

Ending The Ablation Evasion: Current Surgical Therapy for AF

Zach M. DeBoard, MD FACS
Te Manawa Taki Cardiothoracic Surgery



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Disclosures

- AtriCure: proctor; travel stipend for surgical ablation conference.



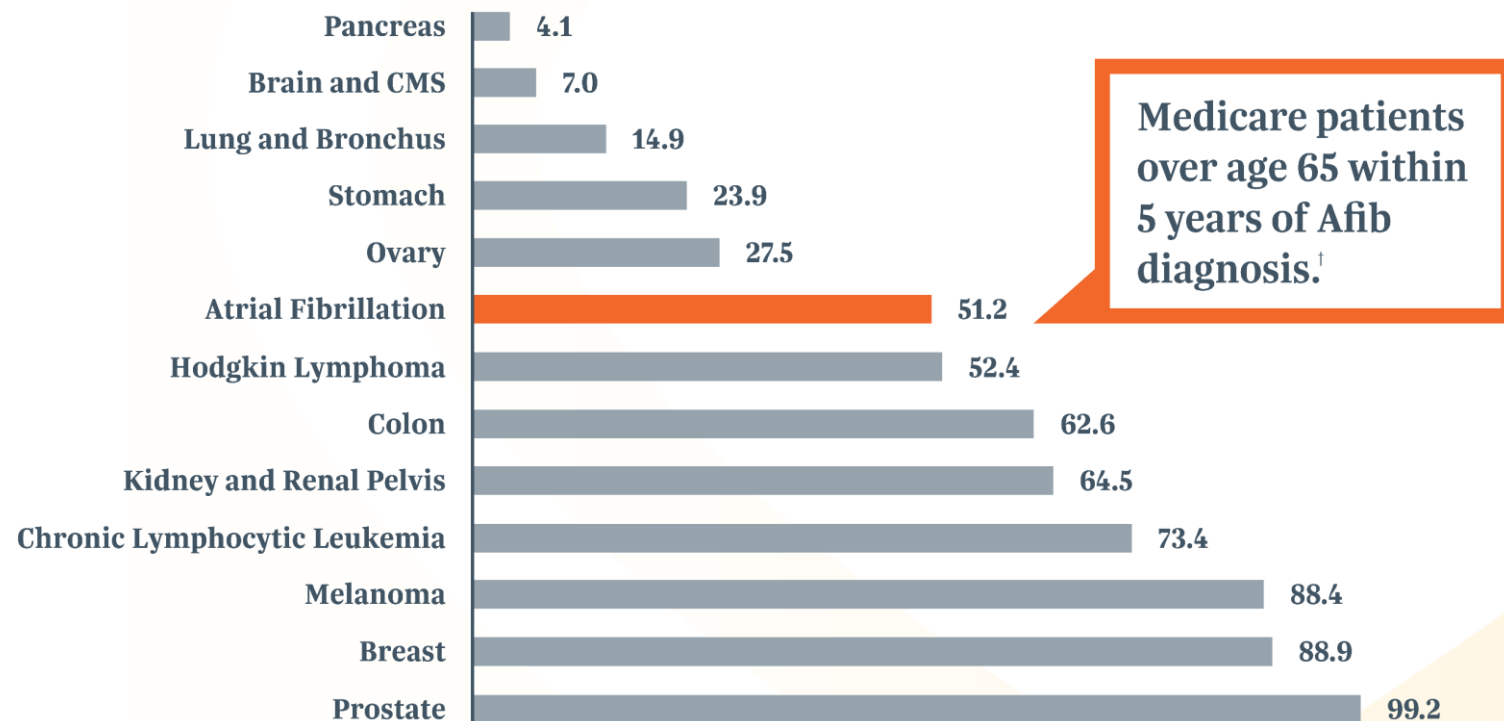
Historic Surgical AF Management

- Nothing.
 - My mentor, the great Dr. X said...
 - Doesn't matter, doesn't work
 - Takes too long



