

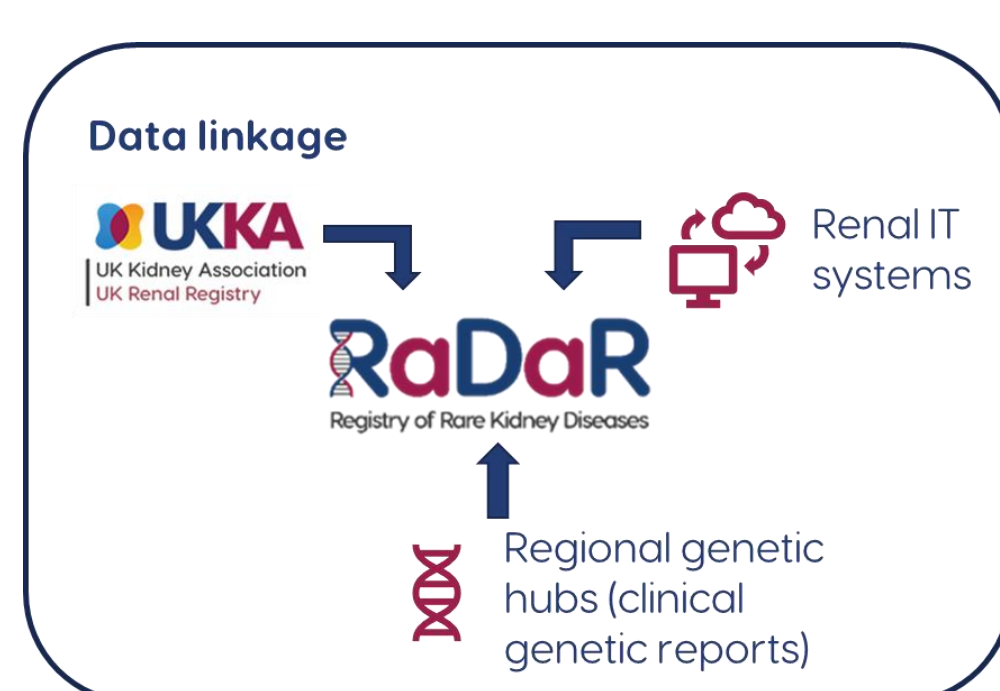
Outcomes of renal transplantation in FSGS and IgA Nephropathy in the UK RaDaR registry mapped to post-transplant proteinuria control

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Background and methods

- Long term graft survival after renal transplantation varies by primary renal diagnosis and has been correlated with proteinuria.
- This study of the UK Rare Disease Registry (RaDaR) examines outcomes in patients with biopsy proven primary renal diagnoses of (non-secondary) focal segmental glomerulosclerosis (FSGS), minimal change disease (MCD) and IgA Nephropathy (IgAN)
- Graft failure defined as a composite outcome of kidney replacement therapy (KRT), eGFR sustained < 15ml/min/1.73m², and death
- Outcomes mapped to proteinuria at 1 year post transplant and to the subsequent control of proteinuria at 18-36 months post transplant
- Data extraction occurred on 14 August 2025

