Urine Proteomic Signatures of Kidney Function Decline after Hospitalization - Supplemental Material

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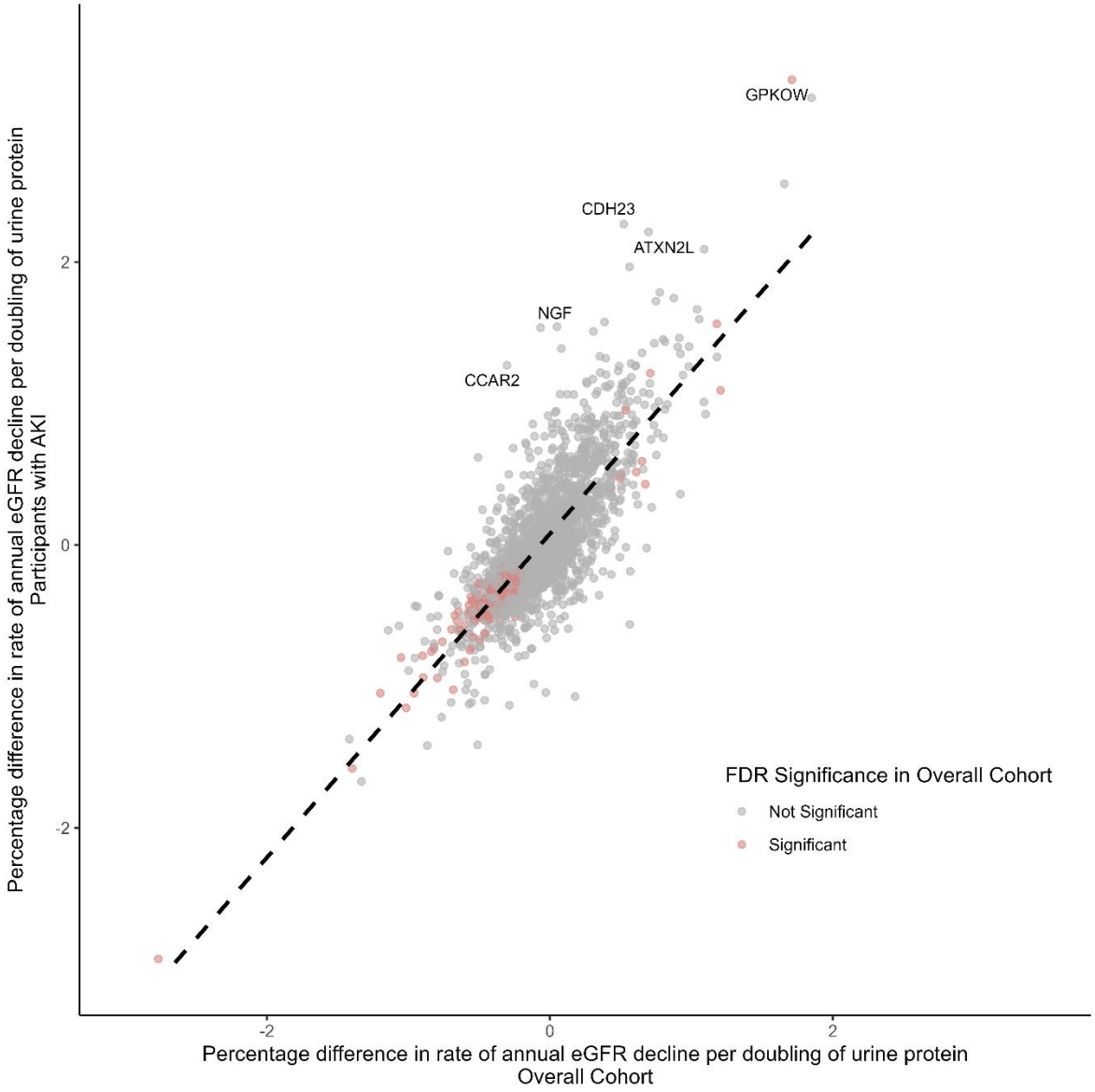
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