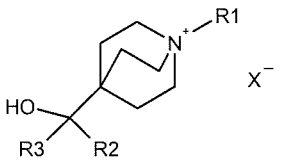
What is claimed is:

1. A compound of formula (I) as indicated below

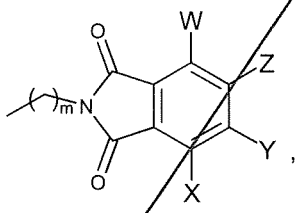


(I)

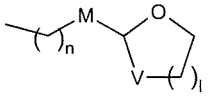
wherein:

R1 is selected from the group consisting of C1-15 alkyl, halosubstituted C1-15 alkyl, C1-15 alkyl cycloalkyl, cycloalkyl, C2-15 alkenyl, hydroxy substituted C1-15 alkyl, C1-15 alkyl aryl, C1-15 alkyl heteroaryl, (CR7R7)qNRaRa, (CR7R7)qNC(O)Ra, (CR7R7)qC(O)NRaRa, (CR7R7)qC(O)Ra, (CR7R7)qOC (O)Ra, (CR7R7)qNRaC(O)NRaRa, (CR7R7)qORc and (CR7R7)qNS(O)$_2$Ra

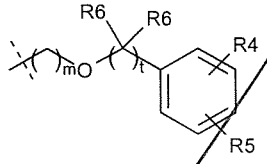
R1 is selected from the group consisting of:



and



R1 is selected from the group consisting of:



R2 and R3 are independently selected from the group consisting of aryl, C1-4 alkyl aryl, heteroaryl, C1-4 alkyl heteroaryl, heterocyclic and a C1-4 alkyl heterocyclic moiety, all of which moieties may be optionally substituted;

Ra is selected from the group consisting of hydrogen, C1-15 alkyl, C1-15 alkoxy, aryl, C1-15 alkyl aryl, heteroaryl, C1-15 alkyl heteroaryl, heterocyclic and a C1-15 alkyl heterocyclic moiety, all of which moieties may be optionally substituted;

Rc is selected from the group consisting of hydrogen, C1-15 alkyl, C1-15 alkoxy, heterocyclic and a C1-15 alkyl heterocyclic moiety, all of which moieties may be optionally substituted;

R4 and R5 are independently selected from the group consisting of hydrogen, halogen, C1-4 alkyl, aryl, C1-4 alkyl aryl, cyano, nitro, (CR7R7)pORb, (CR7R7)pNRbRb, or R4 and R5 together may form a 5 to 6 membered saturated or unsaturated ring; and wherein the alkyl, aryl, arylalkyl, heteroaryl, heteroalkyl, heterocyclic, heterocyclicalkyl groups may be optionally substituted;

R6 is selected from the group consisting of hydrogen, C1-4 alkyl;

q is 0 or an integer having a value of 1 to 15;
n is an integer having a value of 1 to 14;
m is an integer having a value of 1 to 15;
l is an integer having a value of 1 to 4;
t is 0 or an integer having a value of 1 to 5;
p is 0 or an integer having a value of 1 to 4;

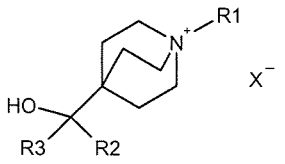
X, Y, Z and W are independently selected from the group consisting of hydrogen, C1-4 alkyl;
V is selected from the group consisting of $CH_2$, O, S, and NRb;
M is O or $CH_2$;
Rb is selected from the group consisting of hydrogen, C1-4 alkyl, aryl and C1-4 alkyl aryl;

R7 is selected from the group consisting of hydrogen, C1-4 alkyl, halosubstituted C1-4 alkyl, and hydroxysubstituted C1-4 alkyl;

X- is a physiologically acceptable anion, such as chloride, bromide, iodide, hydroxide, sulfate, nitrate, phosphate, acetate, trifluoroacetate, fumarate, citrate, tartrate, oxalate, succinate, mandelate, methanesulfonate and p-toluenesulfonate;

**and further wherein 4-[hydroxy(diphenyl)methyl]-1-{2-[(phenylmethyl)oxy]ethyl}-1-azoniabicyclo[2.2.2]octane bromide is excluded.**

