

## Supplemental Material

**Supplemental Table 1 SCr (mg/dL) over 7 days, 30 days, and 1 year by DGF status**

DGF status		N	Variable	Mean	Minimum, maximum	Median	P25, P75	
Overall <sup>a</sup>		361	Baseline SCr	6.4	1.2, 15.6	6.2	4.8, 7.6	
		361	7-Day avg	5.9	1.1, 14.0	5.8	4.5, 7.4	
		361	30-Day avg	4.6	1.0, 10.0	4.6	3.1, 5.9	
		361	Year avg	3.2	1.0, 9.2	3.1	2.2, 4.0	
DGF: Dialysis- based definition	Yes <sup>b</sup>	119	Baseline SCr	6.3	1.9, 13.4	6.1	5.0, 7.5	
		119	7-Day avg	7.0	2.9, 12.0	6.5	5.7, 8.3	
		119	30-Day avg	5.9	2.9, 9.9	5.7	4.8, 6.8	
		119	Year avg	4.2	1.8, 9.2	4.0	3.3, 5.0	
	No	243	Baseline SCr	6.5	1.2, 15.6	6.2	4.7, 7.7	
		243	7-Day avg	5.4	1.1, 14.0	5.2	3.6, 6.9	
		243	30-Day avg	3.9	1.0, 10.0	3.8	2.6, 5.0	
		243	Year avg	2.8	1.0, 7.0	2.6	1.9, 3.3	
Functional DGF: 7-day definition	Yes <sup>c</sup>	217	Baseline SCr	6.1	1.2, 12.1	5.8	4.7, 7.3	
		217	7-Day avg	6.9	2.1, 12.0	6.6	5.6, 8.3	
		217	30-Day avg	5.5	1.9, 9.9	5.4	4.4, 6.4	
		217	Year avg	3.8	1.7, 9.2	3.6	3.0, 4.4	
	No	Intermediate graft function <sup>d</sup>	85	Baseline SCr	6.6	2.1, 15.6	6.3	4.4, 7.7
			85	7-Day avg	4.8	1.1, 14.0	4.8	3.0, 5.8
			85	30-Day avg	3.4	1.0, 10.0	3.1	2.2, 4.2
			85	Year avg	2.5	1.0, 5.9	2.3	1.9, 2.9
		Immediate graft function <sup>e</sup>	37	Baseline SCr	7.7	3.8, 13.8	7.4	5.7, 8.8
			37	7-Day avg	3.4	1.3, 8.6	3.1	2.3, 4.6
			37	30-Day avg	2.4	1.1, 5.3	2.2	1.7, 3.0
			37	Year avg	1.8	1.0, 3.2	1.7	1.4, 2.1
Not defined <sup>f</sup>	23	Baseline SCr	7.1	3.6, 13.4	7.0	5.5, 8.0		
	23	7-Day avg	5.3	2.9, 10.7	5.1	4.3, 5.7		
	23	30-Day avg	4.0	2.5, 8.4	3.8	2.9, 4.3		
	23	Year avg	2.8	1.8, 6.1	2.6	2.1, 2.9		

**Notes:** <sup>a</sup> One patient had primary graft non-function. <sup>b</sup> Requirement for dialysis in first 7 days post-transplantation, excluding requirement for dialysis due to hyperpotassiumemia within the first 24 hours postoperatively. <sup>c</sup> <30% reduction in baseline SCr in the first 7 days with or without dialysis. <sup>d</sup> 30% to 70% reduction in baseline SCr in the first 7 days without dialysis. <sup>e</sup> >70% reduction in Baseline SCr during the first 7 days without dialysis. <sup>f</sup> Had dialysis within 3 days and SCr drop >10%, or dialysis within 7 days and SCr drop >30%.

**Abbreviations:** Avg, average; DGF, delayed graft function; SCr, serum creatinine; P25, P75, 25th percentile, 75th percentile.

