CLAIMS

1. A liquid pharmaceutical composition suitable for administration by inhalation comprising:

(i) ensifentrine particles;

(ii) glycopyrrolate; and

(iii) a diluent, which diluent comprises water,

wherein:

the glycopyrrolate is dissolved in the diluent;

the concentration of glycopyrrolate is less than or equal to 5.0 mg/mL; and

the pH of the liquid pharmaceutical composition is from 3.0 to 6.0.

2. A liquid pharmaceutical composition according to claim 1, wherein the pH of the liquid pharmaceutical composition is from 3.5 to 5.0.

3. A liquid pharmaceutical composition according to claim 1 or claim 2, wherein the liquid pharmaceutical composition further comprises a buffer, preferably wherein the buffer is a citrate buffer.

4. A liquid pharmaceutical composition according to any one of claims 1 to 3, wherein the concentration of the buffer is from 10.0 to 40.0 mg/mL, preferably from 20.0 to 30.0 mg/mL.

5. A liquid pharmaceutical composition according to any one of the preceding claims, wherein the concentration of glycopyrrolate is from 0.01 mg/mL to 2.0 mg/mL, preferably from 0.02 mg/mL to 0.25 mg/mL.

6. A liquid pharmaceutical composition according to any one of the preceding claims, wherein the weight ratio ensifentrine:glycopyrrolate in the liquid pharmaceutical composition is from 1:5 to 200:1, preferably from 15:1 to 120:1.

7. A liquid pharmaceutical composition according to any one of the preceding claims, wherein the concentration of ensifentrine particles is from 0.1 to 5.0 mg/mL, preferably from 0.15 to 2.5 mg/mL.

8. A liquid pharmaceutical composition according to any one of the preceding claims, wherein the ensifentrine particles have a Dv50 of from 0.5 to 5.0 μm.

9. A liquid pharmaceutical composition according to any one of the preceding claims, wherein the glycopyrrolate is a pharmaceutically acceptable salt of glycopyrronium,

preferably wherein the glycopyrrolate is glycopyrronium bromide or glycopyrronium chloride,

more preferably wherein the glycopyrrolate is glycopyrronium bromide.

10. A liquid pharmaceutical composition according to any one of the preceding claims, wherein the diluent is water and the liquid pharmaceutical composition comprises at least 80 % by weight of the diluent based on the total weight of the liquid pharmaceutical composition.

11. A liquid pharmaceutical composition according to any one of the preceding claims, wherein the liquid pharmaceutical composition further comprises a tonicity adjuster, preferably wherein the tonicity adjuster is sodium chloride.

12. A liquid pharmaceutical composition according to claim 11, wherein the concentration of the tonicity adjuster is greater than or equal to 1.0 mg/mL, preferably from 4.0 to 20.0 mg/mL, more preferably from 6.0 to 12.0 mg/mL.

13. A liquid pharmaceutical composition according to any one of the preceding claims, wherein the liquid pharmaceutical composition further comprises one or more surfactants, preferably wherein the one or more surfactants are selected from a polysorbate and a sorbitan alkyl ester.

14. A liquid pharmaceutical composition according to claim 13, wherein the total concentration of the one or more surfactants is from 0.01 to 2.0 mg/mL, preferably from 0.1 to 1.0 mg/mL.

15. A liquid pharmaceutical composition according to any one of the preceding claims, wherein the liquid pharmaceutical composition comprises:

(i) ensifentrine particles;

(ii) glycopyrrolate;

(iii) the diluent;

(iv) a polysorbate surfactant;

(v) optionally a sorbitan alkyl ester surfactant;

(vi) a citrate buffer; and

(vii) sodium chloride.

16. A liquid pharmaceutical composition according to any one of the preceding claims, wherein the liquid pharmaceutical composition comprises:

(i) from 0.1 to 2.5 mg/mL ensifentrine particles, optionally from 0.5 to 2.5 mg/mL ensifentrine particles;

(ii) from 0.01 mg/mL to 2.0 mg/mL glycopyrronium bromide;

(iii) water;

(iv) from 0.1 to 1.0 mg/mL polysorbate 20;

(v) optionally from 0.01 to 0.1 mg/mL sorbitan monolaurate;

(vi) from 5.0 to 15.0 mg/mL citric acid;

(vii) from 10.0 to 20.0 mg/mL trisodium citrate; and

(viii) from 5.0 to 15.0 mg/mL sodium chloride.

17. A liquid pharmaceutical composition according to any one of the preceding claims, which liquid pharmaceutical composition is stable with respect to chemical degradation of ensifentrine and glycopyrrolate for at least 1 month when stored at a temperature of 25°C and a relative humidity of 60 %.

18. A liquid pharmaceutical composition according to any one of the preceding claims, which liquid pharmaceutical composition is suitable for administration by a nebuliser.

19. A nebuliser comprising a liquid pharmaceutical composition according to any one of the preceding claims.

20. A liquid pharmaceutical composition according to any one of claims 1 to 18 for use in the treatment of the human or animal body.

21. A liquid pharmaceutical composition according to any one of claims 1 to 18 for use in the treatment or prevention of a disease or condition selected from chronic obstructive pulmonary disease (COPD), asthma, allergic asthma, hay fever, allergic rhinitis, bronchitis, emphysema, bronchiectasis, adult respiratory distress syndrome (ARDS), steroid resistant asthma, severe asthma, paediatric asthma, cystic fibrosis, lung fibrosis, pulmonary fibrosis, interstitial lung disease, a skin disorder, atopic dermatitis, psoriasis, ocular inflammation, cerebral ischaemia, an inflammatory disease and an auto-immune disease.

22. A liquid pharmaceutical composition for use according to claim 21 wherein the disease or condition is chronic obstructive pulmonary disease (COPD).

23. A method of treating or preventing a disease or condition as defined in claim 21 or claim 22 in a subject in need thereof, which method comprises administering to said subject an effective amount of a liquid pharmaceutical composition according to any one of claims 1 to 18.