activities. WO2013/164483 also discloses compounds stated to have GLP-1R and GIPR activities.

WO2018/181864 discloses compounds stated to have GIPR agonist activity.

There is a need for T2DM treatments capable of providing effective glucose control for a larger portion of the patients in need of such treatment. There is a further need for T2DM treatments capable of providing effective glucose control and with a favorable side effect profile. There is a need for alternate treatment options to provide therapeutic weight loss in a patient in need of such treatment, such as a patient with severe obesity. There is a desire for diabetes treatment options that may be combined with insulin therapy and/or incretin therapy to provide the patient with superior glycemic outcomes and/or more desirable side effect profiles.

Summary

In an aspect of the present disclosure, there is provided a compound, or pharmaceutically acceptable salt thereof, wherein the compound is SEQ ID NO:7 or SEQ ID NO:10.

In another aspect of the present disclosure, there is provided a pharmaceutical composition comprising the compound, or a pharmaceutically acceptable salt thereof, disclosed herein and at least one pharmaceutically acceptable carrier, diluent, or excipient.

In a further aspect of the present disclosure, there is provided a use of the compound, or a pharmaceutically acceptable salt thereof, disclosed herein, in the manufacture of a medicament for treating a condition selected from the group consisting of diabetes mellitus, obesity, and metabolic syndrome.

In another aspect of the present disclosure, there is provided a use of the compound, or a pharmaceutically acceptable salt thereof, disclosed herein, in the manufacture of a medicament for treating diabetes in a patient receiving insulin therapy.

In a further aspect of the present disclosure, there is provided a compound disclosed herein, or a pharmaceutically acceptable salt thereof, for use in therapy.

Detailed Description

Compounds with extended duration of action at the GIP receptor are desirable to allow for less frequent dosing of the compound.

Accordingly, embodiment 1 is a compound of Formula I

$Z_1X_1X_2EGTX_6ISDYSIX_{13}LDX_{16}X_{17}X_{18}QX_{20}X_{21}X_{22}VX_{24}X_{25}X_{26}L$

$X_{28}X_{29}GPSSGAPPPSZ_2$ (SEQ ID NO:4) wherein:

Z_1 is a modification of the N-terminal amino group wherein the modification is selected from the group consisting of acetyl and absent;

X_1 is selected from the group consisting of Y and D-Tyr;

X_2 is selected from the group consisting of Aib, A, and D-Ala;

X_6 is selected from the group consisting of F, αMeF, Iva, L, αMeL, and αMeF(2F);

X_{13} is selected from the group consisting of αMeL, A, L, and Aib;

X_{16} is selected from the group consisting of K, E, and Orn;

X_{17} is selected from the group consisting of I and K(2-[2-(2-amino-ethoxy)-ethoxy]- acetyl)$_2$-(γ-Glu)-CO-$(CH_2)_q$-CO_2H;

X_{18} is selected from the group consisting of H, A, and R;

X_{20} is selected from the group consisting of Aib and Q;

X_{21} is selected from the group consisting of D and E;

X_{22} is selected from the group consisting of F and αMeF;

X_{24} is selected from the group consisting of E, N, Q, and D-Glu;

WE CLAIM:

1. A compound, or pharmaceutically acceptable salt thereof, wherein the compound is SEQ ID NO:7 or SEQ ID NO:10.
2. The compound, or a pharmaceutically acceptable salt thereof, as claimed by Claim 1 wherein the compound is SEQ ID NO: 7.
3. The compound, or a pharmaceutically acceptable salt thereof, as claimed by Claim 1 wherein the compound is SEQ ID NO:10.
4. A pharmaceutical composition comprising the compound, or a pharmaceutically acceptable salt thereof, as claimed by any one of claims 1-3 and at least one pharmaceutically acceptable carrier, diluent, or excipient.
5. Use of the compound, or a pharmaceutically acceptable salt thereof, as claimed by any one of claims 1-3, in the manufacture of a medicament for treating a condition selected from the group consisting of diabetes mellitus, obesity, and metabolic syndrome.
6. Use of the compound, or a pharmaceutically acceptable salt thereof, as claimed by any one of claims 1-3 in the manufacture of a medicament for treating diabetes in a patient receiving insulin therapy.
7. The use as claimed by Claim 5 wherein the condition is obesity.
8. The use as claimed by Claim 5 wherein the condition is type 2 diabetes mellitus.
9. A compound as claimed in any one of claims 1-3, or a pharmaceutically acceptable salt thereof, for use in therapy.