

## RISK ASSESSMENT OF ANCA-ASSOCIATED VASCULITIS PROGRESSION IN LITHUANIA: VALIDATION OF THE RENAL RISK SCORE IN A NATIONAL COHORT

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**Introduction and aims:** ANCA-associated vasculitis (AAV) is often diagnosed at advanced stages of kidney injury, making the benefits of immunosuppressive therapy questionable. The ANCA Renal Risk Score (ARRS) by Brix et al. predicts irreversible kidney damage, and progression to end stage renal disease (ESRD). We aimed to validate ARRS in Lithuanian population.

**Methods:** A retrospective study of AAV patients at VUH Santaros Klinikos was conducted between 2013 and 2022. The risk of kidney damage was assessed using the ARRS and compared with the outcomes of Lithuanian patients. Patient outcomes were functioning kidneys, dialysis required and death. Survival rates calculated.

**Results:** Out of 103 patients, 66.02% (n=68) were women. The median age was 63 years [IQR 50.5-71.5]. In median 17 months [IQR 0.61- 49.88] follow-up period, 20.39% (n=21) of patients died, 37.86% (n=39) required renal replacement therapy (RRT), and 2.91% (n=3) died before reaching ESRD. Based on calculated ARRS, patients were divided into low (32%, n=33), medium (49.5%, n=51) and high (18.4%, n=19) risk groups. High-risk patients had lower median GFR, and higher proteinuria compared to other risk groups ( $p<0.05$ ). Mortality was higher in medium (27.4%, n=14) and high (26.3%, n=5) risk groups compared to low (6.06%, n=2). Mean patient survival time was 106.2, 56.7, and 76.7 months, while mean kidney survival time was 98.8, 54.3, and 62.3 months for low, medium, and high-risk groups, respectively ( $p<0.05$ ).

**Conclusion:** The ARRS provided superior ESRD and mortality risk assessment in AAV patients compared to standard measures, offering enhanced prognostic insights to clinicians.