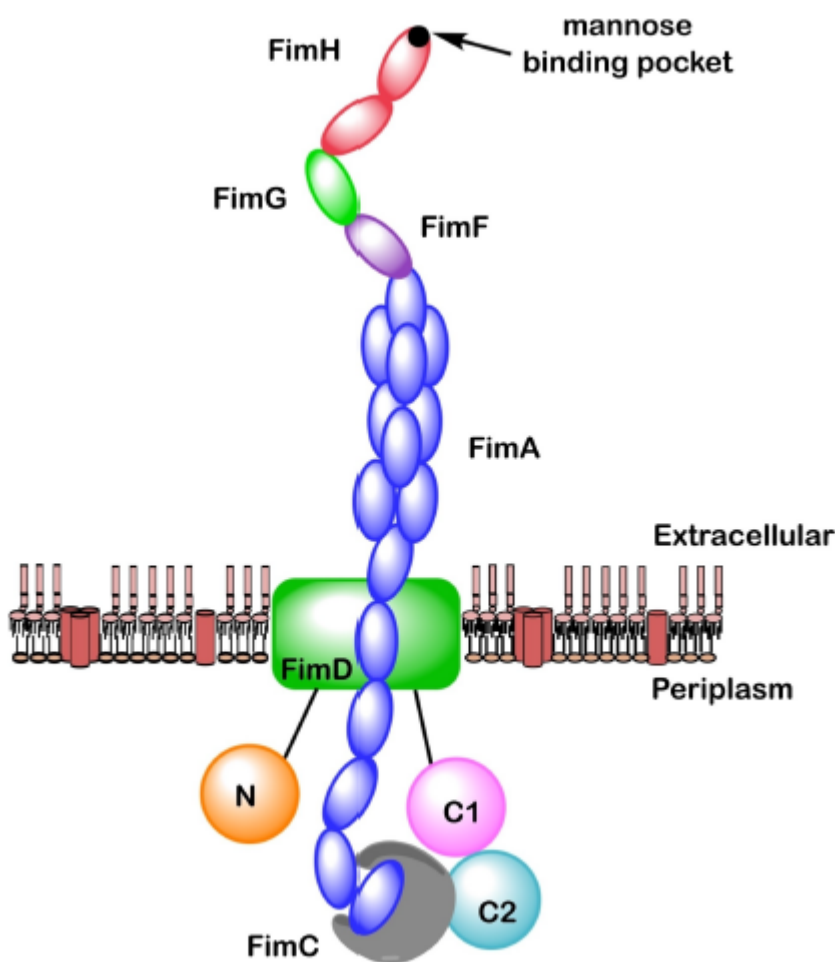


Developments in Mannose-Based Treatments for Uropathogenic Escherichia coli-Induced Urinary Tract Infections

Description



During their lifetime almost half of the women will experience a symptomatic urinary tract infection

(UTI) with a further half experiencing a relapse within six months. Currently UTIs with antibiotics, but increasing antibiotic resistance rates highlight the need for new treatments. Uropathogenic *Escherichia coli* (UPEC) is responsible for the majority of symptomatic UTI cases and thus has become a key pathological target. Adhesion of type one pilus subunit FimH at the surface of UPEC strains to mannose-saturated oligosaccharides located on the urothelium is critical to pathogenesis. Since the identification of FimH as a therapeutic target in the late 1980s, a substantial body of research has been generated focusing on the development of FimH-targeting mannose-based anti-adhesion therapies. The review discusses the design of different classes of these mannose-based compounds and their utility and potential as UPEC therapeutics.

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