

Supplemental material

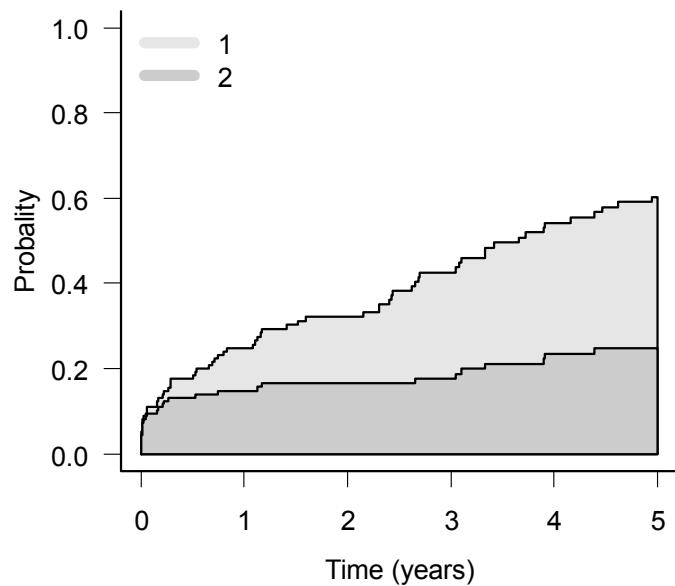
- A: CICR (cumulative incidence competing risk) curves
- B: Missing data analysis
- C: Survival age analysis
- D: Adjusted multivariate outcome regression models
- E: Mortality of elderly transplanted patients from start of dialysis treatment and waitlisted for first transplantation compared with waitlisted elderly patients remaining on dialysis treatment

A: CICR curves

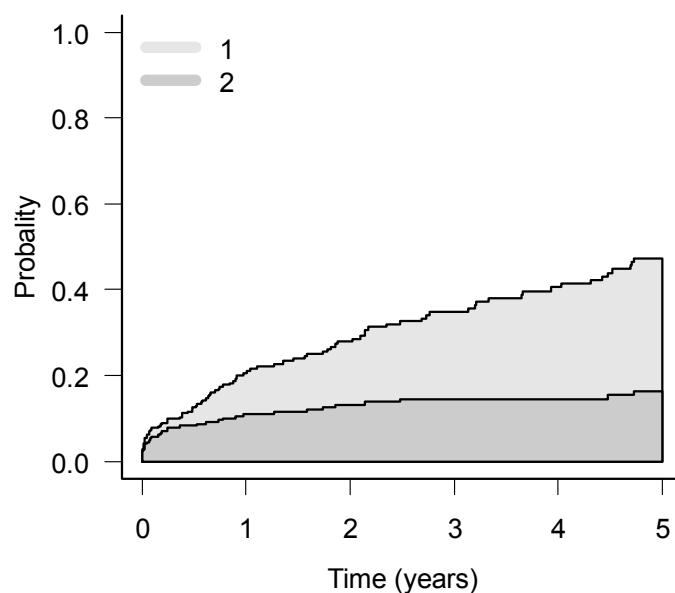
For Stacked cumulative incidence figures

Number at risk at year	0	1	2	3	4	5
Young(d)/Young(r) DBD	1717	1437	1227	1051	944	909
Young(d)/Young(r) DCD	1146	918	764	670	595	562
Young(d)/Elderly(r) DBD	187	144	116	101	87	81
Young(d)/Elderly(r) DCD	143	104	84	76	65	59
Elderly(d)/Elderly(r) DBD	245	176	126	94	72	62
Elderly(d)/Elderly(r) DCD	137	94	73	55	39	33

