Supplemental Material

Supplemental Table 1 – Spearman's rank correlation between serum phenylacetylglutamine

and baseline characteristics

Variable	ρ	P
Age	0.42	< 0.001
Gender (female vs. male)	0.01	0.86
Prior CVD	0.21	< 0.001
Diabetes mellitus	0.24	< 0.001
Current smoker	- 0.08	0.08
Body mass index	0.02	0.70
Systolic blood pressure	0.17	< 0.001
Diastolic blood pressure	- 0.04	0.37
Hemoglobin	- 0.44	< 0.001
Albumin	- 0.22	< 0.001
C-reactive protein	0.13	0.006
Cholesterol	- 0.17	< 0.001
LDL	- 0.15	0.001
HDL	- 0.10	0.02
Calcium	- 0.02	0.69
Phosphate	0.38	< 0.001
Parathormone	0.51	< 0.001
Creatinine	0.73	< 0.001
eGFR	- 0.76	< 0.001
Therapy with ACEI/ARB	0.01	0.84
Therapy with statin	0.13	0.004
Therapy with 25-OH-vitamin D	0.22	< 0.001
Therapy with phosphate binder	0.32	< 0.001

CVD, cardiovascular disease; LDL, low-density lipoprotein; HDL, high-density lipoprotein; eGFR, estimated glomerular filtration rate; ACEI, angiotensin-converting enzyme inhibitor; ARB, angiotensin receptor blocker; ; 25-OH-vitamin D, 25-hydroxy-vitamine D

Supplemental Table 2 – Multivariate regression analysis: Factors associated with serum phenylacetylglutamine (Ln)

Variable	Unit	β	Standardized β	P
Age	y	0.008	0.12	< 0.001
Body mass index	kg/m²	- 0.01	- 0.06	0.04
Hemoglobin	g/dL	- 0.05	- 0.08	0.03
Albumin	g/L	- 0.02	- 0.07	0.02
eGFR (Ln)	ml/min/1.73 m²	- 1.26	- 0.66	< 0.001
		Model R^2		0.59

eGFR, estimated glomerular filtration rate
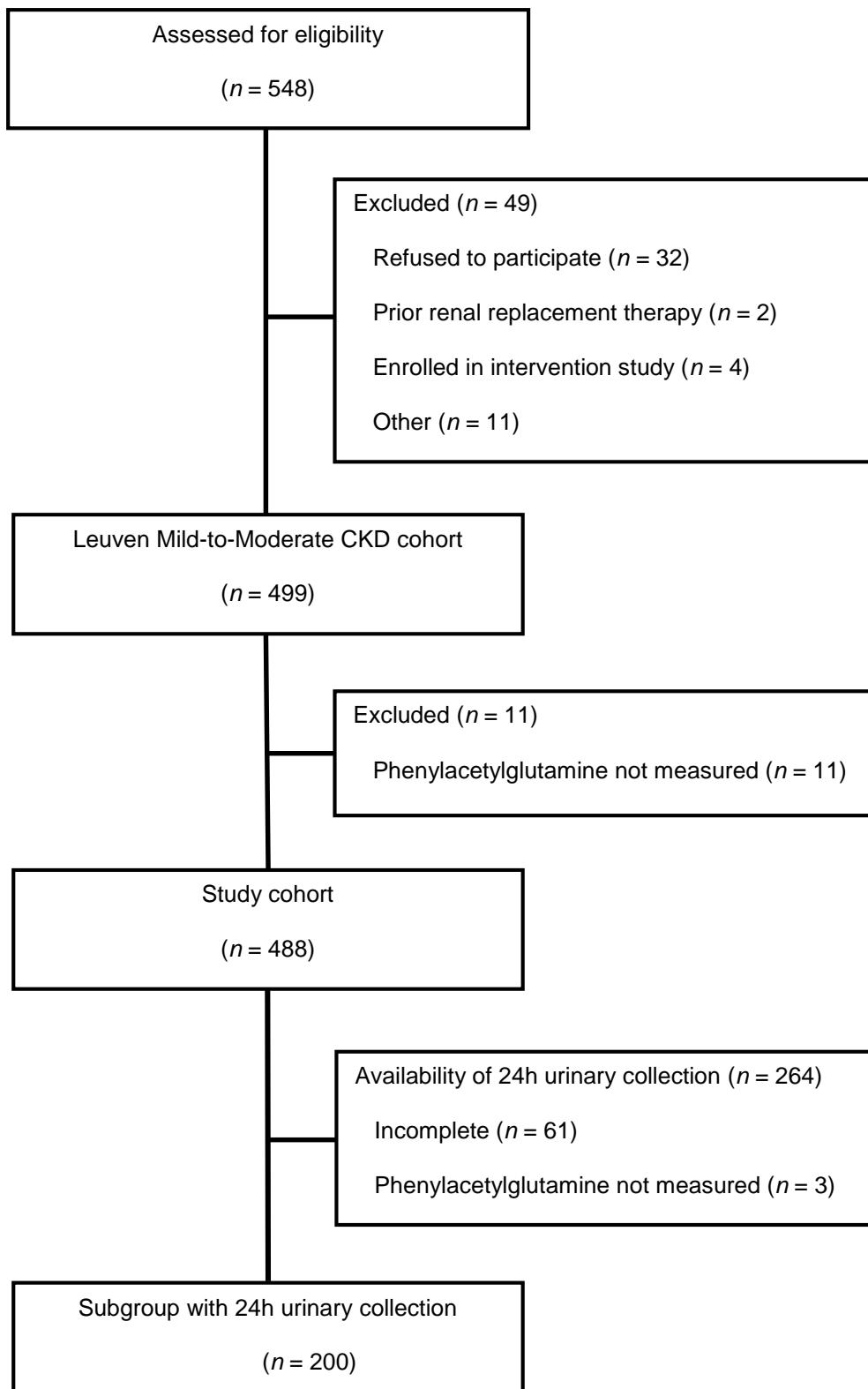
Supplemental Table 3 – Cause of death

Cause (*n* = 51)	*n* (%)
Cardiovascular	16 (31.4 %)
Malignancy	14 (27.5 %)
Infectious	3 (5.9 %)
Other	18 (35.3 %)

Supplemental Table 4 – Cardiovascular events

Events (*n* = 75)	*n* (%)
Non-fatal	64 (85.3 %)
Cardiac	28 (37.3 %)
New onset angina, conservative	10 (13.3 %)
New onset angina, invasive	6 (8.0 %)
Acute myocardial infarction	10 (13.3 %)
Ventricular arrythmia	2 (2.7 %)
Ischemic cerebrovascular accident	5 (6.7 %)
Peripheral arterial disease	31 (41.3 %)
Fatal	11 (14.7 %)

Supplemental Figure 1 – Patient inclusion

Flow chart demonstrating patient screening and inclusion.

Supplemental Figure 2 – Relationship between natural logarithmic transformed serum phenylacetylglutamine, eGFR, renal clearance of phenylacetylglutamine and 24h urinary excretion of phenylacetylglutamine (*n* = 200)