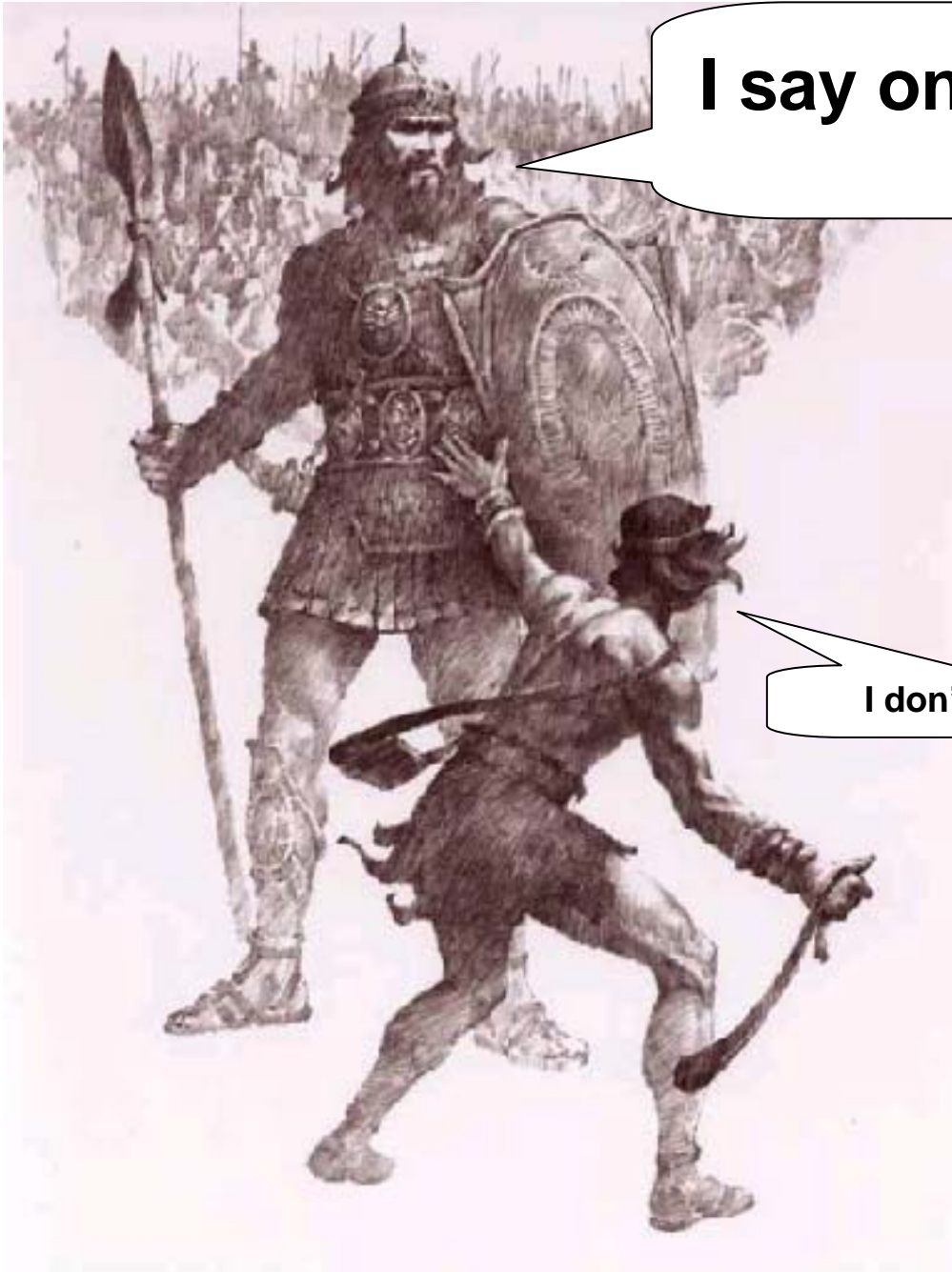


AF ablation: One size fits all?