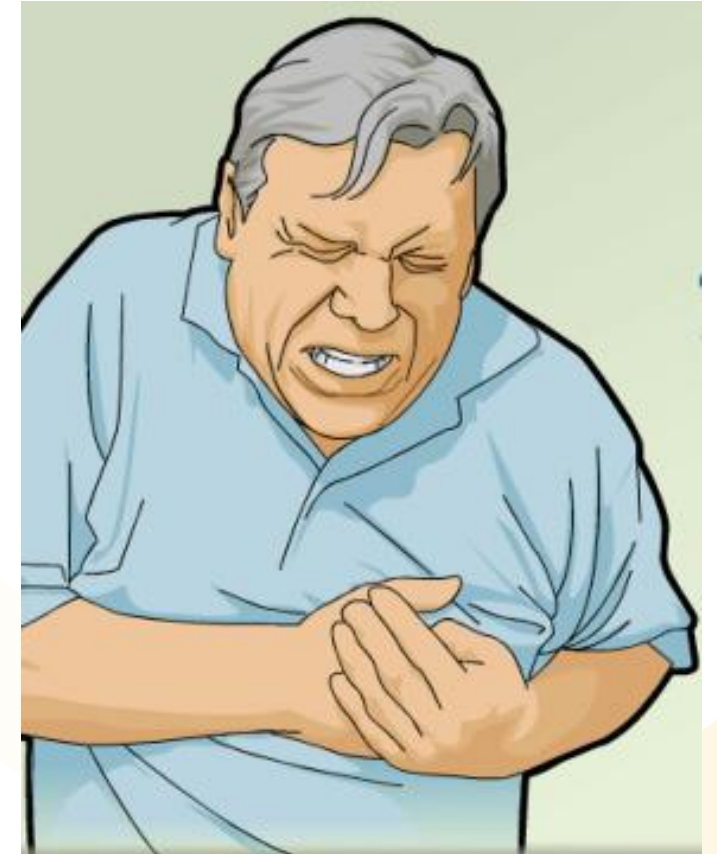
AF Doesn't Matter

- 2-5% population
- Early Morbidity/
Mortality
- Resource & Costs



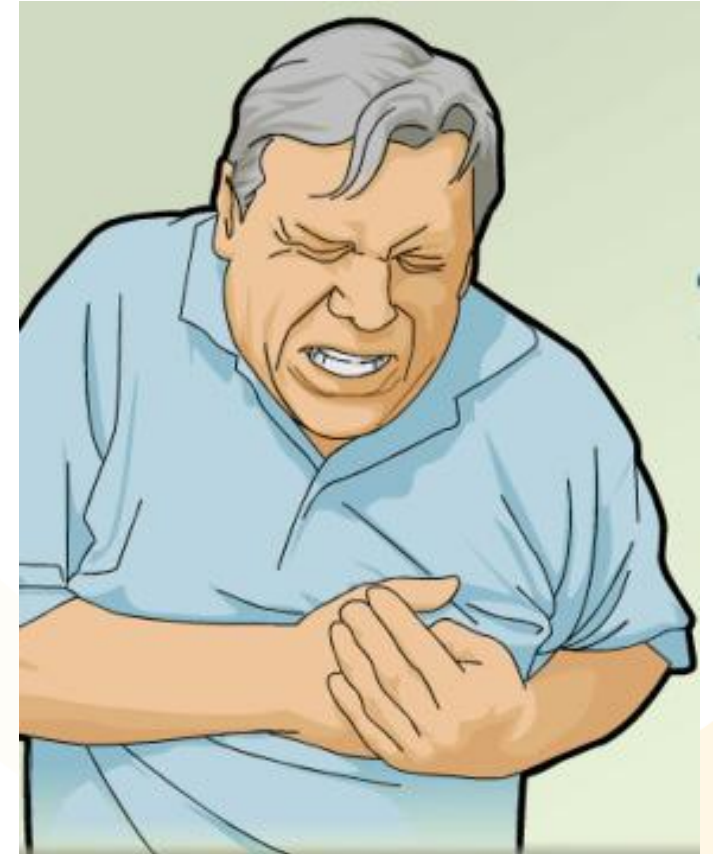
Ablation Doesn't Work

- Ablation failure
 - AT >30 seconds
- CABG/PCI Failure:
 - MACCE (MI, death, bad haircut, sore knees, poor cellphone reception...anything get $p < 0.05$)



