

## **Supplemental Material**

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**Supplemental Table 1 :** Characteristics and outcome of admitted patients with and without proteinuria data available at admission.

	Patients with available proteinuria (n=200)	Patients with NO available proteinuria (n=122)
Male sex	143 (71.5)	75 (61.5)
Age (years)	64±13	65±18
BMI (kg/m <sup>2</sup> )	27.5±3.9	27.0±5.1
Initial sCreat (mg/dl)	1.11±0.41	1.29±0.89
Initial eGFR (ml/min/1.73m <sup>2</sup> )	76±24	77±33
Hypertension	103(51)	45 (37)
Diabetes	50 (25)	16 (13)
CKD ESKD	18 (9) 0 (0)	14 (11) 4 (3)
ICU admission	98 (49)	19 (16)
Death	47 (23)	17 (14)

Quantitative values are given in Mean±SD, qualitative values are given as number of patients/%. BMI (Body Mass Index), CKD (Chronic Kidney Disease), ESKD (End-Stage Kidney Disease), sCreat (Serum Creatinine), eGFR (estimated Glomerular Filtration rate), ICU (Intensive Care Unit).

**Supplemental Table 2:** multivariable logistic regression analysis of outcomes odds according to UPCR  $\geq 1$  g/g, age, sex, BMI, hypertension, diabetes, initial serum creatinine <sup>a</sup>.

	<b>KRT</b> <b>n = 27/200</b>			<b>ICU admission</b> <b>n = 109/169 <sup>b</sup></b>			<b>Death</b> <b>n = 51/169 <sup>b</sup></b>			<b>KRT or Death</b> <b>n = 58/169 <sup>b</sup></b>		
	OR	95%CI	p-value	OR	95%CI	p-value	OR	95%CI	p-value	OR	95%CI	p-value
UPCR $>1$ g/g (Y/N)	4.84	1.93-13.5	0.001	3.66	1.72-8.20	0.001	3.03	1.46-6.39	0.003	4.24	2.08-8.89	$< 0.001$
Age (per +10 years)	0.98	0.70-1.38	$>0.9$	1.00	0.74-1.34	$>0.9$	1.35	0.98-1.87	0.069	1.41	1.03-1.95	0.037
Male sex (Y/N)	1.39	0.48-4.69	0.6	1.38	0.59-3.18	0.5	1.22	0.51-3.06	0.2	1.00	0.42-2.42	$> 0.9$
BMI				1.12	1.03-1.22	0.008	1.06	0.98-1.15	0.2	1.10	1.02-1.20	0.015
Hypertension (Y/N)	0.53	0.20-1.35	0.2	0.41	0.15-1.09	0.078	1.04	0.36-2.87	$> 0.9$	0.95	0.42-2.13	0.9
Diabetes (Y/N)				0.74	0.31-1.79	0.5	0.72	0.30-1.65	0.4	0.59	0.25-1.34	0.2
Initial sCreat (per +1 mg/dl)	1.39	0.82-2.50	0.2	1.46	0.79-3.3	0.3	1.21	0.73-2.02	0.4	1.32	0.81-2.34	0.3

OR (Odds Ratio), CI (Confidence Interval), KRT (Kidney Replacement Therapy), ICU (Intensive Care Unit), UPCR (urine Protein-to-Creatinine Ratio), BMI (Body Mass Index), sCreat (serum Creatinine), Yes/No (Y/N). n = number of event / number of patients included in analysis

<sup>a</sup>For the outcome KRT, only 5 variables (UPCR, age, sex, hypertension, sCreat) were included in the multivariable model analysis due to small number of events.

<sup>b</sup>Complete case analysis were performed : patients with missing data for one or more covariates were excluded.

**Supplemental Table 3:** multivariable logistic regression analysis of outcomes odds according to urine retinol-binding protein to creatinine ratio  $\geq 0.3$  mg/g, age, sex, BMI, hypertension, diabetes, initial serum creatinine <sup>a</sup>.

	AKI n = 30 / 72 <sup>b</sup>			ICU admission n = 43 / 71 <sup>b</sup>			Death n = 23 / 85			KRT or Death n = 24 / 85		
	OR	95%CI	p-value	OR	95%CI	p-value	OR	95%CI	p-value	OR	95%CI	p-value
URBPCR $>0.3$ (Y/N)	5.18	1.18-29.3	0.041	15.5	4.35-69.7	$<0.001$	20.9	3.79-395	0.005	5.68	1.60-24.70	0.011
Age (per +10 years)	1.72	0.87-3.75	0.14	0.97	0.58-1.65	$>0.9$	1.11	0.73-1.69	0.6	0.91	0.59-1.40	0.7
Male sex (Y/N)	0.70	0.11-4.76	0.7	0.66	0.13-3.00	0.6	0.51	0.14-1.82	0.3	0.18	0.04-0.76	0.024
BMI (kg/m <sup>2</sup> )	1.15	0.99-1.37	0.09	1.13	0.98-1.33	0.11						
Hypertension (Y/N)	1.08	0.21-5.25	$>0.9$	0.11	0.01-0.96	0.063						
Diabetes (Y/N)	0.90	0.16-4.70	0.9	0.94	0.20-4.52	$>0.9$						
Initial sCreat (per +1 mg/dl)	2.00	1.41-3.17	$<0.001$	2.54	0.39-21.5	0.4	1.67	0.39-7.54	0.5	293	26.66-6647	$<0.001$

OR (Odds Ratio), CI (Confidence Interval), AKI (Acute Kidney Injury), ICU (Intensive Care Unit), URBPCR (urine retinol-binding protein to creatinine ratio), BMI (Body Mass Index), sCreat (serum Creatinine), Yes/No (Y/N). n = number of event / number of patients included in analysis

<sup>a</sup> Only 4 variables (URBPC, age, sex, sCreat) were included in the multivariable model analysis for the death and KRT or death outcomes, due to small number of events.

<sup>b</sup>Complete case analysis were performed : patients with missing data for one or more covariates were excluded.

**Supplemental Table 4** : characteristics of proteinuria in patients with/without diabetes, with/without chronic kidney disease (CKD).

	Diabetes		CKD	
	Yes (n=51)	No (n=149)	Yes (n=18)	No (n= 182)
UPCR (g/g)	1 [0.52-1.47]	0.76 [0.36-1.52]	1 [0.65-3.63]	0.83 [0.37-1.49]
UPCR >1 g/g (%)	50%	38%	45%%	54%%
UACR (mg/g)	248 (93-561)	101 (26-349)	135 (46-353)	110 (39-390)
UACR/UPCR (g/g)	0.23 (0.13-0.37)	0.16 (0.08-0.29)	0.39 (0.21-0.52)	0.17 (0.08-0.29)

CKD (Chronic Kidney Disease), UACR (urine albumin to creatinine ratio), UPCR (urine protein to creatinine

**Supplemental Figure 1 :**

Correlations between urine retinol-binding protein to creatinine ratio (URBPCR) and urine albumin to protein ratio (UACR/UPCR) **(A)**, urine albumin to creatinine ratio (UACR) **(B)**, urine protein to creatinine ratio (UPCR) **(C)**, by using quadratic (second order polynomial) regression. These analyses indicate that URBPCR is negatively correlated with albuminuria at high levels of alb/prot ratio (UACR/UPCR) or albuminuria (UACR), thus not due to glomerular proteinuria.

