

Supplemental table 1. Demographic characteristics of propensity score matched cohort

	Total N = 104	UPKT N = 37	Controls N = 67	p value
Recipient age (years old), mean±SD	43.8 ± 18.1	43.6 ± 17.9	44.0 ± 18.4	0.914
Recipients aged < 18 yo, n(%)	13 (12.5)	4 (10.8)	9 (13.4)	0.768
Recipient gender – female, n(%)	37 (35.6)	17 (45.9)	20 (29.9)	0.134
Body mass index (kg/m ²), mean±SD	23.8 ± 5.0	23.8 ± 5.7	23.8 ± 4.7	0.960
Recipient race, n(%)				0.834
<i>Caucasian</i>	7 (6.7)	3 (8.1)	4 (6.0)	
<i>Afro-Brazilian</i>	15 (14.4)	6 (16.2)	9 (13.4)	
<i>Mixed race</i>	82 (78.8)	28 (75.7)	54 (80.6)	
CKD etiology, n(%)				0.922
<i>Unknown</i>	41 (39.4)	14 (37.8)	27 (40.3)	
<i>Hypertension</i>	12 (11.5)	6 (16.2)	6 (9.0)	
<i>Diabetes mellitus</i>	17 (16.3)	7 (18.9)	10 (14.90)	
<i>Chronic glomerulonephritis</i>	14 (13.5)	4 (10.8)	10 (14.9)	
<i>Urological</i>	7 (6.7)	2 (5.4)	5 (7.5)	
<i>Other</i>	13 (12.5)	4 (10.8)	9 (13.4)	
RRT before KT, n(%)				0.915
<i>Hemodialysis</i>	94 (90.4)	33 (89.2)	61 (91.0)	
<i>Peritoneal dialysis</i>	3 (2.9)	1 (2.7)	2 (3.0)	
<i>Both</i>	7 (6.7)	3 (8.1)	4 (6.0)	
Time on Dial (months), mean±SD (median)	44.5 ± 33.1 (34.9)	56.7 ± 36.4 (56.9)	37.7 ± 29.3 (30.4)	0.030
Time Dial-WL (months), mean±SD (median)	36.2 ± 32.7 (25.9)	47.2 ± 37.8 (34.7)	30.1 ± 28.1 (21.7)	0.010
Time on WL (months), mean±SD (median)	8.2 ± 11.6 (3.3)	9.6 ± 17.1 (1.8)	7.5 ± 7.1 (4.6)	0.057
HIV positive, n(%)	1 (1.0)	1 (2.7)	0 (0)	0.356
HCV positive, n(%)	2 (1.9)	1 (2.7)	1 (1.5)	1.000
HbSAg positive, n(%)	0 (0)	0 (0)	0 (0)	n.a.
Retransplantation, n(%)	4 (3.8)	2 (5.4)	2 (3.0)	0.615
Class I PRA (%), mean±SD (median)	12.9 ± 24.4 (0)	14.9 ± 25.5 (0)	11.7 ± 23.9 (0)	0.172
Class II PRA (%), mean±SD (median)	5.6 ± 19.4 (0)	7.4 ± 20.4 (0)	4.6 ± 19.0 (0)	0.086
HLA MM, mean±SD	3.9 ± 1.2	4.5 ± 1.0	3.5 ± 1.2	<0.001
Preformed DSA > 1,500 MFI, n(%)	12 (11.5)	4 (10.8)	8 (11.9)	1.000
Donor age (years old), mean±SD	30.7 ± 12.1	28.3 ± 9.1	32.0 ± 13.5	0.137
Cause of donor death, n(%)				0.077
<i>Head trauma</i>	63 (60.6)	29 (78.4)	34 (50.7)	
<i>Cerebrovascular</i>	27 (26.0)	6 (16.2)	21 (31.3)	
<i>Anoxia</i>	6 (5.8)	1 (2.7)	5 (7.5)	
<i>Other</i>	8 (7.7)	1 (2.7)	7 (10.4)	
Donor final creatinine (mg/dL), mean±SD	1.6 ± 1.1	1.7 ± 1.1	1.6 ± 1.2	0.600
Expanded criteria donor, n(%)	3 (2.9)	1 (2.7)	2 (3.0)	1.000
Cold ischemia time (h), mean±SD	23.6 ± 7.2	23.7 ± 5.8	23.5 ± 8.0	0.904
r-ATG induction therapy, n(%)	104 (100.0)	37 (100.0)	67 (100.0)	n.a.
Maintenance IS, n(%)				0.444
<i>TAC – EVR</i>	70 (68.0)	27 (75.0)	43 (64.2)	
<i>TAC – MPA</i>	27 (26.2)	8 (22.2)	19 (28.4)	
<i>Other</i>	6 (5.8)	1 (2.8)	5 (7.5)	
Steroid, n(%)	31 (30.1)	11 (30.6)	20 (29.9)	1.000

