

Abstract

The pore-forming bacterial toxins are crucial virulence factors of pathogenic bacteria. Their essential feature is the capacity to form hydrophilic transmembrane pores in cytoplasmic membrane of target cells. It leads to impairment of osmotic balance which can result in cell lysis. These toxins use different mechanism of cell attack. However, there is few similar steps – membrane binding, insertion into membrane, oligomerization and forming of the transmembrane pore.

Keywords: bacterial pore-forming toxins, mechanism of membrane insertion, cholesterol-dependent cytolysins, α -toxin, aerolysin, α -hemolysin, adenylate-cyclase toxin