

SIGNIFICANCE STATEMENT

C3 glomerulopathies (C3G) and membranoproliferative glomerulonephritis (MPGN) are uncommon forms of glomerulonephritis characterized by high risk of progression to ESRD. This manuscript describes results, using data from a large cohort of patients with C3G/MPGN, of unsupervised cluster analysis, an objective data-driven method to explore whether patients can be separated into homogeneous groups characterized by specific pathophysiologic mechanisms. Based on histologic, biochemical, genetic and clinical features, investigators identified four groups of patients with distinct phenotypes and differing renal survival. These clusters may be useful for better understanding the multifaceted molecular mechanisms underlying C3G/MPGN, and ultimately improve prediction of risk of ESRD and treatment response.