

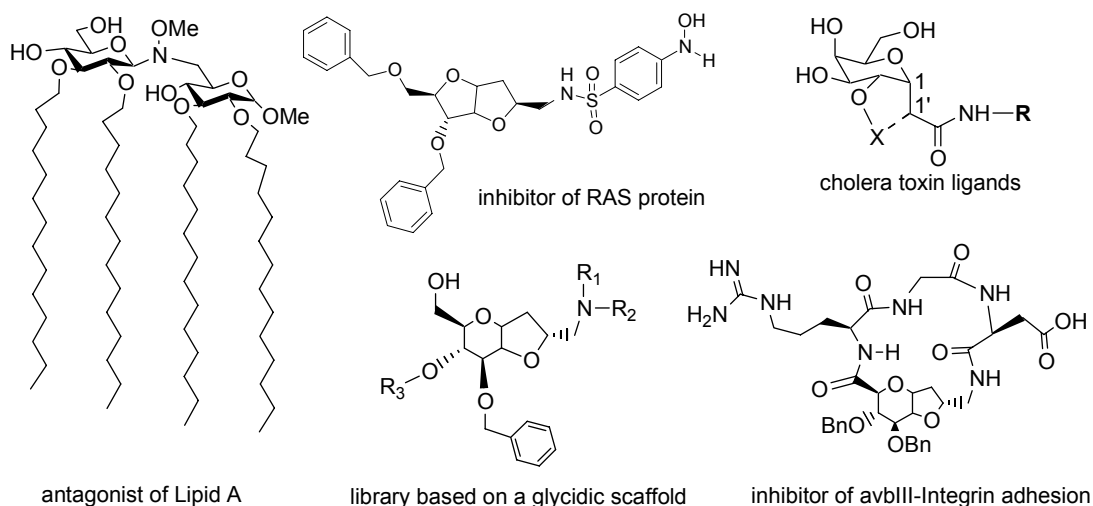
MODIFIED CARBOHYDRATES AS TOOLS IN DRUG RESEARCH

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Most cell-cell and cell-pathogen interactions and signalling are mediated by the glycidic part of cell-wall glycolipids and glycoproteins. Essential elements to be taken into consideration in these recognition phenomena are not only some functional groups (pharmacophores) of the natural molecule, but also the conformational rigidity of the glycidic backbone that act as a scaffold properly orienting those groups in the space. Inspired by the role of carbohydrates as natural scaffolds, we exploited the sugar skeleton not only to synthesise mimics of carbohydrates involved in pathological processes, but also as templates to synthesise non-glycidic bioactive compounds, and to generate libraries for high-throughput screening. The Figure describes examples of inhibitors and antagonists that will be described.



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