Claims

1. A dry powder nicotine formulation suitable for inhalation, the formulation comprising:

nicotine,

at least one sugar, and

at least one amino acid comprising leucine at a concentration of 0.5 to 10 %.

2. The formulation of claim 1, wherein the nicotine comprises at least one nicotine salt.

3. The formulation of claim 2, wherein the at least one nicotine salt is nicotine tartrate.

4. The formulation of claim 1, wherein the concentration of nicotine is between about 0.5% and about 10%.

5. The formulation of claim 1, wherein the concentration of nicotine is between about 0.7% and about 5%.

6. The formulation of claim 1, wherein the concentration of nicotine is between about 0.5% and about 2%.

7. The formulation of claim 1, wherein the concentration of nicotine is between about 1% and about 2%.

8. The formulation of claim 1, wherein the at least one sugar is lactose.

9. The formulation of claim 8, wherein the concentration of lactose is between about 50% and about 99%.

10. The formulation of claim 8, wherein the concentration of lactose is between about 75% and about 85%.

11. The formulation of claim 1, further comprising at least one flavor component.

12. The formulation of claim 1, further comprising at least one therapeutic agent.

13. The formulation of claim 12, wherein the at least one therapeutic agent is a cough suppressant.

14. The formulation of claim 1, further comprising menthol.

15. The formulation of claim 14, wherein the concentration of menthol is between about 0.5% and about 20%.

16. The formulation of claim 1, further comprising mint.

17. The formulation of claim 16, wherein the concentration of mint is between about 0.5% and about 20%.

18. A method of controlling the amount of nicotine and the amount of menthol in a formulation to be inhaled by a subject, the method comprising the steps of:

identifying the desired concentration of nicotine in the formulation;

identifying the desired total dose of nicotine in the formulation;

identifying the desired concentration of menthol in the formulation;

identifying the desired total dose of menthol in the formulation; and

providing the subject with an amount of formulation comprising nicotine particles and menthol particles, wherein the formulation comprises the dry powder nicotine formulation of claim 1 and further comprises menthol, the formulation having the identified desired concentration of nicotine and the identified desired concentration of menthol, such that the total amount of nicotine particles in

the amount of formulation equals the identified total dose of nicotine, and the total amount of menthol particles in the amount of formulation equals the identified total dose of menthol.

19. The method of claim 18, wherein the nicotine comprises at least one nicotine salt.

20. The method of claim 19, wherein the at least one nicotine salt is nicotine tartrate.

21. The method of claim 18, wherein the formulation further comprises at least one sugar.

22. The method of claim 21, wherein the at least one sugar is lactose.

23. The method of claim 18, wherein the formulation further comprises at least one therapeutic agent.

24. The method of claim 18, wherein the formulation further comprises at least one flavor component.

25. The method of claim 18, wherein the formulation is delivered to a subject via a dry powder inhaler.

26. A method of delivering variable dosages of nicotine to a subject over a number of doses while maintaining a constant amount of menthol per inhalation for each dose, the method comprising the steps of:

identifying a desired concentration of nicotine in a nicotine formulation having a base menthol concentration, wherein the formulation comprises the dry powder nicotine formulation of claim 1 and further comprises menthol;

providing a first dose comprising an amount of formulation comprising nicotine particles having the identified concentration of nicotine and menthol particles having the base menthol concentration; and

providing at least one additional dose comprising an amount of a formulation comprising nicotine particles, wherein the at least one additional dose comprises more nicotine particles than the formulation in the first dose, or less nicotine particles than the formulation in the first dose, and comprises the same base menthol concentration in the first dose.

27. The method of claim 26, wherein the nicotine comprises at least one nicotine salt.

28. The method of claim 27, wherein the at least one nicotine salt is nicotine tartrate.

29. The method of claim 26, wherein the formulation further comprises at least one sugar.

30. The method of claim 29, wherein the at least one sugar is lactose.

31. The method of claim 26, wherein the formulation further comprises at least one therapeutic agent.

32. The method of claim 26, wherein the formulation further comprises at least one flavor component.

33. The method of claim 26, wherein the formulation is delivered to a subject via a dry powder inhaler.

34. A kit for delivering a dry powder nicotine formulation of claim 1, the kit comprising at least an amount of the dry powder nicotine formulation of claim 1 comprising nicotine particles, and an instruction material.