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Supplemental Material

Table S1. Patient characteristics: Pulse wave analysis.

	slow metabolizers (*n* = 90)	fast metabolizers (*n* = 30)	*p*-value
Age (years, mean ± SD)	54.3 ± 13.6	54.1 ± 14.2	0.936 [a]
Male sex, *n* (%)	55 (61.1)	16 (53.3)	0.522 [c]
BMI (kg/m^2, mean ± SD)	26.8 ± 4.2	26.4 ± 4.4	0.627 [a]
Pre-existing recipient hypertension, n (%)	81 (90.0)	28 (93.3)	0.729 [c]
Diagnosis of ESRD, n (%)			
Hypertension	7 (7.8)	1 (3.3)	
Diabetes	11 (12.2)	3 (10.0)	
Polycystic kidney disease	15 (16.7)	3 (10.0)	
Obstructive nephropathy	4 (4.4)	2 (6.7)	0.596 [d]
Glomerulonephritis	23 (25.6)	7 (23.3)	
FSGS	4 (4.4)	(0.0)	
Interstitial nephritis	7 (7.8)	4 (13.3)	
Other	14 (15.6)	9 (30.0)	
Unknown	5 (5.6)	1 (3.3)	
Dialysis vintage (months, median (IQR))	41.5 (59)	65.0 (96)	0.154[a]
≥ 1 prior kidney transplant, *n* (%)	10 (11.1)	4 (13.3)	0.570[c]
Living donor transplantation	34 (37.8)	9 (30.0)	0.514[c]
Number HLA mismatch, *n* (%)			
0–3	29 (32.2)	11 (36.7)	0.661[c]
4–6	61 (67.8)	19 (63.3)	
Current PRA, *n* (%)			
0–20 %	85 (94.4)	26 (86.7)	0.225[c]
> 20 %	5 (5.6)	4 (13.3)	
Cold ischemia time (hours, mean ± SD)	8.1 ± 5.7	8.9 ± 5.3	0.553 [a]
Warm ischemia time (min, mean ± SD)	34.3 ± 6.9	35.2 ± 10.7	0.698 [a]
Donor age (years, mean ± SD)	49.4 ± 13.2	51.0 ± 13.9	0.575 [a]
Donor male sex, n (%)	40 (44.4)	20 (66.7)	0.057 [c]
Recipient eGFR at 1yr (mL/min per 1.73 m^2, mean ± SD)	56.8 ± 19.8	48.6 ± 16.9	0.070 [a]
Recipient eGFR at pulse wave analysis (mL/min per 1.73 m^2, mean ± SD)	49.9 ± 14.2	42.8 ± 15.8	0.024 [a]
Time from Tx to Measurement (years, median, (1st, 3rd quartile))	4.5 (3.0, 6.0)	4.6 (1.0, 6.7)	0.913 [b]
Peripheral systolic blood pressure (mmHg, mean ± SD)	130 ± 15	133 ± 17	0.438 [a]
Peripheral diastolic blood pressure (mmHg, mean ± SD)	85 ± 10	88 ± 13	0.213 [a]
Mean arterial pressure (mmHg, mean ± SD)	106 ± 11	108 ± 14	0.377 [a]

Central systolic blood pressure (mmHg, mean ± SD)	120 ± 14	124 ± 16	0.283 [a]
Central diastolic blood pressure (mmHg, mean ± SD)	86 ± 10	88 ± 14	0.398 [a]
Pulse wave velocity (m/s, mean ± SD)	8.0 ± 1.8	8.1 ± 1.9	0.935 [a]
Augmentation index (mean ± SD)	19.3 ± 14.6	14.8 ± 13.0	0.141 [a]
Total vascular resistance (s*mmHg/mL)	1.3 ± 0.2	1.3 ± 0.2	0.737 [a]

[a] Student's *t*-test, [b] Mann-Whitney U test, [c] Fisher's exact test, [d] Pearson's chi-squared test.

Table S2. Patient demographics: Glycocalyx assessment.