Dr Anthony Chow

Heart Rhythm Congress 2009

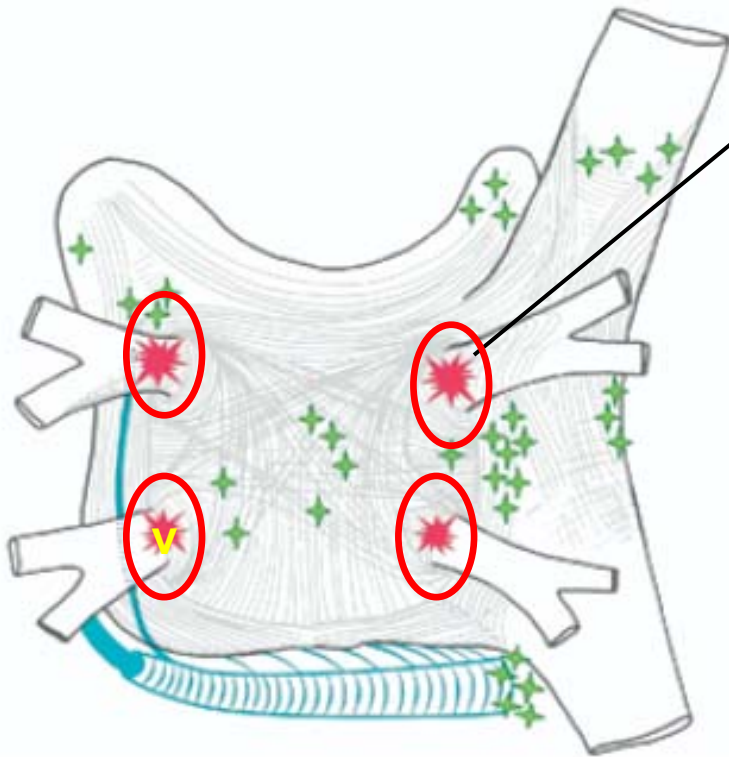




I say one size fits all

I don't think so

Catheter based PVI to treat AF



Las 1-2

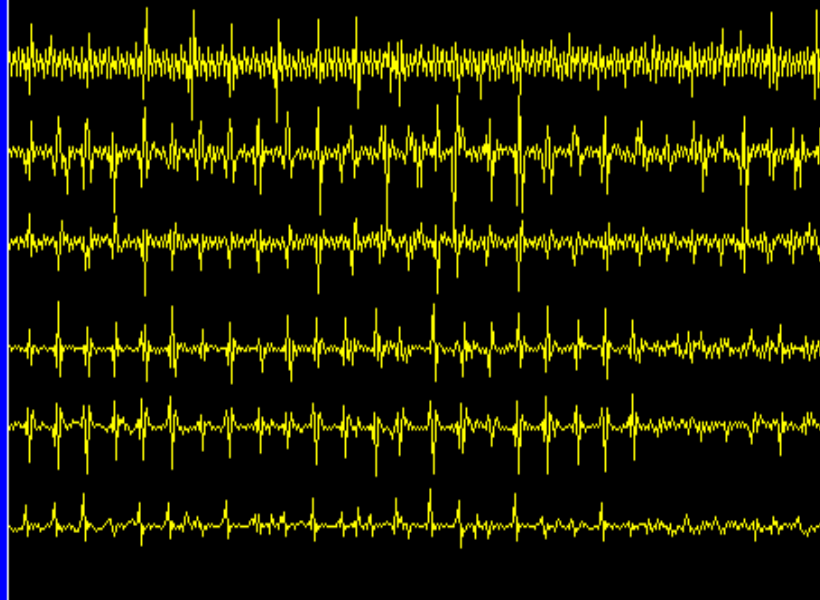
Las 3-4

Las 4-5

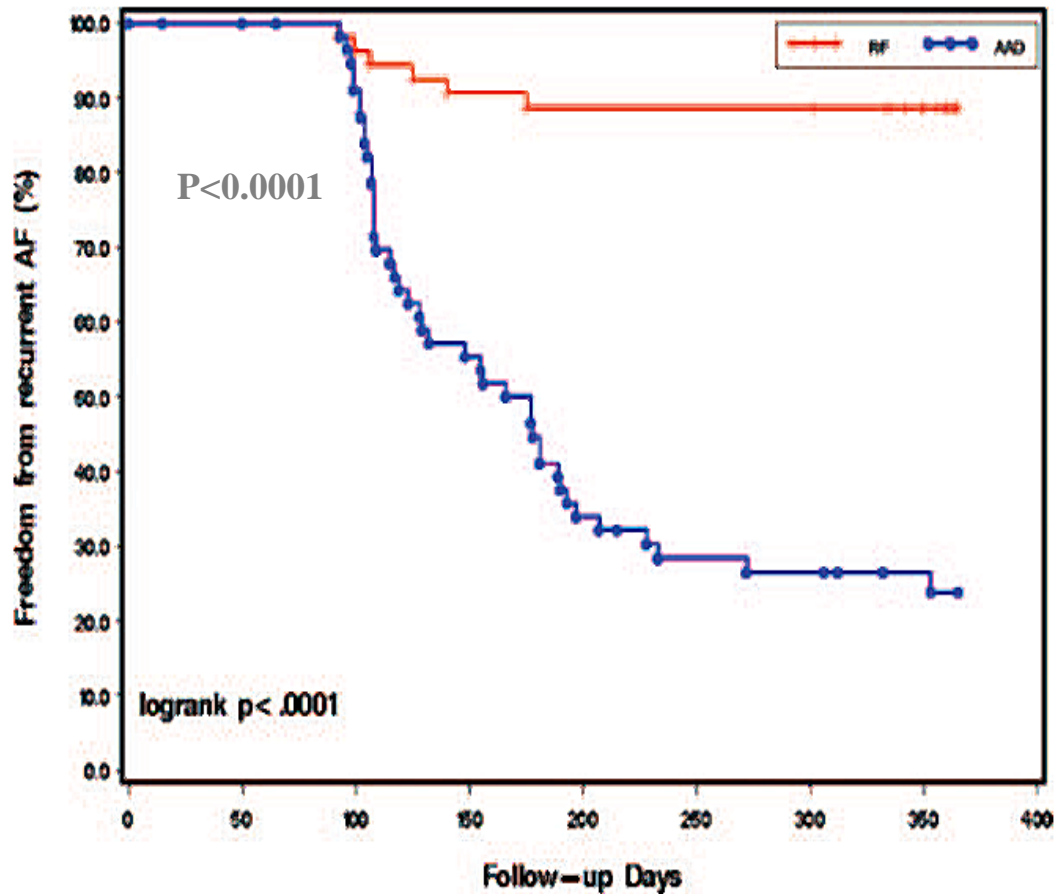
Las 5-6

Las 6-7

Las 7-8

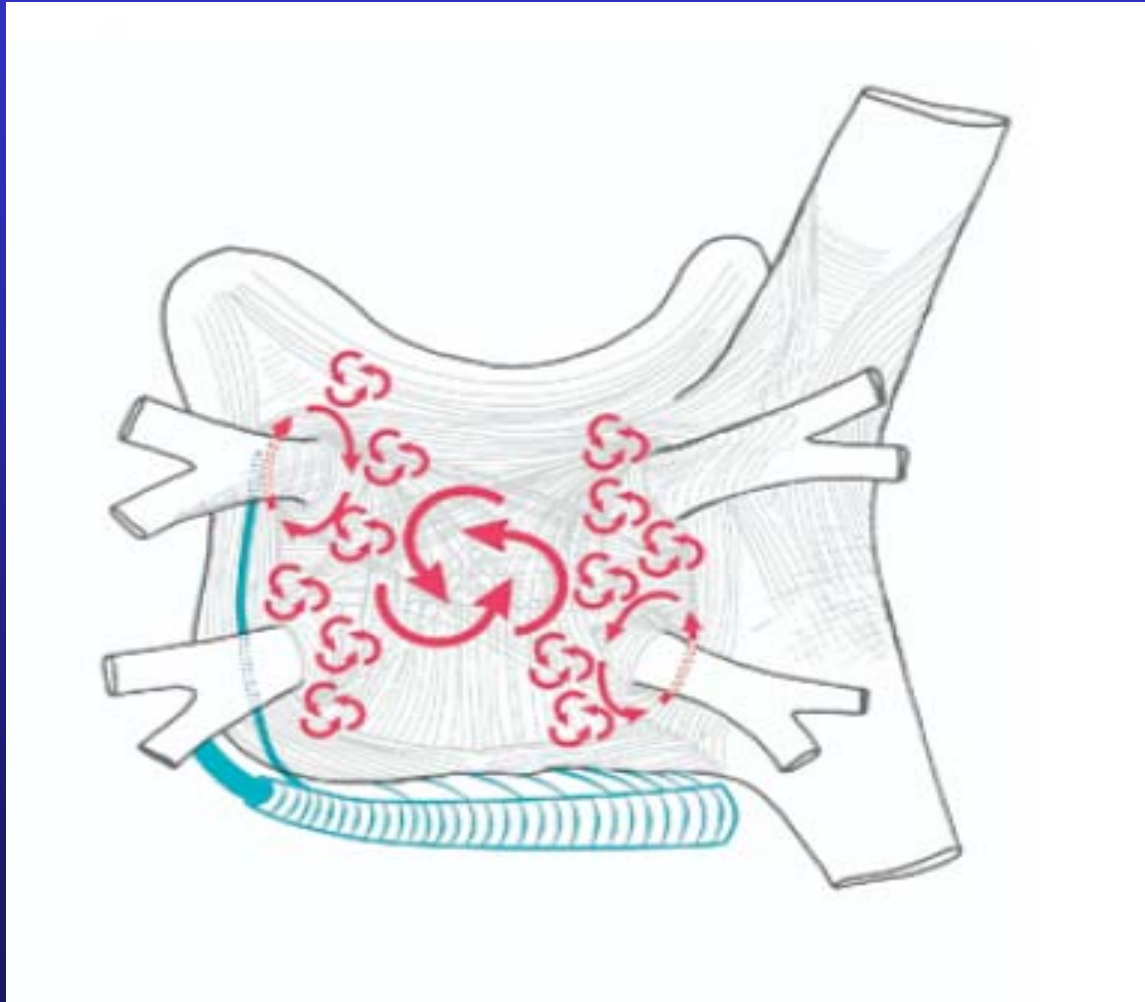


A4 study

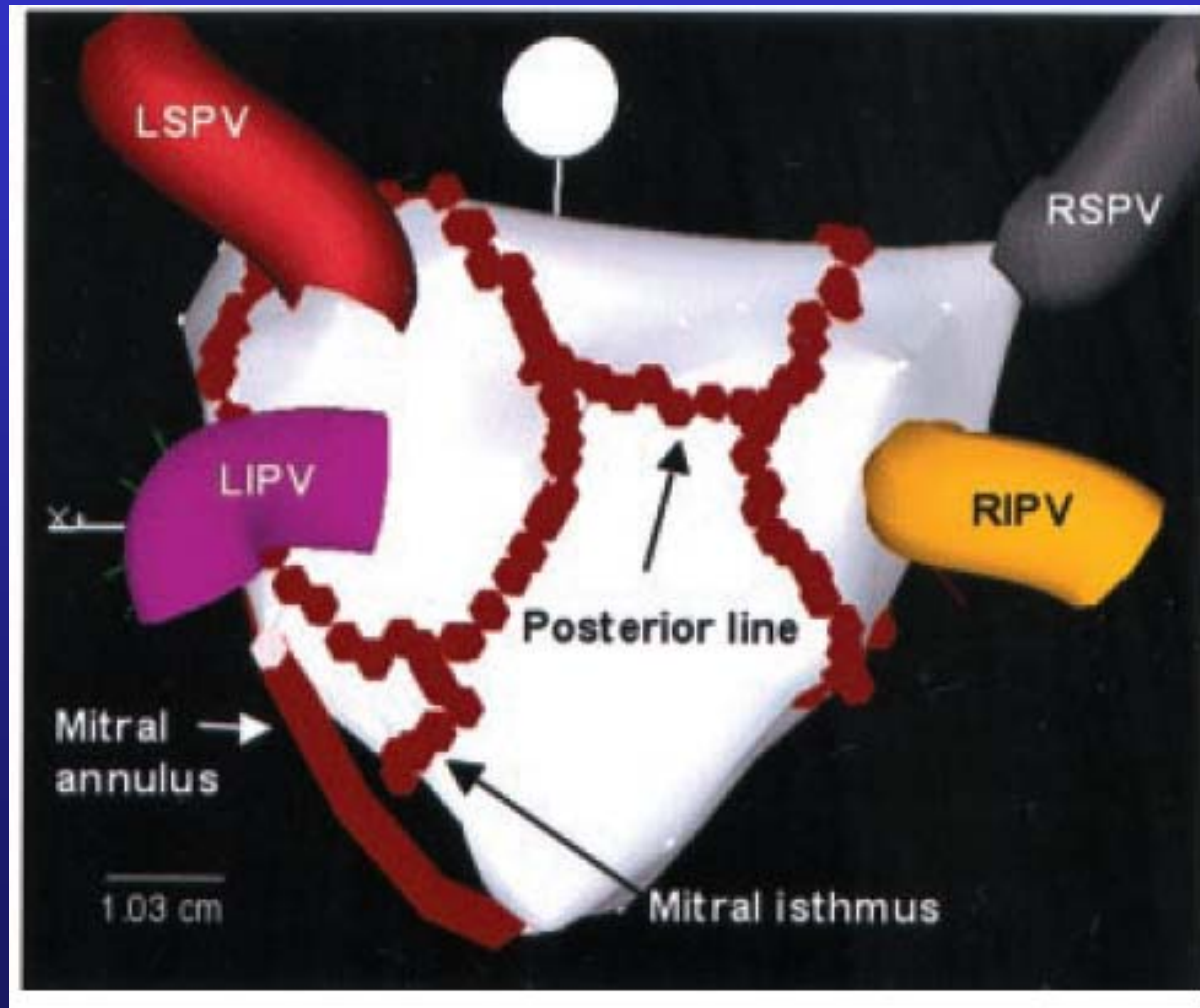


- Multi-centre randomised trial
- 112 patients
- PAF Rx \geq 1AAD
- Up to 3 ablations
- Can change AAD
- 1 year F/U