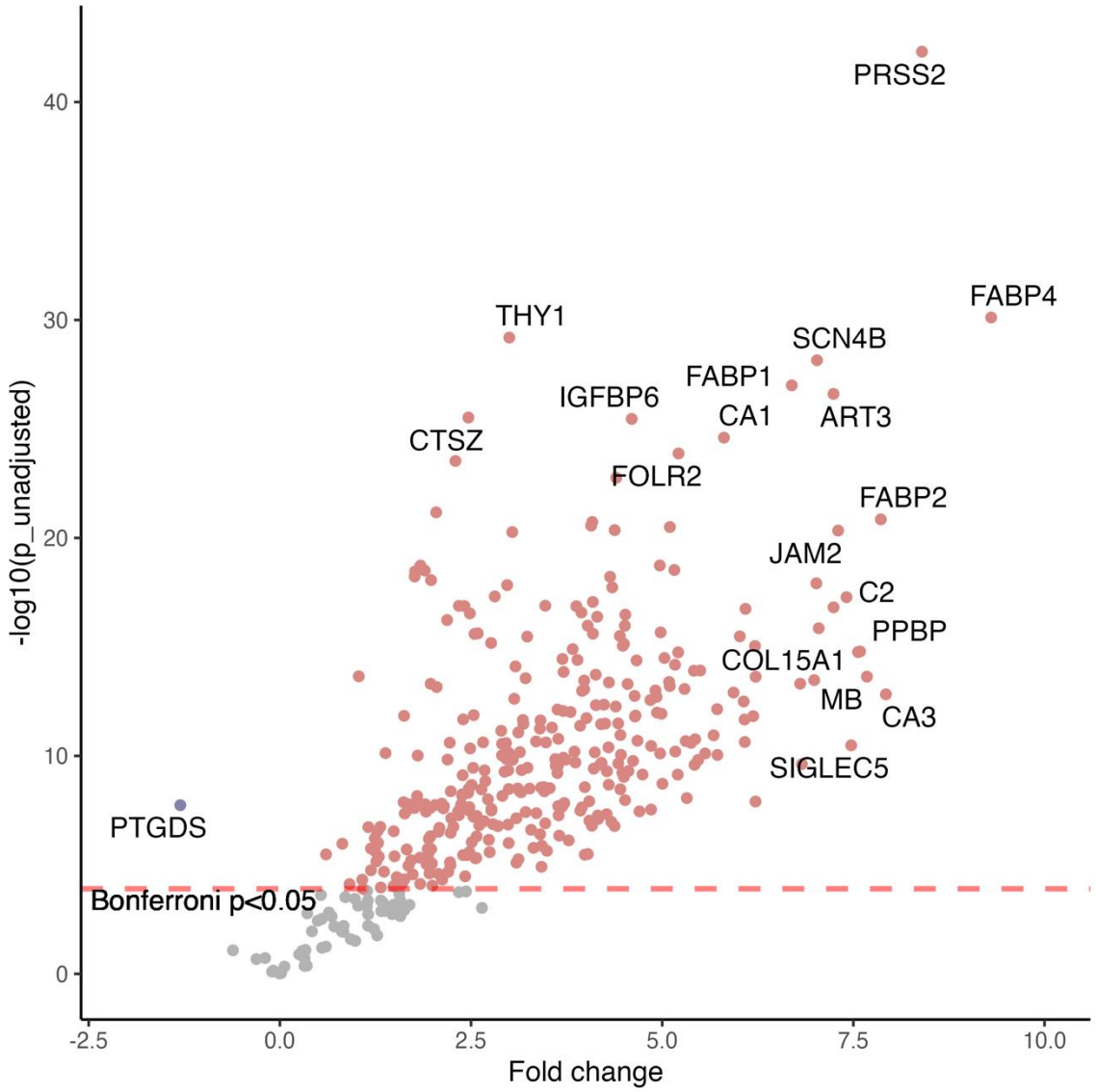
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Supplemental Figure 1 Scatter plot of the effect size of the association of proteins with eGFR in all patients and patients with AKI.



