

**Table S1A, SDC:** Balance table presenting the baseline characteristics after propensity score matching for patient death in the amyloidosis versus all other etiologies of ESRD cohorts.

	Amyloidosis n=481	All other etiologies n=481	% Bias	t test p value
Mean age, years	56.4	56.4	-0.1	0.988
Male (%)	60	60	-0.4	0.948
Race (%)				
Caucasian	NR	NR		
African American	6.0	5.8	0.6	0.892
Other	13.5	12.5	2.8	0.632
Days on dialysis (%), tertiles				
0-356	NR	NR		
357-1099	34.7	34.1	1.3	0.839
≥1100	28.7	28.3	0.9	0.887
Days on the waitlist (%), tertiles				
0-146	NR	NR		
147-590	33.3	33.3	0	1.000
≥591	26.6	25.6	2.3	0.714
Pretransplant diabetes (%)	5.4	6.0	-1.7	0.677
Living donor	NR	NR		
Deceased donor KDPI<20%	9.6	9.4	0.7	0.912
Deceased donor KDPI 20-85%	28.9	28.7	0.5	0.943
Deceased donor KDPI >85%	8.1	7.5	1.7	0.719
Induction Type (%)				
None	NR	NR		
Lymphodepleting	26.8	27.2	-1.0	0.490
Nonlymphodepleting	47.0	47.2	-0.4	0.949

Abbreviations: ESRD-end stage renal disease; NR- not reported; KDPI- kidney donor profile index.

Additional statistical measures demonstrating sufficient balance for the overall match: Rubins' B = 5.9% (reference range < 25%), Rubins' R = 1.04 (reference range 0.5-2)

**Table S1B, SDC:** Balance table presenting the baseline characteristics after propensity score matching for allograft loss in the amyloidosis versus all other etiologies of ESRD cohorts.

	Amyloidosis n=395	All other etiologies n=395	% Bias	t test p value
Mean age, years	56.8	56.8	0.2	0.977
Male (%)	61.5	62.8	-2.6	0.714
Race (%)				
Caucasian	NR	NR		
African American	5.6	5.6	0	1.000
Other	14.4	12.2	6.2	0.346
Days on dialysis (%), tertiles				
0-356	NR	NR		
357-1099	33.9	34.2	-0.5	0.940
≥1100	32.7	32.4	0.6	0.940
Days on the waitlist (%), tertiles				
0-146	NR	NR		
147-590	37.0	35.7	2.7	0.712
≥591	31.4	30.9	1.1	0.878
Pretransplant diabetes (%)	5.3	6.1	-2.1	0.646
Living donor	NR	NR		
Deceased donor KDPI<20%	11.1	9.4	5.8	0.412
Deceased donor KDPI 20-85%	32.7	35.4	-6.1	0.410
Deceased donor KDPI >85%	9.1	7.8	3.4	0.524
Induction Type (%)				
None	NR	NR		
Lymphodepleting	28.4	29.6	-3.1	0.695
Nonlymphodepleting	49.9	49.6	0.5	0.943
Maximum PRA				
0-20%	NR	NR		
21-79%	7.3	7.1	0.9	0.891
Nonlymphodepleting	5.6	4.6	4.5	0.517
Maintenance immunosuppression				
Cyclosporine	NR	NR		
Tacrolimus	78.0	80.3	-4.7	0.431
Rapamycin	1.8	1.5	2.1	0.780
Belatacept	0.8	0.2	6.4	0.317

Abbreviations: ESRD-end stage renal disease; NR- not reported; KDPI- kidney donor profile index; PRA- panel reactive antibody.

Additional statistical measures demonstrating sufficient balance for the overall match: Rubins' B = 15.7% (reference range < 25%), Rubins' R = 1.32 (reference range 0.5 –2)

**Table S2A, SDC:** Balance table presenting the baseline characteristics after propensity score matching for patient death in the amyloidosis versus ESRD due to DM cohort.