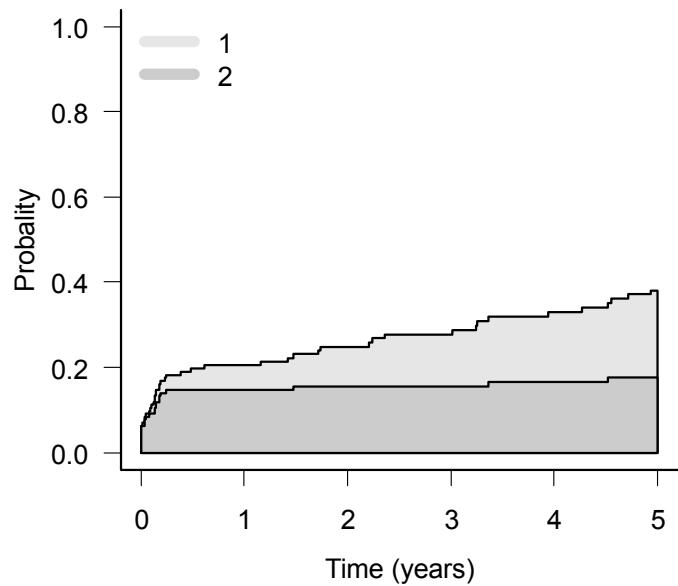
Elderly(d)/Elderly(r) DCD



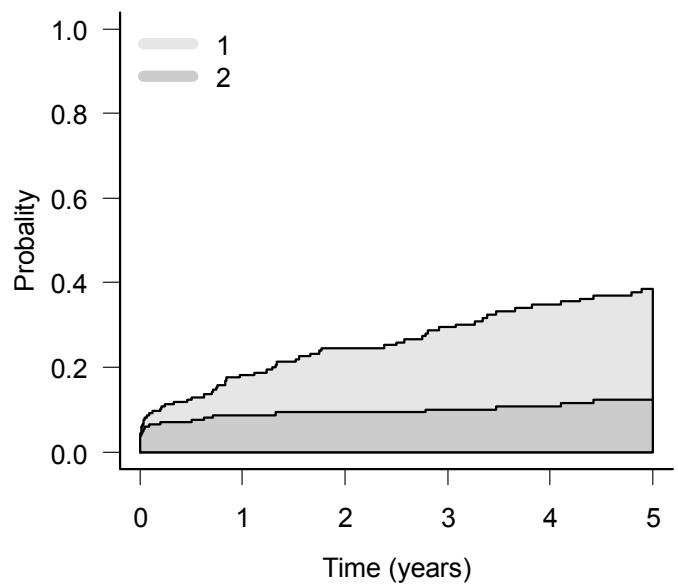
Elderly(d)/Elderly(r) DBD



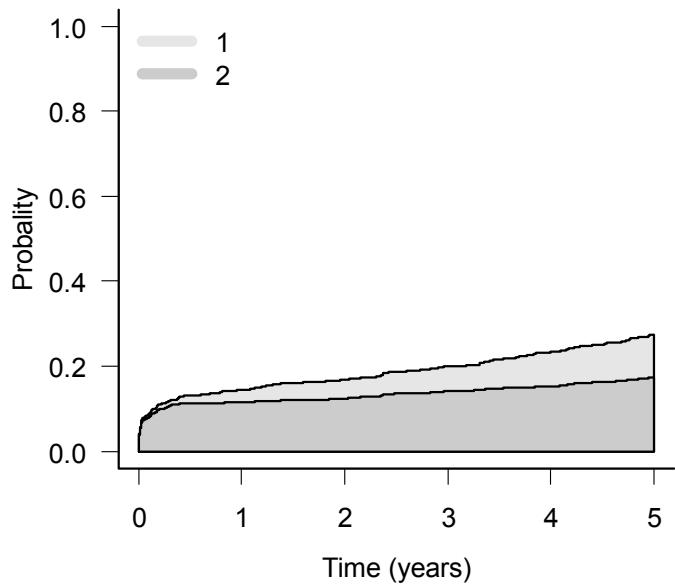
Young(d)/Elderly(r) DCD



Young(d)/Elderly(r) DBD



Young(d)/Young(r) DCD



Young(d)/Young(r) DBD

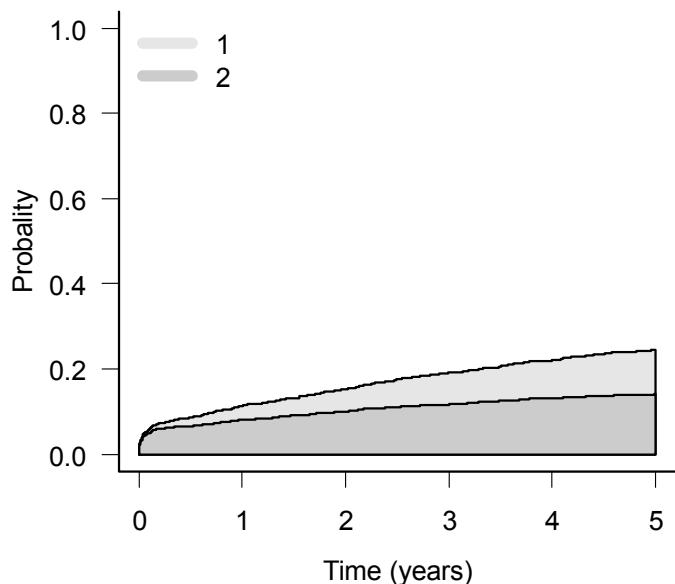


Figure. Stacked cumulative incidence (%) as the first event to occur for loss of a graft (event 2) or patient death (event 1). Percentages of both events are presented in table 2 in the article with 95% confidence intervals. d = donor; r = recipient; young = < 65 years; elderly = ≥ 65 years.

B: Missing data analysis

We compared missing data patterns across the following confounders in the registry database: donor sex, recipient sex, donor hypotensive period, donor terminal MDRD, donor smoking, cold ischemia time, HLA mismatch levels A, HLA mismatch levels B, HLA mismatch levels DR, recipient original disease, and recipient dialysis vintage. Missing data of each confounder was < 10%. We assumed the pattern of missing data at random; we found > 40 different missing patterns across confounders.

Results after imputation of missing data were compared with complete-case-analysis. All missing values of confounders were imputed by using the Multivariate Imputation by Chained Equations (MICE) algorithm, with logistic regression for categorical variables and linear regression for continuous variables. Each missing variable in MICE is treated as an outcome, and missing data are predicted from the remaining variables, incorporating a random element to allow for the uncertainty in this variable's true value.²⁰ We created 10 imputed datasets and pooled the regression results to take different imputed values into account. We included multivariate outcomes of transplantation—primary non-function, delayed graft function, and acute rejection within 3 months—as well as renal function after 3 months and 1 year to the model. The role of each variable in the imputation model is summarized in table 1, and the results in table 2.

