Claims

1. A fusion peptide comprising a GLP1 variant and at least one adiponectin agonist peptide, wherein the at least one adiponectin agonist peptide is chemically attached to the GLP1 variant via by a spacer.

2. The fusion peptide of claim 1, wherein the GLP1 variant comprises a substitution with Gly at position 8, wherein the position corresponds to the position of SEQ ID NO:1.

3. The fusion peptide of claim 1, wherein the GLP1 variant comprises a substitution with Lys at position 18, wherein the position corresponds to the position of SEQ ID NO:1.

4. The fusion peptide of claim 1, wherein the GLP1 variant comprises a substitution with Lys at position 22, wherein the position corresponds to the position of SEQ ID NO:1.

5. The fusion peptide of any the foregoing claims, wherein the at least one adiponectin agonist peptide is attached via the spacer at the position 26 of the GLP1 variant.

6. The fusion peptide of any of claims 1-4, wherein the at least one adiponectin agonist peptide is attached via the spacer at the position 34 of the GLP1 variant.

7. The fusion peptide of any of claims 1-4, wherein the at least one adiponectin agonist peptide comprises a first adiponectin agonist peptide and a second adiponectin agonist peptide, the first adiponectin agonist peptide and the second adiponectin agonist peptide being the same or different and each attached via a spacer at two different positions of the GLP1 variant.

8. The fusion peptide of claim 7, wherein the different two attachment sites comprise position 26 and position 34 of the GLP1 variant, wherein the positions correspond to the positions of SEQ ID NO:1.

9. The fusion peptide of any of the foregoing claims, wherein the at least one adiponectin agonist peptide comprises ALY688.

10. The fusion peptide of any of the foregoing claims, wherein the spacer comprises GGG.

11. The fusion peptide of claim 1, wherein the GLP1 variant has a sequence selected from the group consisting of SEQ ID NO:4, SEQ ID NO:5, and SEQ ID NO:6.

12. A fusion peptide of any of the foregoing claims for use in the treatment of a patient having type 2 diabetes mellitus, wherein an effective amount of the fusion peptide is to be administered to the patient.

13. Use of a fusion peptide of any of claims 1-11 in the manufacture of a medicament for the treatment of a patient having type 2 diabetes mellitus, wherein an effective amount of the fusion peptide is to be administered to the patient.