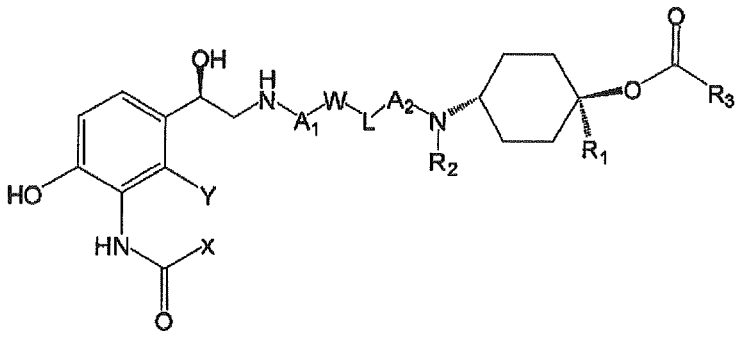
CLAIMS:

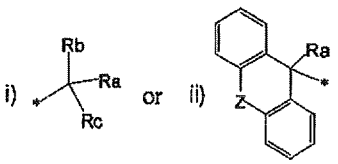
1. A compound of formula (I), or pharmaceutically acceptable salts or solvates or deuterated derivative thereof:



Formula (I)

wherein:

- both X and Y represents a hydrogen atom; or,
- X together with Y form the group –CH=CH-, $-CH_2-O-$ or –S-, wherein in the case of $-CH_2-O-$ the methylene group is bound to the carbon atom in the amido substituent holding X and the oxygen atom is bound to the carbon atom in the phenyl ring holding Y;
- R_1 and R_2 independently represent a hydrogen atom or a C_{1-4} alkyl group;
- R_3 represents a group of formula:



wherein:

  - R^a represents a hydrogen atom, a hydroxy group, a hydroxymethyl group or a C_{1-4} alkyl group;
  - R^b and R^c independently represents a thienyl group, a phenyl group, a benzyl group or a C_{4-6} cycloalkyl group;
  - Z represents a direct bond or an oxygen atom; and
  - * represents the point of attachment of R_3 to the remainder of the molecule of formula (I);
- A_1 and A_2 independently represent a C_{1-6} alkylene group optionally substituted with one or more C_{1-4} alkyl groups;

- L represents a direct bond, -O-, -NH(CO)-, –(CO)NH- or –NH(CO)O- group, wherein in the case of –NH(CO)O-, the nitrogen atom is bound to the W substituent and the oxygen atom is bound to the A2 substituent; and
- W represents a direct bond or a phenylene group which is optionally substituted with one or more substituents selected from a halogen atom, a C_{1-4} alkyl group, a C_{1-4} alkoxy group and a cyano group.

2. A compound according to Claim 1 wherein X together with Y form –CH=CH- or -CH_2-O- group, preferably X together with Y form –CH=CH- group.

3. A compound according to Claim 1 or 2, wherein R_1 and R_2 independently represent a hydrogen atom or a methyl group, preferably both R_1 and R_2 are hydrogen atoms.

4. A compound according to Claim 1 or 2, wherein R_1 represents a hydrogen atom and R_2 represents a methyl group.

5. A compound according to any one of Claims 1 to 4, wherein R_3 represents a group of formula ii), wherein Z is an oxygen atom and R^a is selected from a hydrogen atom, a hydroxy group and a methyl group.

6. A compound according to any one of Claims 1 to 4, wherein R_3 represents a group of formula i) wherein:
    - R^a represents a hydrogen atom, a hydroxy group or methyl group, preferably R^a represents a hydroxy group,
    - R^b and R^c independently represent a thienyl group, a cyclopentyl group or a phenyl group, preferably both R^b and R^c are thienyl groups.

7. A compound according to any preceding claims wherein A_1 and A_2 independently represent a C_{1-6} alkylene group optionally substituted with one or two methyl groups.

8. A compound according to any one of preceding claims wherein L represents –O-, –NH(CO)- or –NH(CO)O- group, wherein, in the case of –NH(CO)O-, the nitrogen atom is bound to the W substituent and the oxygen atom is bound to the A2 substituent; preferably L represents –O- or –NH(CO)-.

9. A compound according to any preceding claim wherein W represents a phenylene group which is optionally substituted with one or two substituents selected from a chlorine atom, a methyl group, a methoxy group and a cyano group, preferably the phenylene group is substituted with two substituents selected from a chlorine atom, a methyl group, a methoxy group and a cyano group.