Table 1
Imputation of variables

Variable	Missing (%)	Role imputation		Constraints	
		Dependent	Predictor	Minimum	Maximum
Donor sex	0%	No	Yes		
Recipient sex	0%	No	Yes		
Donor hypotensive period	0%	No	Yes		
Last measured MDRD Donor	1.5%	Yes	Yes	15	200
Donor smoking	6.1%	Yes	Yes		
Cold ischemia time (hours)	8.4%	Yes	Yes	5	35
HLA mismatch levels A	5.3%	Yes	Yes		
HLA mismatch levels B	5.3%	Yes	Yes		
HLA mismatch levels DR	5.7%	Yes	Yes		
Recipient original disease	0%	No	Yes		
Recipient Dialysis Vintage	6.3%	Yes	Yes	0	25
Primary non-function	0.6%	No	Yes		
Delayed graft function	4.0%	No	Yes		
Acute rejection <3 months	1.6%	No	Yes		
eGFR 3 months	16.1%	No	Yes		
eGFR 1 year	26.6%	No	Yes		
Event (graft loss or patient death after 5 years)	0.6%	No	Yes		
Recipient and donor age groups, stratified by donortype	0%	No	Yes		

Table 2

Imputed dataset: Comparison of transplant outcomes

	Recipients < 65 years		Recipients ≥ 65 years			
	Young Donor (< 65y)	Young Donor (< 65y)	Young Donor (< 65y)	Young Donor (< 65y)	Elderly Donor (≥ 65y)	Elderly Donor (≥ 65y)
	DBD	DCD	DBD	DCD	DBD	DCD
Primary non-function ^A	0.64 (0.36-1.14)	1.18 (0.67-2.08)	1 (Ref)	1.24 (0.58-2.67)	0.70 (0.33-1.48)	1.62 (0.78-3.38)
- Adjusted Model	0.58 (0.32-1.03)	1.11 (0.62-1.98)	1 (Ref)	1.11 (0.51-2.41)	0.54 (0.24-1.22)	1.20 (0.53-2.71)
Delayed graft-function ^B	1.17 (0.77-1.76)	7.83 (5.14-11.90)*	1 (Ref)	11.13 (6.41-19.34)*	2.01 (1.22-3.29)*	13.92 (7.78-24.90)*
- Adjusted Model	1.14 (0.74-1.75)	8.18 (5.30-12.63)*	1 (Ref)	11.68 (6.62-20.61)*	2.43 (1.42-4.15)*	17.35 (9.21-32.96)*
Acute rejection within 3 months ^C	1.95 (1.16-3.27)*	2.26 (1.34-3.81)*	1 (Ref)	1.02 (0.48-2.18)	1.53 (0.82-2.85)	3.20 (1.68-6.10)*
- Adjusted Model	1.79 (1.06-3.02)*	2.11 (1.24-3.59)*	1 (Ref)	0.94 (0.44-2.02)	1.10 (0.57-2.11)	2.25 (1.14-4.45)*
1-year graft failure ^D	0.61 (0.42-0.88)*	0.80 (0.55-1.16)	1 (Ref)	1.20 (0.73-1.97)	1.12 (0.72-1.74)	1.42 (0.87-2.29)
- Adjusted Model	0.59 (0.41-0.86)*	0.78 (0.53-1.14)	1 (Ref)	1.13 (0.68-1.86)	0.98 (0.61-1.59)	1.25 (0.74-2.11)
1-year death-censored graft failure ^D	0.91 (0.54-1.53)	1.33 (0.79-2.23)	1 (Ref)	1.77 (0.92-3.39)	1.24 (0.66-2.31)	1.75 (0.91-3.38)
- Adjusted Model	0.87 (0.51-1.46)	1.25 (0.74-2.11)	1 (Ref)	1.62 (0.84-3.12)	1.10 (0.57-2.15)	1.52 (0.75-3.09)
1-year mortality ^D	0.48 (0.35-0.65)*	0.45 (0.33-0.63)*	1 (Ref)	1.01 (0.66-1.55)	1.29 (0.91-1.84)	1.50 (1.01-2.21)*
- Adjusted Model	0.48 (0.35-0.66)*	0.48 (0.35-0.67)*	1 (Ref)	1.05 (0.69-1.62)	1.29 (0.88-1.90)	1.71 (1.11-2.64)*
5-year graft failure ^D	0.67 (0.45-0.77)*	0.68 (0.52-0.90)*	1 (Ref)	1.03 (0.71-1.51)	1.22 (0.88-1.69)	1.69 (1.19-2.39)*
- Adjusted Model	0.58 (0.44-0.76)*	0.69 (0.52-0.91)*	1 (Ref)	1.11 (0.71-1.73)	1.08 (0.70-1.66)	1.61 (1.02-2.55)*
5-year death-censored graft failure ^D	1.05 (0.68-1.55)	1.36 (0.86-1.65)	1 (Ref)	1.55 (0.86-2.78)	1.35 (0.78-2.33)	2.09 (1.19-3.66)*
- Adjusted Model	0.92 (0.55-1.55)	1.16 (0.69-1.95)	1 (Ref)	1.42 (0.79-2.56)	1.12 (0.63-2.00)	1.69 (0.93-3.09)
5-year mortality ^D	0.46(0.33-0.62)*	0.44 (0.32-0.61)*	1 (Ref)	1.03 (0.68-1.58)	1.44 (1.01-2.04)*	1.64 (1.11-2.43)*
- Adjusted Model	0.56 (0.37-0.83)*	0.54 (0.36-0.81)*	1 (Ref)	1.08 (0.71-1.66)	1.42 (0.96-2.09)	1.85 (1.20-2.86)*

