

Figure S1, SDC. Receiver-operating characteristic curves for predicting 12-month eGFR <30 ml/min/1.73m². United Network for Organ Sharing-defined delayed graft function (UNOS-DGF) is any dialysis in the first post-transplant week. DGF48h is delayed graft function defined as a serum creatinine reduction of $<25\%$ in the first 48 h or >1 dialysis session in the first post-transplant week. AUC, area under the curve (95% confidence interval). Model Only consists of the following *donor variables*: age, circulatory death (rather than brain death), black race, hypertension, diabetes, height, weight, stroke as cause of death, and terminal serum creatinine; and the following *transplant/recipient variables*: cold ischemia time, age, black race, gender, previous kidney transplant, diabetes as the cause of end stage renal disease, number of human leukocyte antigen mismatches, body mass index, duration (vintage) of dialysis before transplant, and percent panel reactive antibody.

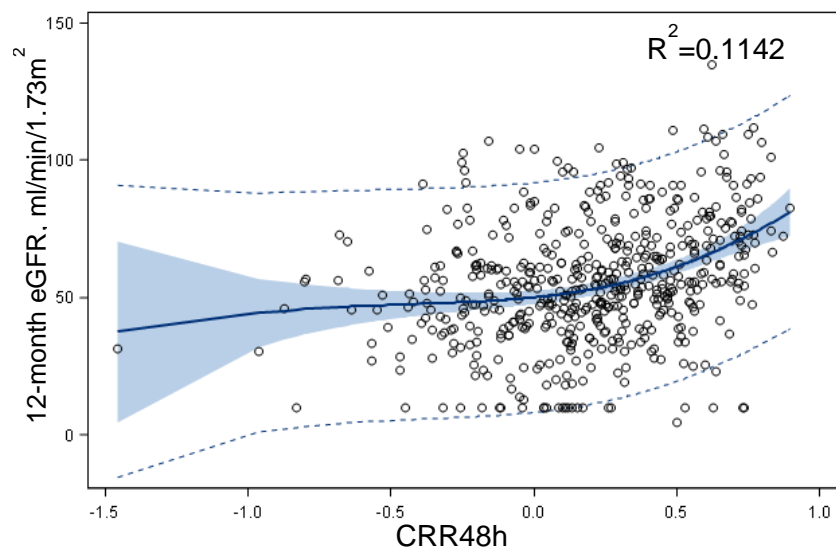
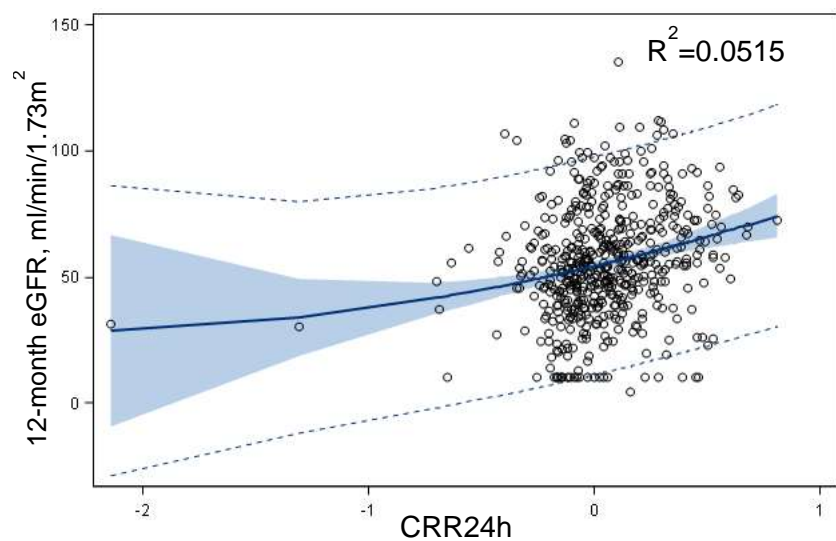
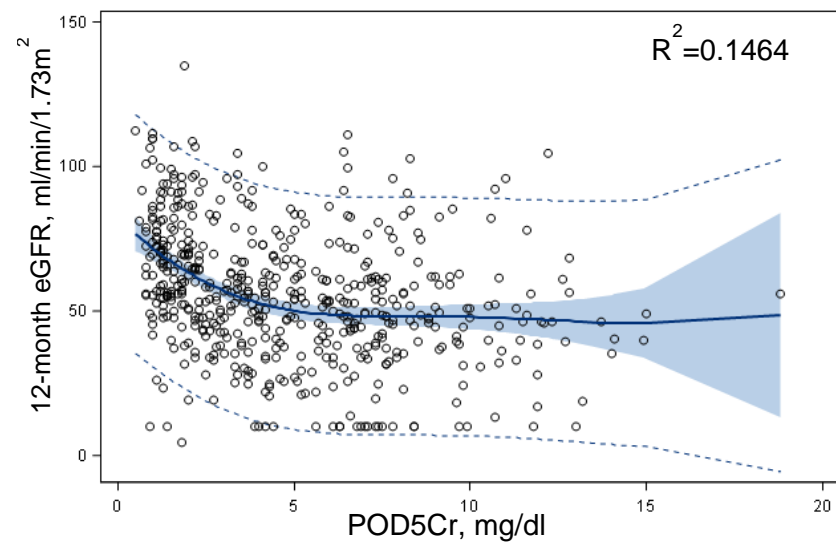


