CLAIMS

We claim:

1. A pharmaceutical composition comprising a glucagon-like peptide 1 receptor ("GLP1R agonist") agonist, metformin, and at least one pharmaceutically acceptable carrier, wherein the GLP1R agonist is (S)-3-(4'-cyano-biphenyl-4-yl)-2-{[(3R,7S)-3-[4-(3,4-dichloro-benzyloxy)-phenyl]-1-methyl-2-oxo-6-((S)-1-phenyl-propyl)-2,3,5,6,7,8-hexahydro-1*H*-4-oxa-1,6-diaza-anthracene-7-carbonyl]-amino}-propionic acid or a pharmaceutically acceptable salt thereof, or (S)-2-{[(3S,8S)-3-[4-(3,4-dichloro-benzyloxy)-phenyl]-7-((S)-1-phenyl-propyl)-2,3,6,7,8,9-hexahydro-[1,4]dioxino[2,3-g]isoquinoline-8-carbonyl]-amino}-3-[4-(2,3-dimethyl-pyridin-4-yl)-phenyl]-propionic acid or a pharmaceutically acceptable salt thereof.

2. The pharmaceutical composition of claim 1, wherein the GLP1R agonist is (S)-3-(4'-cyano-biphenyl-4-yl)-2-{[(3R,7S)-3-[4-(3,4-dichloro-benzyloxy)-phenyl]-1-methyl-2-oxo-6-((S)-1-phenyl-propyl)-2,3,5,6,7,8-hexahydro-1*H*-4-oxa-1,6-diaza-anthracene-7-carbonyl]-amino}-propionic acid or a pharmaceutically acceptable salt thereof.

3. The pharmaceutical composition of claim 1, wherein the GLP1R agonist is (S)-2-{[(3S,8S)-3-[4-(3,4-dichloro-benzyloxy)-phenyl]-7-((S)-1-phenyl-propyl)-2,3,6,7,8,9-hexahydro-[1,4]dioxino[2,3-g]isoquinoline-8-carbonyl]-amino}-3-[4-(2,3-dimethyl-pyridin-4-yl)-phenyl]-propionic acid or a pharmaceutically acceptable salt thereof.

4. The pharmaceutical composition of any one of claims 1 to 3, wherein the metformin is metformin hydrochloride or 1,1-dimethylbiguanide.

5. The pharmaceutical composition of any one of claims 1 or 3, wherein the GLP1R agonist has an absolute oral bioavailability of greater than 1%.

6. The pharmaceutical composition of claim 1,

wherein the GLP1R agonist is (S)-3-(4'-cyano-biphenyl-4-yl)-2-{[(3R,7S)-3-[4-(3,4-dichloro-benzyloxy)-phenyl]-1-methyl-2-oxo-6-((S)-1-phenyl-propyl)-2,3,5,6,7,8-hexahydro-1*H*-4-oxa-1,6-diaza-anthracene-7-carbonyl]-amino}-propionic acid or a pharmaceutically acceptable salt thereof;

wherein the amount of the GLP1R agonist is less than 250 mg;

wherein the amount of metformin is between 100 mg and 1000 mg;

wherein the weight to weight ratio of the GLP1 agonist to metformin is between 1:2 and 1:100,

optionally wherein the GLP1R agonist is (S)-3-(4'-cyano-biphenyl-4-yl)-2-{[(3R,7S)-3-[4-(3,4-dichloro-benzyloxy)-phenyl]-1-methyl-2-oxo-6-((S)-1-phenyl-propyl)-2,3,5,6,7,8-hexahydro-1*H*-4-oxa-1,6-diaza-anthracene-7-carbonyl]-amino}-propionic acid hydrochloride salt, and

optionally wherein the metformin is metformin hydrochloride or 1,1-dimethylbiguanide, and

optionally wherein the weight to weight ratio of the GLP1 agonist to metformin is between 1:2 and 1:20.