Note. Presented are ORs (CI95%) or HRs (CI95%). Marked in green are ORs and HRs with similar significance, whereas marked in red show different ORs and HRs as compared to complete case analysis. ^A = Data available of 3572 patients. ^B = Data available of 3209 patients. ^C = Data available of 3539 patients. ^D = Data available of 3575 patients. In adjusted models, the following variables were taken into account: donor sex, recipient sex, donor hypotensive period, donor terminal MDRD, donor smoking, cold ischemia time, HLA mismatch A, HLA mismatch B, HLA mismatch Dr, recipient original disease, and recipient dialysis vintage. ^{A,B,C} = logistic regression analyses. ^D = Cox-regression analyses. ORs or HRs with * indicate p < .05.

Appendix C: Survival age analysis of elderly recipients

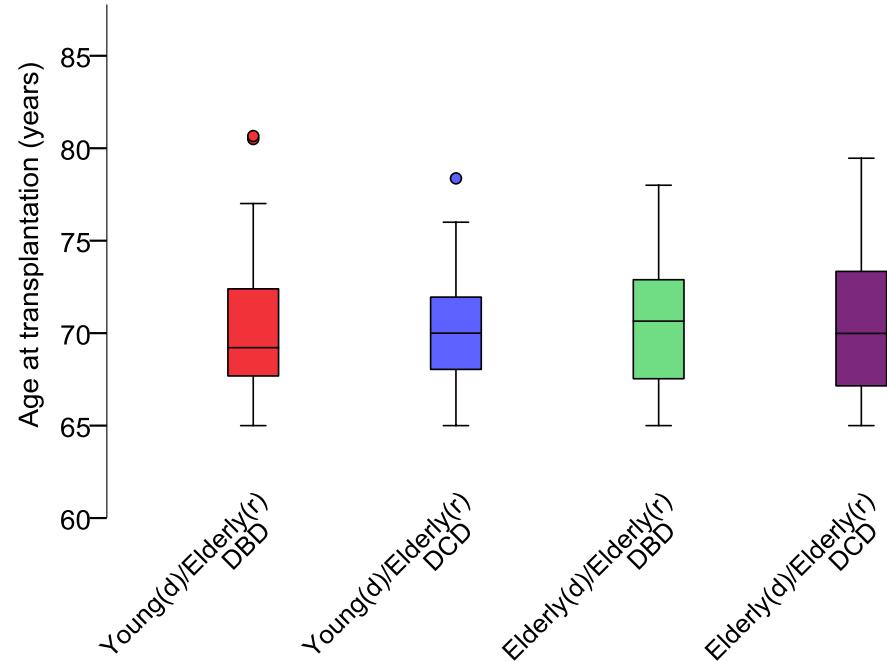
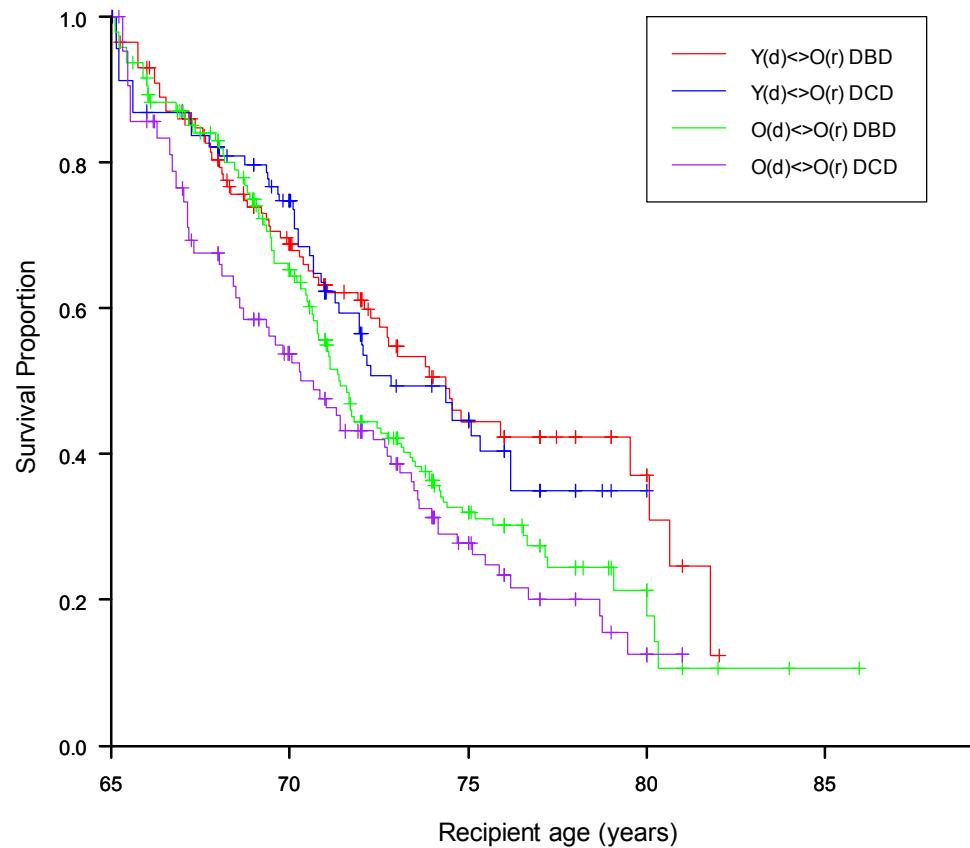