10. A compound according to Claim 1 wherein

- X together with Y form –CH=CH- or $-CH_2$-O- group,
- R_1 represents a hydrogen atom or a methyl group,
- R_2 represents a hydrogen atom or a methyl group,
- R_3 represents a group of formula (i), wherein R^a represents a hydroxy group and R^b and R^c are independently selected from a phenyl group, a cyclopentyl group and a thienyl group, or R^3 represents a group of formula (ii), wherein R^a represents a methyl group and Z represents an oxygen atom,
- A_1 and A_2 independently represent a C_{1-6} alkylene group optionally substituted with one or two methyl groups,
- L is selected from a direct bond, –O- , –NH(CO)- and –NH(CO)O- groups and
- W represents a direct bond or a phenylene group which is optionally substituted with one or two substituents selected from a chlorine atom, a fluorine atom, a methoxy group and a cyano group.

11. A compound according to Claim 10 wherein

- X together with Y form –CH=CH- group,
- R_1 represents a hydrogen atom,
- R_2 represents a hydrogen atom or a methyl group,
- R_3 represents a group of formula (i), wherein R^a represents a hydroxy group and both R^b and R^c are thienyl group,
- A_1 and A_2 independently represent a C_{1-6} alkylene group optionally substituted with one or two methyl groups,
- L is selected from a direct bond, –O- , –NH(CO)- and –NH(CO)O- groups and
- W represents a direct bond or a phenylene group which is optionally substituted with one or two substituents selected from a chlorine atom, a methoxy group and a cyano group.

12. A compound according to Claim 11, wherein R_2 represents a hydrogen atom, L is selected from –O-, –NH(CO)- and –NH(CO)O- group, and W represents a phenylene group which is substituted with two substituents selected from a chlorine atom, a methyl group, a methoxy group and a cyano group.

13. A compound according to Claim 11, wherein R_2 represents a methyl group, L is selected from –O-, –NH(CO)- and –NH(CO)O- group, and W represents a phenylene group which is substituted with two substituents selected from a chlorine atom, a methyl group, a methoxy group and a cyano group

14. A compound according to Claim 1 which is one of

Formic acid - *trans*-4-[(9-{[(2*R*)-2-hydroxy-2-(8-hydroxy-2-oxo-1,2-dihydroquinolin-5-yl)ethyl]amino}nonyl)(methyl)amino]cyclohexyl hydroxy(di-2-thienyl)acetate (2:1);

Formic acid - *trans*-4-[{2-[4-(2-{[(2*R*)-2-hydroxy-2-(8-hydroxy-2-oxo-1,2-dihydroquinolin-5-yl)ethyl]amino}ethyl)phenoxy]ethyl}(methyl)amino]cyclohexyl hydroxy(di-2-thienyl)acetate (1:1);

Formic acid - *trans*-4-[{3-[4-(2-{[(2*R*)-2-hydroxy-2-(8-hydroxy-2-oxo-1,2-dihydroquinolin-5-yl)ethyl]amino}ethyl)phenoxy]propyl}(methyl)amino]cyclohexyl hydroxy(di-2-thienyl)acetate (1:1);

trans-4-[{2-[(6-{[(2*R*)-2-Hydroxy-2-(8-hydroxy-2-oxo-1,2-dihydroquinolin-5-yl)-ethyl]amino}hexyl)oxy]ethyl}(methyl)amino]cyclohexyl hydroxy(di-2-thienyl)-acetate hydrofluoride;

trans-4-[{3-[(6-{[(2*R*)-2-Hydroxy-2-(8-hydroxy-2-oxo-1,2-dihydroquinolin-5-yl)-ethyl]amino}hexyl)oxy]propyl}(methyl)amino]cyclohexyl hydroxy(di-2-thienyl)-acetate hydrofluoride;

Formic acid - *trans*-4-[{3-[4-({[(2*R*)-2-hydroxy-2-(8-hydroxy-2-oxo-1,2-dihydroquinolin-5-yl)ethyl]amino}methyl)phenoxy]propyl}(methyl)amino]cyclohexyl hydroxy(di-2-thienyl)acetate (1:1);

trans-4-[{2-[4-({[(2*R*)-2-Hydroxy-2-(8-hydroxy-2-oxo-1,2-dihydroquinolin-5-yl)-ethyl]amino}methyl)phenoxy]ethyl}(methyl)amino]cyclohexyl hydroxy(di-2-thienyl)acetate hydrofluoride;

trans-4-[{3-[4-(2-{[(2*R*)-2-Hydroxy-2-(8-hydroxy-2-oxo-1,2-dihydroquinolin-5-yl)ethyl]amino}propyl)phenoxy]propyl}(methyl)amino]cyclohexyl hydroxy(di-2-thienyl)acetate hydrofluoride,