Figure S2, SDC. Basis spline curves for 12-month eGFR vs. POD5Cr, CRR24h and CRR48h. The shaded bands are 95% confidence limits, and the dotted bands are 95% prediction limits.

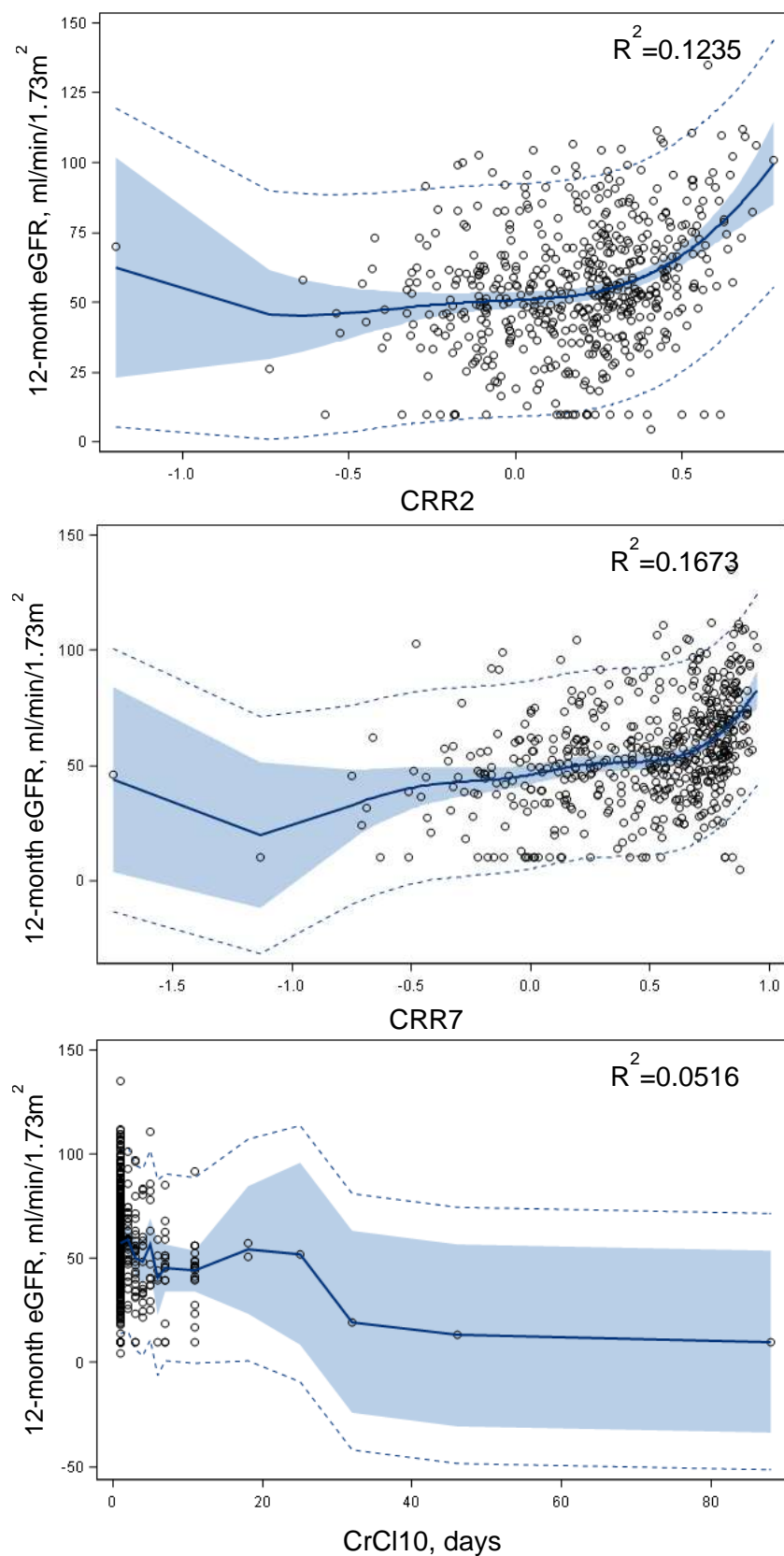


Figure S3, SDC. Basis spline curves for 12-month eGFR vs. CRR2, CRR7 and CrCl10. The shaded bands are 95% confidence limits, and the dotted bands are 95% prediction limits.