Figure. Left-panel: Left truncated Kaplan-Meier estimates of elderly recipient survival age. The five year patient median survival age was lowest in elderly recipients of elderly DCD kidneys with 70.7 years (CI 68.4 – 73.5). This was about 8 months higher among elderly with elderly DBD (71.4 years, CI 70.6 – 73.4), 2.1 years higher among elderly of young DCD kidneys (72.8 years, CI 71.3 – n.a.), and 3.7 years (74.7, CI 72.1 – 80.7) higher for elderly of young DBD kidneys. Results are unadjusted for confounders due to non-proportionality of the hazards over time. Y = young (<65y); d = donor; O=Old (≥ 65 y); r = recipient; DCD = Donation after circulatory death; DBD = Donation after brain death. **Right-panel:** Corresponding number at risk in boxplots for each category of patients who enter the study when transplanted at certain age.

Appendix D: Adjusted multivariate outcome regression models

5-Year graft survival	Hazard ratio	P-value	Wald Statistic	Degrees of freedom	Lower 95%CI	Upper 95%CI
Recipient age groups						
Young(d)/Elderly(r) DBD (ref)	1.0 (ref)	0.000	35.35	5		
Young(d)/Elderly(r) DBD	1.03	0.891	0.02	1	0.68	1.57
Elderly(d)/Elderly(r) DBD	1.00	0.984	0.00	1	0.67	1.49
Elderly(d)/Elderly(r) DCD	1.49	0.066	3.39	1	0.97	2.29
Young(d)/Young(r) DBD	0.64	0.004	8.47	1	0.47	0.86
Young(d)/Young(r) DCD	0.71	0.031	4.63	1	0.52	0.97
Donor sex (male)	1.00	0.981	0.00	1	0.86	1.16
Recipient sex (male)	0.91	0.208	1.59	1	0.78	1.06
CIT categories						
CIT < 12 h	1.0 (ref)	0.042	8.20	3		
CIT ≥12h and <18h	1.17	0.237	1.40	1	0.90	1.50
CIT ≥18h and <24h	1.16	0.263	1.25	1	0.89	1.51
CIT ≥24h	1.48	0.008	7.05	1	1.11	1.99
HLA-A						
HLA-A (0 mismatches)	0.85	0.195	1.68	1	0.66	1.09
HLA-A (1 mismatch)	0.82	0.080	3.07	1	0.65	1.02
HLA-A (2 mismatches)	1.0 (ref)					
HLA-B						
HLA-B (0 mismatches)	0.70	0.004	8.27	1	0.55	0.89
HLA-B (1 mismatch)	0.80	0.021	5.30	1	0.66	0.97
HLA-B (2 mismatches)	1.0 (ref)					
HLA-Dr						
HLA-Dr (0 mismatches)	0.96	0.784	0.08	1	0.70	1.31
HLA-Dr (1 mismatch)	1.01	0.923	0.01	1	0.76	1.35
HLA-Dr (2 mismatches)	1.0 (ref)					
Donor hypotensive period (yes)	0.92	0.311	1.02	1	0.78	1.08
Dialysis vintage (years)	1.04	0.006	7.51	1	1.01	1.07

Smoking (yes)	1.21	0.010	6.59	1	1.05	1.41
Terminal eGFR donor (MDRD)	1.00	0.000	13.03	1	0.99	1.00
Recipient primary disease		0.000	24.83	6		
Polycystic kidney disease	1.0 (ref)			6		
Glomerulonephritis	1.02	0.903	0.01	1	0.78	1.32
Renal vascular disease	1.50	0.002	9.26	1	1.16	1.95
Diabetes	1.49	0.008	7.12	1	1.11	2.00
Chronic renal failure (etiology unknown)	0.94	0.666	0.19	1	0.70	1.25
Pyelonephritis	1.04	0.828	0.05	1	0.73	1.47
Other	1.18	0.272	1.21	1	0.88	1.59