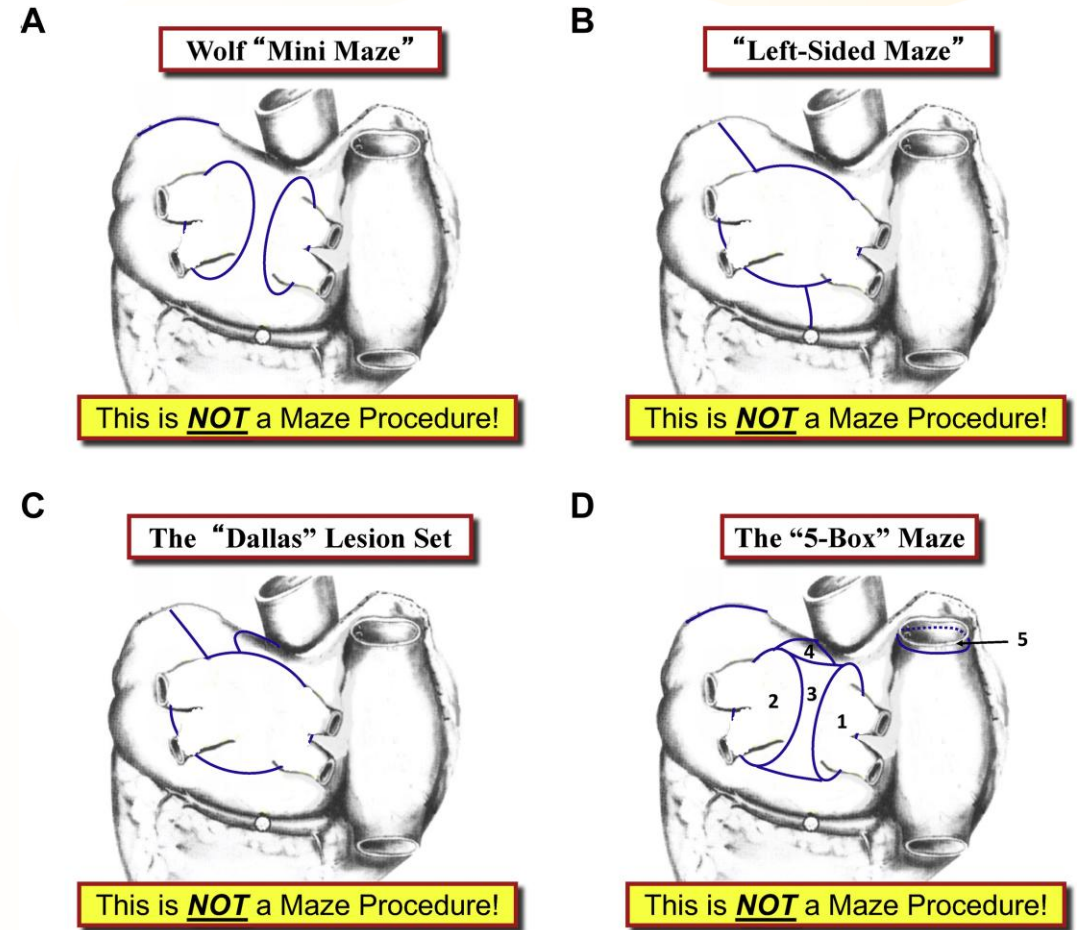
Current Outcome Metrics

- Arrhythmia burden
- Survival
- CVA/CEE
- QOL, symptoms
- Medications



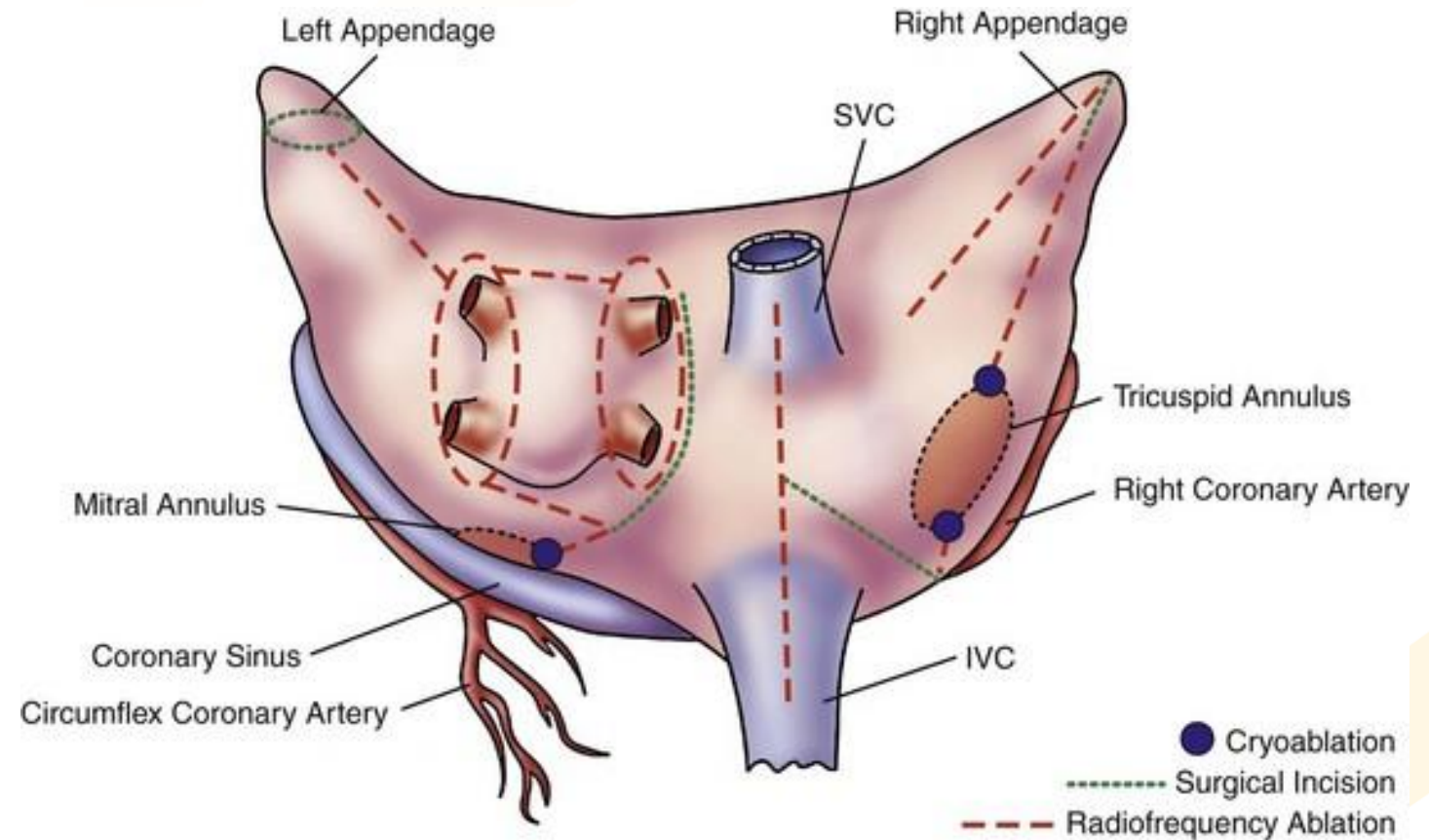
Historical Surgical AF Management

- Cut & Sew MAZE
 - Long, confusing
 - Great outcomes
- Numerous iterations
 - “Ablation bad”
 - Data collection awful



