

Supplemental Table 1; Causes of End stage kidney disease (ESKD) in recipients from Extended criteria donors (ECD) categorized by donor age groups.

	All patients (n = 647)	Donors 50-59 Yrs (n = 91)	Donors 60-69 yrs (n = 264)	Donors 70-79 yrs (n = 265)	Donors ≥ 80 yrs (n = 27)	P value
Causes of ESKD						
Diabetes	44 (6.8 %)	4 (4.4%)	19 (7.2%)	19 (7.2%)	2 (7.5%)	P = 0.05
Glomerular	135 (20.9 %)	22 (24.2%)	49 (18.6%)	61 (23.0%)	3 (11.1%)	
Interstitial	76 (11.7 %)	7 (7.6 %)	39 (14.8%)	27 (10.2%)	3 (11.1%)	
APKD	101 (15.6 %)	16 (17.6%)	49 (18.6%)	31 (11.7%)	5 (18.5%)	
Hypertension	101 (15.6 %)	12 (13.2%)	29 (11.0%)	51 (19.2%)	9 (33.3%)	
Other	190 (29.4 %)	30 (33.0%)	79 (29.9%)	76 (28.7%)	5 (18.5%)	

ESKD = end stage kidney disease; APKD = Adult polycystic kidney disease

Supplemental Table 2; causes of death in recipients from Extended criteria donors (ECD) categorized by donor age groups

	All patients (n= 647)	Donor 50-59 yrs (n = 264)	Donor 60-69 yrs (n = 265)	Donor 70-79 yrs (n = 265)	Donors ≥ 80 yrs (n = 27)	P value
Causes of death	110 (17.0%)	12 (13.2%)	47 (17.8%)	46 (17.4%)	5 (18.5%)	P = 0.91
Cardiovascular	34 (5%)	6 (6.6%)	12 (4.5%)	15 (5.7%)	1 (3.7%)	P = 0.10
Cancer	19 (3.4%)	0	8 (3%)	9 (3.4%)	2 (7.4%)	
Sepsis	30 (4.7%)	4 (4.4%)	9 (3.4%)	16 (6%)	1 (3.7%)	
Other	27 (4.5%)	2 (2.2%)	18 (6.8%)	6 (2.3%)	1 (3.7%)	

Supplemental Table 3; Causes of graft loss in recipients from Extended criteria Donors (ECD) categorized by donor age groups

		All patients (n = 647)	Donors 50-59 yrs (n = 91)	Donors 60-69 yrs (n =264)	Donors 70-79 yrs (n = 265)	Donors ≥ 80 yrs (n = 27)	P value
Graft loss		215 (33.2%)	29 (31.9%)	89 (33.7%)	86 (32.5%)	10 (37.0%)	P = 0.85
Causes of graft loss	DFG	78 (12.6%)	8 (8.8%)	34 (12.9%)	33 (12.5%)	3 (11.1%)	P = 0.87
	Vascular events	14 (2.3%)	1 (1.1%)	6 (2.3%)	6 (2.3%)	1 (3.7%)	
	Urological complications	9 (1.4%)	2 (2.2%)	4 (1.5%)	2 (0.8%)	1 (3.7%)	
	De novo GNF	4 (0.4%)	2 (2.2%)	1 (0.4%)	1 (0.4%)	0	
	Recurrent GNF	7 (1.3%)	0	5 (1.9%)	2 (0.8%)	0	
	AR	10 (1.4%)	2 (2.2%)	4 (1.5%)	3 (1.1%)	1 (3.7%)	
	Chronic failure	63 (9.7%)	9 (9.9%)	26 (9.8%)	25 (9.4%)	3 (11.1%)	
	Other	30 (4.6%)	5 (5.5%)	9 (3.%)	14 (5.3%)	1 (3.7%)	

DFG = death with functioning graft; Vascular events = arterial or venous thrombosis; Urological complication = ureteral fistula or stenosis; GNF = glomerulonephritis; AR = acute rejection; chronic failure = transplant glomerulopathy, interstitial fibrosis/tubular atrophy, chronic transplant nephropathy

Supplemental Table 4. Post-transplant complications in recipient from Extended Criteria Donors (ECD) categorized by donor age groups