5-Year death-censored graft failure	Hazard ratio	P-value	Wald Statistic	Degrees of freedom	Lower 95%CI	Upper 95%CI
Recipient age groups						
Young(d)/Elderly(r) DBD (ref)	1.0 (ref)	0.352	5.55	5	0.70	2.67
Young(d)/Elderly(r) DBD	1.37	0.359	0.84	1	0.53	2.00
Elderly(d)/Elderly(r) DBD	1.03	0.920	0.01	1	0.79	3.11
Elderly(d)/Elderly(r) DCD	1.57	0.200	1.64	1	0.68	1.91
Young(d)/Young(r) DBD	1.14	0.618	0.25	1	0.82	2.32
Young(d)/Young(r) DCD	1.38	0.228	1.46	1	0.78	1.17
Donor sex (male)	0.96	0.652	0.20	1	0.78	1.17
Recipient sex (male)	0.96	0.661	0.19	1	0.78	1.17
CIT categories						
CIT < 12 h	1.0 (ref)	0.000	24.35	3		
CIT ≥12h and <18h	1.60	0.024	5.13	1	1.07	2.40
CIT ≥18h and <24h	1.78	0.006	7.43	1	1.17	2.68
CIT ≥24h	2.67	0.000	19.86	1	1.73	4.12
HLA-A						
HLA-A (0 mismatches)	0.71	0.040	4.21	1	0.51	0.98
HLA-A (1 mismatch)	0.71	0.022	5.26	1	0.52	0.95
HLA-A (2 mismatches)	1.0 (ref)					
HLA-B						
HLA-B (0 mismatches)	0.67	0.015	8.38	2	0.49	0.92

HLA-B (1 mismatch)	0.70	0.007	7.19	1	0.55	0.91	
HLA-B (2 mismatches)	1.0 (ref)						
HLA-Dr		0.284	2.52	2			
HLA-Dr (0 mismatches)	0.79	0.297	1.09	1	0.51	1.23	
HLA-Dr (1 mismatch)	0.93	0.750	0.10	1	0.62	1.42	
HLA-Dr (2 mismatches)	1.0 (ref)						
Donor hypotensive period (yes)	1.00	0.980	0.00	1	0.80	1.24	
Dialysis vintage (years)	1.03	0.134	2.24	1	0.99	1.07	
Smoking (yes)	1.20	0.073	3.20	1	0.98	1.46	
Terminal eGFR donor (MDRD)	1.00	0.000	12.27	1	0.99	1.00	
Recipient primary disease		0.379	6.41	6			
Polycystic kidney disease	1.0 (ref)						
Glomerulonephritis	0.77	0.166	1.92	1	0.53	1.12	
Renal vascular disease	0.87	0.417	0.66	1	0.63	1.21	
Diabetes	0.96	0.830	0.05	1	0.68	1.36	
Chronic renal failure (etiology unknown)	0.70	0.114	2.50	1	0.46	1.09	
Pyelonephritis	0.72	0.081	3.04	1	0.50	1.04	
Other	0.75	0.205	1.61	1	0.47	1.17	

5-Year mortality	Hazard ratio	P-value	Wald Statistic	Degrees of freedom	Lower 95%CI	Upper 95%CI
Recipient age groups						
Young(d)/Elderly(r) DBD (ref)	1.0 (ref)	.000	81.57	5		
Young(d)/Elderly(r) DBD	1.15	.553	0.35	1	0.72	1.82
Elderly(d)/Elderly(r) DBD	1.35	.186	1.75	1	0.87	2.09
Elderly(d)/Elderly(r) DCD	1.86	.012	6.33	1	1.15	3.02
Young(d)/Young(r) DBD	0.49	.000	15.58	1	0.35	0.70
Young(d)/Young(r) DCD	0.48	.000	15.28	1	0.33	0.69
Donor sex (male)	1.13	.193	1.69	1	0.94	1.35
Recipient sex (male)	0.93	.431	0.62	1	0.77	1.12
CIT categories						
CIT < 12 h	1.0 (ref)	.832	0.87	3		

CIT ≥12h and <18h	0.97	.833	0.04	1	0.73	1.28	
CIT ≥18h and <24h	0.89	.434	0.61	1	0.66	1.19	
CIT ≥24h	0.95	.771	0.08	1	0.67	1.35	
HLA-A		.642	0.89	2			
HLA-A (0 mismatches)	1.16	.370	0.80	1	0.84	1.58	
HLA-A (1 mismatch)	1.07	.628	0.23	1	0.81	1.42	
HLA-A (2 mismatches)	1.0 (ref)						
HLA-B		.127	4.13	2			
HLA-B (0 mismatches)	0.74	.048	3.92	1	0.55	1.00	
HLA-B (1 mismatch)	0.84	.139	2.19	1	0.67	1.06	
HLA-B (2 mismatches)	1.0 (ref)						
HLA-Dr		.956	0.09	2			
HLA-Dr (0 mismatches)	1.05	.775	0.08	1	0.73	1.51	
HLA-Dr (1 mismatch)	1.03	.857	0.03	1	0.74	1.43	
HLA-Dr (2 mismatches)	1.0 (ref)						
Donor hypotensive period (yes)	0.91	.342	0.90	1	0.74	1.11	
Dialysis vintage (years)	1.08	.000	18.70	1	1.04	1.12	
Smoking (yes)	1.40	.000	13.06	1	1.17	1.68	
Terminal eGFR donor (MDRD)	1.00	.148	2.09	1	1.00	1.00	
Recipient primary disease		.000	38.04	6			
Polycystic kidney disease	1.0 (ref)						
Glomerulonephritis	0.88	.440	0.60	1	0.63	1.23	
Renal vascular disease	1.61	.003	8.66	1	1.17	2.21	
Diabetes	1.87	.000	12.61	1	1.32	2.64	
Chronic renal failure (etiology unknown)	0.93	.700	0.15	1	0.65	1.33	
Pyelonephritis	0.97	.887	0.02	1	0.62	1.51	
Other	1.14	.489	0.48	1	0.79	1.65	

