

Automated Design of Macrocycles for Therapeutic Applications

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Macrocyclization is a promising strategy to stabilize bioactive conformations and to improve several properties for lead optimization. A general computational workflow for the recognition and evaluation of sites for macrocyclization, the identification of compatible chemical linkers, and their conformational and enthalpic scoring has been developed. The broader applicability of this approach will be demonstrated with application to different case studies, e.g. GLP1/glucagon and small molecules (TAFIa) inhibitors.