	Amyloidosis n=481	All other etiologies n=481	% Bias	t test p value
Mean age, years	55.3	55.4	-0.7	0.907
Male (%)	61	62	-2.2	0.716
Race (%)				
Caucasian	NR	NR		
African American	5.9	5.4	1.5	0.702
Other	13.0	12.8	0.5	0.930
Days on dialysis (%), tertiles				
0-356	NR	NR		
357-1099	35.9	36.5	-1.1	0.854
≥1100	27.6	25.9	3.8	0.506
Days on the waitlist (%), tertiles				
0-146	NR	NR		
147-590	33.3	33.9	-1.1	0.852
≥591	25.5	24.8	1.5	0.786
Living donor	NR	NR		
Deceased donor KDPI<20%	8.7	8.0	2.3	0.670
Deceased donor KDPI 20-85%	25.5	26.9	-3.0	0.592
Deceased donor KDPI >85%	17.5	16.3	3.2	0.583
Induction Type (%)				
None	NR	NR		
Lymphodepleting	22.7	21.9	2.1	0.724
Nonlymphodepleting	44.8	45.0	-0.3	0.953

Abbreviations: ESRD-end stage renal disease; DM- diabetes mellitus; NR- not reported; KDPI- kidney donor profile index.

Additional statistical measures demonstrating sufficient balance for the overall match: Rubins' B = 7.9% (reference range < 25%), Rubins' R = 1.16 (reference range 0.5 –2)

**Table S2B, SDC:** Balance table presenting the baseline characteristics after propensity score matching for allograft loss in the amyloidosis versus ESRD due to DM cohort.

	Amyloidosis n=466	All other etiologies n=466	% Bias	t test p value
Mean age, years	55.9	55.8	1.0	0.868
Male (%)	63.5	66.3	-2.5	0.373
Race (%)				
Caucasian	NR	NR		
African American	5.6	5.8	-0.6	0.888
Other	13.7	13.1	1.7	0.773
Days on dialysis (%), tertiles				
0-356	NR	NR		
357-1099	36.7	33.9	5.8	0.373
≥1100	31.3	32.2	-1.9	0.779
Days on the waitlist (%), tertiles				
0-146	NR	NR		
147-590	37.8	39.1	-2.7	0.687
≥591	30.4	27.7	6.2	0.349
Living donor	NR	NR		
Deceased donor KDPI<20%	10.3	8.2	7.0	0.258
Deceased donor KDPI 20-85%	29.4	31.3	-4.2	0.522
Deceased donor KDPI >85%	19.3	19.3	0	1.000
Induction Type (%)				
None	NR	NR		
Lymphodepleting	24.2	23.6	1.6	0.818
Nonlymphodepleting	48.1	46.8	2.6	0.694
Maximum PRA	NR	NR		
0-20%	7.3	6.2	3.7	0.515
21-79%	4.9	2.8	9.7	0.089
Maintenance immunosuppression				
Cyclosporine	NR	NR		
Tacrolimus	67.6	66.7	1.8	0.781
Rapamycin	1.5	1.7	-1.8	0.795
Belatacept	0.6	0.4	2.7	0.654

Abbreviations: ESRD-end stage renal disease; DM- diabetes mellitus; NR- not reported;

KDPI- kidney donor profile index; PRA- panel reactive antibody.

Additional statistical measures demonstrating sufficient balance for the overall match:

Rubins' B = 18.4% (reference range < 25%), Rubins' R =1.59 (reference range 0.5 –2).

**Table S3A, SDC:** Balance table presenting the baseline characteristics after propensity score matching for patient death in the amyloidosis versus the elderly cohort.

	Amyloidosis n=481	All other etiologies n=481	% Bias	t test p value
Male (%)	60	60	0	1.000
Race (%)				
Caucasian	NR	NR		
African American	6.0	6.0	0	1.000
Other	13.5	13.5	0	1.000
Days on dialysis (%), tertiles				
0-356	NR	NR		
357-1099	34.7	34.7	0	1.000
≥1100	28.7	28.7	0	1.000
Days on the waitlist (%), tertiles				
0-146	NR	NR		
147-590	33.3	33.3	0	1.000
≥591	26.6	26.6	0	1.000
Pretransplant diabetes (%)	5.4	5.4	0	1.000
Living donor	NR	NR		
Deceased donor KDPI<20%	9.6	9.6	0	1.000
Deceased donor KDPI 20-85%	28.9	28.9	0	1.000
Deceased donor KDPI >85%	8.1	8.1	0	1.000
Induction Type (%)				
None	NR	NR		
Lymphodepleting	26.8	26.8	0	1.000
Nonlymphodepleting	47.0	47.0	0	1.000

Abbreviations: NR- not reported; KDPI- kidney donor profile index.