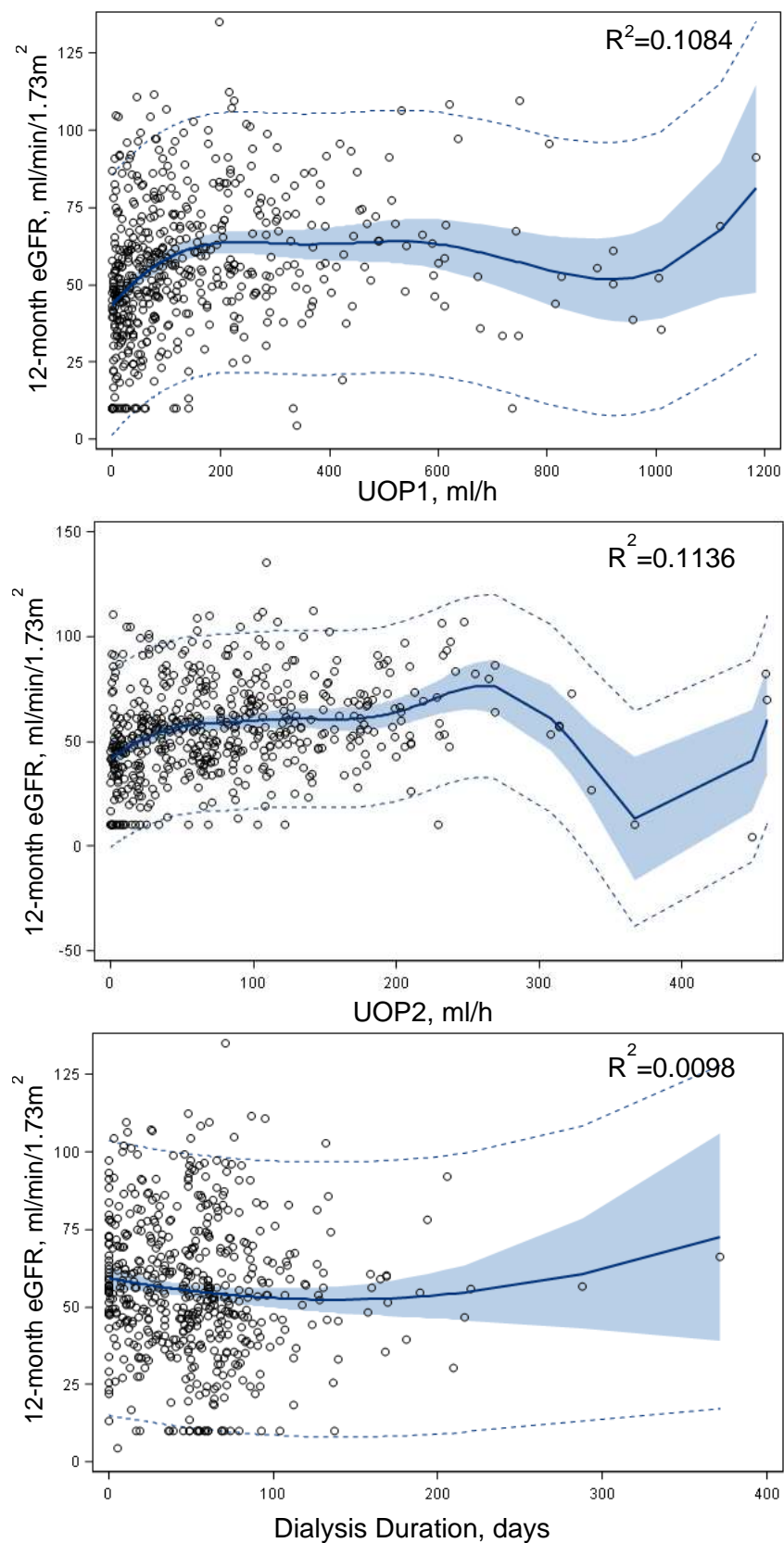


Figure S4, SDC. Basis spline curves for 12-month eGFR vs. UOP1, UOP2 and dialysis duration. The shaded bands are 95% confidence limits, and the dotted bands are 95% prediction limits.

Table S1, SDC. Secondary 12-month outcomes by phenotypes of IGF-SGF-DGF

		12-mo Rejection	12-mo Graft Failure*	12-mo Mortality
No dialysis in the 1st 7 days, n=345		41 (12%)	6 (2%)	7 (2%)
POD5Cr <3 mg/dl, n=197	IGF	21 (11%)	2 (1%)	3 (2%)
POD5Cr ≥3 mg/dl, n=148	SGF	20 (14%)	4 (3%)	4 (3%)
POD7Cr <2.5 mg/dl, n=240	IGF	25 (10%)	3 (1%)	3 (1%)
POD7Cr ≥2.5 mg/dl, n=10	SGF	16 (15%)	3 (3%)	4 (4%)
CRR24h ≥0.25, n=93	IGF	13 (14%)	2 (2%)	2 (2%)
CRR24h <0.25, n=252	SGF	28 (11%)	4 (2%)	5 (2%)
CRR48h ≥0.25, n=204	IGF	23 (11%)	4 (2%)	2 (1%)
CRR48h <0.25, n=141	SGF	18 (13%)	2 (1%)	5 (4%)
CRR2 ≥0.3, n=141	IGF	14 (10%)	4 (3%)	2 (1%)
CRR2 <0.3, n=204	SGF	27 (13%)	2 (1%)	5 (2%)
