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Abstract Deadline: November 30, 2022, at 11:59 PM EST

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Image files must be in a jpeg or png file no larger than 2MB

Title: Proteinuria and disease progression in the RaDaR IgAN cohort

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Background:

Primary IgA nephropathy (IgAN) is the most common form of glomerulonephritis worldwide and a major cause of kidney failure (KF).. We investigate the relationship of prolonged proteinuria and KF over long-term follow-up (FU) in patients from the UK National Registry of Rare Kidney Diseases (RaDaR) IgAN cohort.

Methods:

Patients with biopsy-proven IgAN and eGFR <60 mL/min/1.73m² or PU ≥0.5 g/24h were enrolled from 87 UK sites since 2013, with automated collection of retrospective and prospective laboratory data. Eligibility criteria included diagnosis date, PU measurements in FU (within 2yr from diagnosis), no KF (CKD stage 5 or kidney replacement therapy) or death within 6mo from diagnosis. Time-averaged protein-creatinine ratio (TA-PCR), and eGFR slope were calculated over full FU or until KF/death. Kidney survival, from diagnosis to KF/death, was assessed with Cox regression.

Results:

Characteristics at diagnosis and clinical outcomes of the 923 eligible patients are summarized in Fig. 1a. Higher TA-PCR grades were associated with more rapid eGFR decline (ANOVA p<0.001, Fig.1b) and greater risk of KF/death (Log-rank p<0.001, Fig.1c; Cox regression p<0.001, Fig.1d).

Conclusion:

Elevated proteinuria over time is significantly associated with rapid eGFR decline and risk of progression to KF/death in IgAN.

Figure 1: Characteristics at diagnosis and clinical outcomes (a); mean eGFR slope by TA-PCR grade (b); Kaplan-Meier survival curves by TA-PCR grade (c); risk of KF/death by TA-PCR grade (d)