trans-4-((3-(2-Chloro-4-(((2*R*)-2-hydroxy-2-(8-hydroxy-2-oxo-1,2-dihydroquinolin-5-yl)ethylamino)methyl)-5-methoxyphenylamino)-3-oxopropyl)(methyl)amino)-cyclohexyl hydroxy(di-2-thienyl)acetate hydrofluoride;

trans-4-((3-(2-Chloro-4-(((2*R*)-2-hydroxy-2-(8-hydroxy-2-oxo-1,2-dihydroquinolin-5-yl)ethylamino)methyl)phenylamino)-3-oxopropyl)(methyl)amino)cyclohexyl-hydroxy(di-2-thienyl)acetate hydrofluoride,

trans-4-[{3-[2-Chloro-4-({[(2R)-2-hydroxy-2-(8-hydroxy-2-oxo-1,2-dihydroquinolin-5-yl)ethyl]amino}methyl)-5-methoxyphenoxy]propyl}(methyl)amino]cyclohexyl-hydroxy(di-2-thienyl)acetate hydrofluoride;

trans-4-[{2-[({[2-Chloro-4-({[(2R)-2-hydroxy-2-(8-hydroxy-2-oxo-1,2-dihydro-quinolin-5-yl)ethyl]amino}methyl)-5-methoxyphenyl]amino}carbonyl)oxy]ethyl}-(methyl)amino]-cyclohexylhydroxy(di-2-thienyl)acetate hydrofluoride,

trans-4-[(3-{[2-chloro-4-({[(2*R*)-2-hydroxy-2-(8-hydroxy-2-oxo-1,2-dihydroquinolin-5-yl)ethyl]amino}methyl)-5-methoxyphenyl]amino}-3-oxopropyl)(methyl)amino]-1-methylcyclohexyl hydroxy(di-2-thienyl)acetate,

trans-4-[(3-{[4-({[(2*R*)-2-hydroxy-2-(8-hydroxy-2-oxo-1,2-dihydroquinolin-5-yl)ethyl]amino}methyl)phenyl]amino}-3-oxopropyl)(methyl)amino]cyclohexyl hydroxy(di-2-thienyl)acetate hydrofluoride (1:2),

trans-4-[(4-{[2-chloro-4-({[(2*R*)-2-hydroxy-2-(8-hydroxy-2-oxo-1,2-dihydroquinolin-5-yl)ethyl]amino}methyl)-5-methoxyphenyl]amino}-4-oxobutyl)(methyl)amino]-cyclohexyl hydroxy(di-2-thienyl)acetate,

trans-4-[(3-{[2-fluoro-4-({[(2*R*)-2-hydroxy-2-(8-hydroxy-2-oxo-1,2-dihydroquinolin-5-yl)ethyl]amino}methyl)-5-methoxyphenyl]amino}-3-oxopropyl)(methyl)amino]-cyclohexyl hydroxy(di-2-thienyl)acetate,

trans-4-[(3-{[4-({[(2*R*)-2-hydroxy-2-(8-hydroxy-2-oxo-1,2-dihydroquinolin-5-yl)ethyl]amino}methyl)-3-methoxyphenyl]amino}-3-oxopropyl)(methyl)amino]-cyclohexyl hydroxy(di-2-thienyl)acetate hydrofluoride (1:2),

trans-4-[(3-{[2,5-difluoro-4-({[(2*R*)-2-hydroxy-2-(8-hydroxy-2-oxo-1,2-dihydroquinolin-5-yl)ethyl]amino}methyl)phenyl]amino}-3-oxopropyl)(methyl)amino]-cyclohexyl hydroxy(di-2-thienyl)acetate hydrofluoride (1:2),

trans-4-[(3-{[2-fluoro-4-({[(2*R*)-2-hydroxy-2-(8-hydroxy-2-oxo-1,2-dihydroquinolin-5-yl)ethyl]amino}methyl)phenyl]amino}-3-oxopropyl)(methyl)amino]cyclohexyl hydroxy(di-2-thienyl)acetate hydrofluoride (1:2),

trans-4-[(3-{[2-chloro-4-(2-{[(2*R*)-2-hydroxy-2-(8-hydroxy-2-oxo-1,2-dihydroquinolin-5-yl)ethyl]amino}ethyl)-5-methoxyphenyl]amino}-3-oxopropyl)-(methyl)amino]cyclohexyl hydroxy(di-2-thienyl)acetate hydrofluoride (1:2),

trans-4-[{3-[2-chloro-4-(2-{[(2*R*)-2-hydroxy-2-(8-hydroxy-2-oxo-1,2-dihydroquinolin-5-yl)ethyl]amino}ethyl)-5-methoxyphenoxy]propyl}(methyl)-amino]cyclohexyl hydroxy(di-2-thienyl)acetate hydrofluoride (1:2),

