THE PATHOPHYSIOLOGY OF IgA NEPHROPATHY IS MADE UP OF SEVERAL INFLAMMATORY PROCESSES WITHIN A MULTI-HIT MODEL

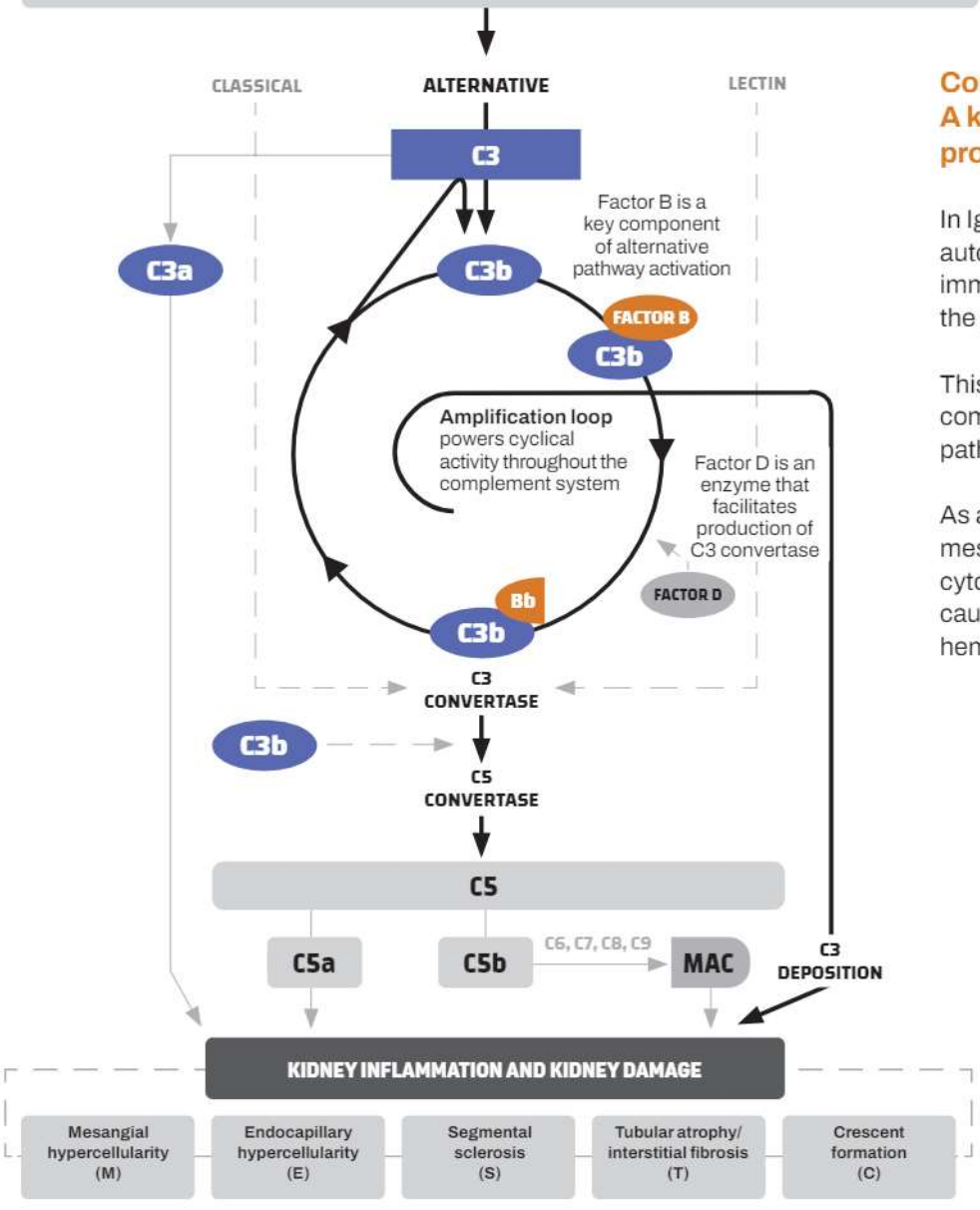
Components of the multi-hit model trigger disease progression and kidney damage in a sequence of events.

HIT 1: Increase in galactose-deficient IgA1 antibodies

HIT 2: Induction of autoantibody production

HIT 3: Autoantibodies and antibodies bind to form immune complexes

HIT 4: IgA/autoantibody deposition in the mesangium activates the complement system



These pathological features have been shown to be independent predictors of outcomes in IgA nephropathy.

Complement Activation: A key pathogenic step in the progression of IgA nephropathy

In IgA nephropathy, the production of autoantibodies leads to the formation of immune complexes, which are deposited in the glomeruli.

This process leads to the activation of the complement system via either the alternative pathway or, less often, the lectin pathway.

As a result of these glomerular depositions, mesangial cells proliferate, producing cytokines and extracellular matrix proteins, causing glomerular injury (manifested by hematuria and proteinuria).

NOVARTIS

Novartis Pharmaceuticals Corporation
East Hanover, New Jersey 07936-1080