	All patients (n = 647)	Donors 50-59 Yrs (n = 91)	Donor 60-69 yrs (n = 264)	Donor 70-79 yrs (n = 265)	Donors ≥ 80 yrs (n = 27)	P value
PNF (%)	13 (2.0 %)	0	6 (2.3 %)	5 (1.9 %)	2 (7.4 %)	P=0.03
DGF (%)	212 (32.8 %)	34 (36.9 %)	84 (31.9 %)	82 (30.9 %)	12 (46.2 %)	P=0.36
Ischemic Cardiopathy (%)	46 (7.1 %)	6 (6.7 %)	20 (7.7 %)	19 (7.0 %)	1 (3.7 %)	P=0.92
Urinary fistula (%)	36 (5.6 %)	0	19 (7.3 %)	15 (5.5 %)	2 (7.4 %)	P=0.07
Urethral stenosis (%)	57 (8.8 %)	5 (5.6 %)	24 (9.2 %)	28 (10.6 %)	0	P=0.21
Vascular fistula (%)	40 (6.2 %)	2 (2.3 %)	19 (7.3 %)	19 (7.1 %)	0	P=0.12
Renal Artery stenosis (%)	85 (13.2 %)	13 (14.0 %)	26 (9.8 %)	40 (15.2 %)	6 (22.2 %)	P=0.19
NODAT (%)	152 (23.4 %)	17 (18.2 %)	61 (23.0 %)	68 (25.7 %)	6 (22.2 %)	P=0.73
CMV reactivation (%)	186 (28.7 %)	24 (26.4 %)	84 (31.8 %)	75 (28.3 %)	3 (11.1 %)	P=0.04
BPAR (%)	112 (17.1 %)	16 (17.8 %)	46 (17.6 %)	42 (15.8 %)	6 (22.2 %)	P=0.80
Malignancies (%)	131 (20.2 %)	13 (14.3 %)	57 (21.6 %)	56 (21.1 %)	5 (18.5 %)	P=0.62

PNF = Primary non function; DGF = Delayed Graft Function; NODAT = New Onset Diabetes After Transplantation. CMV = Citomegalovirus; BPAR = Biopsy Proven Acute Rejection.

DGF is defined as needing of at least one dialysis session in first week post-transplantation; CMV reactivation is defined as detectable DNAemia > 2000-5000 copies/ml.

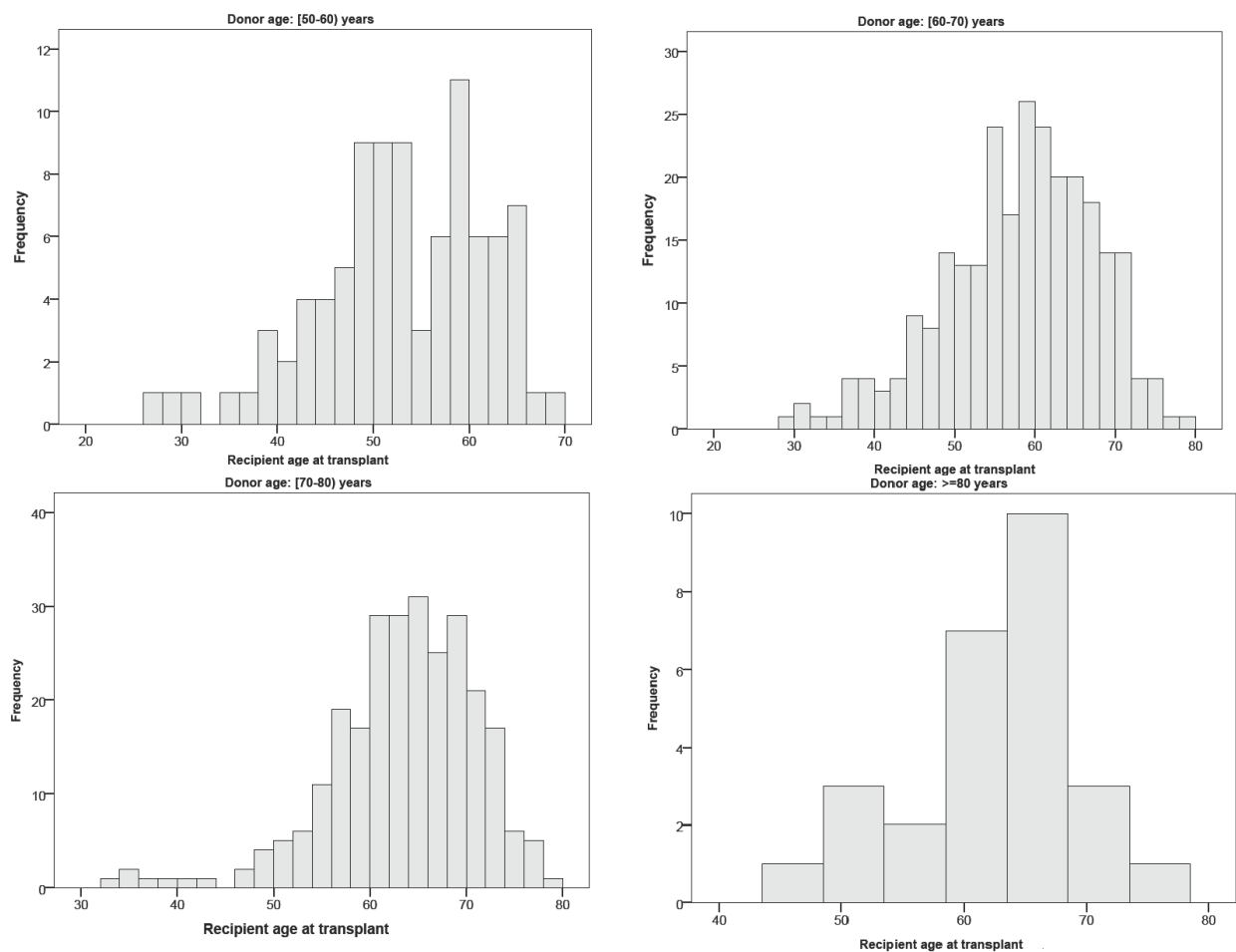
Supplemental Table 5; Infections rates in recipients from extended criteria donors (ECD) by donor age groups, etiology and site involved