Primary non-function	Odds ratio	P-value	Wald Statistic	Degrees of freedom	Lower 95%CI	Upper 95%CI
Recipient age groups						
Young(d)/Elderly(r) DBD (ref)	1.0 (ref)	.001	20.43	5		
Young(d)/Elderly(r) DBD	.98	.972	0.00	1	0.38	2.54

Elderly(d)/Elderly(r) DBD	.48	.143	2.14	1	0.18	1.28	
Elderly(d)/Elderly(r) DCD	1.18	.735	0.11	1	0.45	3.06	
Young(d)/Young(r) DBD	.61	.165	1.93	1	0.30	1.23	
Young(d)/Young(r) DCD	1.28	.490	0.48	1	0.64	2.56	
Donor sex (male)	1.02	.890	0.02	1	0.75	1.39	
Recipient sex (male)	1.03	.837	0.04	1	0.76	1.41	
CIT categories		.010	11.37	3			
CIT < 12 h	1.0 (ref)						
CIT ≥12h and <18h	1.17	.587	0.30	1	0.67	2.03	
CIT ≥18h and <24h	1.34	.307	1.04	1	0.76	2.37	
CIT ≥24h	2.25	.008	7.01	1	1.24	4.11	
HLA-A		.421	1.73	2			
HLA-A (0 mismatches)	.78	.347	0.89	1	0.47	1.30	
HLA-A (1 mismatch)	.73	.189	1.73	1	0.46	1.17	
HLA-A (2 mismatches)	1.0 (ref)						
HLA-B		.005	10.66	2			
HLA-B (0 mismatches)	.41	.001	10.66	1	0.24	0.70	
HLA-B (1 mismatch)	.71	.079	3.09	1	0.48	1.04	
HLA-B (2 mismatches)	1.0 (ref)						
HLA-Dr		.724	0.65	2			
HLA-Dr (0 mismatches)	.76	.424	.64	1	.39	1.49	
HLA-Dr (1 mismatch)	.79	.461	.54	1	.42	1.48	
HLA-Dr (2 mismatches)	1.0 (ref)						
Donor hypotensive period (yes)	.93	.697	.15	1	.66	1.33	
Dialysis vintage (years)	1.00	.922	.01	1	.94	1.06	
Smoking (yes)	1.34	.065	3.41	1	.98	1.82	
Terminal eGFR donor (MDRD)	.99	.016	5.81	1	.99	1.00	
Recipient primary disease		.384	6.36	6			
Polycystic kidney disease	1.0 (ref)						
Glomerulonephritis	1.01	.972	.00	1	.62	1.65	
Renal vascular disease	.95	.842	.04	1	.55	1.62	
Diabetes	.86	.627	.24	1	.47	1.59	
Chronic renal failure (etiology unknown)	.61	.102	2.67	1	.34	1.10	
Pyelonephritis	.60	.198	1.65	1	.28	1.31	
Other	1.12	.680	.17	1	.65	1.96	

Intercept	.21	.017	5.74	1		
-----------	-----	------	------	---	--	--

Delayed graft function	Odds ratio	P-value	Wald Statistic	Degrees of freedom	Lower 95%CI	Upper 95%CI
Recipient age groups						
Young(d)/Elderly(r) DBD (ref)	1.0 (ref)	.000	422.24	5		
Young(d)/Elderly(r) DBD	10.43	.000	59.69	1	5.75	18.91
Elderly(d)/Elderly(r) DBD	1.84	.037	4.36	1	1.04	3.26
Elderly(d)/Elderly(r) DCD	14.87	.000	59.04	1	7.47	29.61
Young(d)/Young(r) DBD	1.08	.742	0.11	1	0.69	1.69
Young(d)/Young(r) DCD	7.09	.000	71.53	1	4.50	11.17
Donor sex (male)	0.77	.004	8.31	1	0.64	0.92
Recipient sex (male)	0.91	.312	1.02	1	0.76	1.09
CIT categories						
CIT < 12 h	1.0 (ref)					
CIT ≥12h and <18h	1.35	.050	3.85	1	1.00	1.81
CIT ≥18h and <24h	1.77	.000	13.29	1	1.30	2.41
CIT ≥24h	2.30	.000	20.82	1	1.61	3.28
HLA-A						
HLA-A (0 mismatches)	1.02	.905	0.01	1	0.74	1.41
HLA-A (1 mismatch)	1.14	.400	0.71	1	0.84	1.54
HLA-A (2 mismatches)	1.0 (ref)					
HLA-B						
HLA-B (0 mismatches)	0.91	.552	0.35	1	0.68	1.23
HLA-B (1 mismatch)	1.00	.987	0.00	1	0.78	1.27
HLA-B (2 mismatches)	1.0 (ref)					
HLA-Dr						
HLA-Dr (0 mismatches)	1.05	.824	0.05	1	0.68	1.62
HLA-Dr (1 mismatch)	1.24	.304	1.06	1	0.82	1.87
HLA-Dr (2 mismatches)	1.0 (ref)					
Donor hypotensive period (yes)	0.84	.097	2.75	1	0.69	1.03
Dialysis vintage (years)	1.06	.001	11.78	1	1.03	1.10
Smoking (yes)	1.11	.253	1.31	1	0.93	1.33