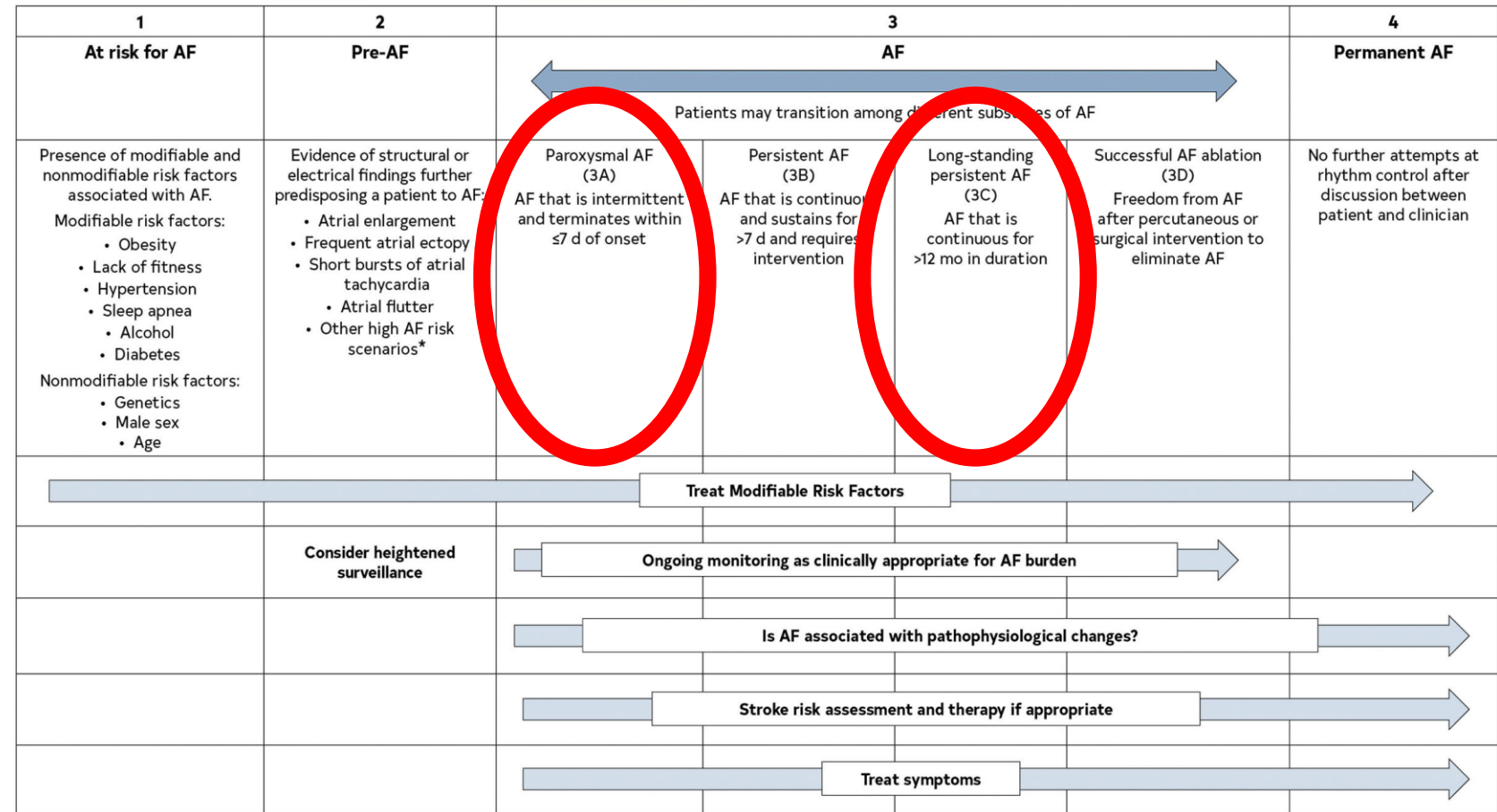
Current Surgical AF Management

- MAZE IV
 - LA + RA
 - RFA + Cryo
- LAA exclusion



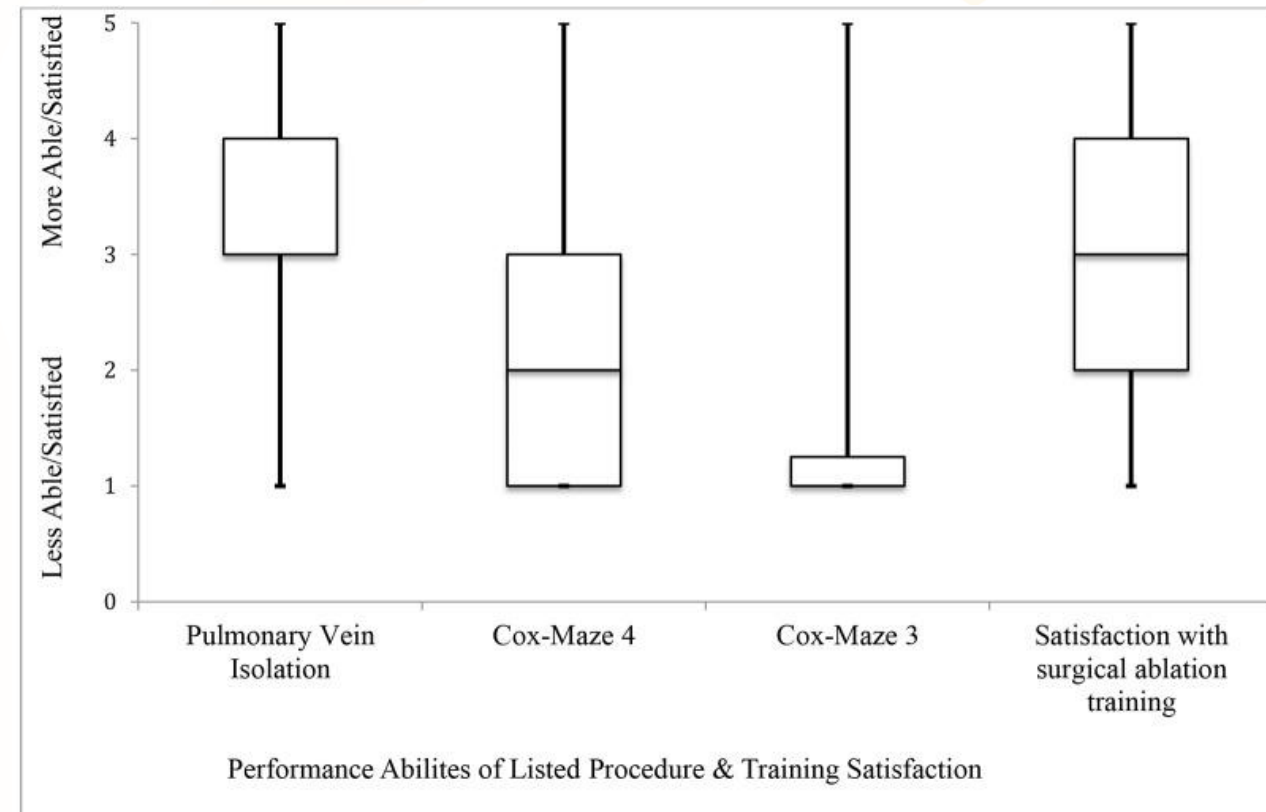
Current Surgical AF Management

- PVI
 - PAF
- LA set
 - PAF w/ LA
- MAZE
 - Persistent/LSP



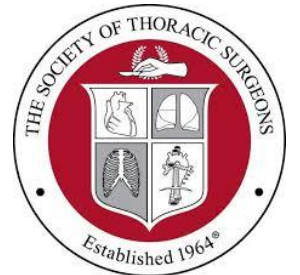
Surgical AF Therapy In Practise

- Worldwide: ~20%
- NZ: 8%
- Australia: 11%
- Training requirements?



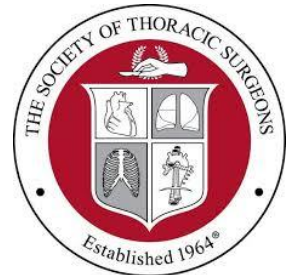
Current Guidelines

- Class 1
 - Concomitant: valve/CABG/aorta
- Class 2a
 - Standalone: refractory to CA, DCCV, meds, MDM/patient preference



Current Guidelines

- Class 1
 - LAA exclusion: all open cardiac surgery
- Class 2a
 - Low or intermediate risk:
SAVR or MVR over trans-catheter



