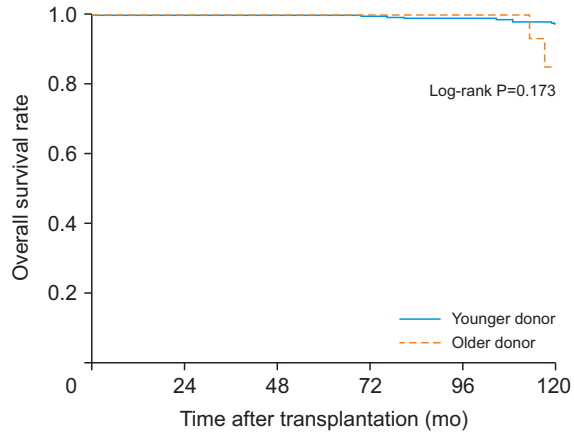**Supplementary Table 1.** Donor age and risk of patient death

Risk factor	Univariable		Multivariable[a]	
	HR (95% CI)	P-value	HR (95% CI)	P-value
Recipient				
Age	1.091 (1.052−1.131)	<0.001	1.083 (1.043−1.125)	<0.001
Male	1.546 (0.750−3.188)	0.238		
BMI	1.075 (0.978−1.182)	0.134		
DM	2.703 (1.248−5.853)	0.012	1.504 (0.669−3.382)	0.324
HTN	0.758 (0.312−1.840)	0.541		
Underlying kidney disease 2[b]		0.030		
DM nephropathy		ref		
GN (IgA, FSGS, others)	0.170 (0.052−0.554)	0.003		
ADPCK	0.330 (0.042−2.608)	0.293		
Hypertensive	0.522 (0.193−1.410)	0.200		
Other and UK	0.334 (0.140−0.798)	0.014		
Dialysis duration	1.070 (0.885−1.294)	0.486		
Pre-emptive KT[c]	0.962 (0.416−2.223)	0.927		
HLA mismatch	1.097 (0.875−1.375)	0.424		
DSA-positive	0.992 (0.056−17.453)	0.996		
Induction agent		0.771		
Maintenance regimen		0.234		
Donor				
Male	1.118 (0.563−2.218)	0.751		
BMI	1.027 (0.928−1.136)	0.609		
DM	3.309 (0.191−57.37)	0.411		
HTN	2.224 (0.301−16.426)	0.433		
Cr	0.853 (0.095−7.660)	0.887		
Older donor group[d]	2.611 (0.622−10.963)	0.190	2.240 (0.521−9.637)	0.2787

HR, hazard ratio; CI, confidence interval; BMI, body mass index; DM, diabetes mellitus; HTN, hypertension; GN, glomerulonephritis; IgA, immunoglobulin A; FSGS, focal segmental glomerulosclerosis; ADPCK, autosomal dominant polycystic kidney disease; UK, unknown; KT, kidney transplantation; HLA, human leukocyte antigen; DSA, donor-specific anti-HLA antibody; Cr, Creatinine.

[a]Variables with a P-value of less than 0.1 in the univariable analysis were included in the multivariable analysis; [b]Underlying kidney disease 2 and R_DM have a high relationship; if both variables had P<0.1, only R_DM was included in multivariable analysis; [c]Pre-emptive KT was defined as kidney transplantation after a dialysis duration of less than 30 days; [d]Reference is younger donor group, which is the group of KT donor younger than 60 years old.

No. at risk						
Younger donor	826	826	826	752	612	473
Older donor	33	33	33	27	17	10

Supplementary Fig. 1. Patient survival rate. Kaplan-Meier curve of patient survival rate after living kidney transplantation.