trans-4-[{2-[({[2-cyano-4-({[(2*R*)-2-hydroxy-2-(8-hydroxy-2-oxo-1,2-dihydroquinolin-5-yl)ethyl]amino}methyl)-5-methoxyphenyl]amino}carbonyl)-oxy]ethyl}(methyl)amino]cyclohexyl hydroxy(di-2-thienyl)acetate hydrofluoride (1:2),

trans-4-[{2-[({[2,5-difluoro-4-({[(2*R*)-2-hydroxy-2-(8-hydroxy-2-oxo-1,2-dihydroquinolin-5-yl)ethyl]amino}methyl)phenyl]amino}carbonyl)oxy]ethyl}-(methyl)amino]cyclohexyl hydroxy(di-2-thienyl)acetate hydrofluoride (1:2),

trans-4-[(3-{[2-chloro-4-({[(2R)-2-hydroxy-2-(8-hydroxy-2-oxo-1,2-dihydroquinolin-5-yl)ethyl]amino}methyl)-5-methoxyphenyl]amino}-2,2-dimethyl-3-oxopropyl)-(methyl)amino]cyclohexyl hydroxy(di-2-thienyl)acetate,

trans-4-[{4-[2-chloro-4-({[(2R)-2-hydroxy-2-(8-hydroxy-2-oxo-1,2-dihydroquinolin-5-yl)ethyl]amino}methyl)-5-methoxyphenoxy]butyl}(methyl)amino]cyclohexyl hydroxy(di-2-thienyl)acetate hydrofluoride (1:2),

trans-4-[{2-[({[2-chloro-4-({[(2R)-2-hydroxy-2-(5-hydroxy-3-oxo-3,4-dihydro-2H-1,4-benzoxazin-8-yl)ethyl]amino}methyl)-5-methoxyphenyl]amino}carbonyl)oxy]-ethyl}(methyl)amino]cyclohexyl hydroxy(di-2-thienyl)acetate,

trans-4-[(9-{[(2R)-2-hydroxy-2-(8-hydroxy-2-oxo-1,2-dihydroquinolin-5-yl)ethyl]-amino}nonyl)(methyl)amino]cyclohexyl 9-methyl-9H-xanthene-9-carboxylate,

trans-4-[{2-[({[2-chloro-4-({[(2R)-2-hydroxy-2-(8-hydroxy-2-oxo-1,2-dihydro-quinolin-5-yl)ethyl]amino}methyl)-5-methoxyphenyl]amino}carbonyl)oxy]ethyl}-(methyl)-amino]cyclohexyl (2R)-cyclopentyl (hydroxy)phenylacetate, and

trans-4-[{2-[({[2-chloro-4-({[(2R)-2-hydroxy-2-(8-hydroxy-2-oxo-1,2-dihydro-quinolin-5-yl)ethyl]amino}methyl)-5-methoxyphenyl]amino}carbonyl)oxy]ethyl}-(methyl) amino]cyclohexyl (2S)-cyclopentyl(hydroxy)2-thienylacetate.

or pharmaceutically acceptable salts or solvates or deuterated derivative thereof:

15. A compound according to claim 14 which is trans-4-((3-(2-Chloro-4-(((2R)-2-hydroxy-2-(8-hydroxy-2-oxo-1,2-dihydroquinolin-5-yl)ethylamino)methyl)-5-methoxyphenylamino)-3-oxopropyl) (methyl)amino)cyclohexyl hydroxyl (di-2-thienyl)acetate hydrofluoride; or pharmaceutically acceptable salts or solvates or deuterated derivative thereof.

16. A compound according to claim 14 which is trans-4-[{2-[({[2-Chloro-4-({[(2R)-2-hydroxy-2-(8-hydroxy-2-oxo-1,2-dihydroquinolin-5-yl)ethyl]amino}methyl)-5-methoxyphenyl]amino}carbonyl) oxy]ethyl}(methyl)amino]cyclohexyl hydroxy(di-2-thienyl)acetate hydrofluoride, or pharmaceutically acceptable salts or solvates or deuterated derivative thereof.

17. A compound according to any one of Claims 1-14 for use in the treatment of the human or animal body by therapy.

18. A compound according to any one of Claims 1 to 14 for use in the treatment of a pathological condition or disease susceptible to amelioration by both β2 adrenergic receptor agonist and muscarinic receptor antagonist activities, which condition or disease is preferably selected from pulmonary diseases, pre-labor, glaucoma, neurological disorders, cardiac disorders, inflammation and gastrointestinal disorders, and is more preferably asthma and or chronic obstructive pulmonary disease.