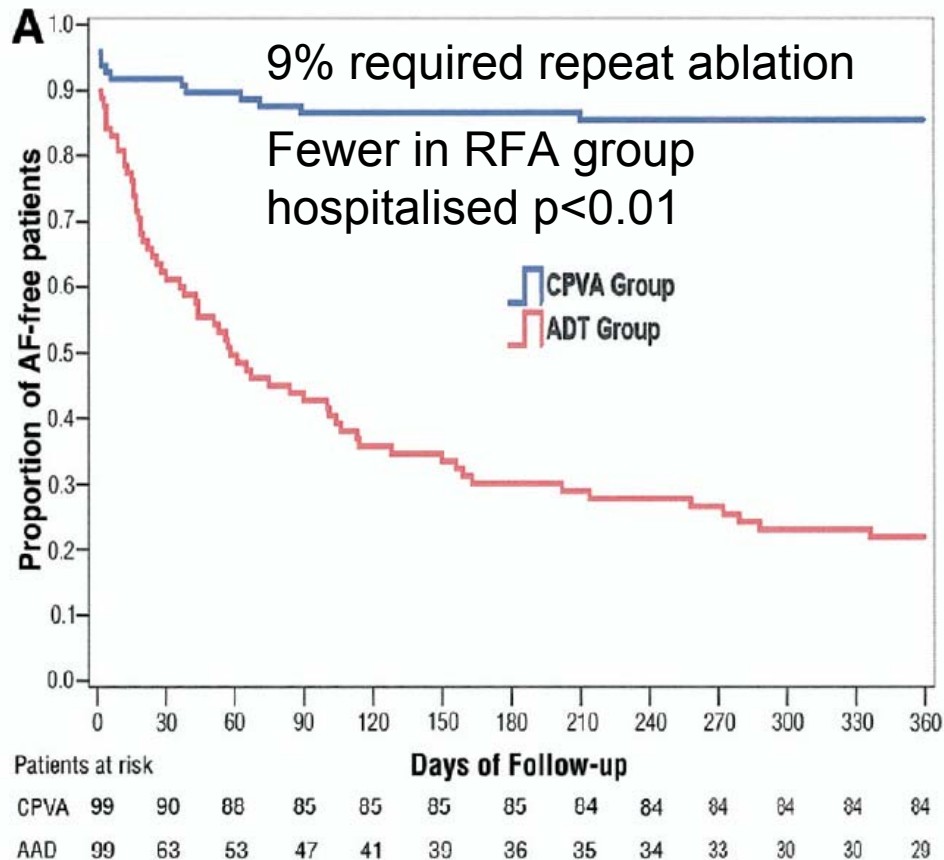
Mother rotas and reentry



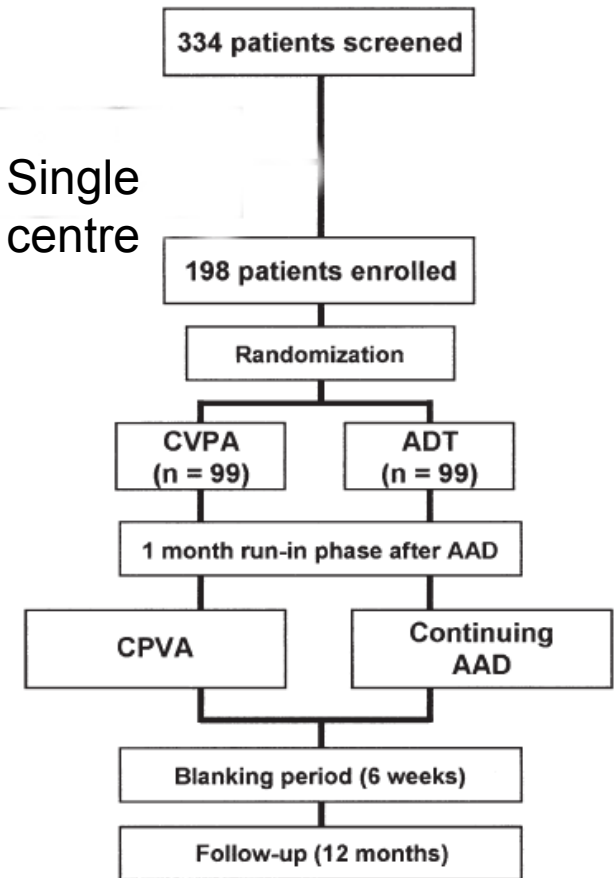
Wide Area Circumferential Ablation



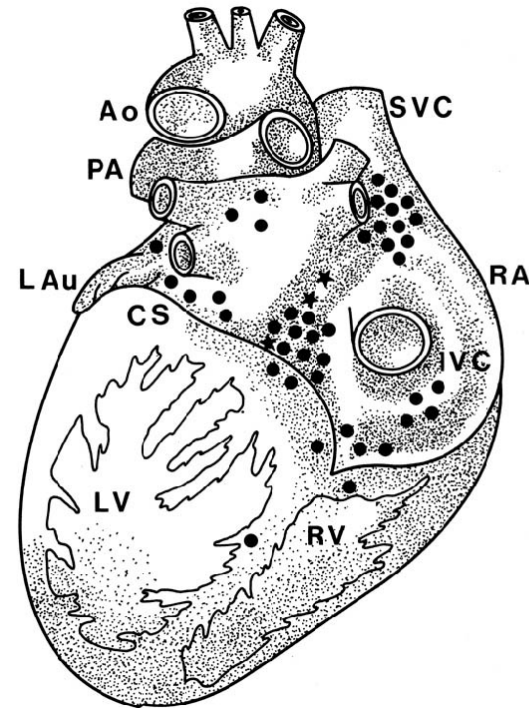
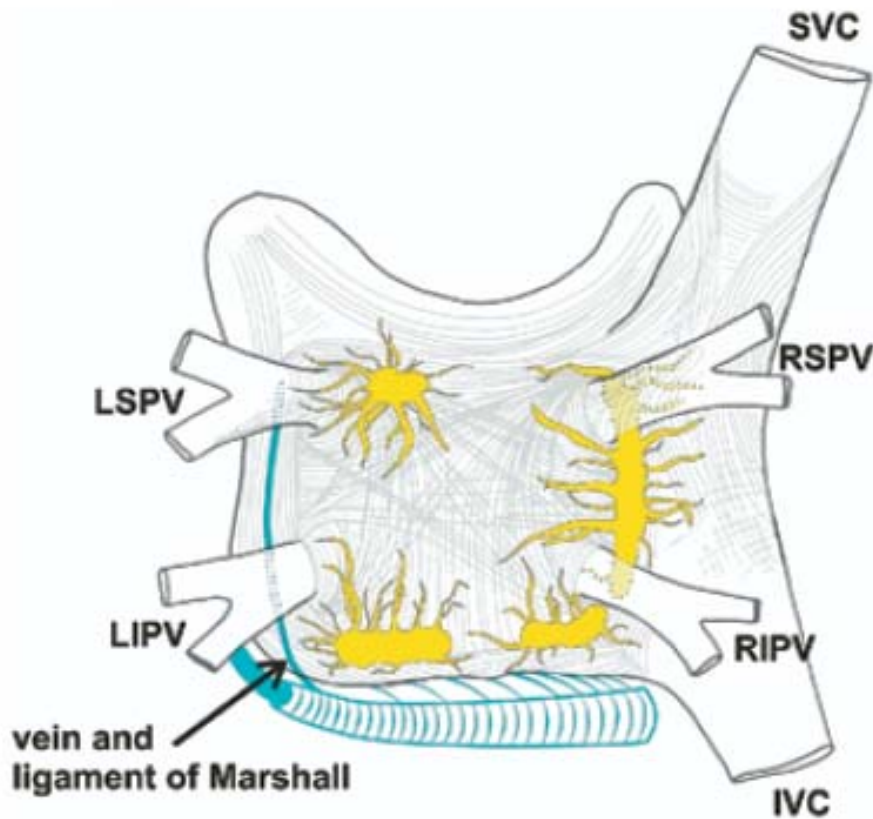
APAF trial for PAF



