

## Supplementary Material

### **The incidence of cardiac surgery in adults with treated kidney failure in Australia: a retrospective cohort study**

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Supplementary Table S1. Unstandardised cardiac surgery incidence rates (per 1000 persons per year) and incidence rate ratios by age group, sex and modality at the time of surgery for 2010-2019

			Dialysis	Transplant	Non-KRT
18-39y	Female	N	13	7	1,900
		Rate (CI)	3.10 (1.65,5.30)	1.07 (0.43,2.21)	0.052 (0.05,0.054)
		IRR (CI)	59.80 (31.78,102.51)	20.66 (8.29,42.65)	
	Male	N	27	3	2,814
		Rate (CI)	5.26 (3.47,7.66)	0.32 (0.07,0.92)	0.076 (0.073,0.079)
		IRR (CI)	69.54 (45.74,101.40)	4.18 (0.86,12.23)	
40-49y	Female	N	45	8	1,831
		Rate (CI)	7.58 (5.53,10.14)	1.01 (0.44,1.99)	0.11 (0.11,0.12)
		IRR (CI)	66.98 (48.68,90.00)	8.94 (3.85,17.64)	
	Male	N	98	23	5,437
		Rate (CI)	12.82 (10.41,15.63)	1.85 (1.17,2.78)	0.34 (0.33,0.35)
		IRR (CI)	37.28 (30.21,45.52)	5.38 (3.41,8.08)	
50-59y	Female	N	91	25	3,832
		Rate (CI)	9.5 (7.65,11.67)	2.43 (1.57,3.58)	0.26 (0.25,0.26)
		IRR (CI)	37.62 (30.25,46.26)	9.51 (6.14,14.06)	
	Male	N	203	50	15,108
		Rate (CI)	15.34 (13.3,17.60)	3 (2.23,3.95)	1.04 (1.02,1.05)
		IRR (CI)	14.86 (12.88,17.06)	2.89 (2.14,3.81)	
60-69y	Female	N	104	21	7,381
		Rate (CI)	8.85 (7.23,10.72)	2.12 (1.31,3.24)	0.61 (0.60,0.62)
		IRR (CI)	14.78 (12.08,17.90)	3.47 (2.15,5.31)	
	Male	N	331	96	26,411
		Rate (CI)	18.72 (16.76,20.85)	5.73 (4.64,7.00)	2.24 (2.22,2.27)
		IRR (CI)	8.49 (7.61,9.46)	2.57 (2.09,3.14)	
70y+	Female	N	63	12	14,675
		Rate (CI)	3.55 (2.73,4.54)	2.48 (1.28,4.34)	1.12 (1.10,1.13)
		IRR (CI)	3.68 (2.88,4.62)	2.78 (1.55,4.58)	
	Male	N	268	53	33,737
		Rate (CI)	8.91 (7.88,10.04)	7.18 (5.38,9.39)	3.12 (3.09,3.15)
		IRR (CI)	3.04 (2.70,3.42)	2.47 (1.87,3.20)	

CI, 95% confidence interval; KRT, kidney replacement therapy; IRR, incidence rate ratio.

Supplementary Table S2. Age-sex-standardised incidence rates (per 1000 persons per year) by modality at the time of surgery and procedure type for 2015-2019. Relative rate denominator is non-KRT population.

		Dialysis	Transplant	Non-KRT
Isolated	N	440	62	33,517
CABG	Rate (CI)	4.97 (4.28,5.73)	0.58 (0.41,0.82)	0.31 (0.31,0.31)
	Relative Rate (CI)	15.97 (13.76,18.43)	1.87 (1.31,2.64)	
Isolated	N	61	31	7,022
AVR	Rate (CI)	0.66 (0.42,1.00)	0.36 (0.20,0.62)	0.065 (0.064,0.067)
	Relative Rate (CI)	10.14 (6.35,15.35)	5.58 (3.02,9.50)	
AVR and	N	63	21	4,160
CABG	Rate (CI)	0.37 (0.27,0.54)	0.18 (0.10,0.32)	0.037 (0.036,0.038)
	Relative Rate (CI)	10.00 (7.31,14.51)	4.83 (2.83,8.80)	
Isolated	N	25	6	3,942
MV surgery	Rate (CI)	0.61 (0.31,1.04)	0.12 (0.03,0.33)	0.038 (0.037,0.039)
	Relative Rate (CI)	15.92 (8.07,27.27)	3.22 (0.71,8.72)	

AVR, aortic valve replacement; CABG, coronary artery bypass graft; CI, 95% confidence interval; KRT, kidney replacement therapy; MV, mitral valve.