

## Relevance of Deceased Donor Urine Findings for Kidney Transplantation: a Comprehensive National Cohort Study\*

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### Background

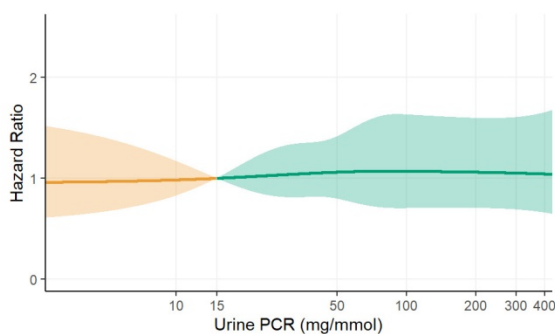
Proteinuria is frequent in patients with nephropathies and associated with progressive kidney disease and risk for end stage kidney disease. In this nationwide cohort study, we evaluated the prevalence of pathological urine findings in deceased donors candidates and measured the impact on outcome after kidney transplantation.

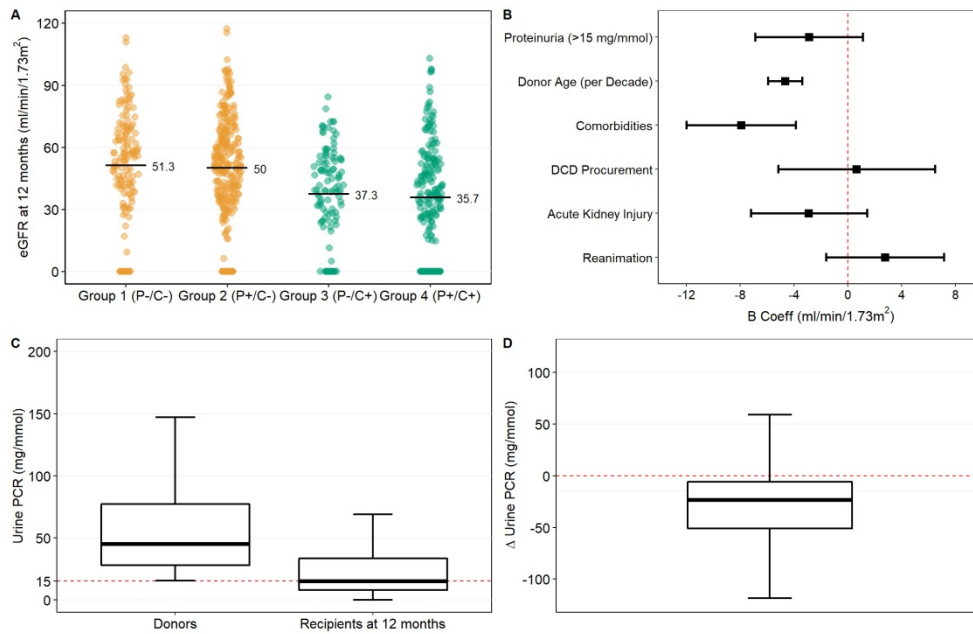
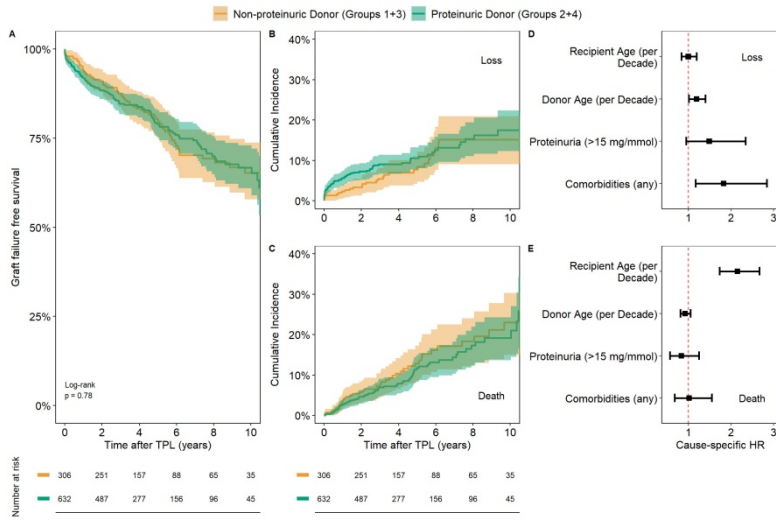
### Methods

Data of the Swiss Organ Allocation System and the Swiss Transplant Cohort Study were analyzed. They comprised 1725 donor candidates and 1516 kidney recipients transplanted between 2008 and 2019. We correlated urine findings with donor characteristics and quantified the impact of proteinuria on outcome and allograft function at 12 months.

### Results

Proteinuria above 15 mg/mmol occurs in 74% of deceased donor candidates and is associated with reanimation, acute kidney injury and lag time between ICU admission and urine sampling. Proteinuria is not associated with donor age or reported donor comorbidities, including hypertension, diabetes mellitus and vascular disease. Donor proteinuria is not associated with patient or allograft survival, nor is it predictive of allograft function at 12 months. In 79.7% of recipients transplanted from a proteinuric donor, proteinuria declines or vanishes within first 12 months after transplantation. Urine findings influence allocation decisions in 4.5% of non-immunological organ declines and are the leading cause for decline in 0.2% of cases.





## Conclusions

We report a high prevalence of pathological urine findings in donor candidates and find no evidence of a deleterious impact of proteinuria on graft function and/or survival. Low-level proteinuria should not be considered a limiting contraindication for kidney allocation in deceased donor transplantation.

\*YSN Paper