Single
centre



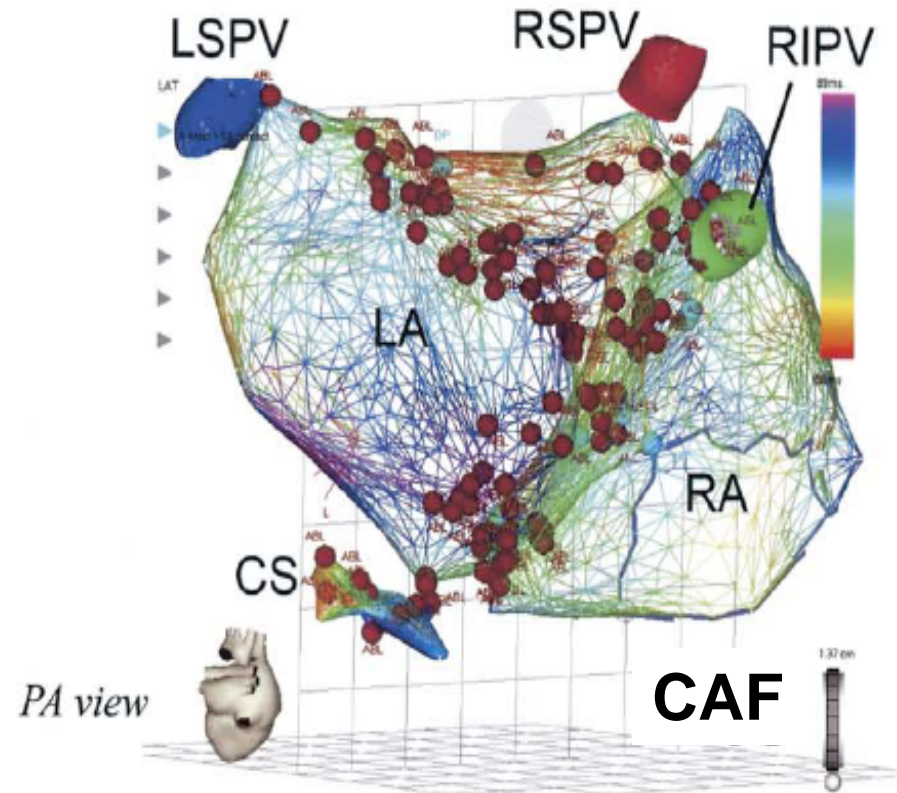
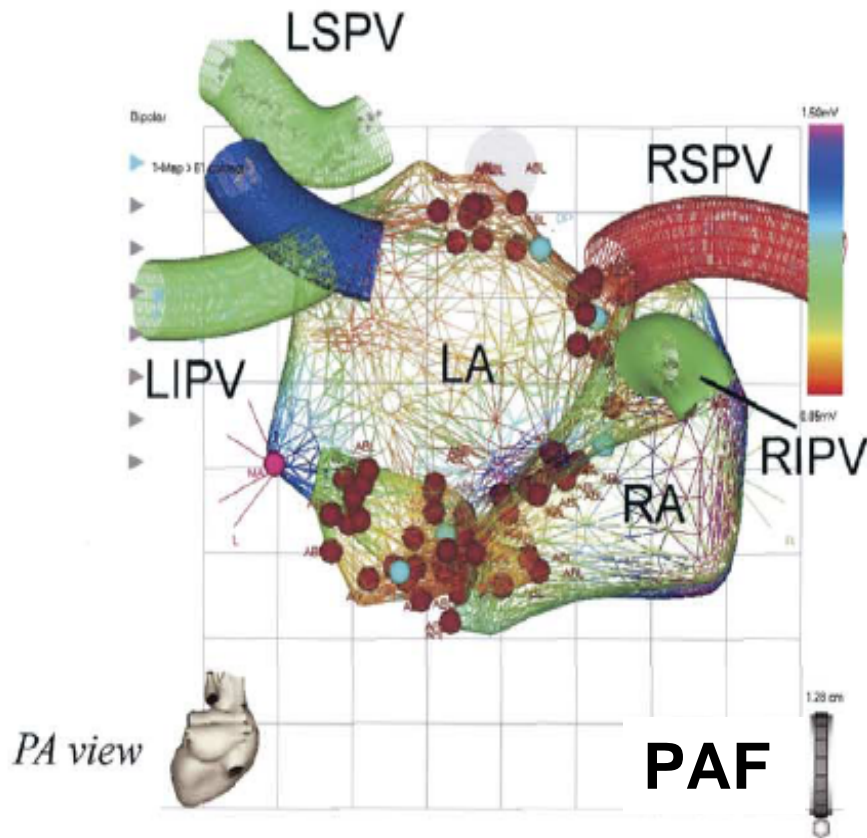
Ganglionic plexii causing AF