Surgical Ablation Outcomes

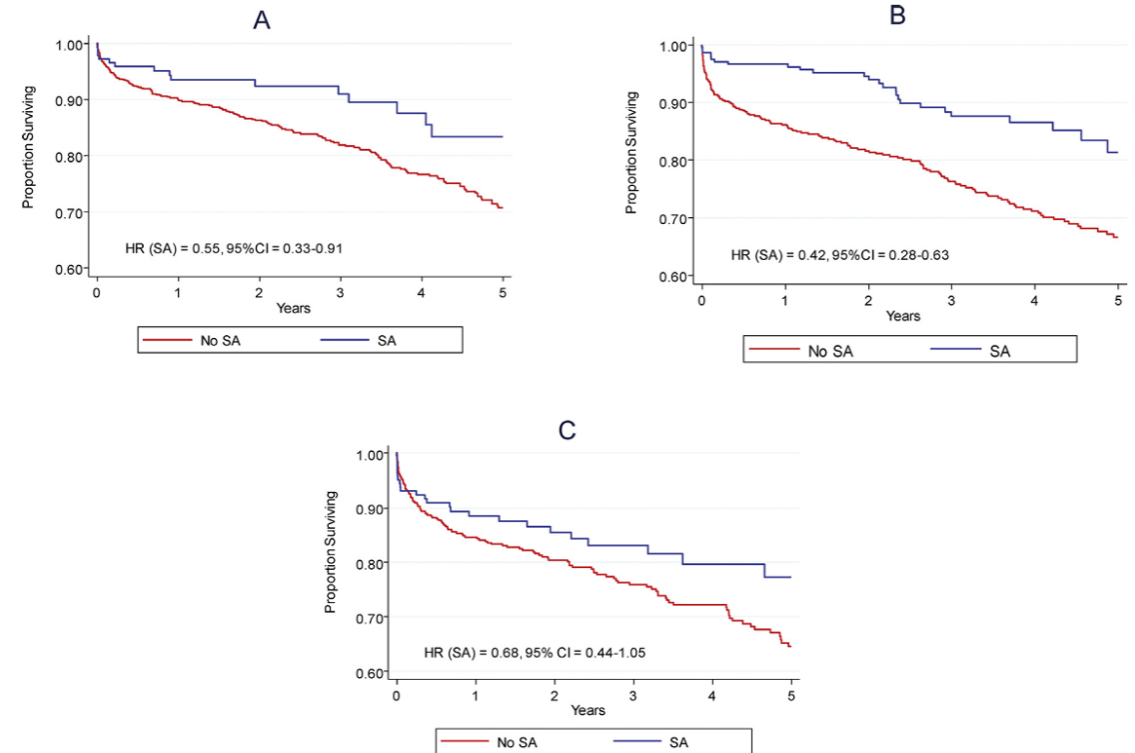
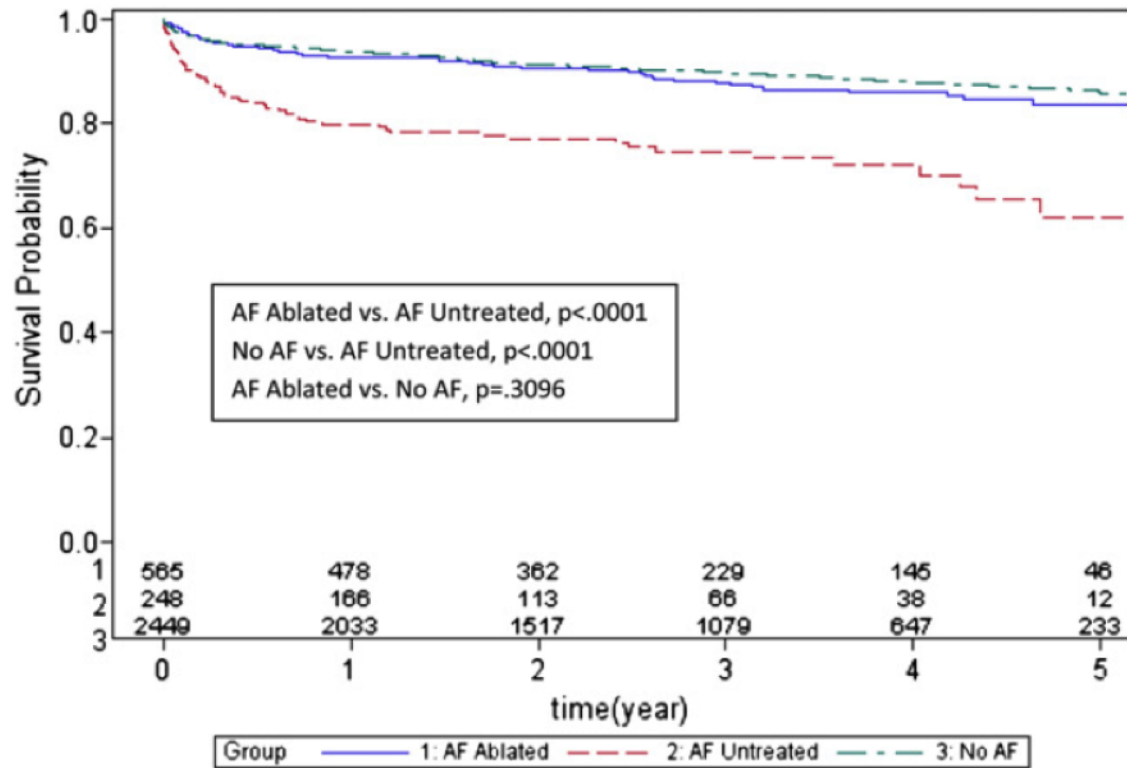
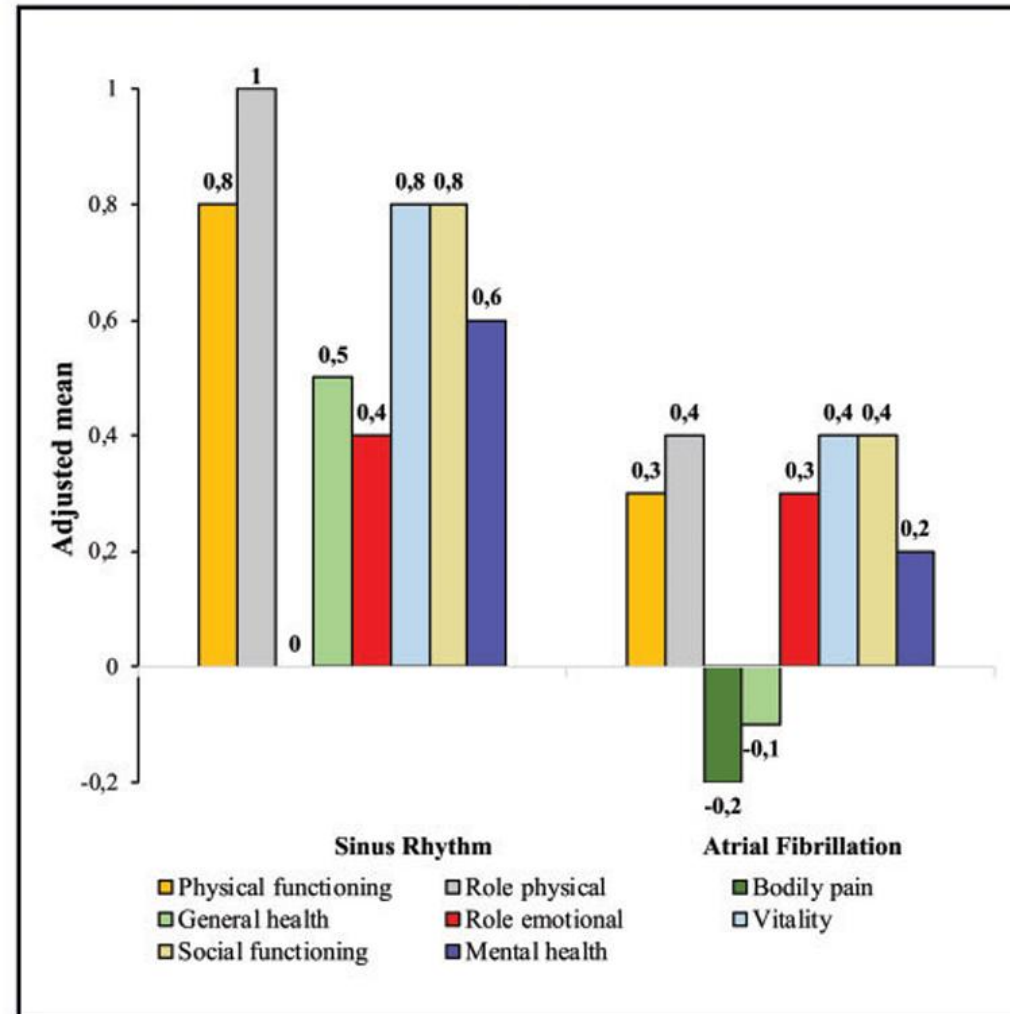


