

Abstract

Description

Multi-drug resistant (MDR) pathogens such as *Burkholderia cenocepacia* have become a hazard in the context of healthcare-associated infections, especially for patients admitted with compromising or aggravating conditions. Like other opportunistic Gram-negative bacteria, this pathogen establishes virulence and biofilms through lectin-mediated adhesion.

Glycans and glycomimetics have become devices of choice to antagonize or disrupt such interactions. We provide an overview of this topic, with spotlights on anti-microbial resistance (AMR), anti-adhesion therapy (AAT), carbohydrate-lectin interactions, and glycomimetics as therapeutic agents.

Furthermore, we focus on the case of MDR lung pathogens, in particular *B. cenocepacia*. We provide a description of its position amongst other pathogens and highlight the *Burkholderia cenocepacia lectin* (BC2L) family and the potential of targeting this pathogen with glycomimetics directed to the superlectin BC2L-C.

A pdf version is available at :

http://glycopedia.eu/IMG/pdf/glycomimetics_against_multi-drug_resistant_pathogens.pdf