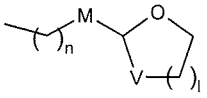
2. A compound of formula (I) as indicated below:

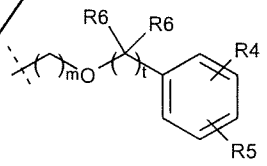



(I)

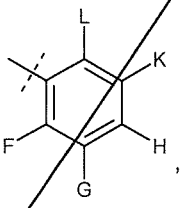
R1 is selected from the group consisting of C1-10 alkyl, halosubstituted C1-10 alkyl, C1-10 alkyl aryl, C1-10 alkyl cycloalkyl, cycloalkyl, hydroxy substituted C1-10 alkyl, C2-10 alkenyl, (CR7R7)qORc; (CR7R7)qOC (O)Ra and (CR7R7)qNS(O)$_2$Ra;

or R1 is selected from the group consisting of:

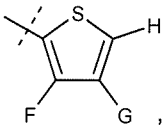


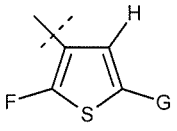

R2 and R3 are, independently, selected from the group consisting of:




,




, and




F, G, H, K and L are independently selected from the group consisting of hydrogen, halogen, C1-4 alkyl, halosubstituted C1-4 alkyl, hydoxysubstituted C1-4 alkyl, and C1-4 alkoxy;
Ra is selected from the group consisting of hydrogen, C1-10 alkyl, C1-10 alkoxy, aryl and heteroaryl, all of which moieties may be optionally substituted;

Rc is selected from the group consisting of hydrogen, C1-5 alkyl, C1-5 alkoxy, all of which moieties may be optionally substituted;

R4 and R5 are independently selected from the group consisting of hydrogen, halogen, C1-4 alkyl, aryl, C1-4 alkyl aryl, cyano, nitro, (CR7R7)pORb, (CR7R7)pNRbRb, or R4 and R5 together may form a 5 to 6 membered saturated or unsaturated ring;

q is 0 or an integer having a value of 1 to 5;
n is an integer having a value of 1 to 4;
m is an integer having a value of 1 to 5;
l is 1 or 2;
t is 0, 1 or 2;
p is 0, 1 or 2;

V is O, or $CH_2$;
R6 is selected from the group consisting of hydrogen, C1-4 alkyl;

M is O or $CH_2$;

Rb is selected from the group consisting of hydrogen, C1-4 alkyl, and aryl C1-4 alkyl
R7 is selected from the group consisting of hydrogen, and C1-4 alkyl;
X- is a physiologically acceptable anion, such as chloride, bromide, iodide, hydroxide, sulfate, nitrate, phosphate, acetate, trifluoroacetate, fumarate, citrate, tartrate, oxalate, succinate, mandelate, methanesulfonate and p-toluenesulfonate;

**and further wherein 4-[hydroxy(diphenyl)methyl]-1-{2-[(phenylmethyl)oxy]ethyl}-1-azoniabicyclo[2.2.2]octane bromide is excluded**.

3. A compound according to claim 1 selected from the group of :

1-(2-{[(3-fluorophenyl)methyl]oxy}ethyl)-4-[hydroxy(diphenyl)methyl]-1-azoniabicyclo[2.2.2]octane bromide
1-(2-{[(4-bromophenyl)methyl]oxy}ethyl)-4-[hydroxy(diphenyl)methyl]-1-azoniabicyclo[2.2.2]octane bromide
1-(2-{[(4-chlorophenyl)methyl]oxy}ethyl)-4-[hydroxy(diphenyl)methyl]-1-azoniabicyclo[2.2.2]octane bromide

4-[bis(4-fluorophenyl)(hydroxy)methyl]-1-{2-[(phenylmethyl)oxy]ethyl}-1-azoniabicyclo[2.2.2]octane bromide

4-{hydroxy[bis(3-methylphenyl)]methyl}-1-{2-[(phenylmethyl)oxy]ethyl}-1-azoniabicyclo[2.2.2]octane bromide

1-(2-{[(4-fluorophenyl)methyl]oxy}ethyl)-4-[hydroxy(diphenyl)methyl]-1-azoniabicyclo[2.2.2]octane bromide

4-[hydroxy(diphenyl)methyl]-1-{2-[(phenylcarbonyl)oxy]ethyl}-1-azoniabicyclo[2.2.2]octane bromide