Hou YL et al Heart Rhythm 2007

Zhou J et al JCE 2007

CFAE targeted AF ablation



127 pat. (57 PAF) 91% free of AF

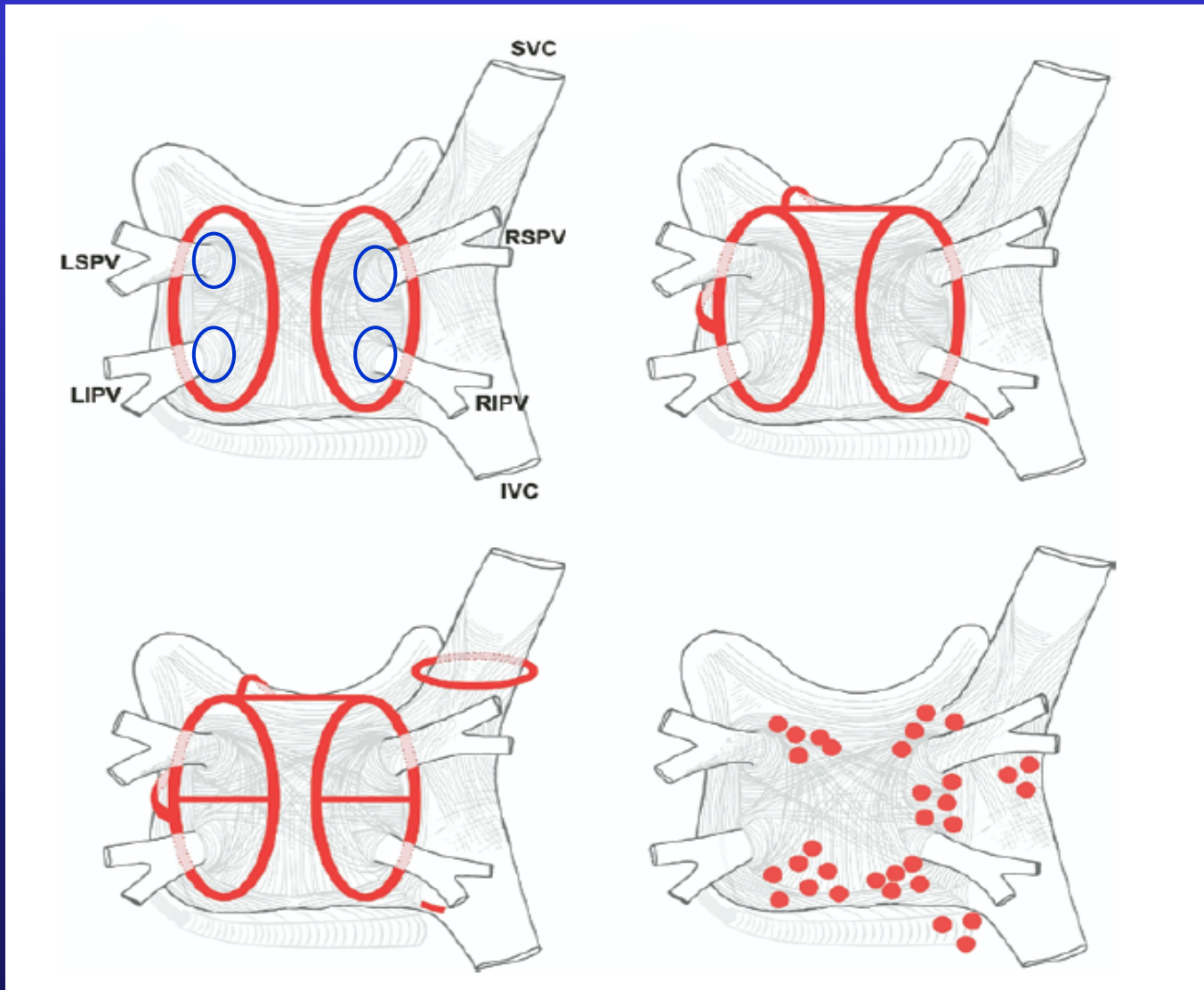
92/127 single procedure

Nademanee K et al JACC 2004;43:2044

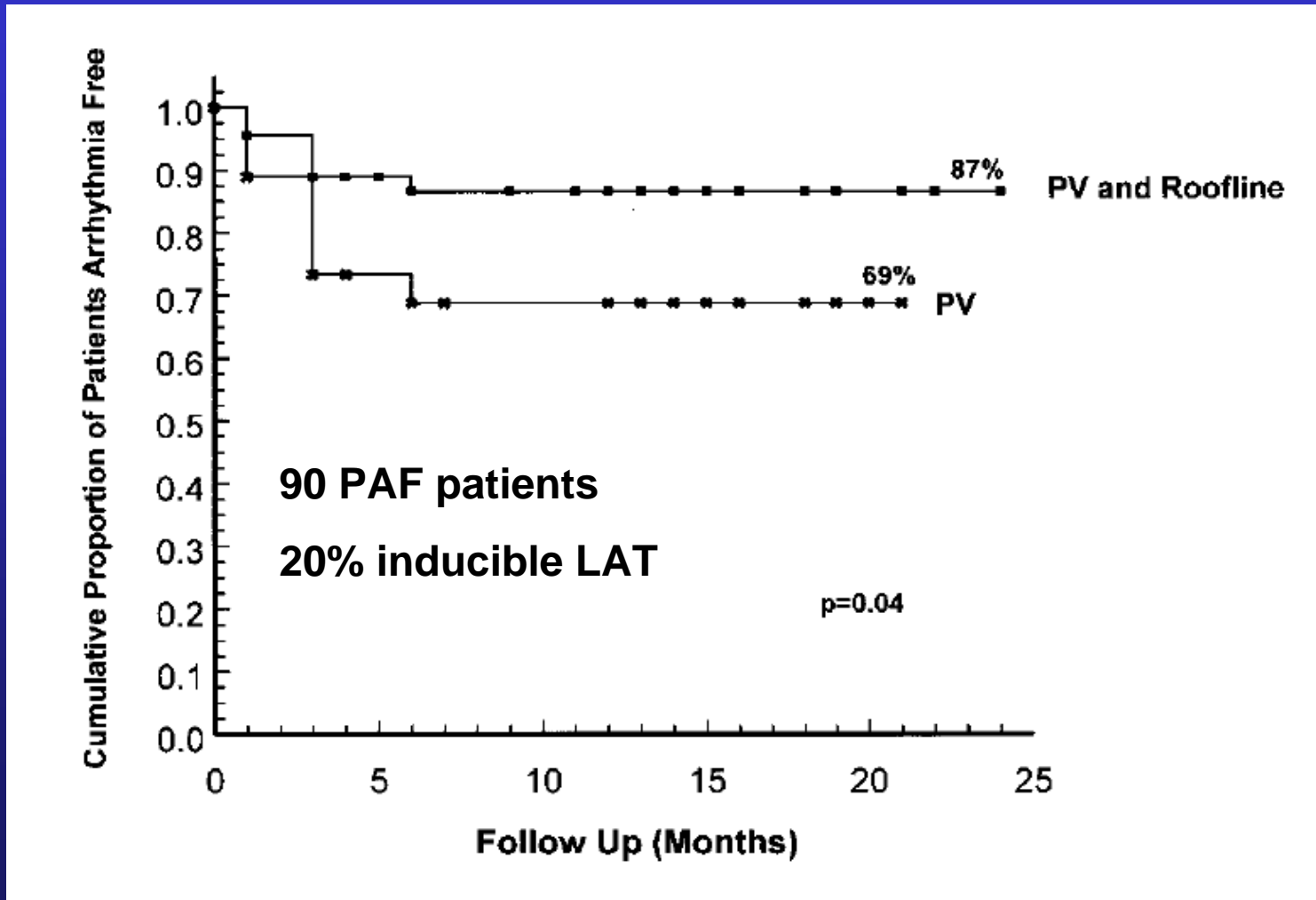
Composite aetiology for AF



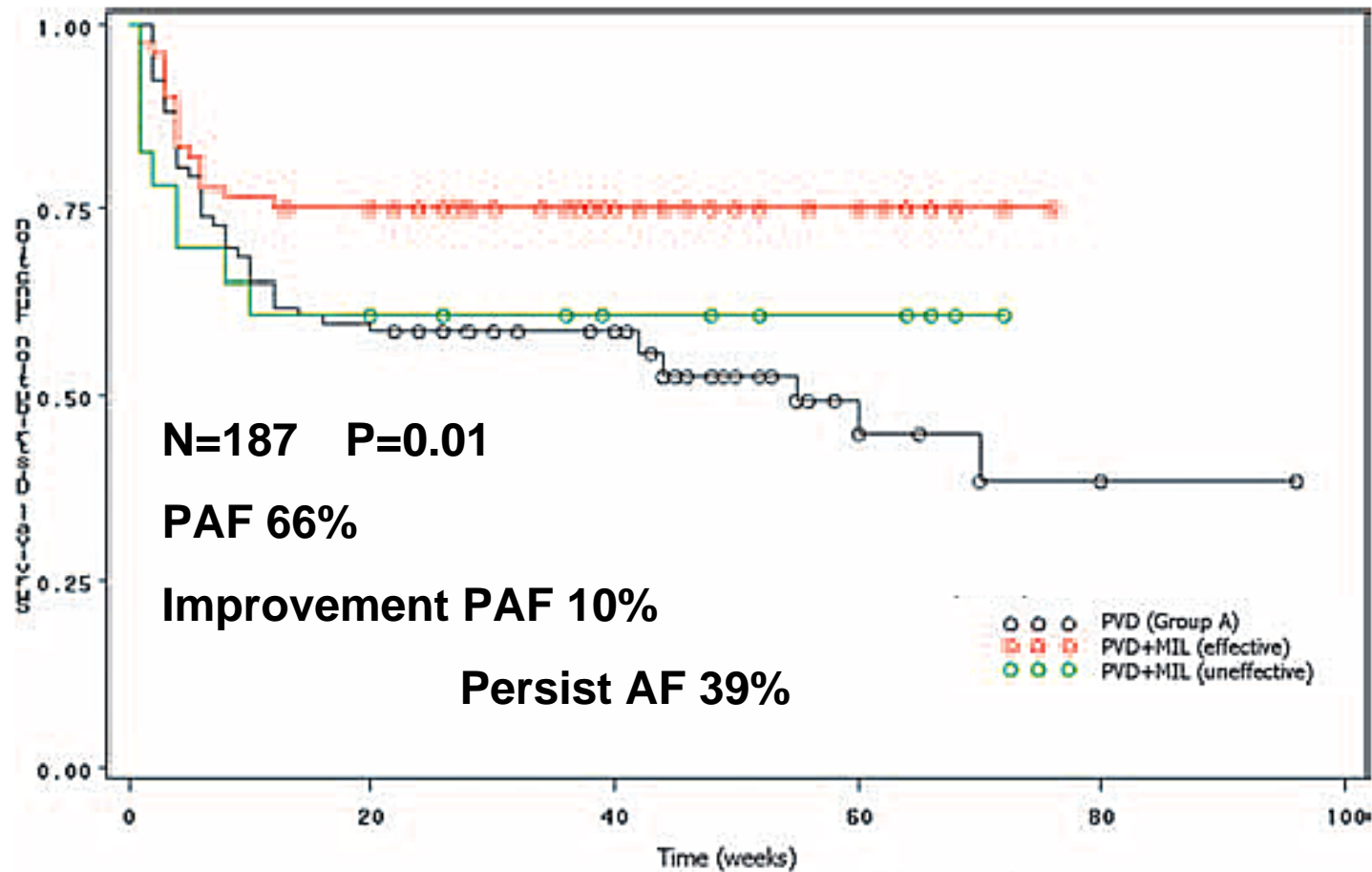
Differing AF ablation strategies



LA roof line on AF recurrence



