

TABLE 349-12 Complement Deficiencies and Associated Diseases

COMPONENT	ASSOCIATED DISEASES
Classic Pathway	
C1q, C1r, C1s, C4	Immune-complex syndromes, ^a pyogenic infections
C2	Immune-complex syndromes, ^a few with pyogenic infections
C1 inhibitor	Rare immune-complex disease, few with pyogenic infections
C3 and Alternative Pathway C3	
C3	Immune-complex syndromes, ^a pyogenic infections
D	Pyogenic infections
Properdin	<i>Neisseria</i> infections
I	Pyogenic infections
H	Hemolytic-uremic syndrome
Membrane Attack Complex	
C5, C6, C7, C8	Recurrent <i>Neisseria</i> infections, immune-complex disease
C9	Rare <i>Neisseria</i> infections

^aImmune-complex syndromes include systemic lupus erythematosus (SLE) and SLE-like syndromes, glomerulonephritis, and vasculitis syndromes.

Source: After JA Schifferli, DK Peters: Lancet 322:957, 1983. Copyright 1983.

Immediate-Type Hypersensitivity Helper T cells that drive antiallergen IgE responses are usually T_H2-type inducer T cells that secrete IL-4, IL-5, IL-6, and IL-10. A subset of T_H1, T_H13, cells have been identified that produce IL-4, IL-5, and IL-13, which play a key role in responses to allergens that induce IgE and mediate anaphylaxis. Mast cells and basophils have high-affinity receptors for the Fc portion of IgE (FcRI), and cell-bound antiallergen IgE effectively “arms” basophils and mast cells. Mediator release is triggered by antigen (allergen) interaction with Fc receptor-bound IgE, and the mediators released are responsible for the pathophysiologic changes of *allergic diseases*. Mediators released from mast cells and basophils can be divided into three broad functional types: (1) those that increase vascular permeability and