



*The following research summary was prepared by ASF's Volunteer Research Program Chair and Board of Directors member, B. André Weinstock, PhD, MSAS.*

Rhode H, Lüse A, Tautkus B et al. [Urinary Protein-Biomarkers Reliably Indicate Very Early Kidney Damage in Children With Alport Syndrome Independently of Albuminuria and Inflammation](#). *KI Reports*. In press 2023, September 29. DOI: <https://doi.org/10.1016/j.ekir.2023.09.028> (open access).

A current challenge to recognizing early Alport syndrome progression and to developing Alport syndrome therapies is that the current standard urinary biomarkers of hematuria (blood in the urine), proteinuria (protein in the urine), albuminuria (albumin in the urine), and creatinine are relatively imprecise and do not reflect loss of kidney function specific to the pathology of Alport syndrome. A consequence of this is that clinical studies of potential Alport therapeutics may take several months to definitively show therapeutic effect and, in turn, are very expensive and difficult to maintain study compliance.

In a recent *Kidney International Reports* article, Rhode et al. identify three novel urinary biomarker molecules (ColXIII, HABP2, and C4BP) that accurately track early Alport syndrome kidney function decline across a small but diverse subset of pediatric dog and human Alport syndrome patients. Further work is needed to replicate the results in a broader set of human Alport syndrome patients. If the data shows to be repeatable with a larger set of Alport patients, then this has the potential to lead to new urinalysis tests to monitor Alport syndrome progression more accurately than eGFR or urine albumin-to-creatinine ratio measures.