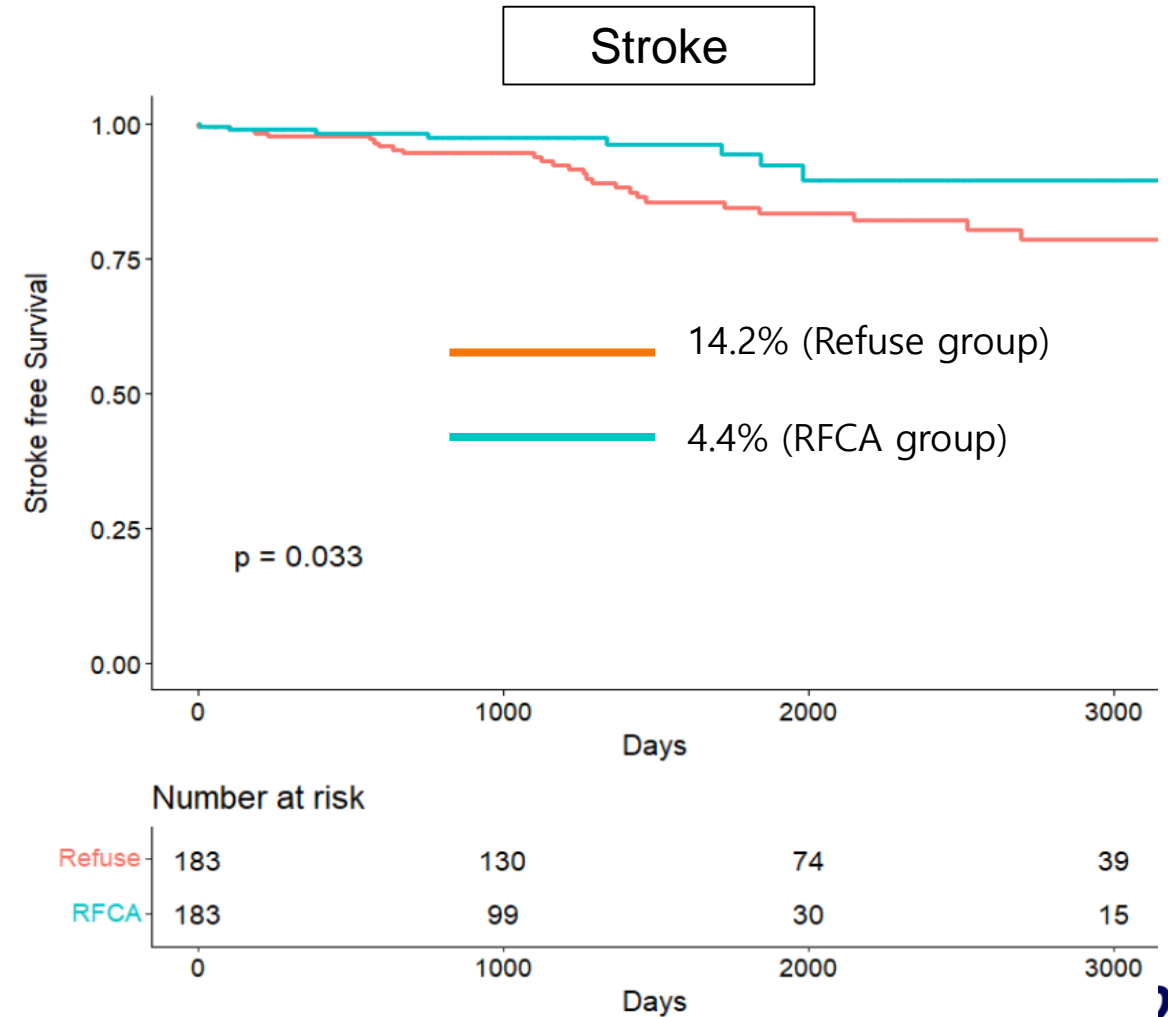
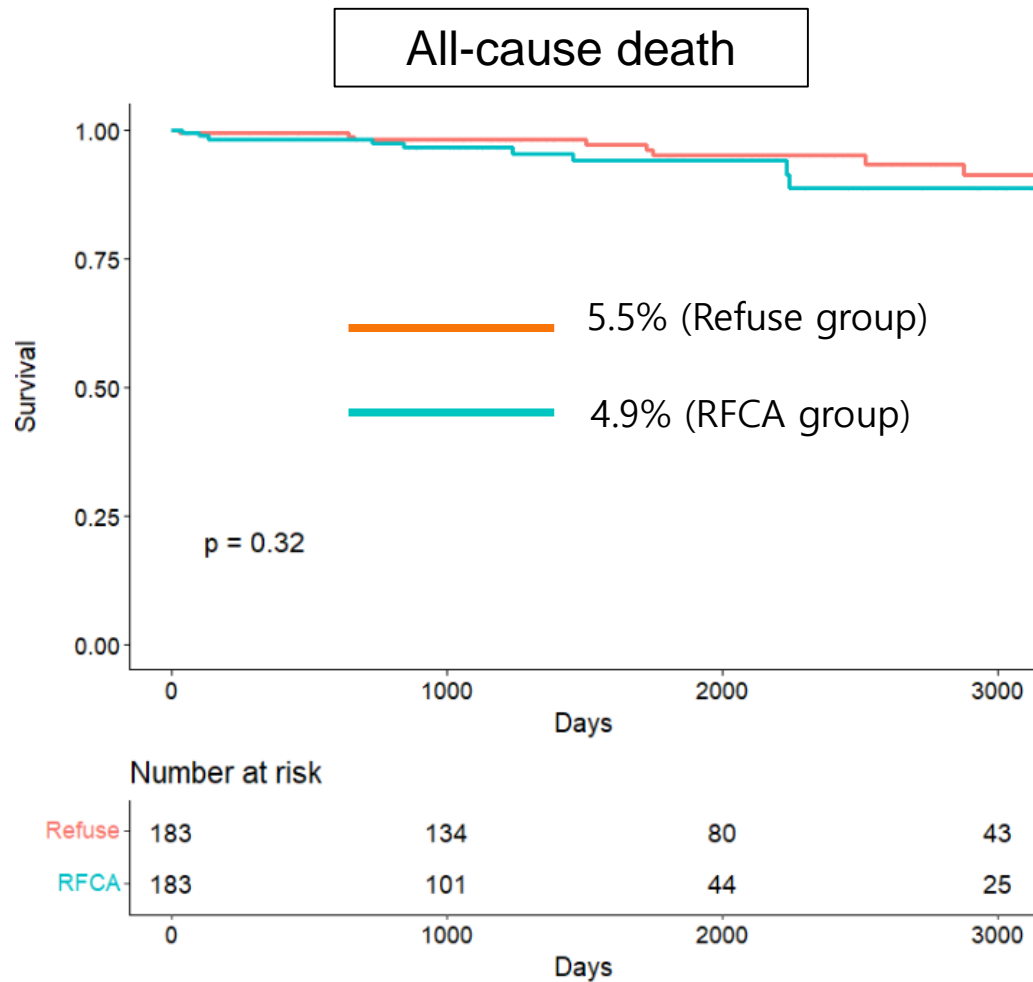
Primary outcome : All-cause mortality