1-{3-[(3-fluorophenyl)oxy]propyl}-4-[hydroxy(diphenyl)methyl]-1-azoniabicyclo[2.2.2]octane bromide

4-{hydroxy[bis(4-methylphenyl)]methyl}-1-{2-[(phenylmethyl)oxy]ethyl}-1-azoniabicyclo[2.2.2]octane bromide

4-[hydroxy(diphenyl)methyl]-1-{3-[(methylsulfonyl)amino]propyl}-1-azoniabicyclo[2.2.2]octane bromide

4-[bis(3-fluorophenyl)(hydroxy)methyl]-1-{2-[(phenylmethyl)oxy]ethyl}-1-azoniabicyclo[2.2.2]octane bromide

1-{3-[(3-chlorophenyl)oxy]propyl}-4-[hydroxy(diphenyl)methyl]-1-azoniabicyclo[2.2.2]octane bromide

4-[hydroxy(di-2-thienyl)methyl]-1-[3-(phenyloxy)propyl]-1-azoniabicyclo[2.2.2]octane bromide

4-[hydroxy(diphenyl)methyl]-1-[3-(phenyloxy)propyl]-1-azoniabicyclo[2.2.2]octane bromide

1-(2-{[(4-cyanophenyl)methyl]oxy}ethyl)-4-[hydroxy(diphenyl)methyl]-1-azoniabicyclo[2.2.2]octane bromide

1-{3-[(4-bromophenyl)oxy]propyl}-4-[hydroxy(diphenyl)methyl]-1-azoniabicyclo[2.2.2]octane bromide

4-[bis(4-fluorophenyl)(hydroxy)methyl]-1-[3-(phenyloxy)propyl]-1-azoniabicyclo[2.2.2]octane bromide

1-{3-[(4-fluorophenyl)oxy]propyl}-4-[hydroxy(diphenyl)methyl]-1-azoniabicyclo[2.2.2]octane bromide

4-[hydroxy(diphenyl)methyl]-1-{2-[(1-methyl-1-phenylethyl)oxy]ethyl}-1-azoniabicyclo[2.2.2]octane bromide

4-[hydroxy(diphenyl)methyl]-1-{2-[(2-naphthalenylmethyl)oxy]ethyl}-1-azoniabicyclo[2.2.2]octane bromide

4-[hydroxy(di-3-thienyl)methyl]-1-[3-(phenyloxy)propyl]-1-azoniabicyclo[2.2.2]octane bromide

4-[hydroxy(diphenyl)methyl]-1-[2-(phenyloxy)ethyl]-1-azoniabicyclo[2.2.2]octane bromide

4-{hydroxy[bis(3-methylphenyl)]methyl}-1-[3-(phenyloxy)propyl]-1-azoniabicyclo[2.2.2]octane bromide

4-{hydroxy[bis(4-methylphenyl)]methyl}-1-[3-(phenyloxy)propyl]-1-azoniabicyclo[2.2.2]octane bromide

4-[hydroxy(diphenyl)methyl]-1-(3-{[4-(methyloxy)phenyl]oxy}propyl)-1-azoniabicyclo[2.2.2]octane bromide

4-[hydroxy(diphenyl)methyl]-1-[3-(2-naphthalenyloxy)propyl]-1-azoniabicyclo[2.2.2]octane bromide

4-[hydroxy(diphenyl)methyl]-1-[2-({[3-(methyloxy)phenyl]methyl}oxy)ethyl]-1-azoniabicyclo[2.2.2]octane bromide

4-[hydroxy(diphenyl)methyl]-1-(2-naphthalenylmethyl)-1-azoniabicyclo[2.2.2]octane bromide

4-[bis(3-fluorophenyl)(hydroxy)methyl]-1-[3-(phenyloxy)propyl]-1-azoniabicyclo[2.2.2]octane bromide

4-[hydroxy(di-2-thienyl)methyl]-1-[2-(phenyloxy)ethyl]-1-azoniabicyclo[2.2.2]octane bromide

4-(hydroxy{bis[3-(methyloxy)phenyl]}methyl)-1-{2-[(phenylmethyl)oxy]ethyl}-1-azoniabicyclo[2.2.2]octane bromide