Additional statistical measures demonstrating sufficient balance for the overall match: Rubins' B

= 0% (reference range < 25%), Rubins' R = 1.0 (reference range 0.5 –2),

**Table S3B, SDC:** Balance table presenting the baseline characteristics after propensity score matching for allograft loss in the amyloid versus the elderly cohort.

	Amyloid n=395	All other etiologies n=395	% Bias	t test p value
Male (%)	61.5	61.8	-0.5	0.942
Race (%)				
Caucasian	NR	NR		
African American	5.6	5.6	0	1.000
Other	14.4	13.2	3.6	0.607
Days on dialysis (%), tertiles				
0-356	NR	NR		
357-1099	33.9	31.9	4.2	0.545
≥1100	32.7	34.2	-3.3	0.651
Days on the waitlist (%), tertiles				
0-146	NR	NR		
147-590	37.0	38.5	-3.2	0.660
≥591	31.4	30.1	2.7	0.700
Pretransplant diabetes (%)	5.3	5.3	0	1.000
Living donor	NR	NR		
Deceased donor KDPI<20%	11.1	11.4	-0.9	0.911
Deceased donor KDPI 20-85%	32.7	32.9	-0.5	0.940
Deceased donor KDPI >85%	9.1	9.4	-0.7	0.902
Induction Type (%)				
None	NR	NR		
Lymphodepleting	28.4	26.8	3.6	0.633
Nonlymphodepleting	49.9	50.9	-2.0	0.776
Maximum PRA				
0-20%	NR	NR		
21-79%	7.3	6.8	1.7	0.782
Nonlymphodepleting	5.6	5.1	2.3	0.752
Maintenance immunosuppression				
Cyclosporine	NR	NR		
Tacrolimus	78.0	78.2	-0.6	0.932
Rapamycin	1.8	1.5	2.1	0.780
Belatacept	0.8	0.5	2.9	0.654

Abbreviations: NR- not reported; KDPI- kidney donor profile index; PRA: panel reactive antibody.

Additional statistical measures demonstrating sufficient balance for the overall match: Rubins' B = 9.8% (reference range < 25%), Rubins' R = 1.32 (reference range 0.5 –2).

**Table S4, SDC:** Univariate analyses for mortality and all-cause allograft loss.

	Mortality			Allograft loss		
	HR	P value	95% CI	HR	P value	95% CI
<b>Recipient Characteristics</b>						
Amyloidosis	1.93	<0.001	1.71-2.16	1.45	<0.001	1.30-1.62
Age <40 years	Ref			Ref		
40-60 years	1.97	<0.001	1.93-2.00	1.12	<0.001	1.10-1.13
>60 years	3.83	<0.001	3.76-3.90	1.62	<0.001	1.60-1.64
Male	1.15	<0.001	1.13-1.16	1.09	<0.001	1.08-1.10
Race						
Caucasian	Ref			Ref		
African American	1.16	<0.001	1.14-1.18	1.41	<0.001	1.40-1.43
Latino	0.79	<0.001	0.77-0.81	0.90	<0.001	0.89-0.92
Asian	0.66	<0.001	0.64-0.69	0.74	<0.001	0.72-0.76
Other	1.07	0.003	1.02-1.16	1.15	<0.001	1.11-1.19
Pre-transplant dialysis	1.87	<0.001	1.83-1.91	1.07	<0.001	1.06-1.07
Dialysis vintage	1.00	<0.001	1.00-1.00	1.00	<0.001	1.00-1.00
Hepatitis B	1.12	<0.001	1.09-1.15	1.14	<0.001	1.12-1.17
Hepatitis C	1.67	<0.001	1.62-1.73	1.67	<0.001	1.63-1.72
BMI	1.02	<0.001	1.02-1.02	1.01	<0.001	1.01-1.01
Diabetes	2.28	<0.001	2.24-2.31	1.61	<0.001	1.59-1.63
PRA >80	1.11	<0.001	1.07-1.14	1.09	<0.001	1.06-1.12
≥ 1 HLA mismatch	1.36	<0.001	1.33-1.39	1.44	<0.001	1.41-1.46
Days on wait list	1.00	<0.001	1.00-1.00	1.00	<0.001	1.00-1.00
<b>Donor Characteristics</b>						
Deceased donor	1.81	<0.001	1.78-1.83	1.65	<0.001	1.64-1.67
Living donor	Ref			Ref		
Deceased donor						
KDPI < 20%	1.40	<0.001	1.37-1.43	1.20	<0.001	1.18-1.23
KDPI 21-85%	1.81	<0.001	1.79-1.84	1.59	<0.001	1.57-1.61
KDPI >85%	2.00	<0.001	1.97-2.04	2.05	<0.001	2.02-2.08
<b>Transplant Characteristics</b>						
Cold ischemic time (hours)	1.02	<0.001	1.01-1.02	1.02	<0.001	1.01-1.02
Induction						
No Induction	Ref			Ref		
Depleting therapy	0.94	<0.001	0.93-0.96	0.80	<0.001	0.79-0.81
Non-depleting therapy	1.01	0.083	0.99-1.03	0.90	<0.001	0.89-0.91
Maintenance						
Cyclosporine	Ref			Ref		
Tacrolimus	0.87	<0.001	0.85-0.88	0.73	<0.001	0.72-0.74
Rapamycin	1.29	<0.001	1.23-1.36	1.14	<0.001	1.09-1.19
Belatacept	0.81	0.032	0.67-0.98	0.55	<0.001	0.47-0.65
Acute rejection at 1 year	1.09	<0.001	1.07-1.10	1.32	<0.001	1.30-1.34

