RECOMMENDATIONS AND FUTURE DIRECTIONS

SAXA, a novel oral hypoglycaemic drug of the DPP-4 inhibitor class, has initiated a new therapeutic approach for the treatment of T2DM. Currently, SAXA in combination with GLIM is undergoing clinical trials.

The RP-HPLC methods can be applied to the simultaneous determination of SAXA and GLIM. The proposed single RP-HPLC method has the advantage of simplicity, precision, accuracy, and convenience for the separation, and quantitation of the SAXA in combination with GLIM. The method was applied for determining the SAXA and GLIM in tablets, without the interference from the tablets’s other excipients. Moreover, the bioanalytical method was employed in the pharmacokinetic study of SAXA and GLIM, in the form of tablets, to evaluate plasma concentration of the cited drugs in wister albino rats. Our study gives a single RP-HPLC method, which can be applied to the simultaneous determination of SAXA and GLIM in different formulations, and biological samples.

The developed methods can be further explored for the stability analysis of the SAXA, and GLIM in the formulations, and biological samples. The methods can also be applied for the determination of SAXA and GLIM in other types of dosage forms.