CRR3 ≥0.1, n=262	IGF	29 (11%)	5 (2%)	4 (2%)
CRR3 <0.1, n=83	SGF	12 (14%)	1 (1%)	3 (4%)
CRR7 ≥0.7, n=184	IGF	22 (12%)	3 (2%)	2 (1%)
CRR7 <0.7, n=161	SGF	19 (12%)	3 (2%)	5 (3%)
CrCl10 ≤6 days, n=331	IGF	39 (12%)	5 (2%)	6 (2%)
CrCl10 >6 days, n=14	SGF	2 (14%)	1 (7%)	1 (7%)
UOP1 ≥42 ml/h, n=307	IGF	36 (12%)	6 (2%)	6 (2%)
UOP1 <42 ml/h, n=30	SGF	5 (17%)	0 (0%)	1 (3%)
UOP2 ≥42 ml/h, n=302	IGF	33 (11%)	5 (2%)	5 (2%)
UOP2 <42 ml/h, n=42	SGF	8 (19%)	1 (2%)	2 (5%)
UNOS-DGF (any dialysis in the 1st 7 days), n=215		25 (12%)	17 (8%)	7 (3%)
Number of dialysis sessions				
1 within 1 day, n=45		2 (4%)	0 (0%)	1 (2%)
1 after POD1, n=32		4 (13%)	2 (6%)	0 (0%)
2, n=77		9 (12%)	6 (8%)	1 (1%)
≥3, n=61		10 (16%)	9 (15%)	5 (8%)
Dialysis Duration				
1 to 7 days, n=102		10 (10%)	3 (3%)	3 (3%)
8 to 14 days, n=46		5 (11%)	0 (0%)	2 (4%)
>14 days, n=67		10 (15%)	14 (21%)	2 (3%)