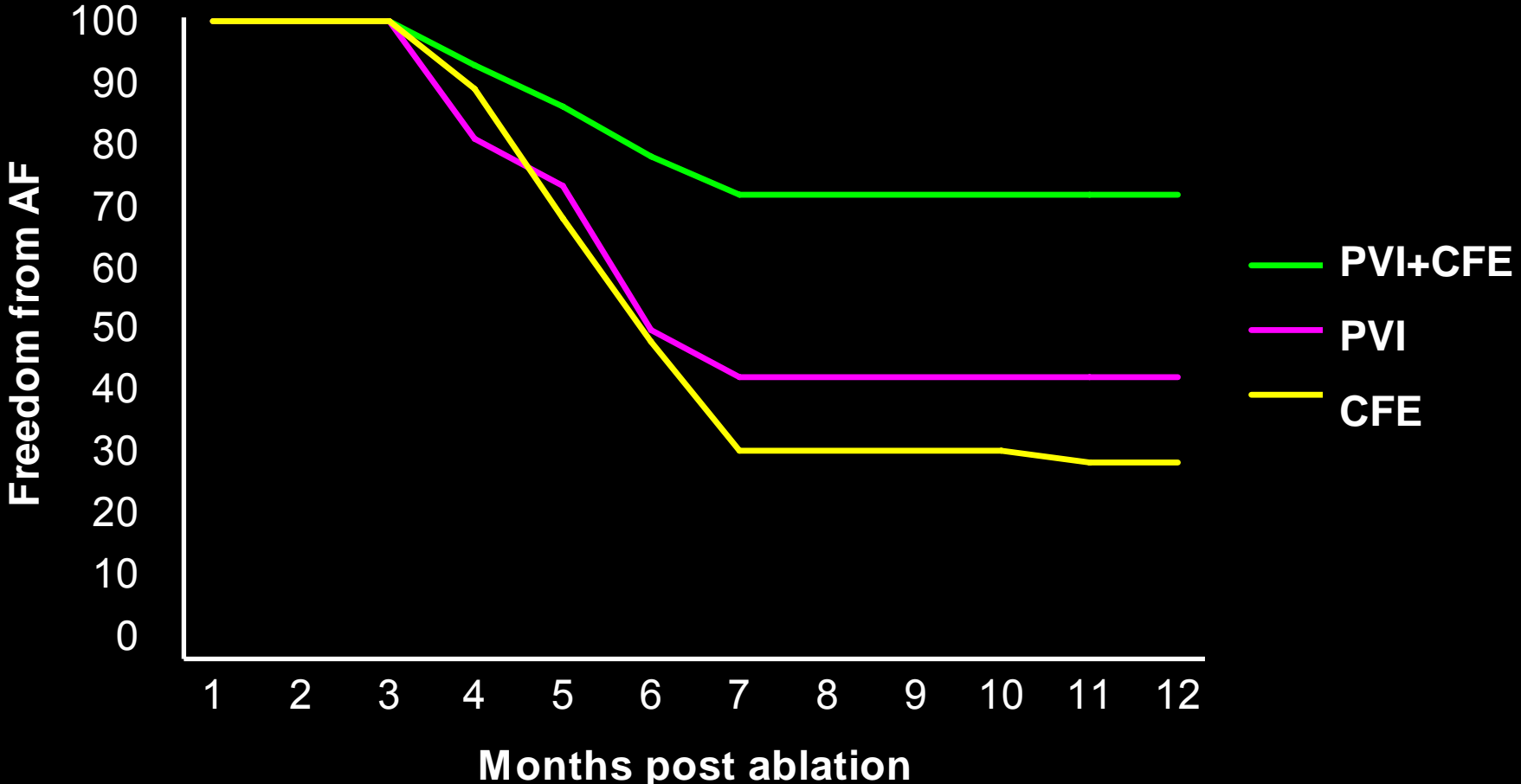
Effect of linear ablation on AF



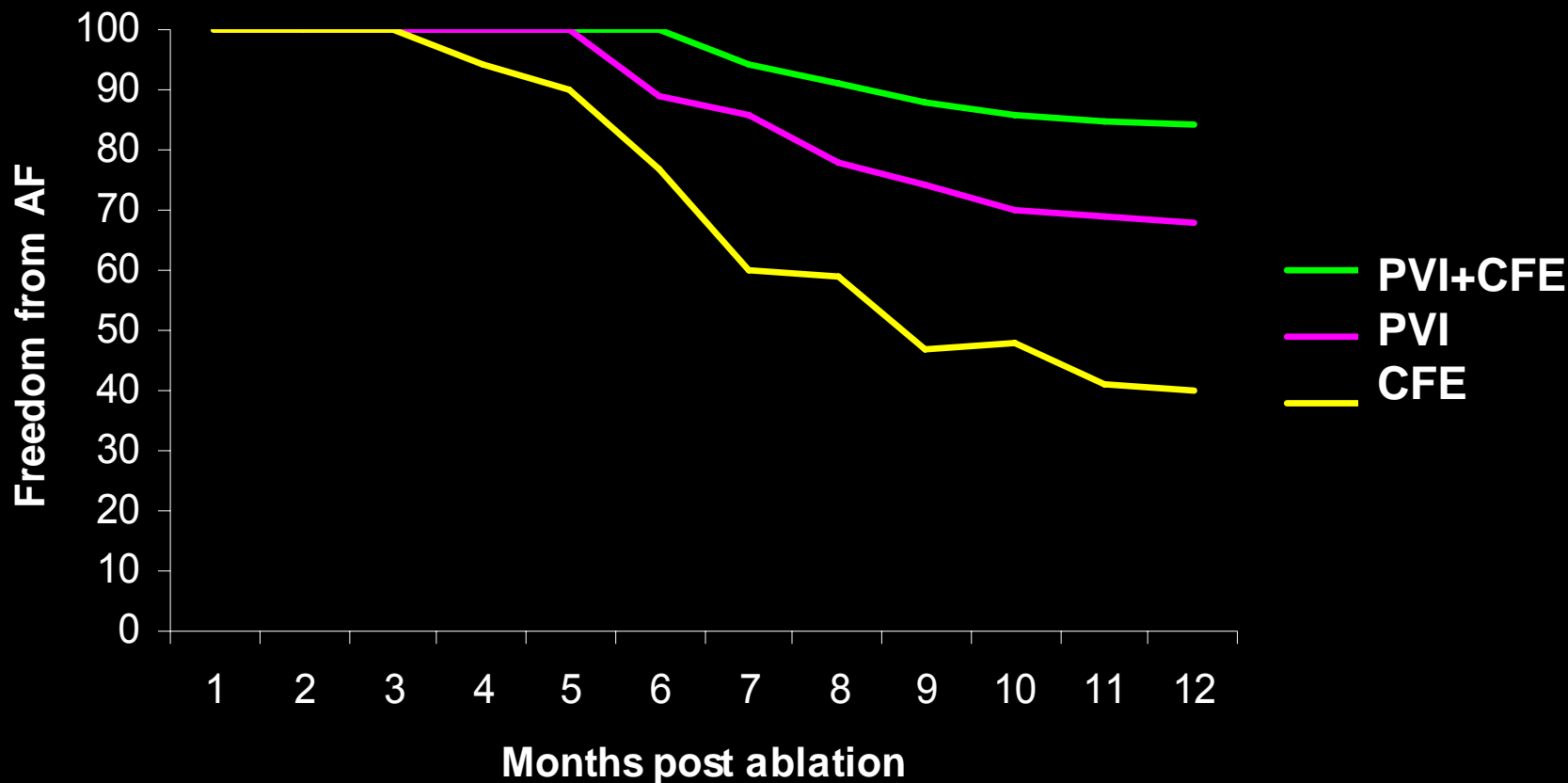
STAR AF study

- Multicentre, randomized trial (8 centres)
- High burden PAF/persistent AF patients
 - >4 episodes in 6/12, >6hr duration/ >7 days but <12 months
 - Tried >1 AAD
 - DCC X1 <12 months
- Enrolment into one of 3 arms (1:1:1):
 - CFE, PVI or PVI + CFE
- Aim to enrol 90 patients total – 30 patients per arm

