WHAT IS CLAIMED IS:

1. A method of treating type 2 diabetes comprising: administering to a subject a glucokinase activator in combination with a suboptimal amount of metformin.

2. The method of claim 1, wherein the glucokinase activator is a liver-selective glucokinase activator.

3. The method of claim 1 or 2, wherein the glucokinase activator is {2-[3-cyclohexyl-3-(*trans*-4-propoxy-cyclohexyl)-ureido]-thiazol-5-ylsulfanyl}-acetic acid or a pharmaceutically acceptable salt thereof.

4. A method of lowering blood glucose in a subject comprising: administering to the subject a glucokinase activator in combination with a suboptimal amount of metformin.

5. The method of claim 4, wherein the glucokinase activator is a liver-selective glucokinase activator.

6. The method of claim 4 or 5, wherein the glucokinase activator is {2-[3-cyclohexyl-3-(*trans*-4-propoxy-cyclohexyl)-ureido]-thiazol-5-ylsulfanyl}-acetic acid or a pharmaceutically acceptable salt thereof.

7. A method of enhancing phosphorylation of glucose in a subject comprising: administering to the subject a glucokinase activator in combination with a suboptimal amount of metformin.

8. The method of claim 7, wherein the glucokinase activator is a liver-selective glucokinase activator.

9. The method of claim 7 or 8, wherein the glucokinase activator is {2-[3-cyclohexyl-3-(*trans*-4-propoxy-cyclohexyl)-ureido]-thiazol-5-ylsulfanyl}-acetic acid or a pharmaceutically acceptable salt thereof.

10. A method of improving insulin sensitivity in a subject comprising: administering to the subject a glucokinase activator in combination with a suboptimal amount of metformin.

11. The method of claim 10, wherein the glucokinase activator is a liver-selective glucokinase activator.

12. The method of claim 10 or 11, wherein the glucokinase activator is {2-[3-cyclohexyl-3-(*trans*-4-propoxy-cyclohexyl)-ureido]-thiazol-5-ylsulfanyl}-acetic acid or a pharmaceutically acceptable salt thereof.

13. A pharmaceutical composition comprising a glucokinase activator, a suboptimal amount of metformin, and at least one pharmaceutically acceptable carrier, excipient, diluent, or a mixture thereof.

14. The pharmaceutical composition of claim 13, wherein the glucokinase activator is a liver-selective glucokinase activator.

15. The pharmaceutical composition of claim 13 or 14, wherein the glucokinase activator is {2-[3-cyclohexyl-3-(*trans*-4-propoxy-cyclohexyl)-ureido]-thiazol-5-ylsulfanyl}-acetic acid or a pharmaceutically acceptable salt thereof.

16. A salt comprising one molecular cation and one molecular anion, where the molecular cation is a cation of 1,1-dimethylbiguanide and the molecular anion is an anion of a glucokinase activator.

17. The salt of claim 16, wherein the glucokinase activator is a liver-selective glucokinase activator.

18. The salt of claim 16 or 17, wherein the glucokinase activator is {2-[3-cyclohexyl-3-(*trans*-4-propoxy-cyclohexyl)-ureido]-thiazol-5-ylsulfanyl}-acetic acid.

19. A pharmaceutical composition comprising the salt of any one of claims 16 to 18 and at least a pharmaceutically acceptable carrier, excipient, diluent, or a mixture thereof.

20. The pharmaceutical composition of any one of claims 13 to 15, wherein the pharmaceutical composition comprises a salt of any one of claims 16 to 18.

21. The method of any one of claims 1-12, comprising administering to a subject a salt of any one of claims 16 to 18.

WHAT IS CLAIMED IS:

1. A pharmaceutical composition comprising a glucokinase activator, a suboptimal amount of metformin, and at least one pharmaceutically acceptable carrier, excipient, diluent, or a mixture thereof, wherein the glucokinase activator is {2-[3-cyclohexyl-3-(*trans*-4-propoxy-cyclohexyl)-ureido]-thiazol-5-ylsulfanyl}-acetic acid or a pharmaceutically acceptable salt thereof.

2. The pharmaceutical composition of Claim 1, wherein the suboptimal amount of metformin is between 0.01 mg and 1000 mg.

3. The pharmaceutical composition of Claim 1, wherein the suboptimal amount of metformin is between 50 mg and 700 mg.

4. The pharmaceutical composition of any one of Claims 1 to 3, wherein the amount of the glucokinase activator is between 10 mg and 1000 mg.

5. The pharmaceutical composition of any one of Claim 4, wherein the amount of the glucokinase activator is between 75 mg and 700 mg.

6. A salt comprising one molecular cation and one molecular anion, where the molecular cation is a cation of 1,1-dimethylbiguanide and the molecular anion is an anion of a glucokinase activator, wherein the glucokinase activator is {2-[3-cyclohexyl-3-(*trans*-4-propoxy-cyclohexyl)-ureido]-thiazol-5-ylsulfanyl}-acetic acid.

7. A pharmaceutical composition comprising the salt of Claim 6 and at least a pharmaceutically acceptable carrier, excipient, diluent, or a mixture thereof.