

Table S1. Combined (n =703) Demographics^a.

Recipient and donor characteristics	All kidneys ^b (n = 564)	Kidneys that did not progress to failure after the biopsy ^b (n = 436)	Kidneys that progressed to failure after the biopsy ^b (n = 128)	P value ^d (Failed vs working)
Mean recipient age (years)	49 (10 – 86)	49 (10 – 86)	46 (18 – 74)	0.02
Recipient Gender (% male)	365 (65%)	277 (64%)	88 (69%)	0.28
Race				
Caucasian	421 (75%)	332 (76%)	89 (70%)	0.13
Black	45 (8%)	34 (8%)	11 (9%)	0.77
Other	72 (13%)	52 (12%)	20 (16%)	0.27
NA	26 (5%)	18 (4%)	8 (6%)	0.31
Primary disease				
Diabetic nephropathy	93 (16%)	76 (17%)	17 (13%)	0.27
Hypertension / large vessel disease	37 (7%)	29 (7%)	8 (6%)	0.87
Glomerulonephritis / vasculitis	156 (27%)	106 (24%)	50 (39%)	0.001
Interstitial nephritis / pyelonephritis	26 (5%)	20 (5%)	6 (5%)	0.96
Polycystic kidney disease	64 (11%)	51 (12%)	13 (10%)	0.63
Other primary diseases ^c	30 (7%)	22 (5%)	8 (6%)	0.59
Unknown etiology	158 (27%)	132 (29%)	26 (20%)	0.04
Mean donor age	41 (1 – 75)	41 (2 – 75)	39 (1 – 65)	0.16
Donor gender (% male)	93 (16%)	76 (17%)	17 (13%)	0.27
Donor type (% deceased donor transplants)	37 (7%)	29 (7%)	8 (6%)	0.87
Clinical characteristics at time of biopsy	All biopsies (n = 703)	Kidneys that did not progress to failure after the biopsy ^b (n = 436)	Kidneys that progressed to failure after the biopsy ^b (n = 128)	P value (Failed vs working)
Median and range time from transplant to biopsy (days)	571 (3 – 12831)	400 (3 - 12831)	2149 (6 – 11453)	<0.001
Median follow up time (days)	902 (0 - 3212)	987 (0 - 3212)	405 (0 – 2610)	<0.001
Indication for biopsy				
Primary non-function	11 (2%)	6 (1%)	2 (2%)	1.00
Rapid deterioration of graft function	161 (23%)	85 (19%)	46 (36%)	<0.001
Slow deterioration of graft function	216 (31%)	137 (31%)	32 (25%)	0.16
Stable impaired graft function	88 (13%)	53 (12%)	14 (11%)	0.71
Investigate proteinuria	103 (15%)	66 (15%)	19 (15%)	0.93
Follow-up from previous biopsy	20 (3%)	10 (2%)	4 (3%)	0.53
Others	76 (11%)	22 (5%)	8 (6%)	0.59
Indication unknown	28 (4%)	57 (13%)	3 (2%)	<0.001
Maintenance immunosuppressive regimens at biopsy				
MMF, tacrolimus, steroid	259 (37%)	163 (37%)	34 (27%)	0.02
MMF, cyclosporine, steroid	125 (18%)	63 (14%)	29 (23%)	0.03
Others	319 (45%)	210 (48%)	65 (51%)	0.60
HLA antibody assessment at time of biopsy				
DSA positive	209 (29%)	99 (23%)	64 (50%)	<0.001
Non-donor specific HLA antibodies	133 (19%)	85 (19%)	17 (13%)	0.11
No HLA antibodies	268 (38%)	176 (40%)	34 (27%)	<0.001
Not tested	93 (13%)	76 (17%)	13 (10%)	0.047
HLA antibody assessment at time of transplant				
PRA positive	144 (20%)	98 (22%)	23 (18%)	0.27
PRA negative	405 (58%)	233 (53%)	69 (54%)	0.93
No data available	154 (22%)	105 (24%)	36 (28%)	0.35

^a The centers included University of Alberta, Edmonton, AB, Canada; University of Minnesota, Minneapolis, MN, USA; Manchester Royal Infirmary, Manchester, England; University of Maryland School of Medicine, Baltimore, MD, USA; Hospital Vall d'Hebron, Barcelona, Spain; Hennepin County Medical Center, Minneapolis, MN, USA; Medical School of Hannover, Hannover, Germany; and University of Illinois, Chicago, IL, USA

^b We selected one random biopsy per kidney.

^c Other primary diseases included membranous nephropathy, miscellaneous, neoplasms/tumors, nephrolithiasis, reflux nephropathy, and scleroderma. ^d Chi-square test, Fisher's exact test or Student's t test used for statistical analyses