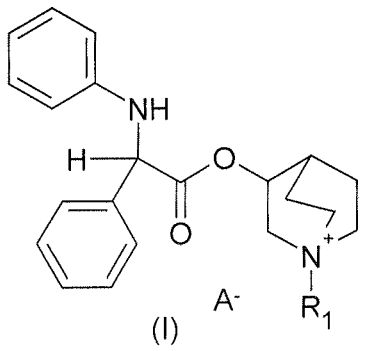
CLAIMS

1. An inhalable dry powder formulation comprising, as active ingredient, micronized particles of a compound of general formula (**I**)



(I)

wherein:

$\mathbf{R_1}$ is a group of formula **(Y)**

$$---(CH_2)p---P---W$$

(Y)

wherein

p is 0 or an integer from 1 to 4;

P is absent or is selected from the group consisting of O, S, SO, SO_2 and CO;

W is selected from the group consisting of H, aryl and heteroaryl, wherein aryl and heteroaryl are optionally substituted by one or more substituents selected from the group consisting of halogen atoms, OH, SH, NO_2, CN, COOH and NH_2;

A^- represents a physiologically acceptable anion;

a fraction of microparticles constituted of a mixture composed of particles of α-lactose monohydrate and particles of magnesium stearate, said microparticles having a mass median diameter (MMD) equal to or less than 15 micron; and a fraction of coarse particles of α-lactose monohydrate having a highly fissured surface and a mass diameter (MD) between 150 and 400 micron~~physiologically acceptable pharmacologically inert solid carrier~~.

2. The inhalable powder according to claim 1, wherein the physiologically acceptable anion A^- is selected from the group consisting of chloride, bromide, iodide, trifluoroacetate, formate, sulfate, phosphate, methanesulfonate, nitrate, maleate, acetate, citrate, fumarate, tartrate, oxalate, succinate, benzoate and p-toluenesulfonate.

3. The inhalable powder according to claim 1 or 2, wherein the active ingredient is administered at a single dose comprised between 5 μg and 2500 μg.

4. The inhalable powder according to claim 3, wherein the single dose is comprised between 10 μg and 2000 μg.

5. The inhalable powder according to claim 4, wherein the single dose is comprised between 15 μg and 1000 μg.

6. The inhalable powder according to claim 5, wherein the single dose is comprised between 20 μg and 800 μg.

7. The inhalable powder according to claim 6, wherein the single dose is comprised between 25 and 600 μg.

~~8. The inhalable powder according to any one of claims 1 to 7, wherein the carrier comprises a crystalline sugar selected from the group consisting of glucose, arabinose, maltose, saccharose, dextrose and lactose or a polyalcohol selected from the group consisting of mannitol, maltitol, lactitol and sorbitol.~~

~~9. The inhalable powder according to claim 8, wherein the sugar is lactose.~~

~~10. The inhalable powder according to claim 9, wherein the sugar is α-lactose monohydrate.~~

8~~11~~. The inhalable powder according to any one of claims 1 to 7~~10~~, wherein the microparticles~~carrier is in form of finely divided particles~~ have~~ing~~ a ~~mass median diameter (~~MMD~~)~~ equal to or ~~of~~ less than 10 micron.

~~12. The inhalable powder according to any one of the claims 1 to 10, wherein the carrier is in form of coarse particles having a mass diameter of at least 50 micron.~~

~~13. The inhalable powder according to claim 12, wherein the mass diameter is comprised between 150 and 400 micron.~~

~~14. The inhalable powder according to any one of claims 1 to 10, wherein the carrier comprises a mixture of coarse particles having a mass diameter comprised between 150 and 400 micron and finely divided particles with a MMD equal to or less than 10 micron.~~

~~15. The inhalable powder according to any one of claims 11 to 14, further comprising one or more additive materials selected form the group consisting of amino acids, water soluble surface active agents, lubricants and glidants.~~

~~16. The inhalable powder according to claim 15, wherein the additive material is a lubricant.~~

~~17. The inhalable powder according to claim 16, wherein the additive material is magnesium stearate.~~

9~~18~~. The inhalable powder according to any one of the preceding claims ~~17~~, wherein magnesium stearate is present in an amount comprised between 0.01 and 2% by weight based on the total weight of the formulation.

10~~19~~. The inhalable powder according to claim 9~~18~~, wherein the amount of magnesium stearate is comprised between 0.02 and 1% w/w.

11~~20~~. A dry powder inhaler comprising an inhalable dry powder formulation according to any one of claims 1 to 10~~19~~.

12~~21~~. The inhalable dry powder formulation according to any one of claims 1 to 10~~19~~, for use for the prevention and/or treatment of any disease wherein inhibition of the muscarinic receptor is required.

13~~22~~. The inhalable powder according to claim 12~~21~~, wherein the disease is respiratory disease such as asthma and chronic obstructive pulmonary disease (COPD).

14~~23~~. A package comprising an inhalable dry powder formulation according to any one of claims 1 to 10~~19~~ and a dry powder inhaler.

15. Use of the inhalable dry powder formulation according to any one of claims 1 to 10 in the manufacture of a medicament for the prevention and/or treatment of any disease wherein inhibition of the muscarinic receptor is required.

16. The use according to claim 15, wherein the disease is a respiratory disease such as asthma and chronic obstructive pulmonary disease (COPD).