CLAIMS

What is claimed is:

1. A composition of a solid oral immediate release formulation of LSD, comprising LSD contained within an immediate release dosage form chosen from the group consisting of a capsule, tablet, and orally disintegrating tablet.

2. The composition of claim 1, wherein said LSD is in a form chosen from free base and salt.

3. The composition of claim 2, wherein said LSD is in a salt form and the salt is chosen from the group consisting of hydrochloride, hydrobromide, maleate, tartrate, citrate, phosphate, fumarate, sulfate, mesylate, acetate, and oxalate.

4. The composition of claim 1, wherein said LSD is present in an amount of 0.01-1 mg.

5. The composition of claim 1, wherein said LSD is in a form chosen from crystalline and non-crystalline.

6. The composition of claim 1, wherein said composition is produced by granulation.

7. The composition of claim 6, further including a filler chosen from the group consisting of lactose, mannitol, dicalcium phosphate, calcium sulfate, starch, cellulose, kaolin, sodium chloride, sorbitol, trehalose, and sucrose.

8. The composition of claim 6, further including a binder chosen from the group consisting of acacia gum, hydroxypropyl methylcellulose, hydroxypropyl cellulose, tragacanth, polyvinyl pyrrolidone (PVP), and starch.

9. The composition of claim 6, further including an absorbent chosen from the group consisting of croscarmellose sodium, starch, mesoporous silicon dioxide, and microcrystalline cellulose.

10. The composition of claim 6, further including a disintegrant chosen from the group consisting of croscarmellose sodium, starch, microcrystalline cellulose, crospovidone, and sodium starch glycolate.

11. The composition of claim 6, further including a glidant chosen from the group consisting of magnesium stearate and colloidal silicon dioxide.

12. The composition of claim 6, further including a lubricant chosen from the group consisting of magnesium stearate, sodium stearyl fumarate, polyethylene glycol (PEG), polyoxyethylene stearates, lauryl sulphate salts, talc, glyceryl behenate, stearic acid, glyceryl palmitostearate, calcium stearate, and hydrogenated vegetable oils.

13. The composition of claim 6, further including an agent for adjusting pH chosen from the group consisting of citrate, phosphate, acetate, sodium hydroxide, and hydrochloric acid.

14. The composition of claim 6, further including an antioxidant chosen from the group consisting of ascorbic acid, butylated hydroxyanisole (BHA), and butylated hydroxytoluene (BHT).

15. The composition of claim 6, further including a photostabilization agent.

16. The composition of claim 6, further including a permeation enhancer chosen from the group consisting of sulphoxides, azones, pyrrolidones, alcohols, alkanols, glycols, surfactants, and terpenes.

17. The composition of claim 6, further including coloring agents, sweeteners, and flavoring agents.

18. The composition of claim 1, wherein said composition is produced by dry blending.

19. The composition of claim 18, further including a filler chosen from the group consisting of lactose, mannitol, dicalcium phosphate, calcium sulfate, starch, cellulose, kaolin, sodium chloride, sorbitol, and sucrose.

20. The composition of claim 18, further including a glidant chosen from the group consisting of magnesium stearate and colloidal silicon dioxide.

21. The composition of claim 18, further including a dry binder of microcrystalline cellulose.

22. The composition of claim 18, further including a disintegrant chosen from the group consisting of croscarmellose sodium, starch, microcrystalline cellulose, crospovidone, and sodium starch glycolate.

23. A method of making a solid oral immediate release formulation of LSD, including the steps of:

granulating LSD with excipients of fillers, absorbents, binders, disintegrants, lubricants, and/or glidants; and

encapsulating or compressing to form a tablet of a solid oral immediate release formulation of LSD.

24. The method of claim 23, wherein said granulating step is further defined as moisture activated dry granulation.

25. The method of claim 24, wherein said granulating step includes charging powders of LSD, binders, and fillers to a closed container which contains mixing/blending components, wetting the powders with a binder solution/suspension while mixing allowing for particle cohesion and granule growth, and adding fillers, glidants, disintegrants, and lubricants.

26. The method of claim 23, wherein the LSD is in a form chosen from free base and salt.

27. The method of claim 23, wherein the filler is chosen from the group consisting of lactose, mannitol, dicalcium phosphate, calcium sulfate, starch, cellulose, kaolin, sodium chloride, sorbitol, trehalose, and sucrose.