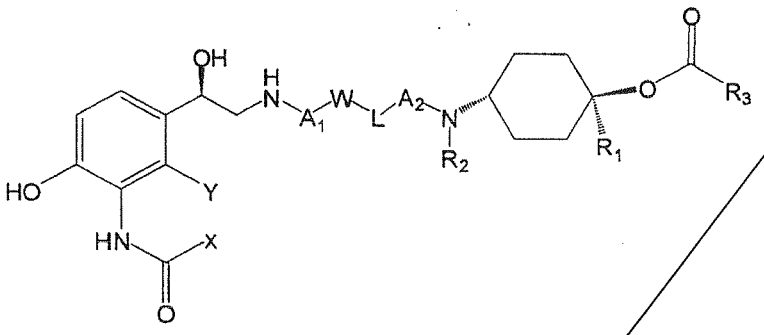
19. A pharmaceutical composition comprising a compound as defined in any one of Claims 1 to 14 in association with a pharmaceutically acceptable diluent or carrier.

20. Use of a compound as defined in any one of Claims 1 to 14 in the manufacture of a medicament for the treatment of a pathological condition or disease as defined in Claim 16.

21. A combination product comprising (i) a compound according to any one of Claims 1 to 14; and (ii) another compound selected from a corticosteroid and a PDE4 inhibitor.

Claims

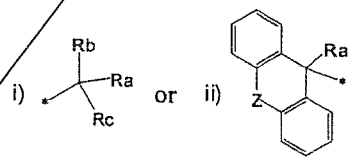
1. A compound of formula (I), or pharmaceutically acceptable salts or solvates or deuterated derivative thereof:



Formula (I)

Wherein:

- Both X and Y represents a hydrogen atom or,
- X together with Y form the group –CH=CH-, $-CH_2-O-$ or –S-, wherein in the case of $-CH_2-O-$ the methylene group is bound to the carbon atom in the amido substituent holding X and the oxygen atom is bound to the carbon atom in the phenyl ring holding Y,
- R_1 and R_2 independently represent a hydrogen atom or a C_{1-4} alkyl group,
- R_3 represents a group of formula:



wherein:

  - R^a represents a hydrogen atom, a hydroxy group, a hydroxymethyl group or a C_{1-4} alkyl group,
  - R^b and R^c independently represents a thienyl group, a phenyl group, a benzyl group or a C_{4-6} cycloalkyl group,
  - Z represents a direct bond or an oxygen atom, and
  - * represents the point of attachment of R_3 to the remainder of the molecule of formula (I),
- A_1 and A_2 independently represent a C_{1-6} alkylene group optionally substituted with one or more C_{1-4} alkyl groups,

- L represents a direct bond, -O-, -NH(CO)-, –(CO)NH- or –NH(CO)O- group, wherein in the case of –NH(CO)O-, the nitrogen atom is bound to the W substituent and the oxygen atom is bound to the A2 substituent; and
- W represents a direct bond or a phenylene group which is optionally substituted with one or more substituents selected from a halogen atom, a C_{1-4} alkyl group, a C_{1-4} alkoxy group and a cyano group.

2. A compound according to claim 1 wherein X together with Y form –CH=CH- or -CH_2-O- group, preferably X together with Y form –CH=CH- group.

3. A compound according to claim 1 or 2, wherein R_1 and R_2 independently represent a hydrogen atom or a methyl group, preferably both R_1 and R_2 are hydrogen atoms.

4. A compound according to claim 1 or 2, wherein R_1 represents a hydrogen atom and R_2 represents a methyl group.

5. A compound according to any one of claims 1 to 4, wherein R_3 represents a group of formula ii), wherein Z is an oxygen atom and R^a is selected from a hydrogen atom, a hydroxy group and a methyl group.

6. A compound according to any one of claims 1 to 4, wherein R_3 represents a group of formula i) wherein:
   - R^a represents a hydrogen atom, a hydroxy group or methyl group, preferably R^a represents a hydroxy group,
   - R^b and R^c independently represent a thienyl group, a cyclopentyl group or a phenyl group, preferably both R^b and R^c are thienyl groups.

7. A compound according to any preceding claims wherein A_1 and A_2 independently represent a C_{1-6} alkylene group optionally substituted with one or two methyl groups.

8. A compound according to any one of preceding claims wherein L represents –O-, –NH(CO)- or –NH(CO)O- group, wherein, in the case of –NH(CO)O-, the nitrogen atom is bound to the W substituent and the oxygen atom is bound to the A2 substituent; preferably L represents –O- or –NH(CO)-.