4-[hydroxy(diphenyl)methyl]-1-{3-[(4-nitrophenyl)oxy]propyl}-1-azoniabicyclo[2.2.2]octane bromide

1-{3-[(2-fluorophenyl)oxy]propyl}-4-[hydroxy(diphenyl)methyl]-1-azoniabicyclo[2.2.2]octane bromide

4-[hydroxy(diphenyl)methyl]-1-{3-[(3-nitrophenyl)oxy]propyl}-1-azoniabicyclo[2.2.2]octane bromide

4-[hydroxy(diphenyl)methyl]-1-({3-[(trifluoromethyl)oxy]phenyl}methyl)-1-azoniabicyclo[2.2.2]octane bromide

4-[hydroxy(diphenyl)methyl]-1-[(5-nitro-2-furanyl)methyl]-1-azoniabicyclo[2.2.2]octane bromide

4-[hydroxy(diphenyl)methyl]-1-[2-(1*H*-indol-3-yl)ethyl]-1-azoniabicyclo[2.2.2]octane bromide

1-[3-(4-biphenylyloxy)propyl]-4-[hydroxy(diphenyl)methyl]-1-azoniabicyclo[2.2.2]octane bromide

4-[hydroxy(diphenyl)methyl]-1-{3-[(2-methylphenyl)oxy]propyl}-1-azoniabicyclo[2.2.2]octane bromide

4-[hydroxy(diphenyl)methyl]-1-(phenylmethyl)-1-azoniabicyclo[2.2.2]octane bromide

4-[hydroxy(diphenyl)methyl]-1-(2-{[2-(methyloxy)ethyl]oxy}ethyl)-1-azoniabicyclo[2.2.2]octane bromide

4-[hydroxy(diphenyl)methyl]-1-{3-[(phenylmethyl)oxy]propyl}-1-azoniabicyclo[2.2.2]octane bromide

4-[hydroxy(diphenyl)methyl]-1-[4-(phenyloxy)butyl]-1-azoniabicyclo[2.2.2]octane bromide

1-(1,3-dioxolan-2-ylmethyl)-4-[hydroxy(diphenyl)methyl]-1-azoniabicyclo[2.2.2]octane bromide

4-[hydroxy(diphenyl)methyl]-1-{3-[(2-hydroxyphenyl)oxy]propyl}-1-azoniabicyclo[2.2.2]octane bromide

1-hexyl-4-[hydroxy(diphenyl)methyl]-1-azoniabicyclo[2.2.2]octane bromide

4-[hydroxy(di-3-thienyl)methyl]-1-[2-(phenyloxy)ethyl]-1-azoniabicyclo[2.2.2]octane bromide

4-[hydroxy(diphenyl)methyl]-1-[3-({4-[(phenylmethyl)oxy]phenyl}oxy)propyl]-1-azoniabicyclo[2.2.2]octane bromide

1-[(3-bromophenyl)methyl]-4-[hydroxy(diphenyl)methyl]-1-azoniabicyclo[2.2.2]octane bromide

4-[hydroxy(di-2-naphthalenyl)methyl]-1-{2-[(phenylmethyl)oxy]ethyl}-1-azoniabicyclo[2.2.2]octane bromide

4-[hydroxy(diphenyl)methyl]-1-[2-(methyloxy)ethyl]-1-azoniabicyclo[2.2.2]octane bromide

4-(hydroxy{bis[4-(methyloxy)phenyl]}methyl)-1-{2-[(phenylmethyl)oxy]ethyl}-1-azoniabicyclo[2.2.2]octane bromide

1-{3-[(4-cyanophenyl)oxy]propyl}-4-[hydroxy(diphenyl)methyl]-1-azoniabicyclo[2.2.2]octane bromide

1-[2-(1-benzofuran-2-yl)-2-oxoethyl]-4-[hydroxy(diphenyl)methyl]-1-azoniabicyclo[2.2.2]octane bromide

1-[2-({[4-(1,1-dimethylethyl)phenyl]methyl}oxy)ethyl]-4-[hydroxy(diphenyl)methyl]-1-azoniabicyclo[2.2.2]octane bromide

4-[hydroxy(diphenyl)methyl]-1-{[3-(methyloxy)phenyl]methyl}-1-azoniabicyclo[2.2.2]octane bromide