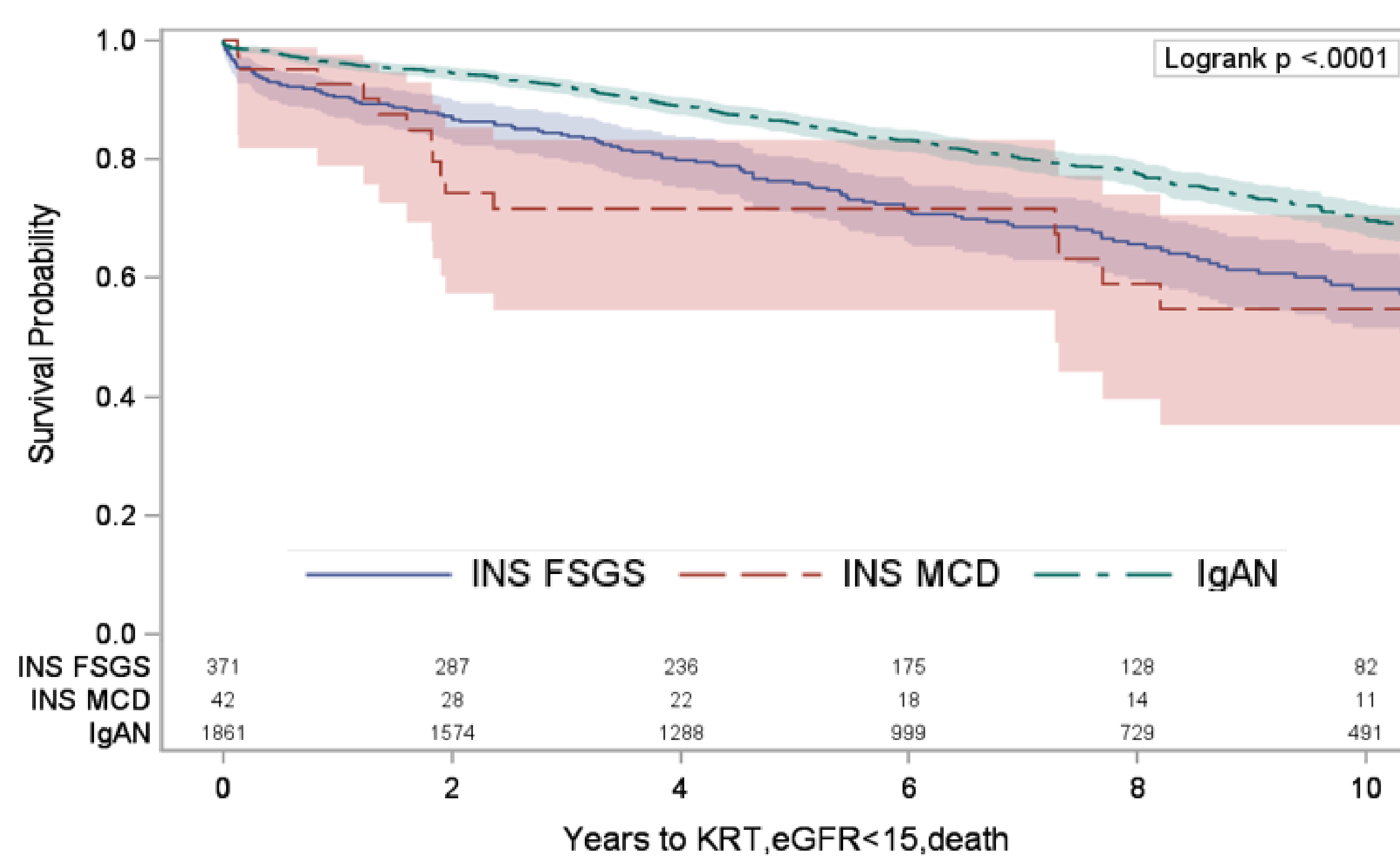


National Registry of Rare Kidney Diseases (RaDaR)

- Recruiting patients with rare kidney diseases since 2010, into 30 different rare disease groups
- > 108 renal units across all 4 nations of the UK

Results

- Kaplan-Meier plot for the 2274 patients who received a first renal transplant since 2005. Graft survival in years from date of transplantation to composite kidney failure event
- Transplant survival significantly better for patients with IgA nephropathy



FSGS focal segmental glomerulosclerosis; MCD minimal change disease; IgAN immunoglobulin A nephropathy; KRT kidney replacement therapy

Demographics and outcomes for patients with a proteinuria value 12 months post transplantation

- 36% of patients transplanted since 2005 had proteinuria data available in RaDaR to quantify uPCR at 1-year post transplant
- Percentage of patients with uPCR ≥0.3 g/g at 12 months post transplantation varied by diagnosis; MCD 60%, FSGS 40%, IgAN 21%

