

Type of GN	Lab Markers	Extrarenal manifestations	Pathological features	Treatment
Post-infectious related	+ BC ASO titre Low C3	Pharyngitis Impetigo Abscess Endocarditis	Diffuse proliferation immunofluorescence IgG and C3	Infection dependent
ANCA associated - Pauci Immune - Granulomatosis with polyangitis ( <i>Wegners</i> )	+ ANCA Ab (MPO or PR3)	Pulmonary nodules/infiltrates Arthralgias Leukocytoclastic vasculitis Neuropathy	Necrotising crescentic Immunofluorescence (-) or trace Ig	Immunosuppression with steroids then dependent on biopsy features and response to steroids
IgA Nephropathy ( <i>Berger's</i> )	Galactose-deficient IgA1	Skin rash Abdominal pain (IgA vasculitis) Hematuria post URI	Immunofluorescence stain IgA	ACEi/ARB Statin Fish oil Immunosuppression – corticosteroid or budesonide ( <i>Tarpeyo</i> ) Investigational – sparsentan ( <i>PROTECT</i> study)
Lupus Nephritis	+ ANA + anti-double stranded DNA antibodies (anti-DS DNA Ab) Low C3 or C4 + anti-phospholipid antibodies	Skin rash Arthralgia Serositis	Varies – findings define classification Six classes (I-VI) - II and IV = most severe	Treatment based on classification  Immunosuppression - Corticosteroids - Monoclonal Ab  Other Tx based on Sx
Cryoglobulinemic	Hepatitis serology Low C3 Monoclonal Ig Hematologic OR autoimmune biomarkers + Seronegative	Purpura Arthralgias Peripheral neuropathy Skin ulcers	Dependent on type of cryoglobulin IgM or IgG Light chain restriction	Immunosuppression - Corticosteroids - Azathioprine - Cyclophosphamide - Rituximab (refractory/severe)
Anti-glomerular basement membrane (GBM) ( <i>Goodpasture's</i> )	+ anti GBM antibodies (+/- anti ANCA antibodies)	Pulmonary Hemorrhage	Necrotising crescentic Immunofluorescence Linear IgG along GBM	Immunosuppression - Corticosteroids - Cyclophosphamide Plasmapheresis
Monoclonal Ig	Low C3 or C4 Monoclonal Ig	Hematologic malignancy Monoclonal gammopathy or renal significance	Membranoproliferative Immunofluorescence IgG $\kappa$ or $\lambda$ light chain restriction	Dependent on underlying pathology

Indicated immune complex deposition disease process