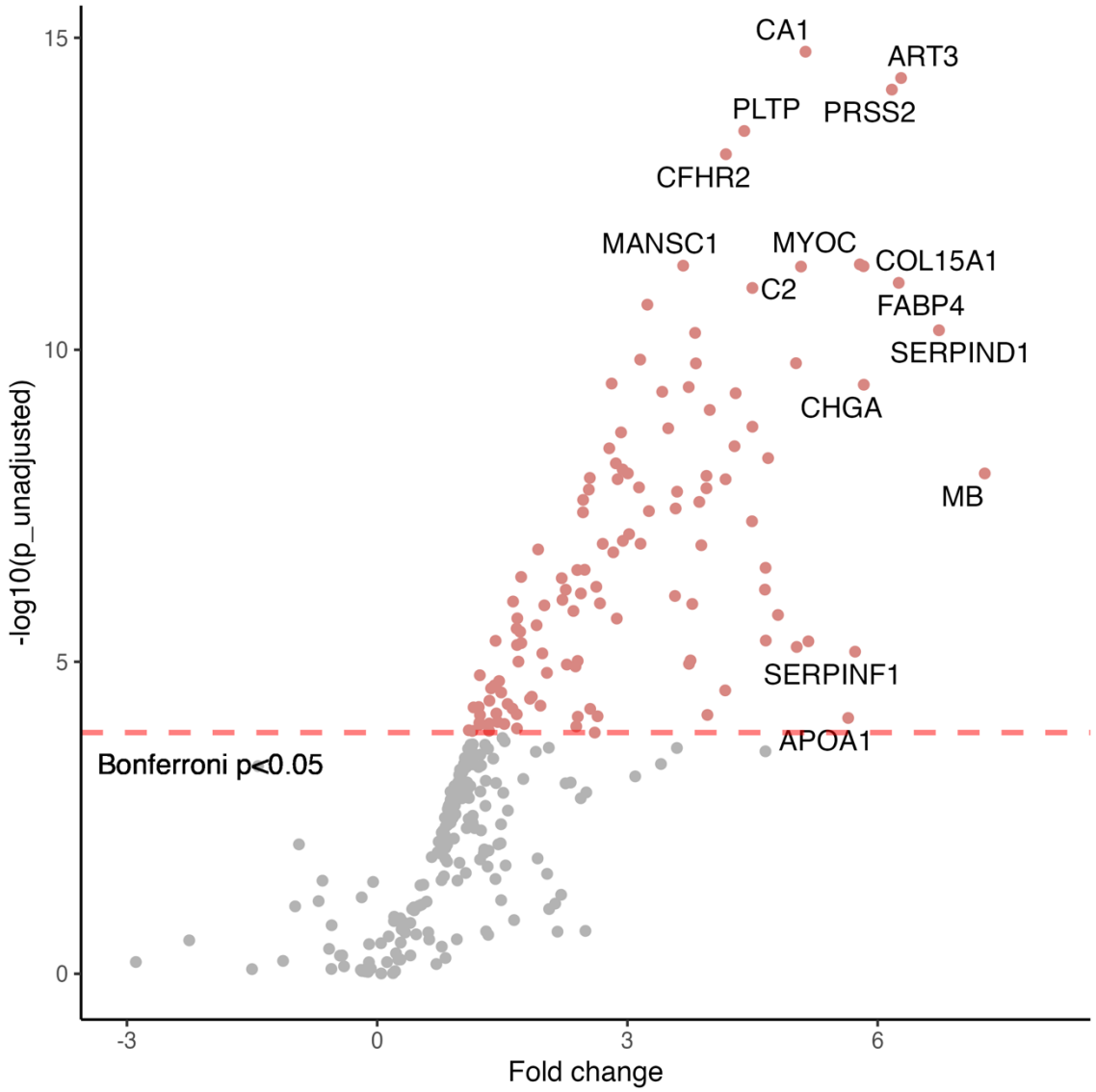
Protein associations with longitudinal eGFR in Overall Cohort (x-axis) vs Participants baseline AKI group (y-axis). Black dashed lineis the identity line; significant proteins in the Overall Cohort represented by red dots (FDR> 0.05).