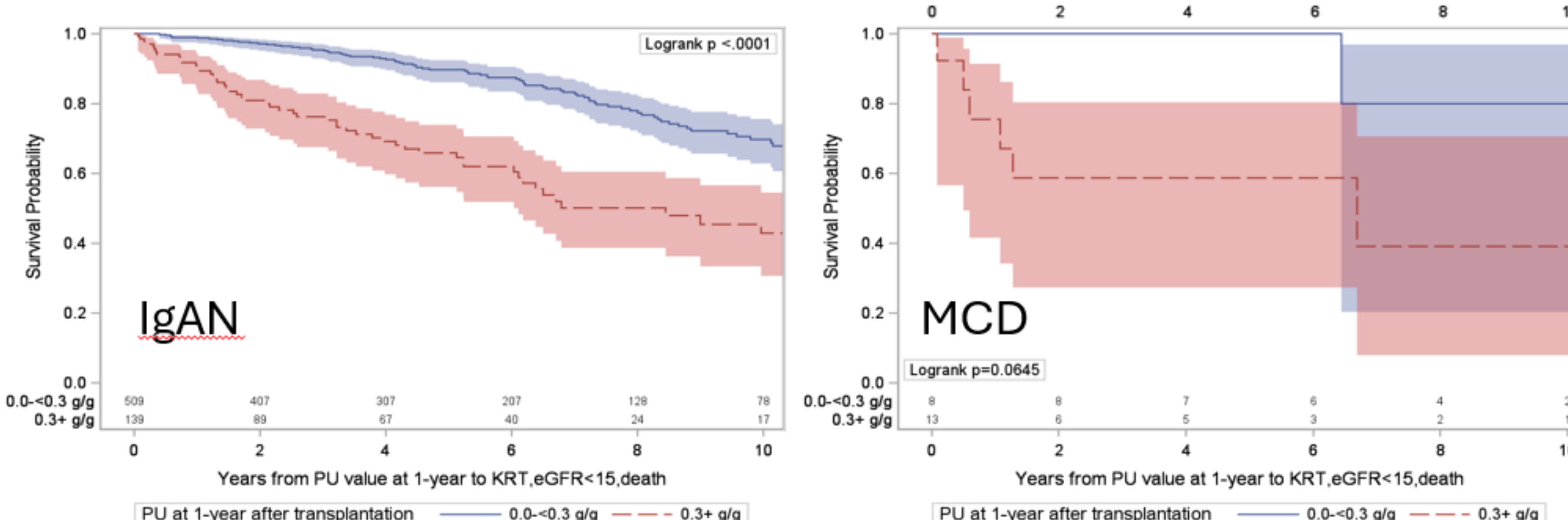
	FSGS		MCD		IgAN	
	n	%	n	%	n	%
Age						
years, median (IQR)	41 (27-55)		16 (14-23)		47 (35-59)	
Gender						
Female	58	41	5	24	159	25
Time from diagnosis to transplantation						
years, median (IQR)	5.1 (3.0-10.1)		8.2 (4.6-13.1)		4.6 (2.1-9.3)	
eGFR at 12 months						
mL/min/1.73m ² , median (IQR)	51 (41-65)		71 (35-108)		54 (42-68)	
UPCR at 12 months						
g/g, median (IQR)	0.18 (0.08-0.88)		0.73 (0.12-8.41)		0.12 (0.07-0.26)	
≥0.3 g/g	57	40	13	62	139	21
Graft survival rate						
5-year (95% CI)	0.79 (0.70, 0.85)		0.75 (0.50, 0.89)		0.85 (0.81, 0.88)	
10-year (95% CI)	0.50 (0.37, 0.62)		0.56 (0.27, 0.78)		0.64 (0.58, 0.69)	

FSGS focal segmental glomerulosclerosis; MCD minimal change disease; IgAN immunoglobulin A nephropathy; IQR interquartile range; CI confidence interval; uPCR urine protein:creatinine ratio.