4-[hydroxy(diphenyl)methyl]-1-({4-[(trifluoromethyl)oxy]phenyl}methyl)-1-azoniabicyclo[2.2.2]octane bromide

4-[hydroxy(diphenyl)methyl]-1-nonyl-1-azoniabicyclo[2.2.2]octane bromide

4-[hydroxy(di-2-naphthalenyl)methyl]-1-[3-(phenyloxy)propyl]-1-azoniabicyclo[2.2.2]octane bromide

1-[(4-fluorophenyl)methyl]-4-[hydroxy(diphenyl)methyl]-1-azoniabicyclo[2.2.2]octane bromide

1-[(4-bromophenyl)methyl]-4-[hydroxy(diphenyl)methyl]-1-azoniabicyclo[2.2.2]octane bromide

4-[hydroxy(diphenyl)methyl]-1-{[3-(trifluoromethyl)phenyl]methyl}-1-azoniabicyclo[2.2.2]octane bromide

1-[(2-fluorophenyl)methyl]-4-[hydroxy(diphenyl)methyl]-1-azoniabicyclo[2.2.2]octane bromide

4-[hydroxy(diphenyl)methyl]-1-{[4-(trifluoromethyl)phenyl]methyl}-1-azoniabicyclo[2.2.2]octane bromide

1-(5-hexen-1-yl)-4-[hydroxy(diphenyl)methyl]-1-azoniabicyclo[2.2.2]octane bromide

1-(3-cyclohexylpropyl)-4-[hydroxy(diphenyl)methyl]-1-azoniabicyclo[2.2.2]octane bromide

4-[hydroxy(diphenyl)methyl]-1-[2-(tetrahydro-2*H*-pyran-2-yloxy)ethyl]-1-azoniabicyclo[2.2.2]octane bromide

1-[2-(1,3-dioxo-1,3-dihydro-2*H*-isoindol-2-yl)ethyl]-4-[hydroxy(diphenyl)methyl]-1-azoniabicyclo[2.2.2]octane bromide

4-[hydroxy(diphenyl)methyl]-1-(2-phenylethyl)-1-azoniabicyclo[2.2.2]octane bromide

1-ethyl-4-[hydroxy(diphenyl)methyl]-1-azoniabicyclo[2.2.2]octane bromide

4-[hydroxy(diphenyl)methyl]-1-[(4-methylphenyl)methyl]-1-azoniabicyclo[2.2.2]octane bromide

1-butyl-4-[hydroxy(diphenyl)methyl]-1-azoniabicyclo[2.2.2]octane bromide

4-[hydroxy(diphenyl)methyl]-1-[2-(3-methyl-1*H*-pyrazol-1-yl)ethyl]-1-azoniabicyclo[2.2.2]octane bromide

4-(hydroxy{bis[4-(methyloxy)phenyl]}methyl)-1-[3-(phenyloxy)propyl]-1-azoniabicyclo[2.2.2]octane bromide

1-[3-(3-biphenylyloxy)propyl]-4-[hydroxy(diphenyl)methyl]-1-azoniabicyclo[2.2.2]octane bromide

4-[hydroxy(diphenyl)methyl]-1-[(1*S*)-1-methyl-2-oxo-2-(phenylamino)ethyl]-1-azoniabicyclo[2.2.2]octane bromide

4-[hydroxy(diphenyl)methyl]-1-propyl-1-azoniabicyclo[2.2.2]octane bromide

1-{3-[(2-bromophenyl)oxy]propyl}-4-[hydroxy(diphenyl)methyl]-1-azoniabicyclo[2.2.2]octane bromide

1-[(3-fluorophenyl)methyl]-4-[hydroxy(diphenyl)methyl]-1-azoniabicyclo[2.2.2]octane bromide

1-[(3,4-dichlorophenyl)methyl]-4-[hydroxy(diphenyl)methyl]-1-azoniabicyclo[2.2.2]octane bromide

1-[(2-fluoro-3-methylphenyl)methyl]-4-[hydroxy(diphenyl)methyl]-1-azoniabicyclo[2.2.2]octane bromide

4-[hydroxy(diphenyl)methyl]-1-{4-[(phenylmethyl)oxy]butyl}-1-azoniabicyclo[2.2.2]octane bromide