**Supplemental Table 2 Change from baseline in AUC<sub>scr</sub> (mg/dL.days) by DGF status 7 days and 30 days post-transplantation**

	Clinical DGF upon chart review <sup>a</sup>	N <sup>b</sup>	Geometric mean	95% CI	Median	Minimum, maximum	P25, P75
Day 7	Yes	122	46.0	43.9, 48.1	45.5	21.1, 83.2	39.4, 53.0
	No	182	30.2	28.1, 32.4	32.9	7.1, 93.5	22.1, 40.8
Day 30	Yes	122	138.4	130.6, 146.7	137.2	61.6, 273.5	111.1, 176.2
	No	182	79.2	74.5, 84.2	79.9	29.3, 250.7	58.5, 109.6

**Notes:** <sup>a</sup> Based on physician chart review, including patients diagnosed with DGF with no documented dialysis event. <sup>b</sup> Data limited to patients with measurement on both 7 and 30 days. Baseline is the value right before transplant.

**Abbreviations:** AUC<sub>scr</sub>, serum creatinine area under the curve; CI, confidence interval; DGF, delayed graft function; P25, P75, 25th percentile, 75th percentile.

**Supplemental Table 3 SCr t<sub>1/2</sub> (days) by DGF status up to 7 days, 30 days, and 1 year post-transplantation**

	Clinical DGF upon chart review <sup>a</sup>	N <sup>b</sup>	Mean	95% CI	Median	Minimum, maximum	P25, P75
Day 7	Yes	5	2.3	-0.8, 5.3	1.0	0.5, 6.3	0.6, 3.0
	No	88	2.8	2.4, 3.2	2.5	0.3, 6.7	1.3, 4.1
Day 30	Yes	95	9.8	8.9, 10.7	9.2	0.5, 21.2	6.8, 12.1
	No	189	7.4	6.6, 8.2	6.7	0.3, 28.9	3.0, 10.3
1 year	Yes	123	18.0	13.5, 22.5	11.4	0.5, 185.4	7.3, 17.1
	No	204	11.6	8.8, 14.4	7.1	0.3, 171.2	3.1, 12.3

**Notes:** <sup>a</sup> Based on physician chart review, including patients diagnosed with DGF with no documented dialysis event. <sup>b</sup> Limited to patients with SCr t<sub>1/2</sub> data.

**Abbreviations:** CI, confidence interval; DGF, delayed graft function; P25, P75, 25<sup>th</sup> percentile, 75<sup>th</sup> percentile; SCr t<sub>1/2</sub>, serum creatinine half-life.

**Supplemental Table 4 SCr category by DGF status at 7 days and 30 days post-transplantation**

Time period	Last SCr post-transplantation (mg/dL)	Overall	Clinical DGF upon chart review <sup>a</sup>		Acute graft rejection event <sup>b</sup>		Mortality event	
			Yes n (%)	No n (%)	Yes n (%)	No n (%)	Yes n (%)	No n (%)
7 Days	≤2.5	67	0 (0.0)	67 (100.0)	1 (1.5)	66 (98.5)	4 (1.5)	261 (97.4)
	>2.5	295	148 (50.2)	147 (49.8)	25 (8.5)	270 (91.5)	2 (2.2)	88 (95.7)
30 Days	≤2.5	268	86 (32.1)	182 (67.9)	12 (4.5)	256 (95.5)	0 (0)	65 (97.0)
	>2.5	92	61 (66.3)	31 (33.7)	12 (13.0)	80 (87.0)	6 (2.0)	286 (96.9)

**Notes:** <sup>a</sup> Based on physician chart review, including patients diagnosed with DGF with no documented dialysis event. <sup>b</sup> Defined by documentation of a hyperacute or acute rejection episode while taking or after stopping immunosuppressive drug(s).

**Abbreviations:** DGF, delayed graft function; SCr, serum creatinine.

**Supplemental Table 5 SCr and dialysis events by DGF status 7 days post-transplantation**

Clinical DGF upon chart review <sup>a</sup>	n (%)	SCr (mg/dL)				Dialysis events			
		Mean SCr	Minimum, maximum	Median	P25, P75	Mean	Minimum, maximum	Median	P25, P75
Yes	148 (40.9)	7.1	2.9, 12.0	6.8	5.8, 8.4	2.3	0.0, 7.0	2.0	1.0, 3.0
No	214 (59.1)	5.1	1.1, 14.0	5.0	3.4, 6.3	0.2	0.0, 2.0	0.0	0.0, 0.0
Total	362 (100.0)	5.9	1.1, 14.0	5.8	4.5, 7.4	1.1	0.0, 7.0	0.0	0.0, 2.0

**Notes:** <sup>a</sup>Based on physician chart review, including patients diagnosed with DGF with no documented dialysis event.

