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In Silico Study of Alpha glucosidase Inhibitors by Flavonoids

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Abstract : The oral antidiabetics drugs such as alpha glucosidase inhibitors present undesirable effects like acarbose. Flavonoids are class of molecules widely distributed in plants, for this reason we are interested in our work to study the inhibition in silico of alpha glucosidase by natural ligands (flavonoids analogues) using molecular modeling methods using MOE (Molecular Operating Environment) software to predict their interaction with this enzyme with score energy, ADME /T tests and druglikeness properties experiments. Two flavonoids Beicalein and Apigenin have high binding affinity with alpha glucosidase with lower IC50 supposed potent inhibitors.

Keywords : alpha glucosidase, flavonoides analogues, drug research, molecular modeling
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