Graft survival stratified by proteinuria value 12 months post transplant

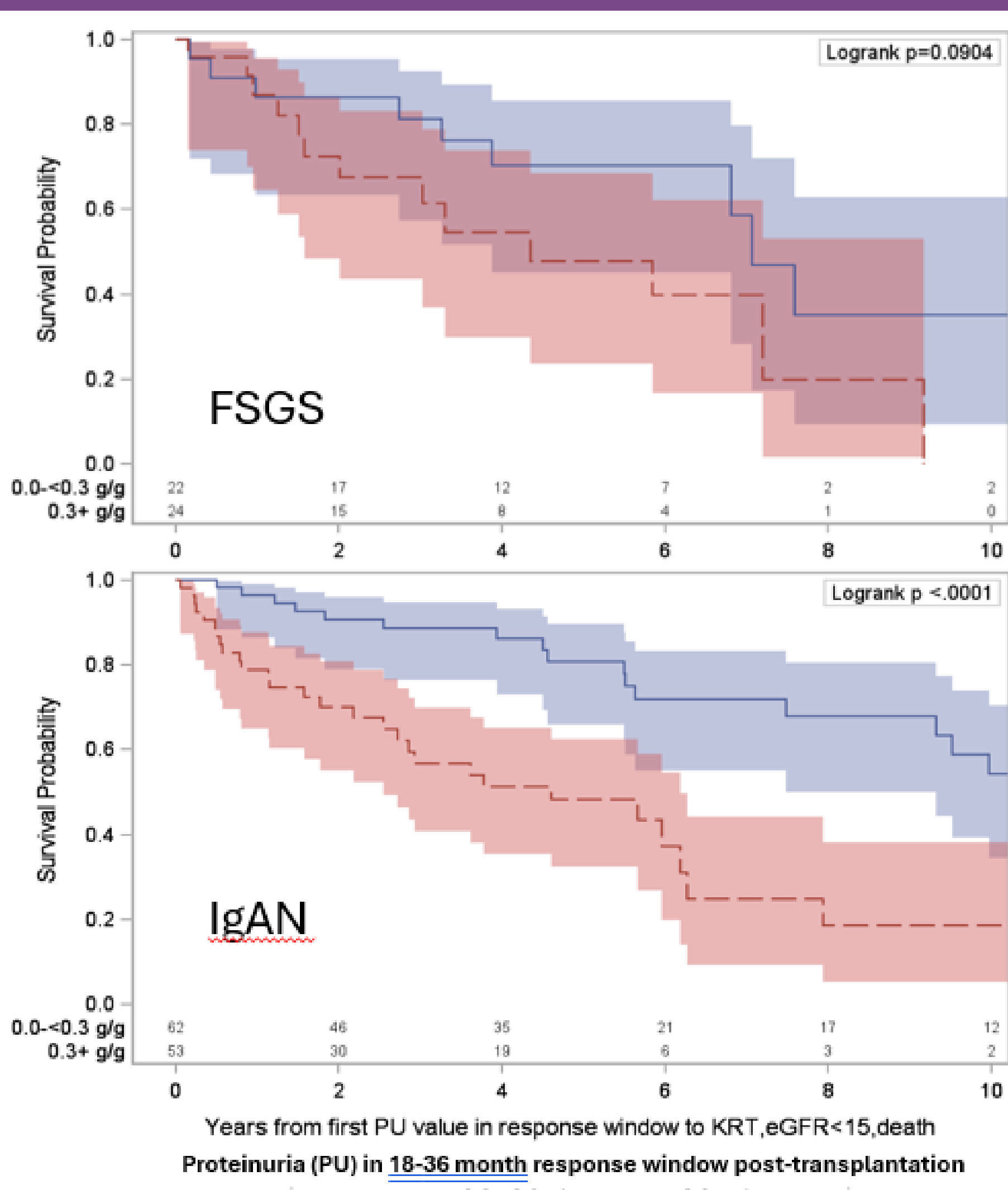
- Patients stratified based on nearest proteinuria value to 12-months after transplantation (within a 9-15 month window)
- Graft survival from uPCR value to composite failure event

- Significantly better graft survival for patients with uPCR < 0.3 g/g at 12 months:
 - FSGS (p<0.0001)
 - IgAN (p<0.0001)
 - MCD (p=0.065)



FSGS focal segmental glomerulosclerosis; MCD minimal change disease; IgAN immunoglobulin A nephropathy; uPCR urine protein:creatinine ratio; PU proteinuria.

Graft survival from 18-36 months post transplantation



- Only patients with proteinuria (PU) >0.3 g/g at 12-months post transplant included here
- Patients are stratified based on the lowest PU value in 18-36 month post transplant follow-up window
- IgAN patients with PU<0.3 g/g had significantly better graft survival (p<0.0001)
- No significant difference for FSGS patients. Too few MCD patients to analyse.

Limitations and conclusions

Limitations

- Only a third of patients had a uPCR measurement at 12-months post transplantation recorded in RaDaR
- Survivor bias means that patients with better outcomes will be over-represented in this analysis since anyone who died post transplant and prior to the set up of RaDaR would not have had the opportunity to be recruited to RaDaR and would therefore be omitted from these analyses

Conclusions

- Renal transplant outcomes are better in IgAN patients than those with native diagnoses of FSGS or MCD. This is associated with lower incidence of proteinuria above 0.3 g/g at 12 months. Disease recurrence rates may contribute to these differences.
- Transplant outcomes in MCD were no better than FSGS despite the younger age of the MCD cohort.
- For those patients who have proteinuria ≥0.3 g/g at 12 months post transplantation, outcomes were poor and not correlated with native diagnosis. These data suggest that the development of PU has prognostic significance irrespective of underlying primary glomerular disease.
- Beyond 12 months, the control of PU appears to be associated with improved outcomes, suggesting the value of interventions that reduce proteinuria.