**Abbreviations:** DGF, delayed graft function; P25, P75, 25th percentile, 75th percentile; SCr, serum creatinine.

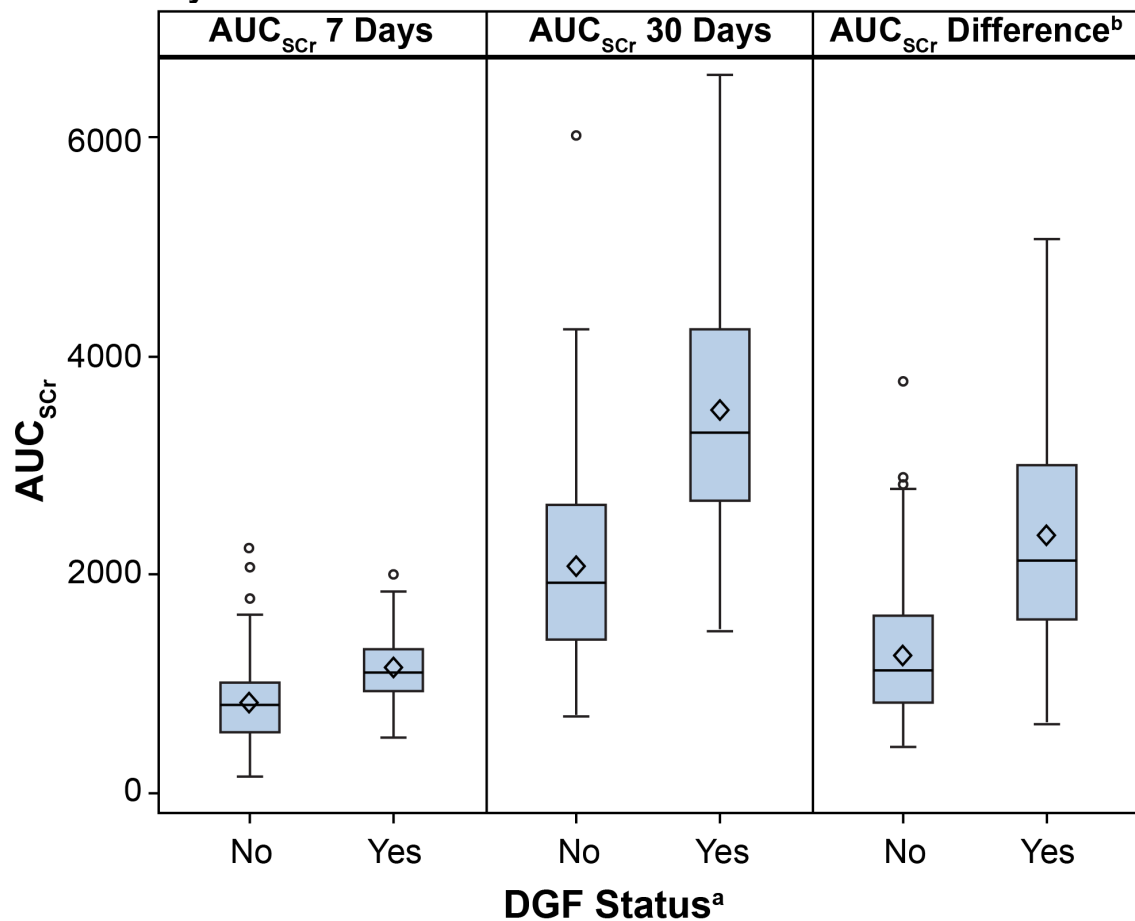
**Supplemental Table 6 Graft survival, acute rejection events, and dialysis independence by DGF status 7 days, 30 days, and 1 year post-transplant**

