GUIDING YOU THROUGH
IgA NEPHROPATHY (IgAN)

PATHOGENESIS

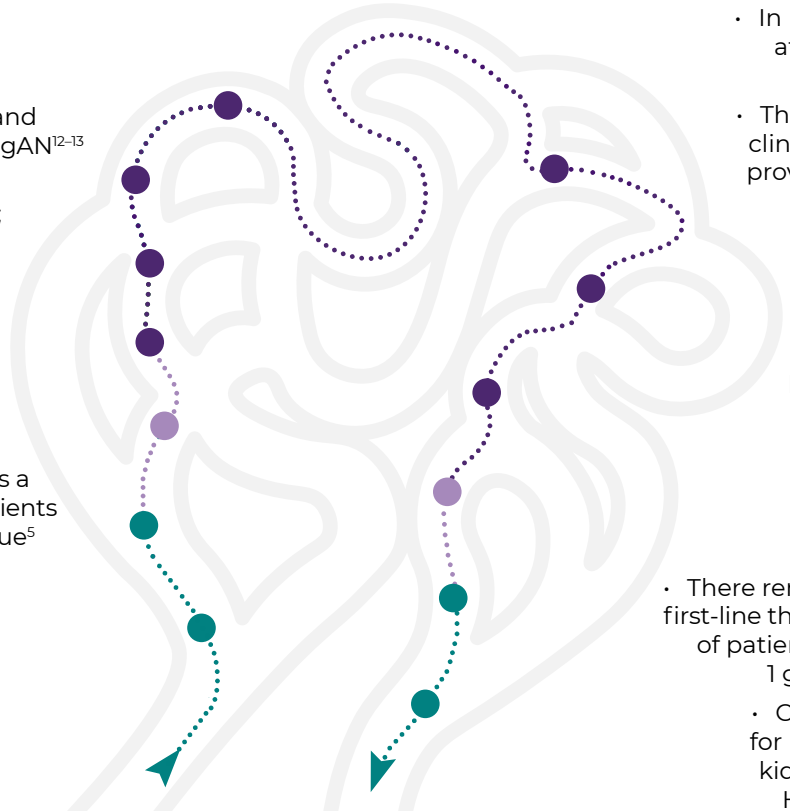
- IgAN is an immune complex-mediated disease; deposition of IgA_1 complexes in the mesangium leads to glomerular inflammation and injury in susceptible individuals, resulting in proteinuria and hematuria[6–10]
- Persistent proteinuria and hematuria lead to tubular injury and interstitial fibrosis and contribute to progressive reduction in GFR[11]
- The ET-1 and Ang II signaling pathways play fundamental roles in disease pathophysiology and progression in several kidney diseases, including IgAN[12–13]
- The ET-1 and Ang II signaling pathways induce a number of pathophysiological effects in IgAN; acting to amplify the inflammatory cytokine response, inducing glomerular and tubular damage; culminating in proteinuria and a progressive decline in kidney function[12–13]

BURDEN

- IgAN is often progressive[3] and, if not controlled, is a major cause of kidney failure, which impacts patients profoundly due to physical limitations[4] and fatigue[5]

EPIDEMIOLOGY

- IgAN is the most prevalent primary glomerulonephritis worldwide[1]
- The global incidence of IgAN is ~2.5/100,000 persons/year,[1] occurring in susceptible individuals of any age, with a peak incidence in the third and fourth decades of life[2]



PROGNOSTIC FACTORS

- Proteinuria is the single strongest and modifiable prognostic indicator for disease progression in IgAN. A reduction in proteinuria slows the rate of disease progression and is associated with improved kidney survival[9,10]
- In IgAN, any patient with proteinuria >1 g/24 hrs is at high risk of progressing to kidney failure[14] and should be considered for treatment
- The international IgAN risk prediction tool utilizes clinical and histologic data at the time of biopsy to provide a prognosis and determine which patients are at high risk of rapid disease progression[15–17]

TREATMENT GOALS

- The goal of therapy in IgAN is to preserve kidney function through management of blood pressure and proteinuria, which is pivotal in slowing progression to kidney failure[18]

UNMET NEED

- There remains a high, unmet clinical need; with current first-line therapies (ACEis and ARBs), a substantial number of patients remain above the target proteinuria level of 1 g/24 hrs and are at a high risk of progression[18–20]
- Corticosteroid therapy in IgAN is the only option for patients who remain at high risk of progressive kidney disease despite maximal supportive care.[18] However, immunosuppression does not impact clinical outcomes,[21] should be avoided in selected patients,[18] and carries a significant risk of toxicity[22]

ACEi=angiotensin-converting enzyme inhibitor; Ang II=angiotensin II; ARB=angiotensin II receptor blocker; ET-1=endothelin-1; GFR=glomerular filtration rate; IgA_1=immunoglobulin A subclass 1.

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