glomerular filtration rate (eGFR). However, only few studies simultaneously measured serum concentrations and Um o excretion in Pts with chronic kidney disease (CKD).

METHODS: One hundred sixteen persons were included. SUmo (mg/ml) and UUmo (mg/l) were measured with ELISA (“Biovendor”, Brno, Slovakia). Daily Um o excretion (UUmo24, mg/day) was calculated. Serum and urinary creatinine concentrations has been established. GFR (ml/min/1.73 m²) was estimated by CKD-EPI equations (creatinine; eGFRcr). Participants were divided on six groups: healthy control (C; n=11); CKD C1 (n=33); CKD C2 (n=37); CKD C3A (n=12); CKD C3B (n=11); CKD C4-5 (n=12). Results were presented as median [interquartile range]. Spearman rank correlation coefficient (RS) and Mann-Whitney tests were used. False Discovery Rate (FDR) procedure has been applied to correct for multiple comparisons. Fisher z transformation served a base for comparison of correlation coefficients.

RESULTS: There is a significant associated between SUmo and UUmo24 (RS=0.34; P<0.0002). eGFRcr strong directly correlated with SUmo (RS=0.57; P<0.0001). UUmo24 was significant associated with eGFRcr (RS=0.27; P=0.0035). RS between eGFRcr and SUmo was significant more than RS between eGFRcr and UUmo24 (P=0.0038). SUmo in C (178.5±104.5-267.4) and CKD C1 (164.4±112.3-202.8) did not differ significantly (P=NS). In CKD C2 SUmod (113.7±89.2-144.0) was significant lower than in C (P=0.0185). Later, SUmo decreased in parallel with the increase in the stage of CKD (CKD C3A 89.5±55.8-144.5, P vs C=0.0288; CKD C3B 61.8±46.7-84.7, P=0.0003; CKD C4-5 34.8±32.2-60.8, P=0.0009). UUmo24 in CKD C1 (76.6±30.9-104.3); CKD C2 (70.0±37.9-142.4); CKD C3A (35.8±27.6-85.6); CKD C3B (27.4±11.1-77.1) were not significantly different from C (64.6±28.6-90.3); P=NS in all cases. Only in Pts with CKD C4-5 UUmo24 (23.4±11.3-33.7) was significant lower than in C (P=0.0089).

CONCLUSIONS: SUmo more tightly associated with kidney function than UUmo24 in patient with CKD. SUmo decreases in the earlier stages of CKD, than UUmo24. Perhaps this is explained more severe lesion of basolateral Um o transport compared with luminal transport of this glycoprotein. A slower decrease in UUmo24 with progression of CKD possibly counteracts urinary tract infections and the kidney stone formation in such patients.

### INTRODUCTION AND AIMS

Uromodulin (Um o) is a glycoprotein exclusively synthesized by epithelial cells of the thick ascending limb of the loop of Henle. Um o protects against urinary tract infection and renal stone formation, is involved in handling tubular Na⁺/K⁺/Cl⁻ or divalent cation tubular transport, and is suspected to contribute to arterial hypertension. Um o can be either pro- or anti-inflammatory. Is unknown is Um o an instigator of kidney injury or it play a nephroprotective role. Higher levels of serum (SUmo) or urinary (UUmo) Um o are associated with higher estimated...