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# Cardioversion of Persistent Atrial Fibrillation Prior to High-Energy Ablation Does Not Improve Outcomes in Short Term Follow Up: Preliminary Analysis

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## Introduction

Catheter ablation of persistent atrial fibrillation (PeAF) is associated with more complexity of procedures including longer procedure times and lower long-time success rates compared to paroxysmal AF. The optimal approach of ablating PeAF has yet to be defined. By convention, mapping/ablation of PeAF is most often performed in AF. The success of ablation hinges on catheter contact and achieving lesion transmuralty.

## Hypothesis

Ablation efficacy would improve during sinus rhythm (SR) given stability and predictability of catheter contact.

## Methods

Non-randomized comparison of PeAF patients who underwent ablation in SR (n=26) under a new practice protocol versus a cohort of PeAF ablated in AF (n= 54). The lesion set was the same for both groups, WACA ± BOX. Study group was treated with higher energy of 45 W vs 40 W for AF; impedance drop of 10 ohms to achieve pulmonary vein isolation (PVI).

## Results

Table 1. Sample Characteristics

	Ablated in SR (n=26)	Ablated in AF (n=54)	P-value
Gender (% of Male)	58%	57%	0.90
Age (years)	69	67	0.49
Procedure time (mins)	135	129	0.33
Fluoro time (mins)	3.81	4.02	0.73
Post-op follow time (days)	128	278	0.00031
% in Sinus Rhythm	81%	80%	0.89
Left Atrial Size (mm)	41.9	41.2	0.57
LVEF < 50%	35%	28%	0.54
OSA (%)	50%	44%	0.65

Figure 1. Kaplan-Meier Survival Curve

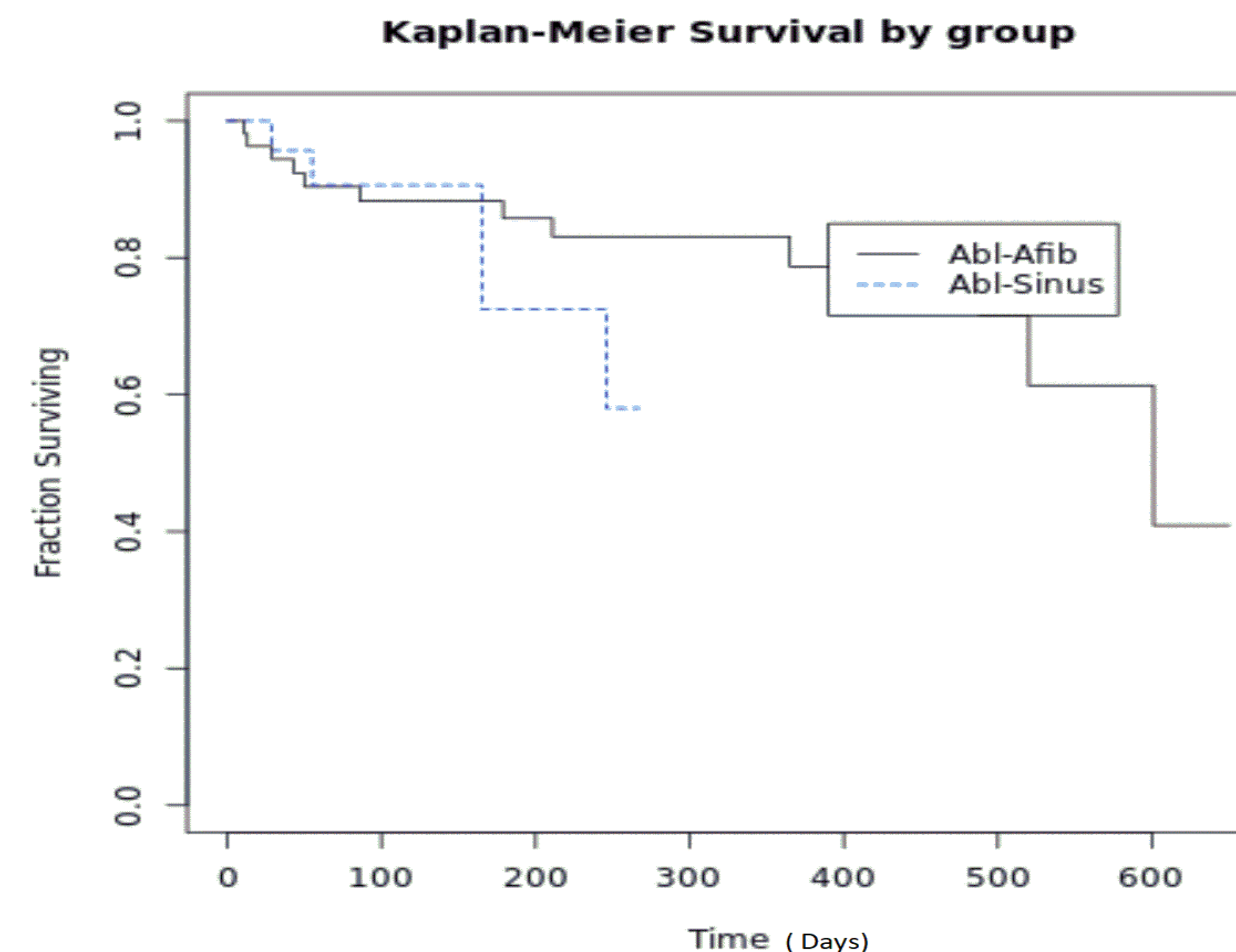


Figure 2  
There were no clinical differences between the two groups except in follow-up time ( $p < 0.01$ ). Log Rank Test:  $p=0.306$  indicated no difference in time to AF recurrence.

## Conclusions

Our preliminary data does not seem to support an advantaged or improved outcome using an ablation strategy in SR for this population.

Data accumulating and longer follow-up time are being employed to corroborate this observation and determine the most effective approach of ablating peAF.

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## References

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