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# Complement Deficiency

National Cancer Institute

## Source

National Cancer Institute. *Complement Deficiency*. NCI Thesaurus. Code C4691.

A broad classification for rare genetic disorders with mostly autosomal recessive patterns of inheritance. They are caused by the ineffective or decreased biosynthesis of complement components. Complement deficiencies may also be acquired acutely post-infection or chronically from co-morbid autoimmune disorders. If complement components are adequately synthesized, their rapid depletion may result in functional deficiencies. Clinical signs of inherited deficiencies present within the first decade of life and are consistent with the signs of recurrent systemic infection or immune complex disease. Complement deficiencies decrease the effectiveness of the humoral immune response. Of all the complement deficiencies, C3 deficiency is associated with the poorest prognosis since it presents at an early age, when susceptibility to recurrent infection is great. Deficiencies of C3 and of the classical activating pathway components: C1, C4, C2 also predispose to immune complex disease.