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Zilucoplan

National Cancer Institute

Source

National Cancer Institute. *Zilucoplan*. NCI Thesaurus. Code C147518.

A synthetic macrocyclic peptide inhibitor of the terminal complement protein C5, with potential anti-inflammatory and cell protective activities. Upon subcutaneous administration, complement zilucoplan binds to a unique site in terminal complement protein C5, which blocks C5 cleavage into C5a and C5b and prevents the C5b-dependent assembly of the membrane-attack complex (MAC). Zilucoplan also inhibits the interaction between C5b and C6, thereby further blocking MAC assembly. This prevents MAC-mediated lysis and destruction of red blood cells (RBCs) that occurs in complement-mediated diseases, such as paroxysmal nocturnal hemoglobinuria (PNH), generalized myasthenia gravis (gMG) and lupus nephritis (LN). C5, a complement pathway protein, is expressed at high levels by the liver.