Supplemental Figure 2. Urine protein concentrations measured by Olink in participants with biopsy proven ATI vs. healthy reference participants from the NAIKID cohort.



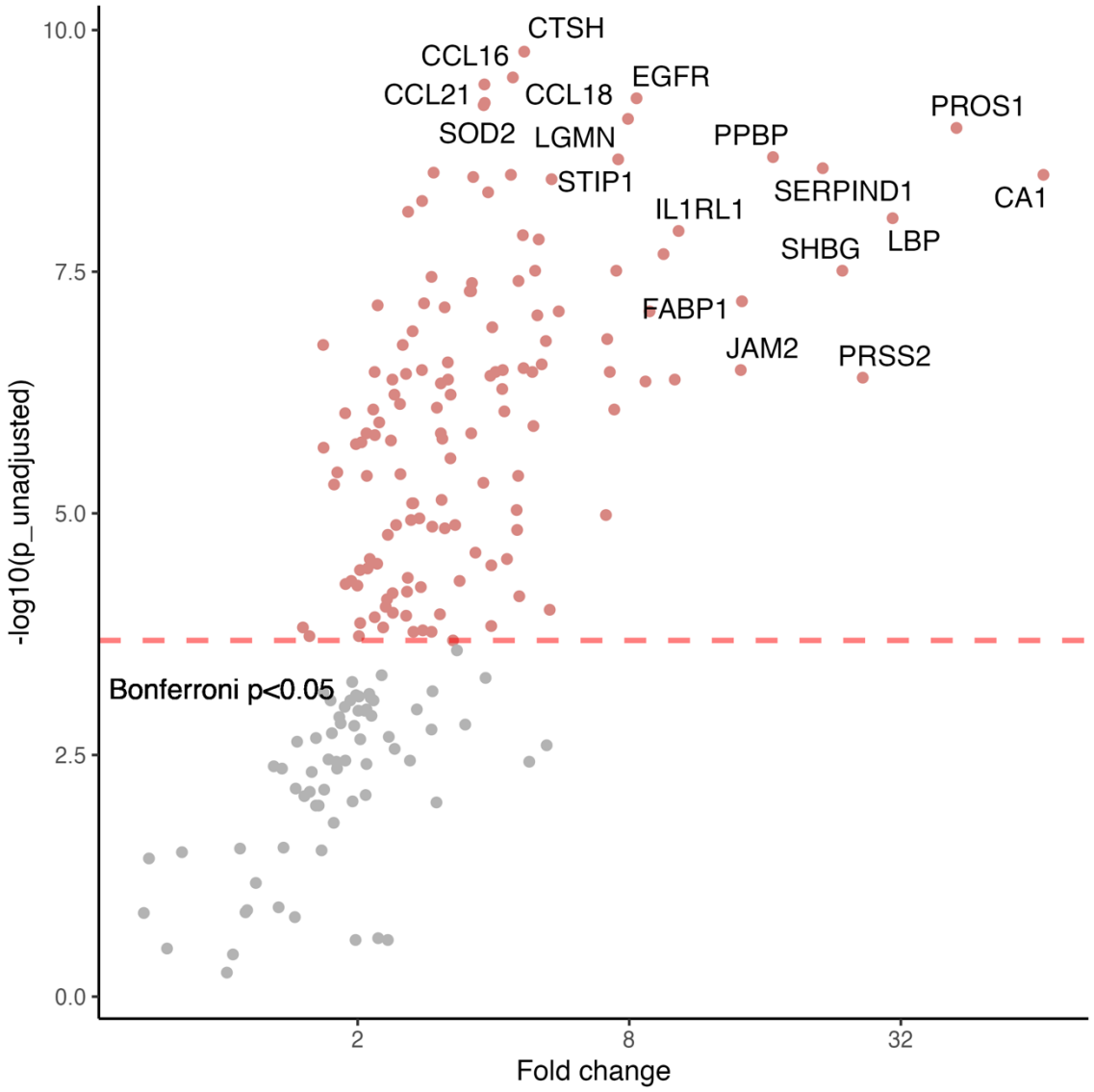
The top 10 proteins in the order of significance for both directions and the top 10 proteins in the order of effect size for proteins higher in patients with ATI are labeled with gene names.

Supplemental Figure 3. Urine protein concentrations measured by Somascan in participants with AKI vs. healthy reference participants receiving research kidney biopsies from the KPMP cohort.



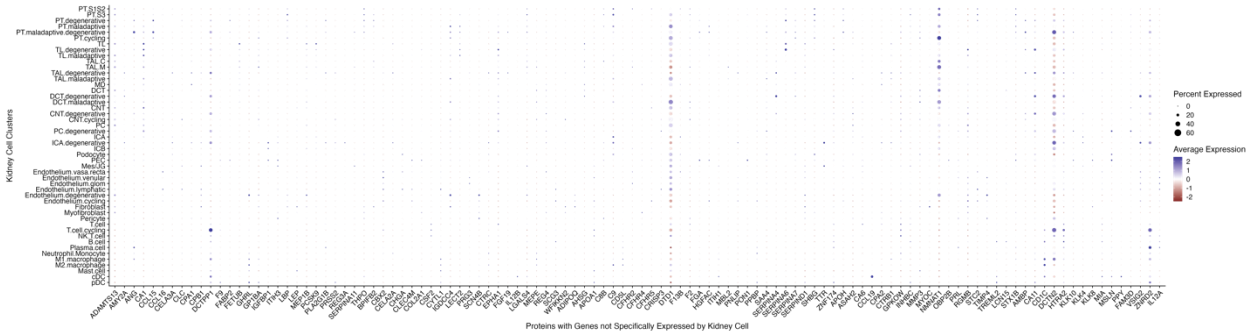
The top 10 proteins in the order of significance and the top 10 proteins in the order of effect size for proteins higher in patients with AKI are labeled with gene names.