	slow metabolizers (*n* = 14)	**fast metabolizers (*n* = 14)**	***p*-value**
Age (years, mean ± SD)	50.7 ± 13.3	48.7 ± 9.7	0.659[a]
Male sex, n (%)	6 (42.9)	7 (50.0)	1.000[c]
BMI (kg/m^2, mean ± SD)	23.6 ± 3.5	25.7 ± 5.8	0.272[a]
Pre-existing recipient hypertension, n (%)	13 (92.9)	12 (85.7)	1.000[c]
Diagnosis of ESRD, n (%)			
Hypertension	1 (7.1)	2 (14.3)	
Diabetes	1 (7.1)	0 (0.0)	
Polycystic kidney disease	1 (7.1)	0 (0.0)	
Obstructive nephropathy	0 (0.0)	1 (7.1)	0.793[d]
Glomerulonephritis	5 (35.7)	4 (28.6)	
FSGS	1 (7.1)	1 (7.1)	
Interstitial nephritis	3 (21.4)	1 (7.1)	
Other	1 (7.1)	4 (28.6)	
Unknown	1 (7.1)	1 (7.1)	
Dialysis vintage (months, median (IQR))	56.5 ± 36.9	60.1 ± 37.0	0.808[a]
≥ 1 prior kidney transplant, *n* (%)	3 (21.4)	4 (28.6)	1.000[c]
Living donor transplantation	3 (21.4)	2 (14.3)	1.000[c]
Number HLA mismatch, n (%)			
0–3	9 (64.3)	10 (71.4)	1.000[c]
4–6	5 (35.7)	4 (28.6)	
Current PRA, n (%)			
0–20 %	11 (78.6)	12 (85.7)	1.000[c]
> 20 %	3 (21.4)	2 (14.3)	
Cold ischemia time (hours, mean ± SD)	8.3 ± 5.2	10.2 ± 4.7	0.307[a]
Warm ischemia time (min, mean ± SD)	31.8 ± 6.9	32.2 ± 8.0	0.684[a]
Donor age (years, mean ± SD)	53.8 ± 13.8	51.1 (9.1)	0.546[a]
Donor male sex, n (%)	6 (42.9)	7 (50.0)	1.000[c]
Recipient eGFR at measurement (ml/min per 1.73 m^2, mean ± SD)	51.5 ± 13.9	45.8 ± 14.2	0.292[a]
Time from Tx to Measurement (years, (median, 1st, 3rd quartile))	4.0 (1.9, 12.0)	5.1 (2.4, 7.6)	0.874[b]
Tac blood trough concentration (ng/ml, mean ± SD)	3.5 ± 1.4	8.1 ± 2.6	<0.001[a]
Tac daily dose (mg, mean ± SD)	6.6 ± 2.3	6.1 ± 1.3	0.495[a]
Tac C/D ratio (ng/mL × 1/mg, mean ± SD)	2.1 ± 0.8	0.8 ± 0.2	<0.001[a]

[a]Student's *t*-test, [b]Mann-Whitney U test, [c]Fisher's exact test, [d]Pearson's chi-squared test.

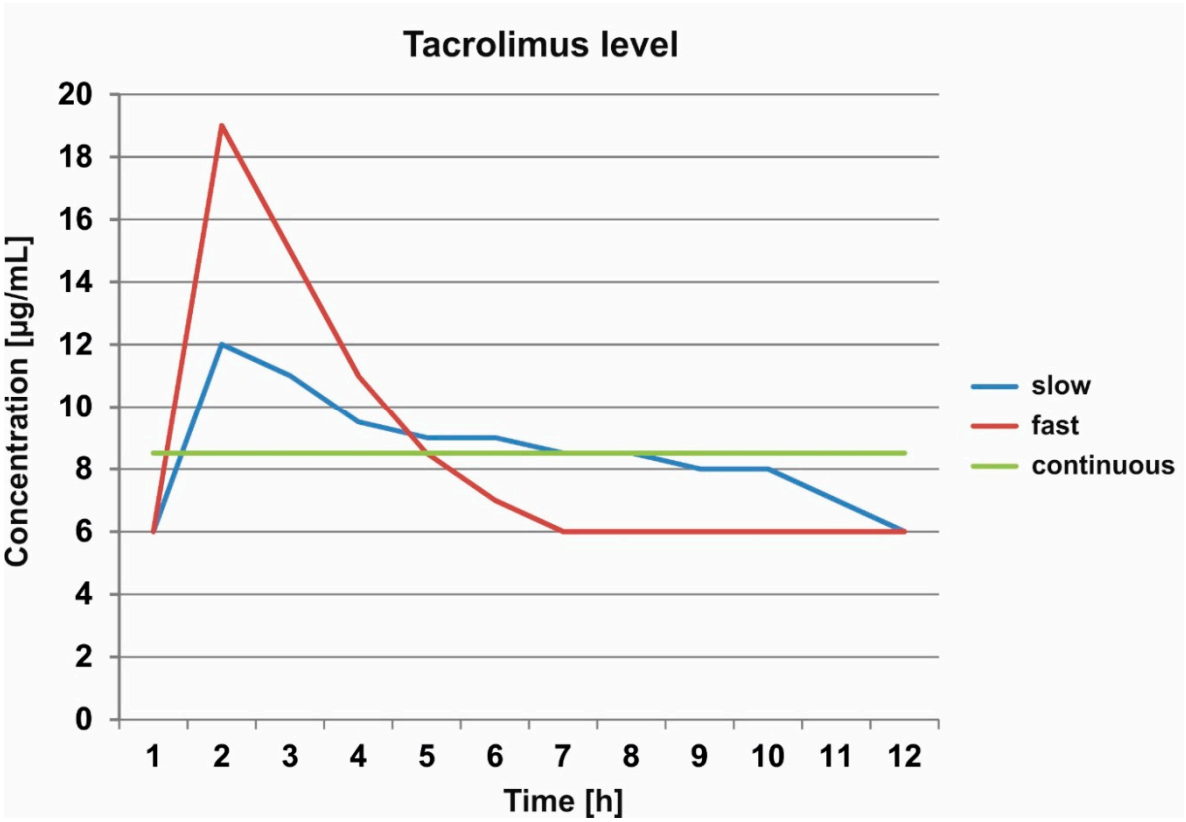

Figure S1. Pharmakokinetic profiles used for NRK cell incubation. Culture medium was changed every hour using the indicated Tac concentrations.