Variable	Overall (N=362)	Clinical DGF upon chart review <sup>a</sup>	
		Yes (N=148)	No (N=214)
<b>Day 7</b>			
Graft survival, n (%)	353 (97.5)	141 (95.3)	212 (99.1)
Acute rejection events <sup>b</sup> , n (%)	5 (1.4)	2 (1.4)	3 (1.4)
Average graft survival (days), mean (SD)	6.8 (1.1)	6.7 (1.5)	6.9 (0.7)
Dialysis independence <sup>c</sup> , n (%)	189 (52.2)	11 (7.4)	178 (83.2)
<b>Day 30</b>			
Graft survival, n (%)	353 (97.5)	141 (95.3)	212 (99.1)
Acute rejection events <sup>b</sup> , n (%)	5 (1.4)	2 (1.4)	3 (1.4)
Average graft survival (days), mean (SD)	29.2 (4.8)	28.5 (6.5)	29.7 (2.9)
Dialysis independence <sup>c</sup> , n (%)	187 (51.7)	9 (6.08)	178 (83.2)
<b>1 Year</b>			
Graft survival, n (%)	346 (95.6)	137 (92.6)	209 (97.7)
Acute rejection events <sup>b</sup> , n (%)	5 (1.4)	2 (1.4)	3 (1.4)
Average graft survival (days), mean (SD)	344.9 (73.9)	332.8 (94.2)	353.2 (54.5)
Dialysis independence <sup>c</sup> , n (%)	186 (51.4)	8 (5.4)	178 (83.2)

**Notes:** <sup>a</sup> Based on physician chart review, including patients diagnosed with DGF with no documented dialysis event. <sup>b</sup> Listed by patient. By definition, each patient had 1 rejection episode. <sup>c</sup> Dialysis independence is defined as no dialysis from first day post-transplantation to the end of period.

**Abbreviations:** DGF, delayed graft function.

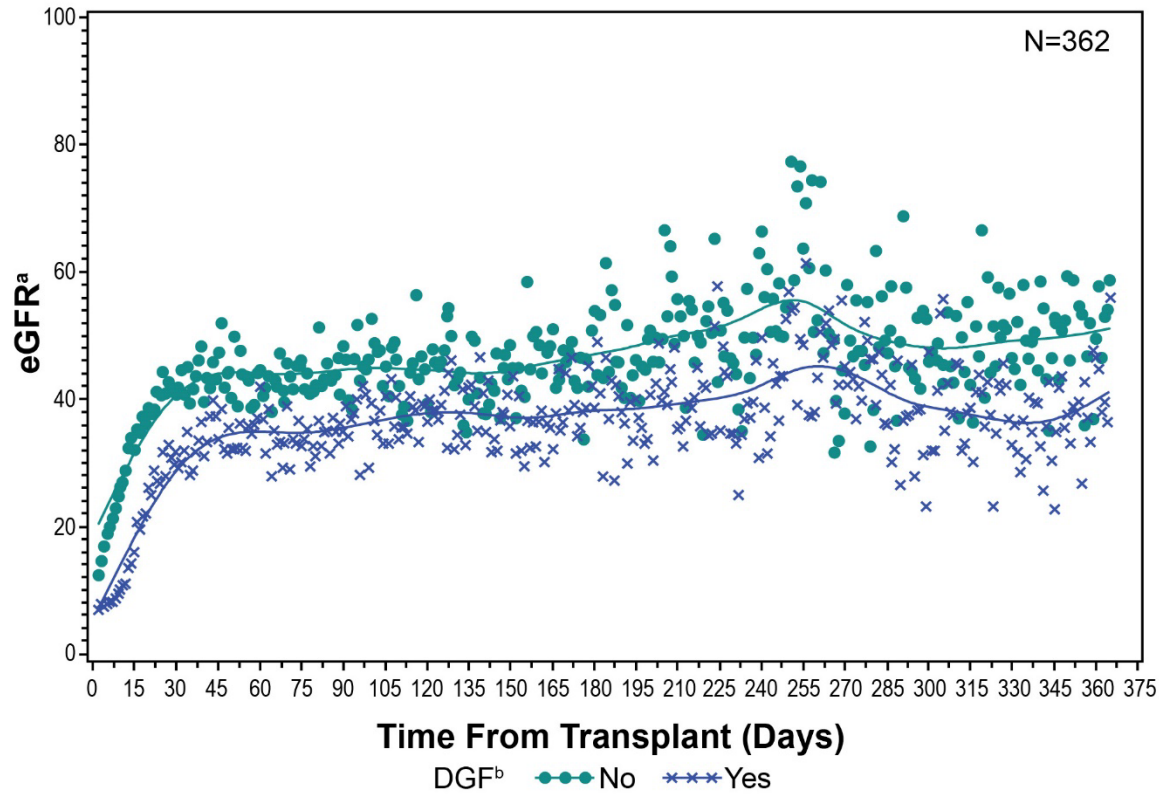
**Supplemental Figure 1 Mean AUC<sub>scr</sub> (mg/dL.hrs) at 7 days and 30 days post-transplant and mean AUC<sub>scr</sub> difference by clinical DGF status.<sup>a</sup>**