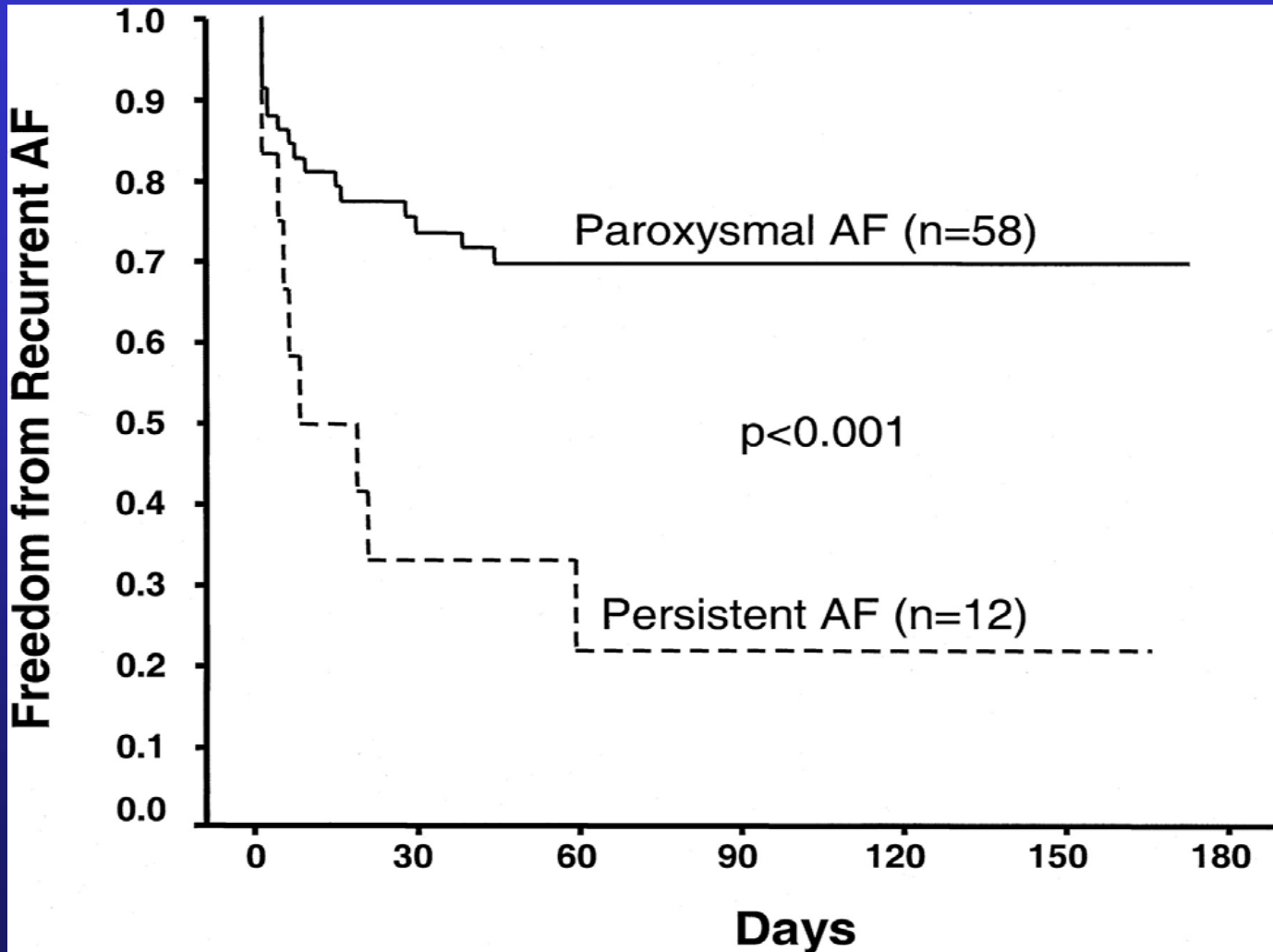
STAR AF single procedure outcome



Star AF 2 procedure outcome

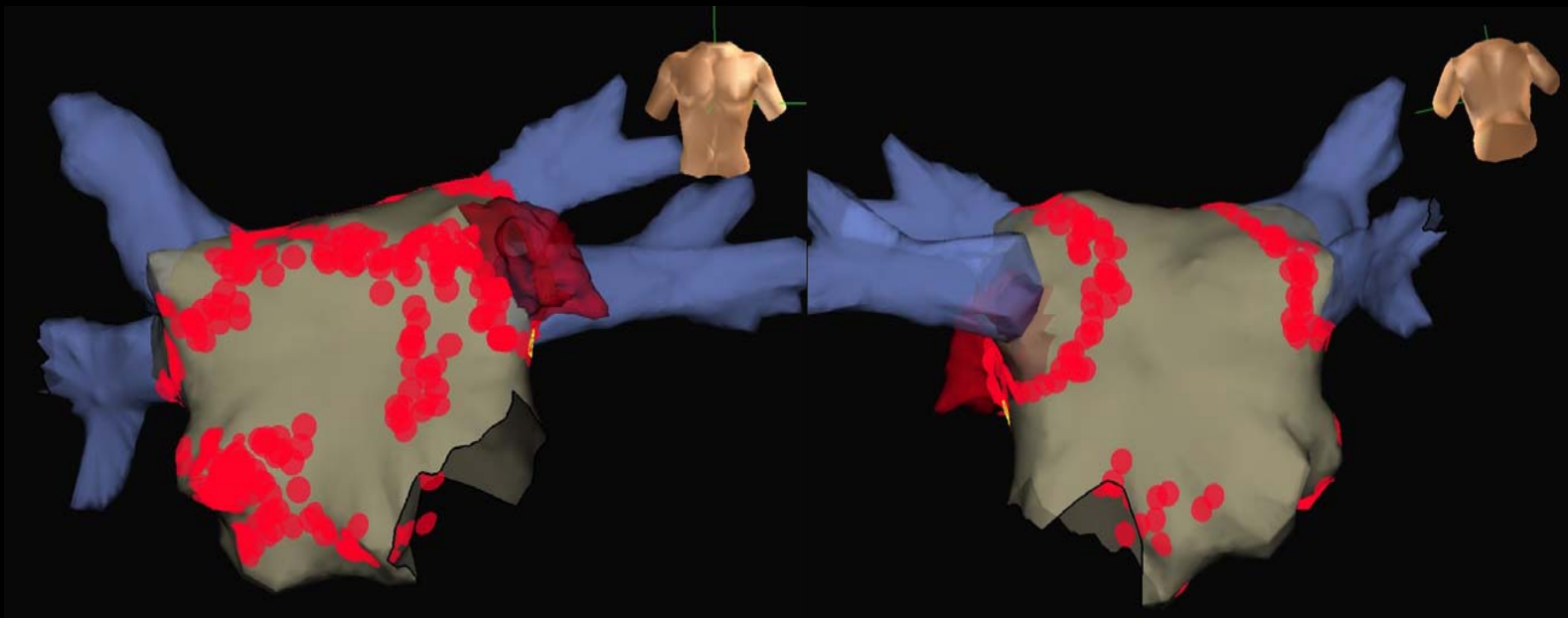
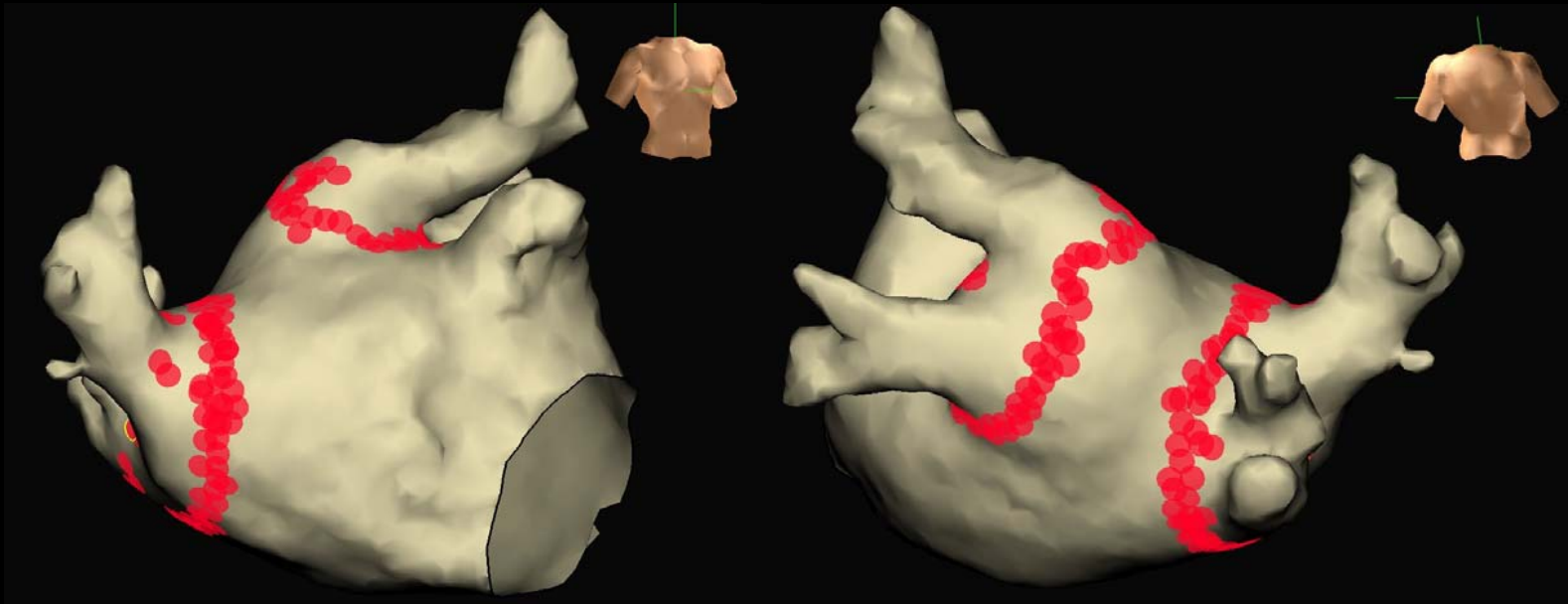