28. The method of claim 23, wherein the binder is chosen from the group consisting of acacia gum, hydroxypropyl methylcellulose, hydroxypropyl cellulose, tragacanth, polyvinyl pyrrolidone (PVP), and starch.

29. The method of claim 23, wherein the absorbent is chosen from the group consisting of croscarmellose sodium, starch, mesoporous silicon dioxide, and microcrystalline cellulose.

30. The method of claim 23, wherein the disintegrant is chosen from the group consisting of croscarmellose sodium, starch, microcrystalline cellulose, crospovidone, and sodium starch glycolate.

31. The method of claim 23, wherein the glidant is chosen from the group consisting of magnesium stearate and colloidal silicon dioxide.

32. The method of claim 25, wherein the lubricant is chosen from the group consisting of magnesium stearate, sodium stearyl fumarate, polyethylene glycol (PEG), polyoxyethylene stearates, lauryl sulphate salts, talc, glyceryl behenate, stearic acid, glyceryl palmitostearate, calcium stearate, and hydrogenated vegetable oils.

33. The method of claim 23, wherein the LSD is in a salt form and the salt is chosen from the group consisting of hydrochloride, hydrobromide, maleate, tartrate, citrate, phosphate, fumarate, sulfate, mesylate, acetate, and oxalate.

34. A method of making a solid oral immediate release formulation of LSD by dry blending, including the steps of:

blending LSD minimally with filler excipients and additionally a disintegrant, dry binder, glidant and lubricant; and

a forming step chosen from the group consisting of directly compressing to form a tablet or orally disintegrating tablet (ODT) of a solid oral immediate release formulation of LSD and encapsulating to form a solid oral immediate release formulation of LSD.

35. The method of claim 34, wherein the filler is chosen from the group consisting of lactose, mannitol, dicalcium phosphate, calcium sulfate, starch, cellulose, kaolin, sodium chloride, sorbitol, trehalose, and sucrose.

36. The method of claim 34, wherein the dry binder is microcrystalline cellulose

37. The method of claim 34, wherein the disintegrant is chosen from the group consisting of croscarmellose sodium, starch, microcrystalline cellulose, crospovidone, and sodium starch glycolate.

38. The method of claim 34, wherein the glidant is chosen from the group consisting of magnesium stearate and colloidal silicon dioxide.

39. The method of claim 34, wherein the lubricant is chosen from the group consisting of magnesium stearate, sodium stearyl fumarate, polyethylene glycol (PEG), polyoxyethylene stearates, lauryl sulphate salts, talc, glyceryl behenate, stearic acid, glyceryl palmitostearate, calcium stearate, and hydrogenated vegetable oils.

40. The method of claim 34, wherein the LSD is in a form chosen from free base and salt.

41. The method of claim 34, wherein the LSD is in a salt form and the salt is chosen from the group consisting of hydrochloride, hydrobromide, maleate, tartrate, citrate, phosphate, fumarate, sulfate, mesylate, acetate, and oxalate.

42. Use of a composition in the manufacture of a medicament for treating an individual with a condition or disease, wherein the composition is a solid oral immediate

release formulation of LSD chosen from the group consisting of a capsule, tablet, and orally disintegrating tablet to be administered to the individual, and wherein the condition or disease is chosen from the group consisting of anxiety disorders, depression, headache disorder, obsessive compulsive disorder (OCD), personality disorders, stress disorders, drug disorders, gambling disorder, eating disorder, body dysmorphic disorder, pain, neurodegenerative disorders, autism spectrum disorder, eating disorders, and neurological disorders.

43. The use of claim 42, wherein the individual has trouble swallowing, is elderly, or has dementia.

44. The use of claim 42, wherein the LSD is in a form chosen from free base and salt.

45. The use of claim 44, wherein the LSD is in a salt form and the salt is chosen from the group consisting of hydrochloride, hydrobromide, maleate, tartrate, citrate, phosphate, fumarate, sulfate, mesylate, acetate, and oxalate.

46. The use of claim 42, wherein 0.01-1 mg of LSD is to be administered.