9. A compound according to any preceding claim wherein W represents a phenylene group which is optionally substituted with one or two substituents selected from a chlorine atom, a methyl group, a methoxy group and a cyano group, preferably the phenylene group is substituted with two substitutents selected from a chlorine atom, a methyl group, a methoxy group and a cyano group.

10. A compound according to claim 1 wherein
    - X together with Y form –CH=CH- or –CH_2-O- group,
    - R_1 represents a hydrogen atom or a methyl group,
    - R_2 represents a hydrogen atom or a methyl group,
    - R_3 represents a group of formula (i), wherein R^a represents a hydroxy group and R^b and R^c are independently selected from a phenyl group, a cyclopentyl group and a thienyl group, or R^3 represents a group of formula (ii), wherein R^a represents a methyl group and Z represents an oxygen atom,
    - A_1 and A_2 independently represent a C_{1-6} alkylene group optionally substituted with one or two methyl groups,
    - L is selected from a direct bond, –O- , –NH(CO)- and –NH(CO)O- groups and
    - W represents a direct bond or a phenylene group which is optionally substituted with one or two substituents selected from a chlorine atom, a fluorine atom, a methoxy group and a cyano group.

11. A compound according to claim 10 wherein
    - X together with Y form –CH=CH- group,
    - R_1 represents a hydrogen atom,
    - R_2 represents a hydrogen atom or a methyl group,
    - R_3 represents a group of formula (i), wherein R^a represents a hydroxy group and both R^b and R^c are thienyl group,
    - A_1 and A_2 independently represent a C_{1-6} alkylene group optionally substituted with one or two methyl groups,
    - L is selected from a direct bond, –O- , –NH(CO)- and –NH(CO)O- groups and
    - W represents a direct bond or a phenylene group which is optionally substituted with one or two substituents selected from a chlorine atom, a methoxy group and a cyano group.

12. A compound according to claim 11, wherein R_2 represents a hydrogen atom, L is selected from –O-, –NH(CO)- and –NH(CO)O- group, and W represents a

phenylene group which is substituted with two substituents selected from a chlorine atom, a methyl group, a methoxy group and a cyano group.

13. A compound according to claim 11, wherein R_2 represents a methyl group, L is selected from –O-, –NH(CO)- and –NH(CO)O- group, and W represents a phenylene group which is substituted with two substituents selected from a chlorine atom, a methyl group, a methoxy group and a cyano group

14. A compound according to claim 1 which is one of

Formic acid - *trans*-4-[(9-{[(2*R*)-2-hydroxy-2-(8-hydroxy-2-oxo-1,2-dihydroquinolin-5-yl)ethyl]amino}nonyl)(methyl)amino]cyclohexyl hydroxy(di-2-thienyl)acetate (2:1);

Formic acid - *trans*-4-[{2-[4-(2-{[(2*R*)-2-hydroxy-2-(8-hydroxy-2-oxo-1,2-dihydroquinolin-5-yl)ethyl]amino}ethyl)phenoxy]ethyl}(methyl)amino]cyclohexyl hydroxy(di-2-thienyl)acetate (1:1);

Formic acid - *trans*-4-[{3-[4-(2-{[(2*R*)-2-hydroxy-2-(8-hydroxy-2-oxo-1,2-dihydroquinolin-5-yl)ethyl]amino}ethyl)phenoxy]propyl}(methyl)amino]cyclohexyl hydroxy(di-2-thienyl)acetate (1:1);

trans-4-[{2-[(6-{[(2*R*)-2-Hydroxy-2-(8-hydroxy-2-oxo-1,2-dihydroquinolin-5-yl)-ethyl]amino}hexyl)oxy]ethyl}(methyl)amino]cyclohexyl hydroxy(di-2-thienyl)-acetate hydrofluoride;

trans-4-[{3-[(6-{[(2*R*)-2-Hydroxy-2-(8-hydroxy-2-oxo-1,2-dihydroquinolin-5-yl)-ethyl]amino}hexyl)oxy]propyl}(methyl)amino]cyclohexyl hydroxy(di-2-thienyl)-acetate hydrofluoride,

Formic acid - *trans*-4-[{3-[4-({[(2*R*)-2-hydroxy-2-(8-hydroxy-2-oxo-1,2-dihydroquinolin-5-yl)ethyl]amino}methyl)phenoxy]propyl}(methyl)amino]cyclohexyl hydroxy(di-2-thienyl)acetate (1:1);

trans-4-[{2-[4-({[(2*R*)-2-Hydroxy-2-(8-hydroxy-2-oxo-1,2-dihydroquinolin-5-yl)-ethyl]amino}methyl)phenoxy]ethyl}(methyl)amino]cyclohexyl hydroxy(di-2-thienyl)acetate hydrofluoride;