Primary outcome : Incidence of stroke



Primary outcome by PS-match



Predictors of stroke

	Unadjusted HR	95% CI	p-value	Multivariate Adjusted HR	95% CI	p-value
Refuse RFCA or electrical cardioversion	3.65	1.8-7.4	<0.001	2.74	1.30-5.78	0.008
Age	1.07	1.02-1.12	0.006	0.67	0.26-1.75	0.240
Sex	0.83	0.42-1.64	0.586	1.68	0.79-3.59	0.177
Prior stroke	2.75	1.41-5.34	0.003	0.67	0.26-1.75	0.416
CHA ₂ -DS ₂ -VASc score	1.34	1.12-1.62	0.002	1.23	0.88-1.73	0.228
Paroxysmal AF at baseline	0.51	0.25-1.06	0.071	1.37	0.62-3.0	0.433
Hypertension	0.89	0.46-1.69	0.715	1.43	0.67-3.07	0.353
Diabetes mellitus	1.11	0.51-2.43	0.797	1.01	0.44-2.33	0.981



Stratified with paroxysmal AF

	Paroxysmal AF (n=322)			Non-paroxysmal AF (n=227)		
	Refuse group (n=140)	RFCA group (n=182)	p-value	Refuse group (n=43)	RFCA group (n=184)	p-value
All-cause mortality	7 (5.0%)	2 (4.7%)	0.64	9 (4.9%)	8 (4.3%)	0.47
Stroke	17 (12.1%)	5 (2.7%)	0.014	5 (11.6%)	4 (2.2%)	0.05
	22 (6.8%)			9 (4.0%)		0.07



Conclusion

- In AAD refractory AF, refusing further rhythm control was associated with higher incidence of stroke.
- Refusal of RFCA did not show significant difference in all-cause mortality
- Efficacy of rhythm control could be extended to drug refractory AF patients
- Maintenance of sinus rhythm is an important goal for AF management



Thank you for listening