Supplemental Figure 4. Post- vs. pre-operative urine protein concentrations in participants undergoing cardiac surgery from the TRIBE-AKI cohort.

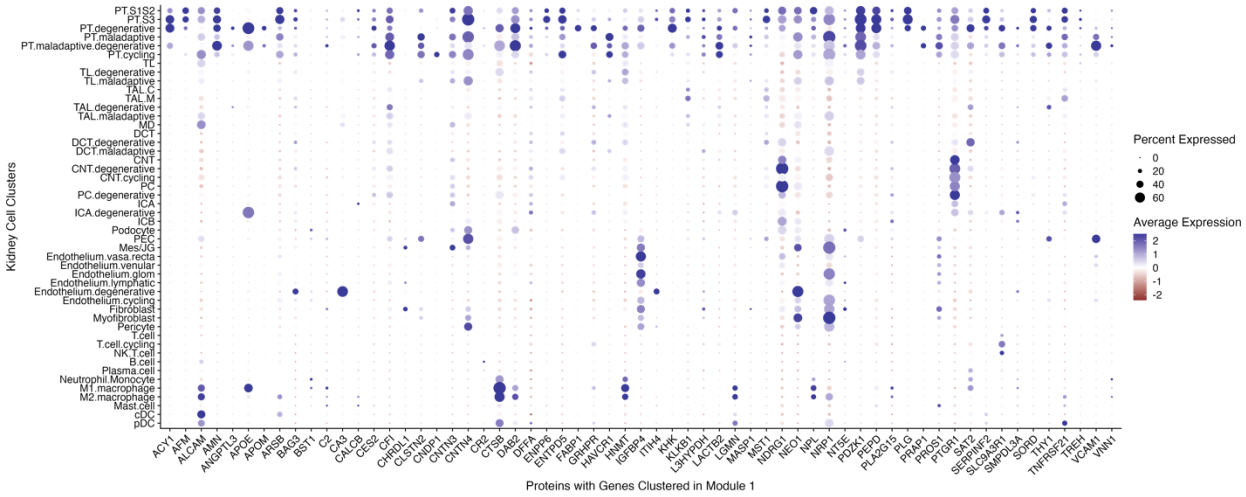


The top 10 proteins in the order of significance and the top 10 proteins in the order of effect size for proteins higher after cardiac surgery are labeled with gene names.

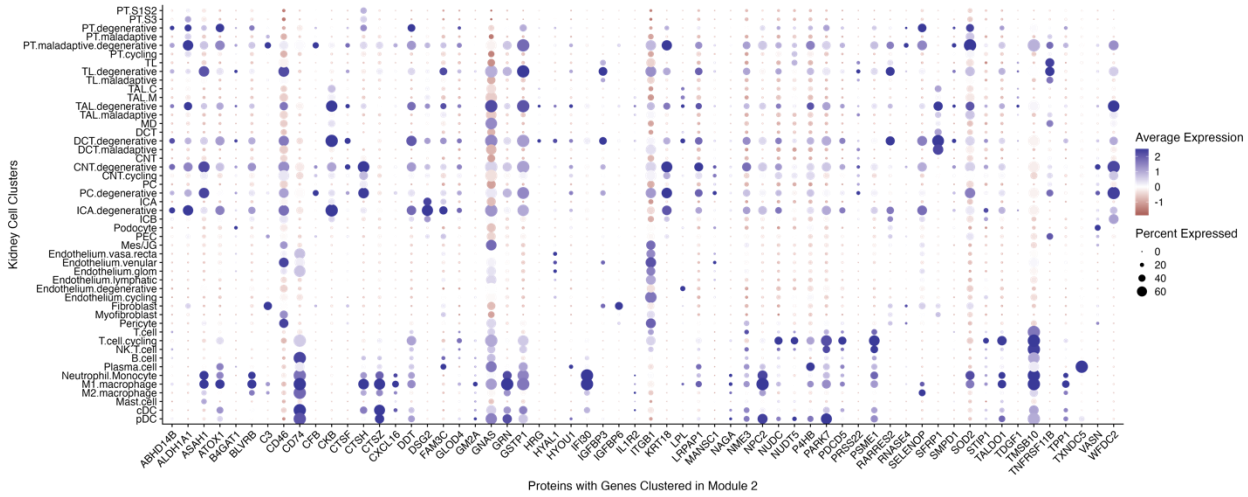
Supplemental Figure 5. Low gene expression for 114 urine proteins associated with longitudinal eGFR decline in participants from the KPMP cohort.