trans-4-[{3-[4-(2-{[(2*R*)-2-Hydroxy-2-(8-hydroxy-2-oxo-1,2-dihydroquinolin-5-yl)ethyl]amino}propyl)phenoxy]propyl}(methyl)amino]cyclohexyl hydroxy(di-2-thienyl)acetate hydrofluoride,

trans-4-((3-(2-Chloro-4-(((2*R*)-2-hydroxy-2-(8-hydroxy-2-oxo-1,2-dihydroquinolin-5-yl)ethylamino)methyl)-5-methoxyphenylamino)-3-oxopropyl)(methyl)amino)-cyclohexyl hydroxy(di-2-thienyl)acetate hydrofluoride;

trans-4-((3-(2-Chloro-4-(((2*R*)-2-hydroxy-2-(8-hydroxy-2-oxo-1,2-dihydroquinolin-5-yl)ethylamino)methyl)phenylamino)-3-oxopropyl)(methyl)amino)cyclohexyl-hydroxy(di-2-thienyl)acetate hydrofluoride,

trans-4-[{3-[2-Chloro-4-({[(2R)-2-hydroxy-2-(8-hydroxy-2-oxo-1,2-dihydroquinolin-5-yl)ethyl]amino}methyl)-5-methoxyphenoxy]propyl}(methyl)amino]cyclohexyl-hydroxy(di-2-thienyl)acetate hydrofluoride;

trans-4-[{2-[({[2-Chloro-4-({[(2R)-2-hydroxy-2-(8-hydroxy-2-oxo-1,2-dihydro-quinolin-5-yl)ethyl]amino}methyl)-5-methoxyphenyl]amino}carbonyl)oxy]ethyl}-(methyl)amino]-cyclohexylhydroxy(di-2-thienyl)acetate hydrofluoride,

trans-4-[(3-{[2-chloro-4-({[(2*R*)-2-hydroxy-2-(8-hydroxy-2-oxo-1,2-dihydroquinolin-5-yl)ethyl]amino}methyl)-5-methoxyphenyl]amino}-3-oxopropyl)(methyl)amino]-1-methylcyclohexyl hydroxy(di-2-thienyl)acetate,

trans-4-[(3-{[4-({[(2*R*)-2-hydroxy-2-(8-hydroxy-2-oxo-1,2-dihydroquinolin-5-yl)ethyl]amino}methyl)phenyl]amino}-3-oxopropyl)(methyl)amino]cyclohexyl hydroxy(di-2-thienyl)acetate hydrofluoride (1:2),

trans-4-[(4-{[2-chloro-4-({[(2*R*)-2-hydroxy-2-(8-hydroxy-2-oxo-1,2-dihydroquinolin-5-yl)ethyl]amino}methyl)-5-methoxyphenyl]amino}-4-oxobutyl)(methyl)amino]-cyclohexyl hydroxy(di-2-thienyl)acetate,

trans-4-[(3-{[2-fluoro-4-({[(2*R*)-2-hydroxy-2-(8-hydroxy-2-oxo-1,2-dihydroquinolin-5-yl)ethyl]amino}methyl)-5-methoxyphenyl]amino}-3-oxopropyl)(methyl)amino]-cyclohexyl hydroxy(di-2-thienyl)acetate,

trans-4-[(3-{[4-({[(2*R*)-2-hydroxy-2-(8-hydroxy-2-oxo-1,2-dihydroquinolin-5-yl)ethyl]amino}methyl)-3-methoxyphenyl]amino}-3-oxopropyl)(methyl)amino]-cyclohexyl hydroxy(di-2-thienyl)acetate hydrofluoride (1:2),

trans-4-[(3-{[2,5-difluoro-4-({[(2*R*)-2-hydroxy-2-(8-hydroxy-2-oxo-1,2-dihydroquinolin-5-yl)ethyl]amino}methyl)phenyl]amino}-3-oxopropyl)(methyl)amino]-cyclohexyl hydroxy(di-2-thienyl)acetate hydrofluoride (1:2),

trans-4-[(3-{[2-fluoro-4-({[(2*R*)-2-hydroxy-2-(8-hydroxy-2-oxo-1,2-dihydroquinolin-5-yl)ethyl]amino}methyl)phenyl]amino}-3-oxopropyl)(methyl)amino]cyclohexyl hydroxy(di-2-thienyl)acetate hydrofluoride (1:2),

trans-4-[(3-{[2-chloro-4-(2-{[(2*R*)-2-hydroxy-2-(8-hydroxy-2-oxo-1,2-dihydroquinolin-5-yl)ethyl]amino}ethyl)-5-methoxyphenyl]amino}-3-oxopropyl)-(methyl)amino]cyclohexyl hydroxy(di-2-thienyl)acetate hydrofluoride (1:2),

