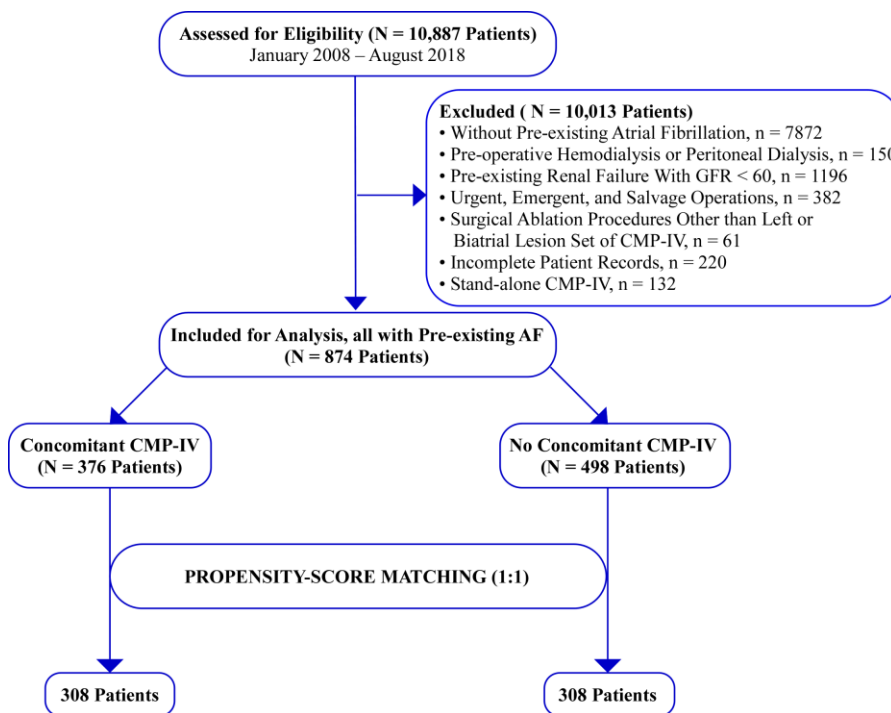


Figure E1. CONSORT diagram showing study population selection.



CMP-IV, Cox-Maze IV; *GFR*, Glomerular filtration rate.

Figure E2. Distribution of propensity scores between concomitant CMP-IV (blue) and no AF surgery (red) groups, before and after matching.

