

Plasma Vitamin C and Risk of Late Graft Failure in Kidney Transplant Recipients:

Results of the TransplantLines Biobank and Cohort Study

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Table S1. Potential effect-modifiers of the association between plasma vitamin C and risk of graft failure

Potential effect-modifiers	Plasma vitamin C, per 1-SD increment	
	B	P
Age, years	0.01	0.28
Sex (male)	0.35	0.24
eGFR, mL/min/1.73 m ²	<0.001	0.68
Proteinuria ≥0.5 g/24 h	-0.29	0.29
Systolic blood pressure, mmHg	0.002	0.69
Fruit consumption, servings/day	0.04	0.74
Vegetable consumption, tablespoons/day	-0.04	0.83
hs-CRP, mg/L	0.001	0.98
Triglycerides, mg/dL	0.28	0.01
HDL cholesterol, mg/dL	-1.11	0.04
LDL cholesterol, mg/dL	-0.16	0.34
Dialysis vintage	0.65	0.11
Time since transplantation, years	0.004	0.86
Use of calcineurin inhibitor	-0.13	0.20
Cumulative prednisolone, grams	0.002	0.82

Cox proportional-hazards regression analyses were performed with adjustment for age, sex, body mass index, donor age, donor sex, eGFR and proteinuria.

Table S2. Stratified prospective analyses of the association of plasma vitamin C with risk of graft failure, using clinically relevant cut-off points

Models	Plasma vitamin C					
	Tertiles			Per 1-SD, relative increment		
	Tertile 1	Tertile 2	Tertile 3	HR (95% CI)	HR (95% CI)	P
Triglycerides ($P_{int}=0.01$)						
<1.7 mmol/L ($n_e=29$)	1.00	0.58 (0.25–1.33)	0.16 (0.04–0.61)	0.49 (0.30–0.79)	0.003	
≥1.7 mmol/L ($n_e=46$)	1.00	0.75 (0.37–1.53)	1.04 (0.46–2.31)	1.05 (0.73–1.51)	0.80	
HDL ($P_{int}=0.04$)						
<1.1 mmol/L ($n_e=52$)	1.00	0.82 (0.42–1.58)	1.29 (0.60–2.80)	1.08 (0.77–1.53)	0.65	
≥1.1 mmol/L ($n_e=23$)	1.00	0.42 (0.17–1.01)	0.08 (0.02–0.39)	0.41 (0.25–0.68)	0.001	

Cox proportional-hazards regression analyses were performed to assess the association of plasma vitamin C concentration with risk of graft failure ($n_{events}=75$). Associations are shown with plasma vitamin C concentration as a continuous variable and according to tertiles of the vitamin C distribution (tertile 1, $n=197$: <35 µmol/L; tertile 2, $n=202$: 35–51 µmol/L; tertile 3, $n=199$: ≥51 µmol/L), with adjustment for age, sex, body mass index, donor age, donor sex, eGFR and proteinuria.