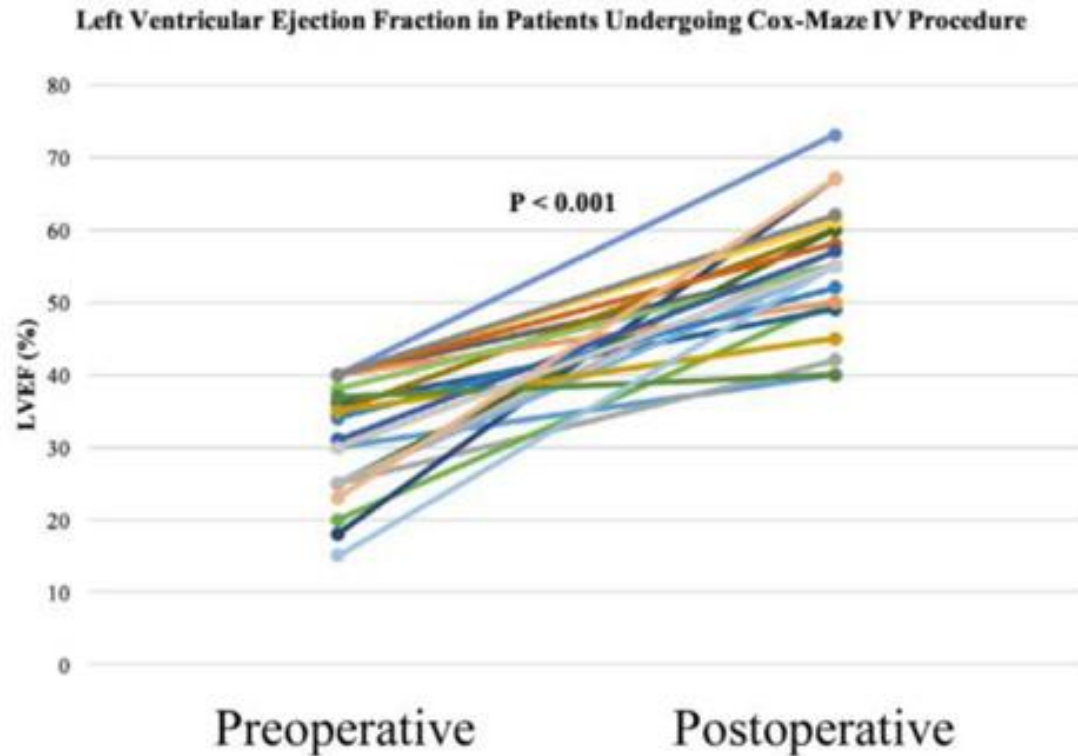
Fig 2. Kaplan-Meier curves for long-term survival of patients for surgical ablation (SA) versus no SA for (A) coronary artery bypass grafting (CABG), (B) valve, and (C) valve plus CABG. (CI = confidence interval; HR = hazard ratio.)