SD: standard deviation; CKD: chronic kidney disease; KT: kidney transplantation; RRT: renal replacement therapy; PRA: panel reactive antibodies; HLA: human leucocyte antigens; MM mismatches; DSA: donor specific anti-HLA antibodies; r-ATG: rabbit antithymocyte globulin; IS: immunosuppression; TAC: tacrolimus; EVR: everolimus; MPA: mycophenolate sodium or mofetil; n.a: not applicable.

Time on Dial: time since the onset of dialysis to KT

Time Dial-WL: time since the onset of dialysis to registration on WL

Time on WL: time since the registration on waiting list to KT

Supplemental table 2. Outcomes of propensity score matched cohort

	Total N = 104	UP KT N = 37	Controls N = 67	p value
DGF, n(%)	53 (51.0)	22 (59.5)	31 (46.3)	0.224
Time on DGF (days), mean±SD (median)	18.1 ± 24.8 (11)	18.0 ± 15.5 (16)	18.2 ± 30.0 (8)	0.120
Technical complication requiring surgery, n(%)	12 (11.5)	4 (10.8)	8 (11.9)	1.000
Length of hospital stay, mean±SD (median)	22.6 ± 31.3	31.7 ± 44.3	17.6 ± 19.7	0.027
Treated AR, n(%)	4 (3.8)	2 (5.4)	2 (3.0)	0.615
BPAR, n(%)	2 (1.9)	2 (5.4)	0 (0)	0.124
1-month rehospitalization for any cause, n(%)	20 (19.6)	5 (14.3)	15 (22.4)	0.240
Infection requiring hospitalization, n(%)	38 (36.9)	16 (43.2)	22 (33.3)	0.395
Graft loss, n(%)	8 (7.7)	5 (13.5)	3 (4.5)	0.129
eGFR at 12 months (mL/min/1.73m ²), mean±SD*	64.7 ± 31.7	62.5 ± 31.8	66.0 ± 31.8	0.588
Time on follow up (months), mean±SD	28.8 ± 16.0	27.7 ± 17.7	29.5 ± 15.0	0.588

SD: standard deviation; DGF: delayed graft function; BPAR: biopsy-proven acute rejection; AR: acute rejection; eGFR: estimated glomerular filtration rate.

*LOCF analysis

Supplemental table 3. Graft losses of propensity score matched cohort

ID	Group	Sex	Age (yo)	CKD etiology	ReKT	Time on dialysis (mo)	DSA	Induction therapy	IS	Graft loss cause	Time to graft loss (days)
19	UP KT	F	23	Unknown	Y	72.0	Y	rATG/IVIG	TAC-EVR-ST	AMR	361
36	UP KT	F	39	CGN	N	21.8	N	rATG*	n.a.	Thrombosis	0
42	UP KT	M	65	Lithiasis	N	63.6	N	rATG	TAC-EVR	IFTA-ni	395
58	UP KT	M	5	Urological	N	32.5	N	rATG*	n.a.	Thrombosis	0
74	UP KT	F	46	Unknown	N	19.6	Y	rATG/IVIG/PP	TAC-EVR-ST	AMR	31
85	Control	M	46	Unknown	N	72.5	N	rATG	TAC-EVR	IFTA-i	358
153	Control	M	65	CGN	N	148.4	N	rATG	TAC-EVR-MP	PNF ¹	149
154	Control	M	54	CGN	N	134.8	N	rATG	TAC-EVR	PNF ²	37

ID: patient identification; M: male; F: female; CKD: chronic kidney disease; CGN: chronic glomerulonephritis ReKT: retransplantation; DSA: preformed anti-HLA donor specific antibodies; Y: yes; N: no; IS: maintenance immunosuppression; rATG: rabbit antithymocyte globulin; IVIG: intravenous immunoglobulin; PP: plasmapheresis; TAC: tacrolimus; MP: mycophenolate sodium or mofetil; ST: steroid; EVR: everolimus; BKVN: BK virus nephropathy; AMR: antibody mediated rejection; APN: acute pyelonephritis; IFTA-i: immune interstitial fibrosis and tubular atrophy; IFTA-ni: nonimmune interstitial fibrosis and tubular atrophy; PNF: primary non function.

*only intraoperative dose

1. Renal artery stenosis without improvement of graft perfusion after surgical correction

2. Anatomopathological finding after nephrectomy: acute pyelonephritis