Terminal eGFR donor (MDRD)	0.99	.000	28.18	1	0.99	1.00	
Recipient primary disease				6			
Polycystic kidney disease	1.0 (ref)						
Glomerulonephritis	1.07	.652	0.20	1	0.80	1.44	
Renal vascular disease	1.11	.501	0.45	1	0.81	1.53	
Diabetes	1.61	.010	6.65	1	1.12	2.31	
Chronic renal failure (etiology unknown)	1.11	.510	0.43	1	0.81	1.54	
Pyelonephritis	1.09	.669	0.18	1	0.73	1.62	
Other	0.94	.742	0.11	1	0.67	1.33	
Intercept	0.19	.000	16.31	1			

Acute rejection < 3 months	Odds ratio	P-value	Wald Statistic	Degrees of freedom	Lower 95%CI	Upper 95%CI
Recipient age groups						
Young(d)/Elderly(r) DBD (ref)	1.0 (ref)	.002	18.67	5		
Young(d)/Elderly(r) DBD	.80	.575	0.31	1	0.36	1.76
Elderly(d)/Elderly(r) DBD	1.24	.547	0.36	1	0.62	2.46
Elderly(d)/Elderly(r) DCD	2.78	.005	7.72	1	1.35	5.73
Young(d)/Young(r) DBD	1.43	.189	1.72	1	0.84	2.44
Young(d)/Young(r) DCD	1.79	.035	4.46	1	1.04	3.08
Donor sex (male)	.96	.721	0.13	1	0.79	1.18
Recipient sex (male)	.97	.811	0.06	1	0.79	1.20
CIT categories						
CIT < 12 h	1.0 (ref)	.490	2.42	3		
CIT ≥12h and <18h	1.17	.362	0.83	1	0.83	1.65
CIT ≥18h and <24h	1.31	.133	2.26	1	0.92	1.86
CIT ≥24h	1.20	.396	0.72	1	0.79	1.80
HLA-A						
HLA-A (0 mismatches)	.82	.281	1.16	1	0.57	1.18
HLA-A (1 mismatch)	.90	.534	0.39	1	0.65	1.25
HLA-A (2 mismatches)	1.0 (ref)					
HLA-B						
HLA-B (0 mismatches)	.76	.257	2.72	2		
					0.54	1.06

HLA-B (1 mismatch)	.85	.239	1.39	1	0.65	1.11	
HLA-B (2 mismatches)	1.0 (ref)						
HLA-Dr		.020	7.87	2			
HLA-Dr (0 mismatches)	1.05	.859	0.03	1	0.64	1.71	
HLA-Dr (1 mismatch)	1.41	.152	2.05	1	0.88	2.24	
HLA-Dr (2 mismatches)	1.0 (ref)						
Donor hypotensive period (yes)	1.02	.888	0.02	1	0.81	1.27	
Dialysis vintage (years)	1.04	.049	3.87	1	1.00	1.08	
Smoking (yes)	1.12	.292	1.11	1	0.91	1.37	
Terminal eGFR donor (MDRD)	1.00	.100	2.71	1	1.00	1.00	
Recipient primary disease		.242	7.95	6			
Polycystic kidney disease	1.0 (ref)						
Glomerulonephritis	1.23	.239	1.39	1	0.87	1.72	
Renal vascular disease	.95	.786	0.07	1	0.65	1.39	
Diabetes	1.13	.564	0.33	1	0.74	1.72	
Chronic renal failure (etiology unknown)	1.11	.573	0.32	1	0.77	1.62	
Pyelonephritis	1.63	.025	5.05	1	1.06	2.50	
Other	1.06	.772	0.08	1	0.71	1.59	
Intercept	.12	.000	21.04	1			

E: Mortality of elderly transplanted patients from start of dialysis treatment and waitlisted for first transplantation compared with waitlisted elderly patients remaining on dialysis treatment

Table

Mortality of Dutch elderly patients on renal replacement therapy

	Waiting time in years (IQR)	Patient death before Tx (IQR waiting time)	Patient death 5 years after Tx	Total proportion of patient death (IQR waiting time)
Tx Young(d)/Elderly(r) DBD	3.6 (2.2-5.5)	18.5% (3.9-39.0)	31.3%	49.8% (35.2-70.3)
Tx Young(d)/Elderly(r) DCD	3.5 (2.4-5.1)	16.3% (4.8-25.2)	31.4%	47.7% (36.2-56.6)
If maintained on dialysis	8.5 (7.3-10.4)			63.0% (54.0-75.3)
Tx Elderly(d)/Elderly(r) DBD	3.4 (2.5-4.6)	15.4% (5.0-31.1)	45.0%	60.4% (50.0-76.1)
Elderly(d)/Elderly(r) DCD	3.1 (2.2-4.0)	11.4% (3.9-21.7)	49.1%	60.5% (53.0-70.8)
If maintained on dialysis	8.3 (7.4-9.3)			61.3% (58.1-68.3)

* Note. IQR = Inter Quartile Range. D = donor. R = recipient. Tx = first transplantation.