Surgical Ablation Outcomes

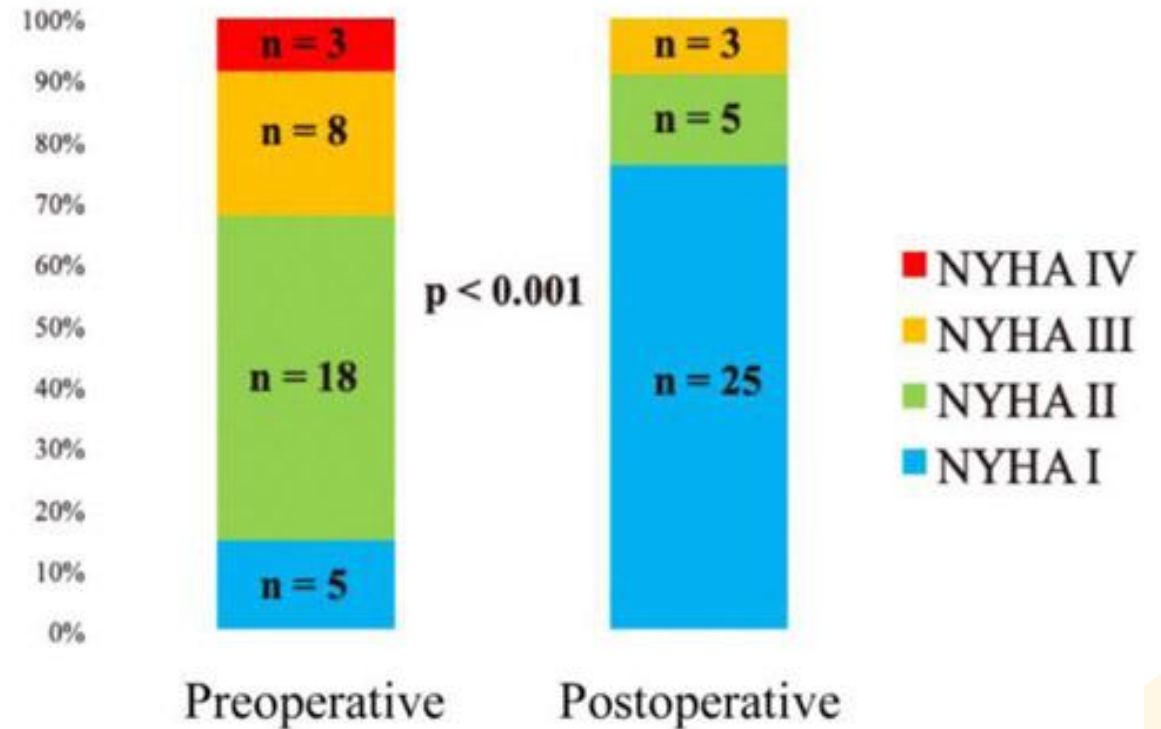


Surgical Ablation Outcomes

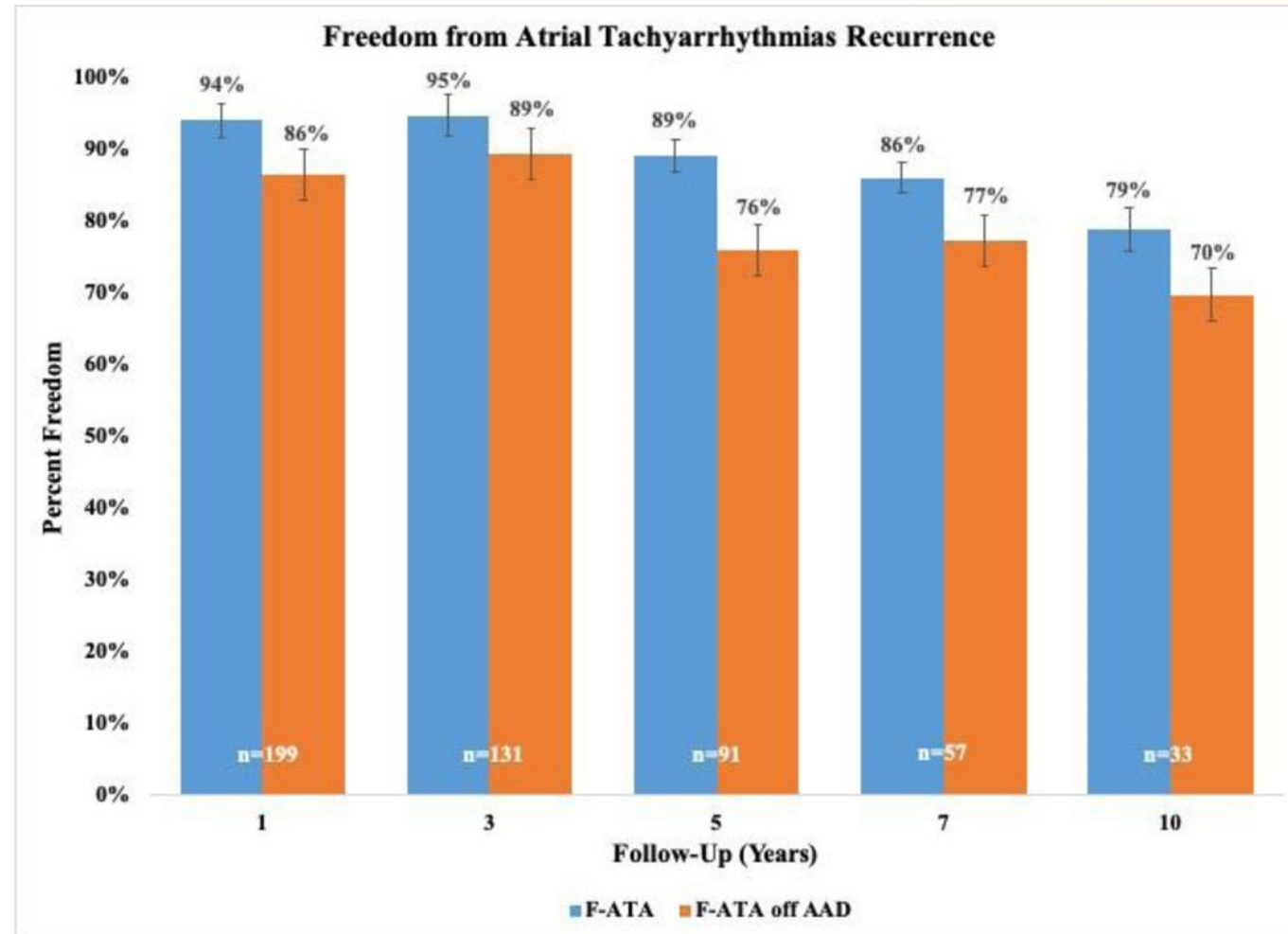
A



B

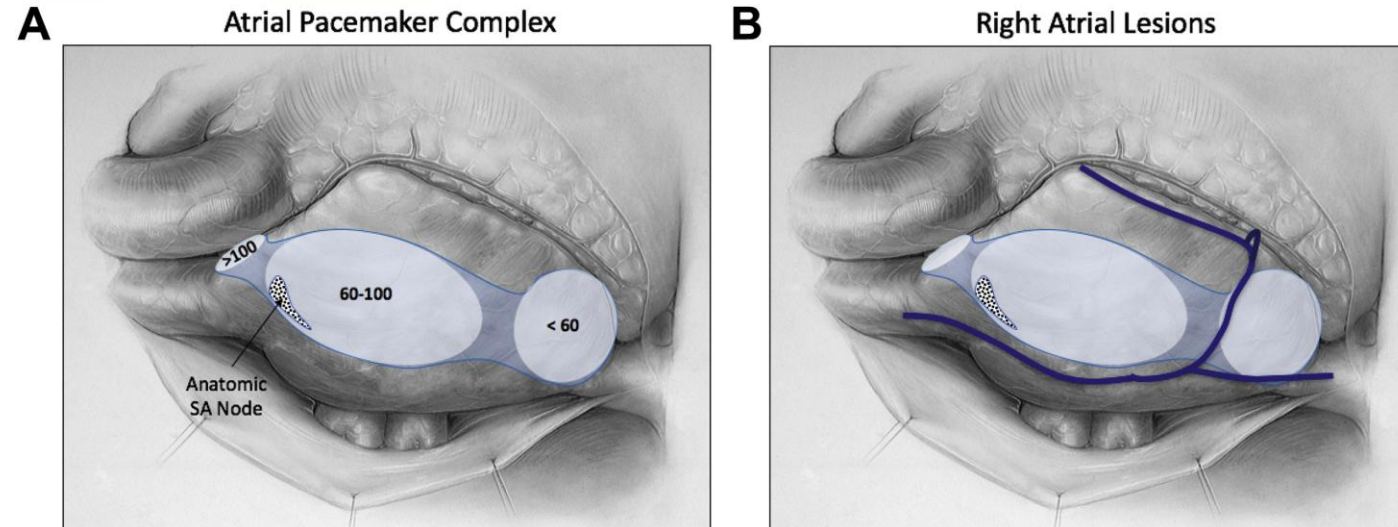


Surgical Ablation Outcomes

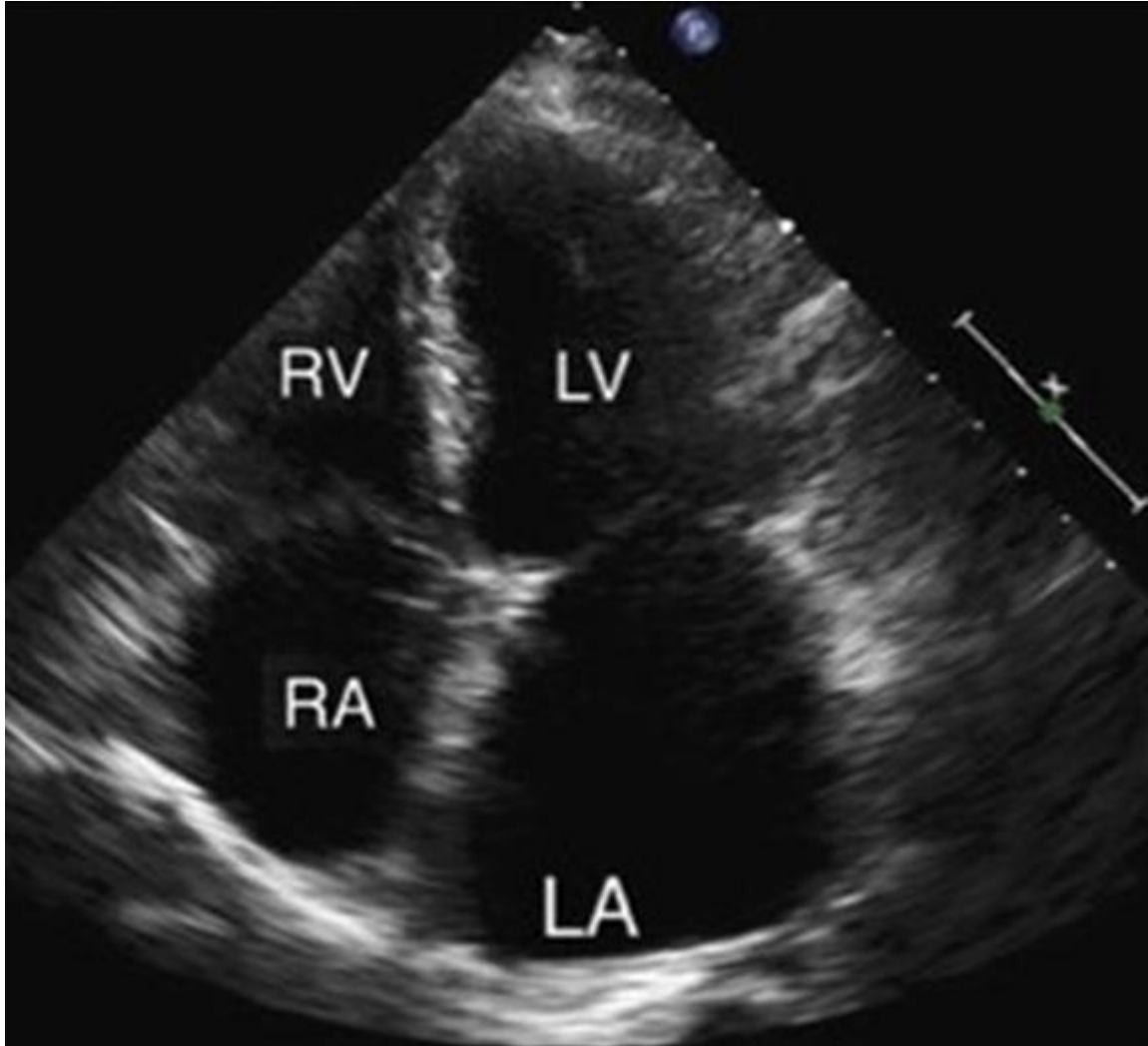


Surgical Ablation Outcomes

- Mortality <1%
- PPM: 1.5-3%
- NSR/Junctional post op
- Flutter
 - CTI



Outcomes – Yeah, but...



- LA size
- Duration of AF
- Completeness of lesion set

Postoperative Management

- AAD
 - Amiodarone
- Anticoagulants
 - 3 months
- LAAE: ANP disruption
 - Spironolactone
- Rhythm monitoring



Looking Ahead

- Hybrid & MIS
- Surgical PFA
- Prophylactic

- Patient awareness
- Screening/data collection
- Provider adherence



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Waipapa
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**University
of Auckland**

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Te Whatu Ora