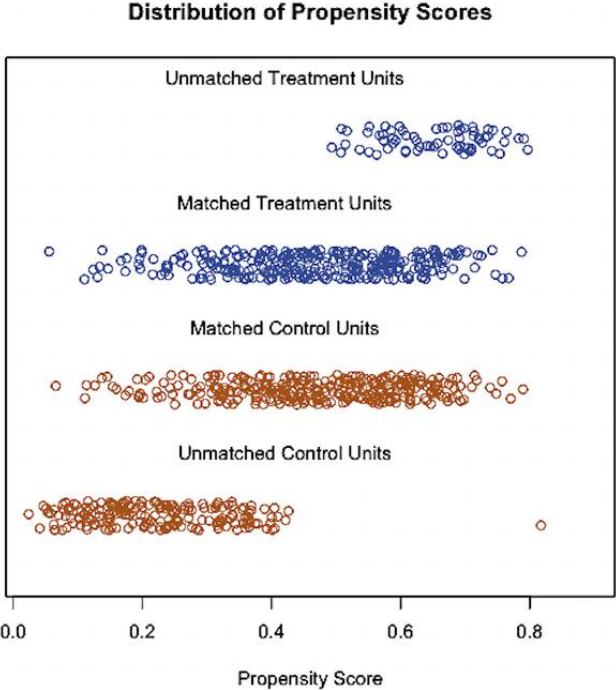
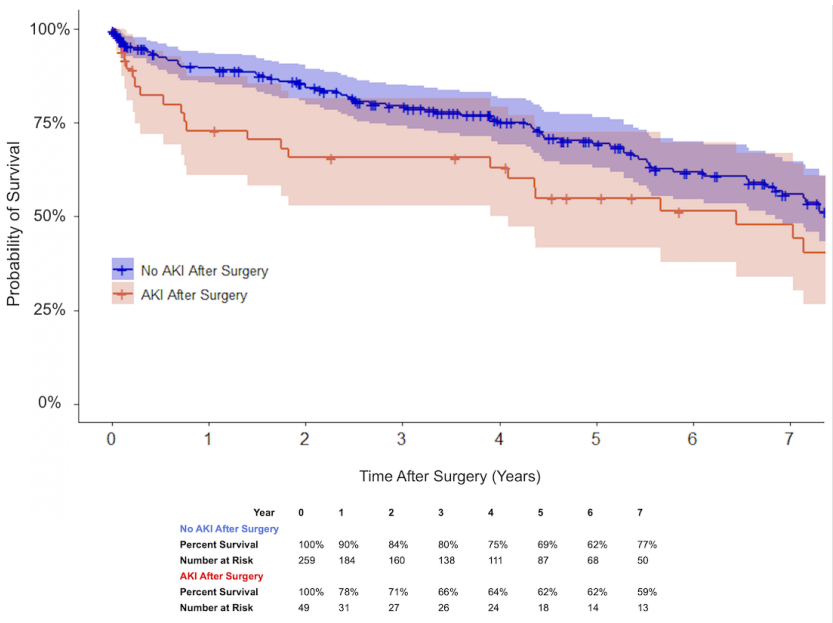


Figure E3. Kaplan-Meier depiction of late survival for patients who underwent no AF surgery stratified by new onset postoperative AKI with 95% confidence intervals: no AKI after surgery (blue) and AKI after surgery (red) ($P=0.014$).



AF, atrial fibrillation; *AKI*, acute kidney injury.

Supplementary Tables:

Table E1. Cox-Maze Lesion Set Subgroup Analysis

| Variable | Biatrial CMP-IV Lesion Set n=277 | Left Sided CMP-IV Lesion Set n=31 | P-value |
|--|---|--|----------------|
| CPB time (mins) | 182 [158-213] | 156 [132-188] | 0.002 |
| Aortic Cross-Clamp Time (mins) | 94 [75-112] | 96 [81-117] | 0.242 |
| AKI Threshold | | | |
| AKI | 90 (32%) | 9 (29%) | 0.697 |
| Renal Failure | 18 (6%) | 1 (3%) | 0.475 |
| Dialysis | 14 (5%) | 0 (0%) | 0.202 |
| Relative increase in serum creatinine from baseline | 1.27 [1.11-1.57] | 1.20 [1.02-1.50] | 0.230 |
| Postoperative GFR (mL/min/1.73m ³) | 60 [45-73] | 63 [46-74] | 0.699 |

Values are n (%) or median with interquartile range [IQR], unless otherwise indicated. *AF*, atrial fibrillation; *AKI*, acute kidney injury; *CMP-IV*, Cox-Maze IV procedure; *CPB*, cardiopulmonary bypass; *GFR*, glomerular filtration rate.

Table E2. Type of Concomitant Procedures

| Concomitant Operation | No AF Surgery n=308 | Concomitant CMP-IV n=308 |
|--------------------------------|--------------------------------|-------------------------------------|
| CABG | 26 (8%) | 40 (13%) |
| AVR ± CABG | 132 (43%) | 51 (17%) |
| MV Repair or Replacement ± AVR | 106 (35%) | 182 (59%) |
| Other | 44 (14%) | 35 (11%) |

Values are n (%) unless otherwise indicated. *AF*, atrial fibrillation; *AVR*, aortic valve replacement; *CABG*, coronary artery bypass graft; *CMP-IV*, Cox-Maze IV procedure; *MV*, mitral valve.