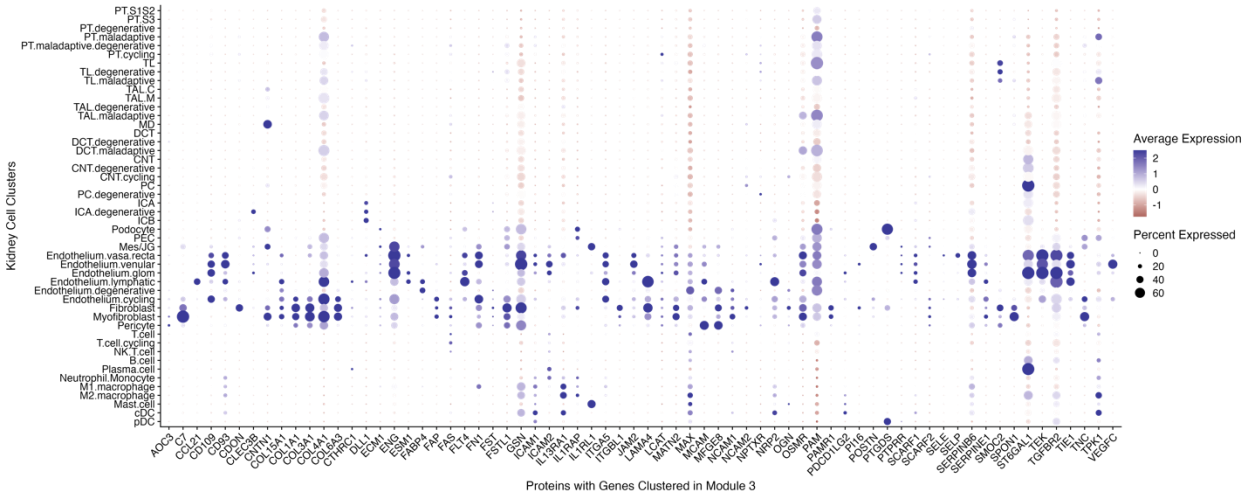
Supplemental Figure 6. Individual gene expression for urine proteins belonging to the M1 cluster in participants from the KPMP cohort.



Supplemental Figure 7. Individual gene expression for urine proteins belonging to the M2 cluster in participants from the KPMP cohort.



Supplemental Figure 8. Individual gene expression for urine proteins belonging to the M3 cluster in participants from the KPMP cohort.



Supplemental Table 1. Characteristics of participants undergoing cardiac surgery from the TRIBE-AKI cohort.

Characteristics†		AKI Progressor (N=27)	AKI Non-progressor (N=27)
Age, years		71 [56, 84]	72 [54, 84]
Sex	**Male**	24 (88.9%)	24 (88.9%)
	Female	3 (11.1%)	3 (11.1%)
Self Identified White or Caucasian Race		27 (100%)	27 (100%)
Hypertension		25 (92.6%)	24 (88.9%)
Diabetes		13 (48.1%)	11 (40.7%)
Surgery Status			
Elective		19 (70.4%)	25 (92.6%)
Urgent		8 (29.6%)	2 (7.4%)
Length hospital stay		17.0 [5.00, 197]	6.00 [4.00, 81.0]
Baseline Serum Creatinine (mg/dL)		1. 20 [0.70, 2.40]	1.00 [0.68, 2.10]
AKI Stage			
Stage 1		0 (0%)	25 (92.6%)
Stage 2		14 (51.9%)	2 (7.4%)
Stage 3		13 (48.1%)	0 (0%)

† Summary statistics are presented in median [IQR] and n(%) unless otherwise indicated.

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