**Notes:** The diamond in each box indicates the group mean. The horizontal line inside the box is the median (50<sup>th</sup> percentile). The top and bottom borders of the box are the 25<sup>th</sup> and 75<sup>th</sup> percentiles respectively. The whiskers are calculated as ±1.5 interquartile range. Outliers are represented as small circles. <sup>a</sup> DGF status is according to physician chart review. <sup>b</sup> Difference between mean AUC<sub>scr</sub> at Day 7 and Day 30.

**Abbreviations:** AUC<sub>scr</sub>, serum creatinine area under the curve; DGF, delayed graft function.

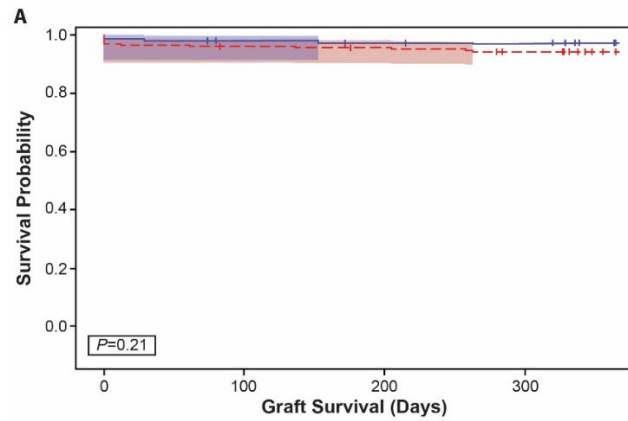
Supplemental Figure 2 Longitudinal eGFR levels by days post-transplant over 1 year (mL/min/1.73 m<sup>2</sup>).



**Notes:** <sup>a</sup> eGFR is first averaged at patient level within a year post-transplant. Includes eGFR assessments at least 48 hours after the last day of dialysis. For patients without dialysis eGFR values are obtained from 48 hours post-transplant. <sup>b</sup> DGF status is according to chart review.

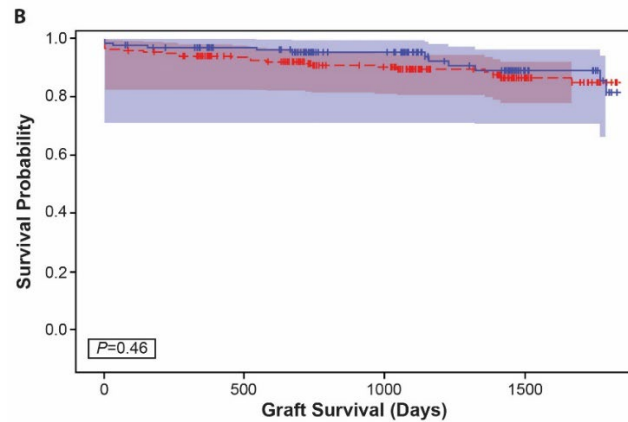
**Abbreviations:** DGF, delayed graft function; eGFR, estimated glomerular filtration rate.

**Supplemental Figure 3. Graft survival by DGF status according to 3-day functional definition. A. 1 year post-transplantation. B. 5 years post-transplantation.**



Number of Patients at Risk

DGF <sup>a</sup>	224	213	211	206
No DGF <sup>b</sup>	138	133	131	130



Number of Patients at Risk

DGF <sup>a</sup>	224	185	142	58
No DGF <sup>b</sup>	138	120	89	33

**Notes:** <sup>a</sup> DGF based on <10% fall in SCr versus baseline per 24 hours averaged over the first 72 hours with or without dialysis. <sup>b</sup> Includes patients with intermediate and immediate graft function.

**Abbreviations:** DGF, delayed graft function; SCr, serum creatinine.