	All patients	Donor 50-59 yrs	Donor 60-69 yrs	Donor 70-79 yrs	Donors ≥ 80 yrs	P value
Infections. number of patients (%)						
Overall Infections	451 (69.7%)	52 (57.1%)	199 (75.4%)	187 (70.6%)	13 (48.1%)	< 0.001
Bacterial Infections	325 (50.2%)	42 (46.2%)	136 (51.5%)	134 (50.6%)	13 (48.1%)	0.84
• UTI	231 (35.7%)	26 (28.6%)	106 (40.2%)	93 (35.1%)	6 (22.2%)	
• APN	96 (14.8%)	13 (14.3%)	43 (16.3%)	34 (12.8%)	6 (22.2%)	
• Pneumonia	114 (17.6%)	12 (13.2%)	57 (21.6%)	43 (16.2%)	2 (7.4%)	
• Other	51 (7.9%)	12 (13.2%)	17 (6.4%)	19 (7.2%)	3 (11.1%)	
Fungal Infections	16 (2.5%)	4 (4.4%)	4 (1.5%)	7 (2.6%)	1 (3.7%)	0.46
Viral Infections	240 (37.1%)	35 (38.5%)	104 (39.4%)	98 (37.0%)	3 (11.1%)	0.04
• CMV	186 (28.7%)	24 (26.4%)	84 (31.8%)	75 (28.3%)	3 (11.1%)	
• EBV	14 (2.2%)	1 (1.1%)	6 (2.3%)	7 (2.6%)	0	
• BKV	36 (5.6%)	5 (5.5%)	13 (4.9%)	18 (6.8%)	0	
• Herpes Zoster	36 (5.6%)	8 (8.8%)	17 (6.4%)	11 (4.2%)	0	
• Other	36 (5.6%)	3 (3.3%)	16 (6.1%)	17 (6.4%)	0	