PVI outcome in PAF vs persistent AF

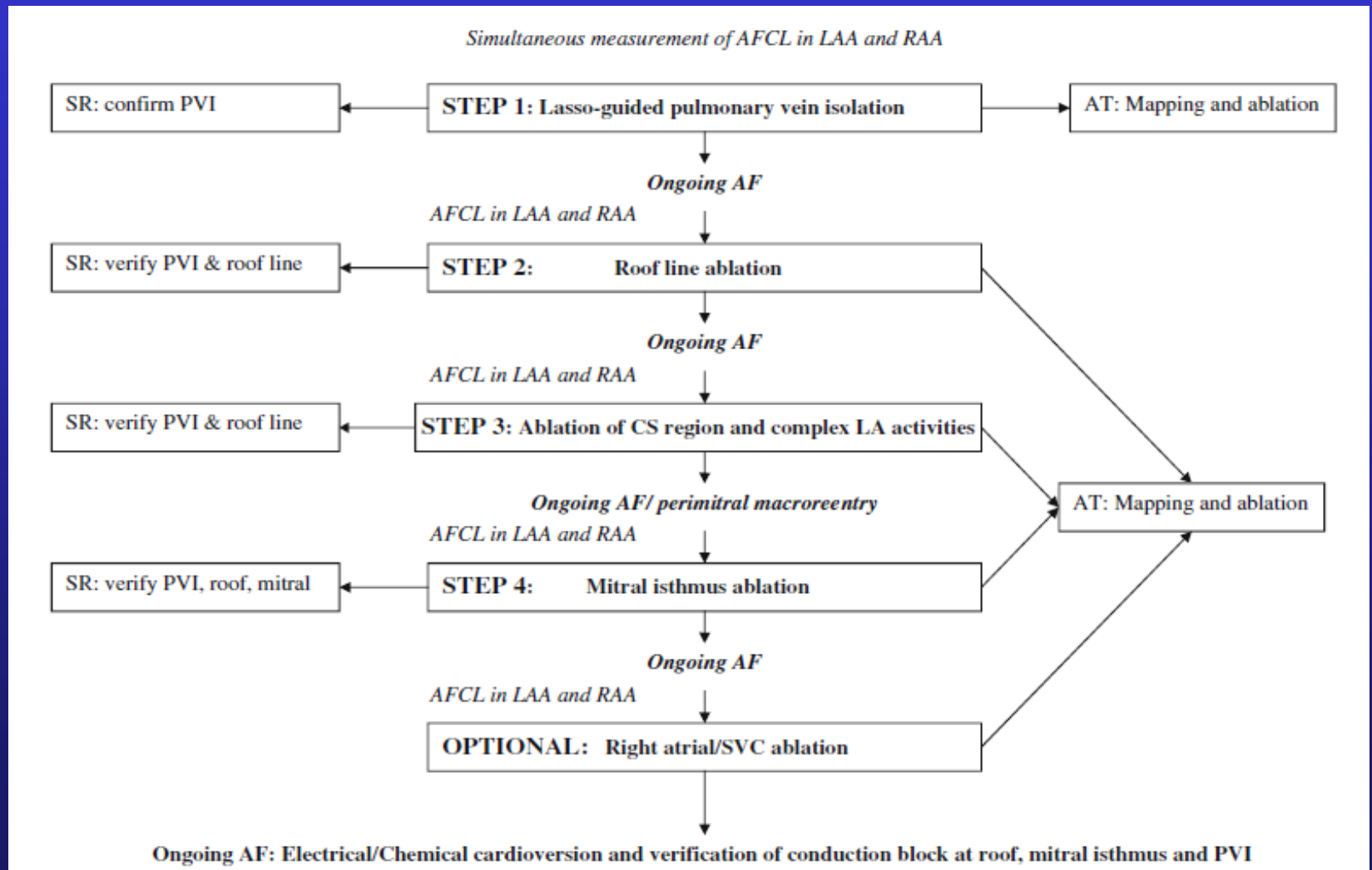


Persistent AF PVI results

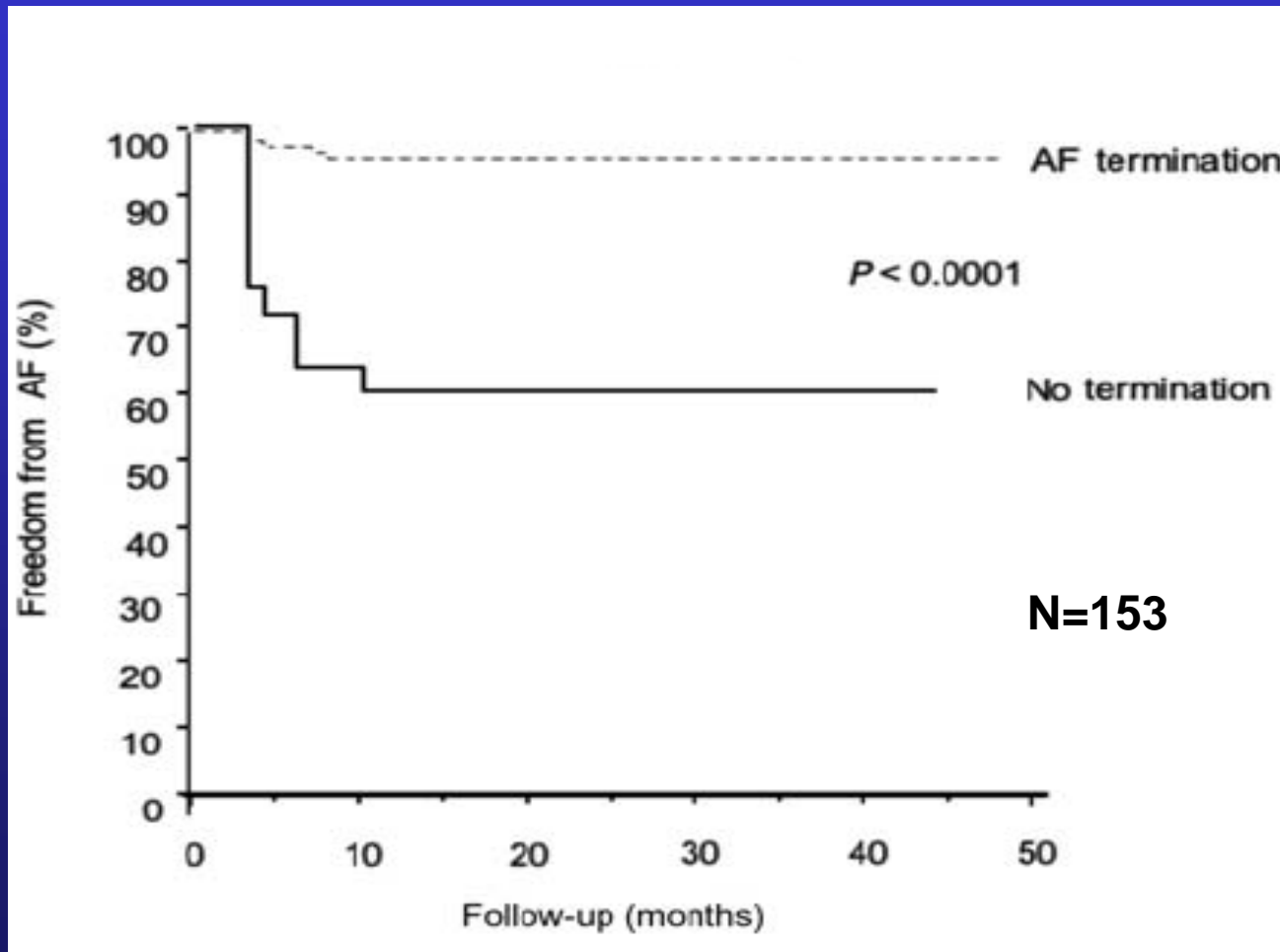
	No patients	F/U months	PVI/ WACA % success	PVI±lines±CFAE % success
Elayi CS HR 2008	144	16	28 / 83	94
Oral Circ 2002	70	5	22	
Kanagaratnam PACE 2001	70	29	62	
Willems EHJ 2006	70	16	20	69



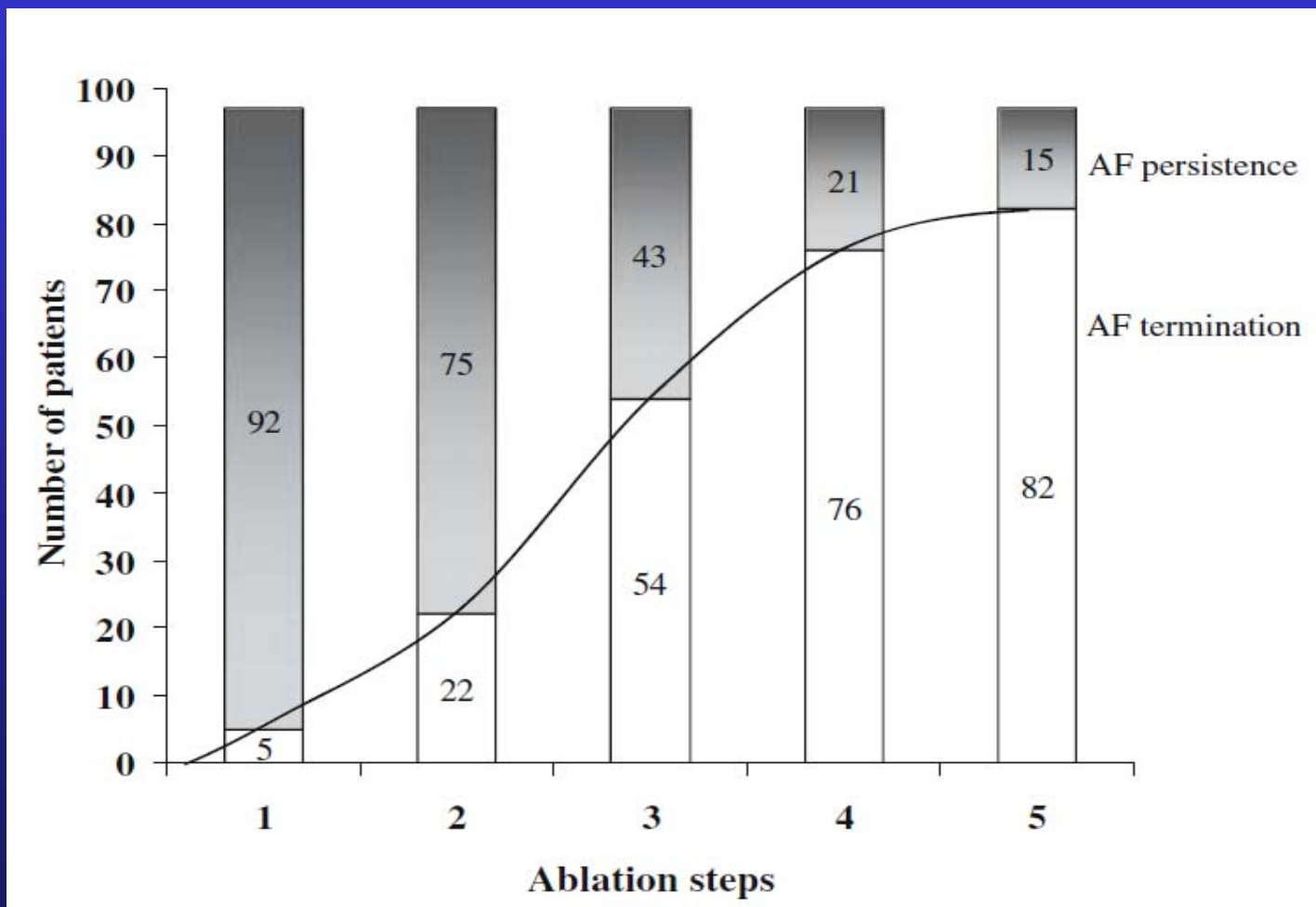
The Bordeaux sequential approach



Ablation termination of CAF



Stepwise ablation for AF termination



Summary

- AF substrate is complex
- The substrate evolves at different stage of disease
- We don't have "the perfect tool"
- One size does not fit all
- More individualised approach is required