trans-4-[{3-[2-chloro-4-(2-{[(2*R*)-2-hydroxy-2-(8-hydroxy-2-oxo-1,2-dihydroquinolin-5-yl)ethyl]amino}ethyl)-5-methoxyphenoxy]propyl}(methyl)-amino]cyclohexyl hydroxy(di-2-thienyl)acetate hydrofluoride (1:2),

trans-4-[{2-[({[2-cyano-4-({[(2*R*)-2-hydroxy-2-(8-hydroxy-2-oxo-1,2-dihydroquinolin-5-yl)ethyl]amino}methyl)-5-methoxyphenyl]amino}carbonyl)-oxy]ethyl}(methyl)amino]cyclohexyl hydroxy(di-2-thienyl)acetate hydrofluoride (1:2),

trans-4-[{2-[({[2,5-difluoro-4-({[(2*R*)-2-hydroxy-2-(8-hydroxy-2-oxo-1,2-dihydroquinolin-5-yl)ethyl]amino}methyl)phenyl]amino}carbonyl)oxy]ethyl}-(methyl)amino]cyclohexyl hydroxy(di-2-thienyl)acetate hydrofluoride (1:2),

trans-4-[(3-{[2-chloro-4-({[(2R)-2-hydroxy-2-(8-hydroxy-2-oxo-1,2-dihydroquinolin-5-yl)ethyl]amino}methyl)-5-methoxyphenyl]amino}-2,2-dimethyl-3-oxopropyl)-(methyl)amino]cyclohexyl hydroxy(di-2-thienyl)acetate,

trans-4-[{4-[2-chloro-4-({[(2R)-2-hydroxy-2-(8-hydroxy-2-oxo-1,2-dihydroquinolin-5-yl)ethyl]amino}methyl)-5-methoxyphenoxy]butyl}(methyl)amino]cyclohexyl hydroxy(di-2-thienyl)acetate hydrofluoride (1:2),

trans-4-[{2-[({[2-chloro-4-({[(2R)-2-hydroxy-2-(5-hydroxy-3-oxo-3,4-dihydro-2H-1,4-benzoxazin-8-yl)ethyl]amino}methyl)-5-methoxyphenyl]amino}carbonyl)oxy]-ethyl}(methyl)amino]cyclohexyl hydroxy(di-2-thienyl)acetate,

trans-4-[(9-{[(2R)-2-hydroxy-2-(8-hydroxy-2-oxo-1,2-dihydroquinolin-5-yl)ethyl]-amino}nonyl)(methyl)amino]cyclohexyl 9-methyl-9H-xanthene-9-carboxylate,

trans-4-[{2-[({[2-chloro-4-({[(2R)-2-hydroxy-2-(8-hydroxy-2-oxo-1,2-dihydro-quinolin-5-yl)ethyl]amino}methyl)-5-methoxyphenyl]amino}carbonyl)oxy]ethyl}-(methyl)-amino]cyclohexyl (2R)-cyclopentyl (hydroxy)phenylacetate, and

trans-4-[{2-[({[2-chloro-4-({[(2R)-2-hydroxy-2-(8-hydroxy-2-oxo-1,2-dihydro-quinolin-5-yl)ethyl]amino}methyl)-5-methoxyphenyl]amino}carbonyl)oxy]ethyl}-(methyl) amino]cyclohexyl (2S)-cyclopentyl(hydroxy)2-thienylacetate.

or pharmaceutically acceptable salts or solvates or deuterated derivative thereof:

15. A compound according to any one of claims 1-14 for use in the treatment of the human or animal body by therapy.

16. A compound according to any one of claims 1 to 14 for use in the treatment of a pathological condition or disease susceptible to amelioration by both β2 adrenergic receptor agonist and muscarinic receptor antagonist activities, which condition or disease is preferably selected from pulmonary diseases, pre-labor, glaucoma, neurological disorders, cardiac disorders, inflammation and gastrointestinal disorders, and is more preferably asthma and or chronic obstructive pulmonary disease.

17. A pharmaceutical composition comprising a compound as defined in any one of claims 1 to 14 in association with a pharmaceutically acceptable diluent or carrier.

18. Use of a compound as defined in any one of claims 1 to 14 in the manufacture of a medicament for the treatment of a pathological condition or disease as defined in claim 16.

19. A method for treating a subject afflicted with a pathological condition or disease as defined in claim 16, which comprises administering to said subject an effective amount of a compound as defined in any one of claims 1 to 14.

20. A combination product comprising (i) a compound according to any one of claims 1 to 14; and (ii) another compound selected from a corticosteroid and a PDE4 inhibitor.