

Supplementary Table 2. Association of urine metabolites/creatinine (Cr) concentration with all-cause mortality, using backward stepwise multivariate Cox model

Ln (metabolites/Cr)	Unadjusted			Model 1 ^a			Model 2 ^b			Model 3 ^c		
	HR	95% CI	p-value	HR	95% CI	p-value	HR	95% CI	p-value	HR	95% CI	p-value
Glucose	1.26	1.11-1.42	<0.001	1.25	1.10-1.42	0.001	1.27	1.11-1.44	<0.001	1.25	1.09-1.43	0.001
Mannose	1.50	1.23-1.83	<0.001	1.47	1.18-1.83	0.001	1.55	1.25-1.91	<0.001	1.51	1.21-1.88	<0.001
Xylose	1.09	0.79-1.52	0.63									
Myo-inositol	1.73	1.32-2.28	<0.001	1.53	1.11-2.11	0.01	1.68	1.26-2.23	<0.001	1.57	1.16-2.13	0.003
Glycerol	1.58	1.17-2.15	0.003	1.47	1.06-2.04	0.02	1.37	0.98-1.91	0.07	1.39	0.98-1.99	0.07
Lactate	1.53	1.25-1.86	<0.001	1.43	1.15-1.78	0.001	1.34	1.07-1.68	0.01	1.35	1.07-1.70	0.01
Pyruvate	1.14	0.90-1.45	0.26	1.25	0.99-1.56	0.06						
Citrate	0.89	0.73-1.08	0.23				1.28	0.99-1.64	0.06	1.26	0.97-1.62	0.08
Oxoglutarate	1.07	0.83-1.38	0.61	1.28	0.99-1.64	0.06	1.36	1.05-1.76	0.02	1.25	0.97-1.61	0.09
Succinate	1.13	0.89-1.42	0.33									
Fumarate	1.29	1.03-1.63	0.03	1.28	1.01-1.63	0.04	1.30	1.02-1.67	0.03	1.24	0.97-1.59	0.09
Pyroglutamate	2.71	1.56-4.70	<0.001	1.80	0.98-3.32	0.060	2.07	1.11-3.87	0.02	2.11	1.06-4.18	0.03
Acetone	1.23	0.94-1.60	0.14									
Acetylcarnitine	1.19	0.91-1.54	0.20									
Isoleucine	1.39	1.10-1.75	0.006	1.48	1.16-1.89	0.001	1.44	1.14-1.83	0.003	1.40	1.09-1.79	0.009
Leucine	1.57	1.20-2.06	0.001	1.63	1.22-2.17	0.001	1.71	1.31-2.24	<0.001	1.57	1.16-2.12	0.003
Valine	1.52	1.19-1.94	0.001	1.56	1.23-1.99	<0.001	1.53	1.22-1.93	<0.001	1.50	1.17-1.92	0.001
Creatine	0.82	0.61-1.11	0.19									
Taurine	1.13	0.84-1.51	0.44									
Threonine	1.48	1.19-1.85	0.001	1.48	1.20-1.84	<0.001	1.45	1.16-1.79	0.001	1.41	1.12-1.76	0.003
Carnitine	1.08	0.87-1.34	0.49									
Oxoisocaproate	1.74	1.12-2.72	0.01	1.70	1.05-2.74	0.03						
Choline	1.64	1.34-2.01	<0.001	1.63	1.30-2.04	<0.001	1.64	1.32-2.04	<0.001	1.62	1.28-2.06	<0.001
DMG	1.24	0.86-1.80	0.24	1.57	1.04-2.35	0.03	1.49	0.98-2.28	0.06	1.58	1.01-2.47	0.046
TMNO	1.19	0.94-1.50	0.14									
Betaine	1.39	0.99-1.94	0.06	1.43	0.98-2.08	0.07						

CI, confidence interval; DMG, N,N-dimethylglycine; HR, hazard ratio; TMNO, trimethylamine N-oxide.
^aAdjusted for age, sex, hypertension, and estimated glomerular filtration rate. ^bAdjusted for model 1 variables, plus hemoglobin, albumin, aspartate transaminase, alanine transaminase, cholesterol, and uric acid. ^cAdjusted for model 2 variables, plus spot urine protein-creatinine ratio and hemoglobin A1c.