1-[(4-cyanophenyl)methyl]-4-[hydroxy(diphenyl)methyl]-1-azoniabicyclo[2.2.2]octane bromide

4-(hydroxy{bis[3-(methyloxy)phenyl]}methyl)-1-[3-(phenyloxy)propyl]-1-azoniabicyclo[2.2.2]octane bromide

1-(3-{[3-(diethylamino)phenyl]oxy}propyl)-4-[hydroxy(diphenyl)methyl]-1-azoniabicyclo[2.2.2]octane bromide

4-[hydroxy(diphenyl)methyl]-1-(2-propen-1-yl)-1-azoniabicyclo[2.2.2]octane bromide

1-{[4-(1,1-dimethylethyl)phenyl]methyl}-4-[hydroxy(diphenyl)methyl]-1-azoniabicyclo[2.2.2]octane bromide

4-[hydroxy(diphenyl)methyl]-1-(3-phenylpropyl)-1-azoniabicyclo[2.2.2]octane bromide

1-[(2,6-difluorophenyl)methyl]-4-[hydroxy(diphenyl)methyl]-1-azoniabicyclo[2.2.2]octane bromide

4-[hydroxy(diphenyl)methyl]-1-[2-({[2-(phenyloxy)-3-pyridinyl]carbonyl}amino)ethyl]-1-azoniabicyclo[2.2.2]octane bromide

4-[hydroxy(di-2-thienyl)methyl]-1-(2-phenylethyl)-1-azoniabicyclo[2.2.2]octane bromide

1-(3-bromopropyl)-4-[hydroxy(diphenyl)methyl]-1-azoniabicyclo[2.2.2]octane bromide

4-[hydroxy(diphenyl)methyl]-1-(2-hydroxyethyl)-1-azoniabicyclo[2.2.2]octane bromide

1-[(3-cyanophenyl)methyl]-4-[hydroxy(diphenyl)methyl]-1-azoniabicyclo[2.2.2]octane bromide

1-[2-({[(2,4-dichlorophenyl)amino]carbonyl}amino)ethyl]-4-[hydroxy(diphenyl)methyl]-1-azoniabicyclo[2.2.2]octane bromide

4-[hydroxy(diphenyl)methyl]-1-(4-penten-1-yl)-1-azoniabicyclo[2.2.2]octane bromide

1-{2-[(2,4-dibromophenyl)oxy]ethyl}-4-[hydroxy(diphenyl)methyl]-1-azoniabicyclo[2.2.2]octane bromide

1-[(2,4-difluorophenyl)methyl]-4-[hydroxy(diphenyl)methyl]-1-azoniabicyclo[2.2.2]octane bromide

4-[hydroxy(diphenyl)methyl]-1-[3-(methyloxy)propyl]-1-azoniabicyclo[2.2.2]octane bromide

4-[hydroxy(diphenyl)methyl]-1-[3-({2-[(phenylmethyl)oxy]phenyl}oxy)propyl]-1-azoniabicyclo[2.2.2]octane bromide

[1-(2-aminoethyl)-1-azoniabicyclo[2.2.2]oct-4-yl](diphenyl)methanolate trifluoroacetate

4-[hydroxy(di-2-thienyl)methyl]-1-(3-phenylpropyl)-1-azoniabicyclo[2.2.2]octane bromide

4-[hydroxy(diphenyl)methyl]-1-methyl-1-azoniabicyclo[2.2.2]octane bromide

4-[hydroxy(diphenyl)methyl]-1-(tetrahydro-2*H*-pyran-2-ylmethyl)-1-azoniabicyclo[2.2.2]octane bromide

1-[(2,3-difluorophenyl)methyl]-4-[hydroxy(diphenyl)methyl]-1-azoniabicyclo[2.2.2]octane bromide

1-[2-(4-biphenylyl)-2-oxoethyl]-4-[hydroxy(diphenyl)methyl]-1-azoniabicyclo[2.2.2]octane bromide

4-[hydroxy(diphenyl)methyl]-1-[2-oxo-2-(4-pentylphenyl)ethyl]-1-azoniabicyclo[2.2.2]octane bromide

1-(2-{[(2,4-dichlorophenyl)carbonyl]amino}ethyl)-4-[hydroxy(diphenyl)methyl]-1-azoniabicyclo[2.2.2]octane bromide

