

Title: *The Associations of Blood Kidney Injury Molecule-1 and Neutrophil Gelatinase-associated Lipocalin with Progression from CKD to ESRD*

Supplemental Material

Supplementary Table 1: Net reclassification Indices for multivariate biomarkers model for ESRD. Results for whole cohort and patients with CKD 3 only at baseline shown

Supplementary Table 2: Multivariate models showing association with risk for all cause mortality

Supplementary Table 3: Multivariate models showing association with risk for major non-fatal cardiovascular events

Supplementary Table 1: Net reclassification Indices for multivariate biomarkers model for ESRD. Results for whole cohort and patients with CKD 3 only at baseline shown

Clinical endpoint	3 categories NRI (95% CI, p value)	Continuous NRI (95% CI, p value)	IDI (95% CI, p value)
ESRD (base model plus KIM-1 and NGAL)	0.01 (-0.018-0.034, p=0.55)	0.32 (0.22-0.43, p<0.001)	0.01 (0.001-0.01, p=0.03,)
ESRD (base model plus KIM-1 and NGAL) in CKD 3 only	0.07 (-0.05-0.19, p=0.26,)	0.64 (0.37-0.91, p=<0.001,)	0.03 (0.01-0.05, p=0.01,)

Supplementary Table 2: Multivariate models showing association with risk for all cause mortality

Variable	Model 1 (Baseline covariates)		Model 2 (Baseline covariates plus biomarkers)	
	HR (95%CI)	P Value	HR (95% CI)	P Value
Age (per 5 years)	1.40 (1.34-1.47)	<0.001	1.40 (1.34-1.47)	<0.001
Male gender	1.33 (1.09-1.61)	0.004	1.29 (1.06-1.57)	0.01
Diabetes	1.36 (1.14-1.63)	0.001	1.33 (1.11-1.60)	0.003
Smoker	1.25 (1.03-1.53)	0.03	1.24 (1.02-1.52)	0.03
Heart failure at baseline	1.56 (1.27-1.91)	<0.001	1.56 (1.27-1.91)	<0.001
Prior cardiovascular event	1.18 (0.98-1.43)	0.08	1.21 (1.00-1.47)	0.05
Mean systolic blood pressure (per 5mmHg)	1.00 (0.95-1.05)	0.45	1.00 (0.99-1.05)	0.55
Baseline eGFR (per 5mls/min/1.73m ²)	0.95 (0.95-1.00)	0.03	0.95 (0.95-1.05)	0.38
Haemoglobin (per 1g/dL)	0.90 (0.86-0.98)	0.008	0.92 (0.87-0.99)	0.02
Albumin (per 0.1g/dL)	0.94 (0.92-0.97)	<0.001	0.95 (0.93-0.97)	<0.001
Phosphate (per 0.5mg/dL)	1.07 (1.01-1.15)	0.03	1.07 (1.00-1.14)	0.04
Parathyroid hormone (per 10pg/mL)	1.00 (0.99-1.00)	0.40	1.00 (1.00-1.00)	0.49
C reactive protein (per 1mg/L)	1.01 (1.00-1.01)	0.002	1.01 (1.00-1.01)	0.002
Ln KIM-1 (per 1 SD)			1.05 (0.94-1.18)	0.38

Ln NGAL (per 1 SD)			1.10 (0.96-1.26)	0.17
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Supplementary Table 3: Multivariate models showing association with risk for major non-fatal cardiovascular events

Variable	Model 1 (Baseline covariates)		Model 2 (Baseline covariates plus biomarkers)	
	HR (95%CI)	P Value	HR (95% CI)	P Value
Age (per 5 years)	1.00 (0.95-1.10)	0.61	1.05 (0.95-1.10)	0.59
Diabetes	1.19 (0.84-1.72)	0.33	1.17 (0.81-1.69)	0.41
Heart failure at baseline	1.25 (0.84-1.88)	0.28	1.25 (0.84-1.88)	0.27
Prior cardiovascular event	3.74 (2.54-5.51)	<0.001	3.77 (2.55-5.56)	<0.001
Baseline eGFR (per 5mls/min/1.73m ²)	0.99 (0.98-1.01)	0.49	0.99 (0.98-1.01)	0.61
Albumin (per 0.1g/dL)	0.95 (0.90-0.99)	0.01	0.95 (0.91-0.99)	0.03
Parathyroid hormone (per 10pg/mL)	1.00 (0.90-1.00)	0.48	1.00 (0.90-1.00)	0.49
Ln KIM-1 (per 1SD)			1.05 (0.85-1.30)	0.62