Abbreviations: BMI- body mass index; PRA: panel reactive antibody; KDPI- kidney donor profile index.

**Table S5, SDC:** Clinical and demographic characteristics of patients transplanted in the modern era (2011-onwards), stratified by etiology of ESRD: amyloidosis versus nonamyloidosis.

	Amyloidosis (N=393)	Nonamyloidosis (N=197 534)	p value
<b>Recipient Characteristics</b>			
Median age in years (IQR)	59 (51-65)	52 (42-61)	<0.001
Male, n (%)	235 (59.8)	120 161 (60.8)	0.675
Median BMI (kg/m <sup>2</sup> , IQR)	25.7 (23.2-28.6)	27.4 (23.8-31.5)	<0.001
Race, n (%)			<0.001
White	314 (80)	103 128 (52.2)	
African American	22 (5.6)	51 085 (25.8)	
Latino	44 (11.2)	28 571 (14.4)	
Asian	8 (2.1)	10 913 (5.5)	
Other	5 (1.1)	3837 (2.1)	
Pretransplant dialysis, n (%)	325 (83.1)	159 812 (81.5)	0.419
Median total days on dialysis (IQR)	552 (133-1213)	685 (98-1493)	0.059
Median total days on wait list (IQR)	302 (119-754)	478 (173-1031)	<0.001
Comorbid Medical Conditions			
Hepatitis B, n (%)	22 (6.4)	16 676 (10.3)	0.016
Hepatitis C, n (%)	12 (3.3)	8485 (4.6)	0.229
Diabetes, n (%)	22 (5.6)	95 340 (33.4)	<0.001
PRA >80, n (%)	21 (6.1)	12 050 (6.8)	0.601
<b>Donor Characteristics</b>			
Median donor age (IQR)	45 (34-55)	41 (28-51)	<0.001
African American Donor, n (%)	17 (4.3)	25 748 (13)	<0.001
Male donor, n (%)	187 (47.5)	102 352 (51.8)	0.093
Deceased donor, n (%)	173 (44)	121 146 (61.3)	<0.001
ECD donor, n (%)	52 (30.1)	21 436 (17.7)	<0.001
Hepatitis C donor, n (%)	3 (0.8)	3369 (1.8)	0.148
PHS-high risk donor, n (%)	12 (3.1)	11 139 (5.6)	<0.001
Diabetic donor, n (%)	16 (4.6)	8464 (4.7)	0.933
Median KDPI (IQR)	0.55 (0.25-0.77)	0.47 (0.24-0.69)	0.074
<b>Transplant Characteristics</b>			
HLA zero mismatch, n (%)	32 (8.7)	16 754 (8.5)	0.085
Median cold ischemic time, hours (IQR)	4 (1-16)	12 (2-20)	<0.001
Delayed graft function, n (%)	56 (14.3)	33 768 (17.1)	0.322
Acute rejection in the 1st year, n (%)	37 (9.4)	17 899 (9.1)	0.807
Induction therapy use, n (%)			0.025
None	71 (18.1)	43 540 (22)	
Nondepleting agents	116 (29.5)	49 630 (25.1)	
Depleting agents	206 (52.4)	104 364 (52.9)	
Calcineurin inhibitor use, n (%)			0.304
Tacrolimus	326 (82.9)	160 400 (81.2)	
Cyclosporine	37 (9.4)	23 650 (12)	