Conclusion

Description

In conclusion, two undeniable truths must be considered: antimicrobial resistance is becoming a critical problem for modern medicine, and the use of glycomimetics to fight against drug-resistant infections holds great potential. Indeed, the roles played by lectins and carbohydrates during the infective process makes them excellent targets for disrupting and preventing infections. Moreover, scientific and technological advances facilitate this task: novel synthetic methodologies allow new glycomimetic structures. The thorough study of carbohydrate-lectin interactions allows for better ligand design. Even computational methods are being developed to maximize the potential of glycomimetics by implementing them into combination therapies.
A relevant group of targets within this effort are lung pathogens: they are tough to manage with antibiotics alone and lay great economic and human burdens on society. A particular case we studied is which of multi-drug resistant Burkholderia cenocepacia and its family of lectins. By delving into a deeper understanding of the lectinsâ?? involvement in the infective process, the design of tailored glycomimetic antagonists can start, paving the way to a realistic anti-adhesive therapy against this pathogen.

Category

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