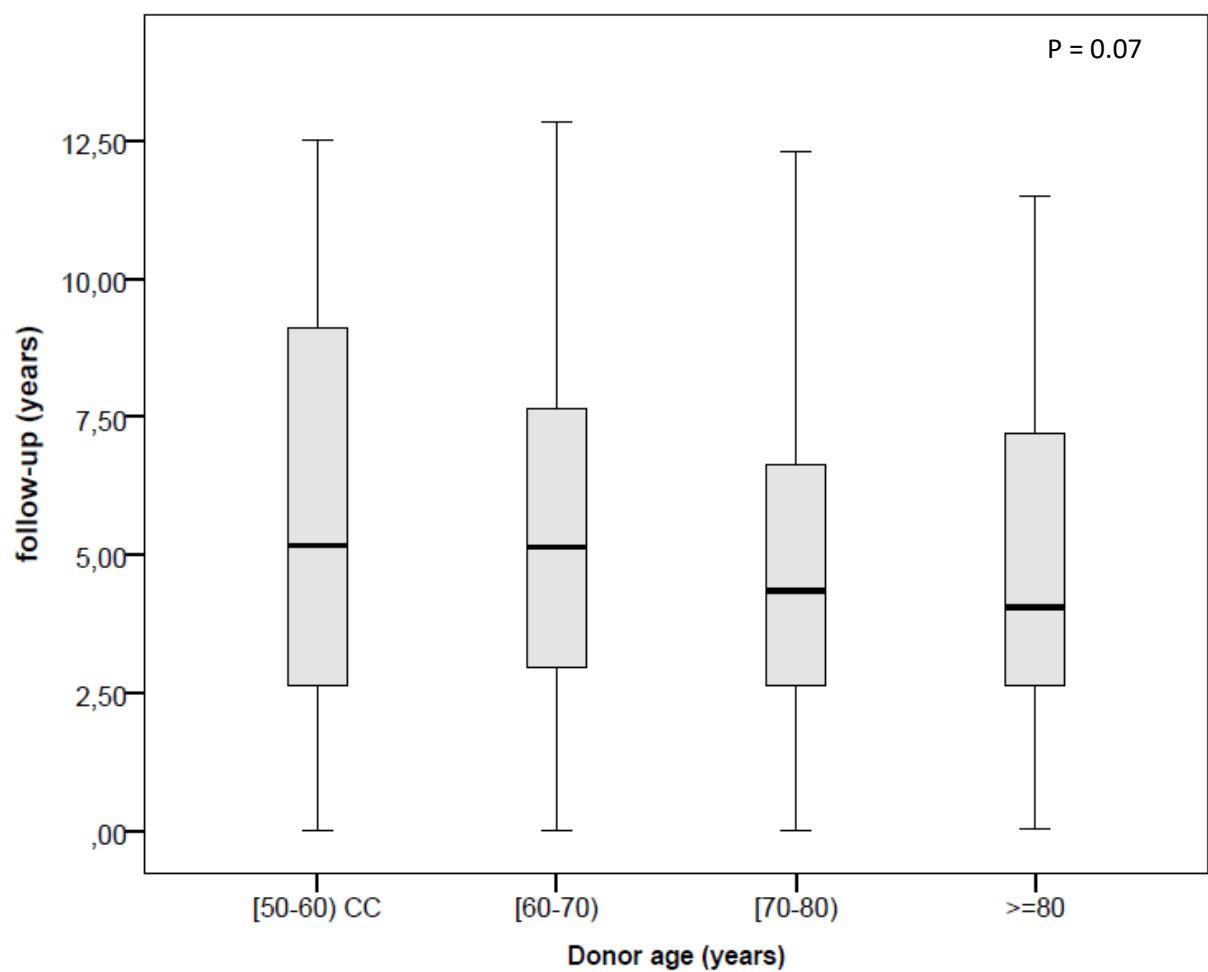
UTI = urinary tract infections (more than 2 episodes per year); APN = acute pyelonephritis; CMV = Cytomegalovirus; EBV = Epstein Barr virus; BKV = Poliovirus.

Urinary tract infections are considered when more than 2 episodes per year. Acute pyelonephritis is always confirmed by CT or MR study; CMV, EBV and BKV infection are diagnosed by detectable viremia > 2000-5000 copies/ml. Regarding BKV, a renal biopsy was performed in cases of worsening of renal function associated with detectable BKV DNAemia.

Supplemental Fig. 1; Recipient age distribution amongst groups.



Supplemental Fig. 2 – Follow up by the different donor age classes



Supplemental Fig. 3a, 3b and 3c . Serum creatinine and CKD-EPI estimated glomerular filtration rate (eGFR) trends over time in the different donor age classes and in the different allocation modalities.

