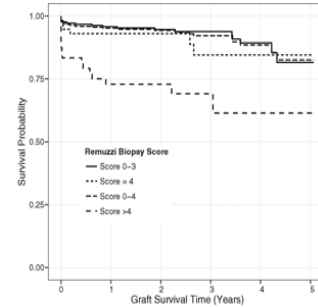


Histopathology The Cambridge Experience

Dr Meryl Griffiths
Dr Vicky Bardsley
Dr Sathia Thiru
Addenbrooke's Hospital Cambridge



Score 0-3	214	185	125	75	29	3
Score = 4	57	44	26	12	7	1
Score 0-4	271	229	151	87	35	4
Score >4	48	30	21	9	4	1

Numbers at risk

Relationship between baseline donor chronic kidney injury and deceased donor transplant survival (320 biopsies).

Baseline Donor Chronic Renal Injury Confers the Same Transplant Survival for DCD and DBD Kidneys.
V Koomaliappan, M Sali, V Bardsley, Y Chen, S Thiru, MH Griffiths, HC Copley, K Saeb-Parsy, JA Bradley, N Torpey and GJ Pettigrew.
Am J Transplant 2015;20:1010.

Grading Pre-Implantation Renal Transplant Biopsies (adapted Remuzzi scoring)

A 5 mm punch biopsy is cut lengthwise as per proforma and sectioned face down. The biopsy should contain 15 or more glomeruli and at least 1 interlobular artery.

Glomerular global sclerosis	0-2%	0
	2-20%	1
	20-50%	2
	>50%	3
Tubular atrophy	0-2%	0
	<20%	1
	20-50%	2
	>50%	3
Interstitial fibrosis	0-2%	0
	<20%	1
	20-50%	2
	>50%	3
Arteries	normal	0
	ms nor	1
	wall+lumen	2
	wall+lumen	3

Score worst artery present, using the shorter diameter i.e. the true cross section, if elliptical.
If arterioles score worse than arteries this should be commented on.
Report acute tubular injury as it influences early post-transplant function.

Ref: Remuzzi G et al. J Am Soc Nephrol 10: 2591-2598, 1999

Synoptic Report

HCST Donor ID

Type

Sample

Biopsy under Donor details

Max Dimensions (mm)

Donor Kidney Number of pieces

Number of glomeruli

Percentage sclerosed glomeruli

Arteries present

Suitable for Remuzzi scoring

Glomerulosclerosis Value

Tubular Atrophy value

Interstitial Fibrosis Value

Arterial score value

Abscise histology

ATI/ATN

Additional comment(s)

Discussed with surgeon pre tx

Date surgeon informed

Remuzzi scoring tool will only be visible if 'Yes' is selected

Reporting to Surgeon

- Score 0-3 histologically suitable for single implantation
 - Score 4 probably suitable for single implantation
 - Score 5 best for dual transplant (older recipient)
 - Score 6 may be used as dual transplant with 4 or 5
 - Score 7-12 discard kidney
-
- If score for any component is 1 but 2-10% and total is 4 or 5 – this is a 'good' 4/5
 - Histological assessment informs only part of the surgeon's assessment which includes size of kidney, ease of perfusion, surgical access etc. etc.)