Values are n (row %). POD5Cr, post-operative day 5 serum creatinine; POD7Cr, POD7 serum Cr; CRR24h, Cr reduction ratio in the first 24 hours; CRR48h, CRR in the first 48 hours; CRR2, CRR on POD2; CRR3, CRR over 3 consecutive days within the first week; CRR7, CRR on POD7; CrCl10, number of days to reach a creatinine clearance ≥10 ml/min; UOP1, average hourly urine output from transplant to the morning of POD1; UOP2, average hourly UOP from the morning of POD1 to 2.

* Death-censored graft failure.

Table S2, SDC. Comparison of UNOS-DGF and DGF48h as predictors of 24-month eGFR

24-month Outcome	UNOS-DGF				DGF48h			
	No, n=345	Yes, n=215	Unadjusted Association (95% CI) *	Adjusted Association (95% CI) **	No, n=230	Yes, n=330	Unadjusted Association (95% CI) *	Adjusted Association (95% CI) **
eGFR, ml/min/1.73m ² ± SD	62±25	51±27	-10.9 (-15.2, -6.5)	-6.5 (-10.9, -2.1)	65±25	53±26	-11.9 (-16.2, -7.3)	-5.9 (-10.3, -1.5)
eGFR <30 ml/min/1.73m ² , n (%)	31 (9)	43 (20)	2.2 (1.4, 3.4)	1.7 (1.1, 2.7)	18 (8)	56 (17)	2.1 (1.3, 3.6)	1.5 (0.9, 2.6)
Acute Rejection, n (%)	48 (14)	29 (13)	1.0 (0.6, 1.5)	1.0 (0.6, 1.6)	28 (12)	49 (15)	1.2 (0.8, 1.9)	1.4 (0.9, 2.2)
Death-Censored Graft Failure, n (%)	11 (3)	20 (9)	2.9 (1.4, 6.0)	2.4 (1.0, 5.5)	7 (3)	24 (7)	2.5 (1.1, 5.7)	1.6 (0.7, 3.9)
Recipient Death, n (%)	9 (3)	12 (6)	2.1 (0.9, 5.0)	1.7 (0.6, 5.0)	3 (1)	18 (5)	4.1 (1.2, 13.8)	2.8 (0.8, 9.6)
Sensitivity Analyses (after removing 52 recipients with graft failure or death)								
	n=325	n=183			n=220	n=288		
eGFR, ml/min/1.73m ² ± SD	64±23	56±24	-8.0 (-12.2, -3.7)	-4.3 (-8.6, -0.1)	67±23	56±23	-10.7 (-14.8, -6.5)	-6.1 (-10.3, -2.0)
eGFR <30 ml/min/1.73m ² , n (%)	20 (6)	20 (11)	1.8 (1.0, 3.2)	1.3 (0.7, 2.4)	10 (5)	30 (10)	2.3 (1.2, 4.7)	1.9 (0.9, 4.0)
Acute Rejection, n (%)	43 (13)	25 (14)	1.0 (0.6, 1.6)	1.0 (0.6, 1.8)	24 (11)	44 (15)	1.4 (0.9, 2.2)	1.5 (0.9, 2.6)

United Network for Organ Sharing-defined delayed graft function (UNOS-DGF) is any dialysis in the first post-transplant week. DGF48h is delayed graft function defined as a serum creatinine reduction of <25% in the first 48 h or >1 dialysis session in the first post-transplant week. Values are mean ± standard deviation, n (%), or measure of association (95% confidence interval) as indicated.

* Unadjusted associations with continuous eGFR tested via mixed effects linear regression and with dichotomous eGFR <30 ml/min/1.73m² via modified Poisson regression

** Same regressions as above adjusted for the following *donor variables*: age, circulatory death (rather than brain death), black race, hypertension, diabetes, height, weight, stroke as cause of death, and terminal serum creatinine; and the following *transplant/recipient variables*: cold ischemia time, age, black race, gender, previous kidney transplant, diabetes as the cause of end stage renal disease, number of human leukocyte antigen mismatches, body mass index, duration (vintage) of dialysis before transplant, and percent panel reactive antibody.