4-[hydroxy(diphenyl)methyl]-1-(3-{[2-(methyloxy)phenyl]oxy}propyl)-1-azoniabicyclo[2.2.2]octane bromide

4-[hydroxy(diphenyl)methyl]-1-[(1-{[(phenylmethyl)oxy]carbonyl}-4-piperidinyl)methyl]-1-azoniabicyclo[2.2.2]octane bromide

4-[hydroxy(diphenyl)methyl]-1-[2-(2-naphthalenyl)-2-oxoethyl]-1-azoniabicyclo[2.2.2]octane bromide

4-[hydroxy(diphenyl)methyl]-1-[(4-nitrophenyl)methyl]-1-azoniabicyclo[2.2.2]octane bromide

1-butyl-4-[hydroxy(di-3-thienyl)methyl]-1-azoniabicyclo[2.2.2]octane bromide

4-[hydroxy(diphenyl)methyl]-1-(2-oxo-2-phenylethyl)-1-azoniabicyclo[2.2.2]octane bromide

1-[(3,4-difluorophenyl)methyl]-4-[hydroxy(diphenyl)methyl]-1-azoniabicyclo[2.2.2]octane bromide; and

1-(cyclopropylmethyl)-4-[hydroxy(diphenyl)methyl]-1-azoniabicyclo[2.2.2]octane bromide.

4. A compound according to claim 1 consisting of the group of:

The preferred compounds useful in the present invention include:

1-(2-{[(3-fluorophenyl)methyl]oxy}ethyl)-4-[hydroxy(diphenyl)methyl]-1-azoniabicyclo[2.2.2]octane bromide
1-(2-{[(4-bromophenyl)methyl]oxy}ethyl)-4-[hydroxy(diphenyl)methyl]-1-azoniabicyclo[2.2.2]octane bromide
1-(2-{[(4-chlorophenyl)methyl]oxy}ethyl)-4-[hydroxy(diphenyl)methyl]-1-azoniabicyclo[2.2.2]octane bromide
4-[bis(4-fluorophenyl)(hydroxy)methyl]-1-{2-[(phenylmethyl)oxy]ethyl}-1-azoniabicyclo[2.2.2]octane bromide
4-{hydroxy[bis(3-methylphenyl)]methyl}-1-{2-[(phenylmethyl)oxy]ethyl}-1-azoniabicyclo[2.2.2]octane bromide
1-(2-{[(4-fluorophenyl)methyl]oxy}ethyl)-4-[hydroxy(diphenyl)methyl]-1-azoniabicyclo[2.2.2]octane bromide
4-[hydroxy(diphenyl)methyl]-1-{2-[(phenylcarbonyl)oxy]ethyl}-1-azoniabicyclo[2.2.2]octane bromide
1-{3-[(3-fluorophenyl)oxy]propyl}-4-[hydroxy(diphenyl)methyl]-1-azoniabicyclo[2.2.2]octane bromide
4-{hydroxy[bis(4-methylphenyl)]methyl}-1-{2-[(phenylmethyl)oxy]ethyl}-1-azoniabicyclo[2.2.2]octane bromide
4-[hydroxy(diphenyl)methyl]-1-{3-[(methylsulfonyl)amino]propyl}-1-azoniabicyclo[2.2.2]octane bromide
4-[bis(3-fluorophenyl)(hydroxy)methyl]-1-{2-[(phenylmethyl)oxy]ethyl}-1-azoniabicyclo[2.2.2]octane bromide
1-{3-[(3-chlorophenyl)oxy]propyl}-4-[hydroxy(diphenyl)methyl]-1-azoniabicyclo[2.2.2]octane bromide
4-[hydroxy(di-2-thienyl)methyl]-1-[3-(phenyloxy)propyl]-1-azoniabicyclo[2.2.2]octane bromide
4-[hydroxy(diphenyl)methyl]-1-[3-(phenyloxy)propyl]-1-azoniabicyclo[2.2.2]octane bromide
1-(2-{[(4-cyanophenyl)methyl]oxy}ethyl)-4-[hydroxy(diphenyl)methyl]-1-azoniabicyclo[2.2.2]octane bromide

1-{3-[(4-bromophenyl)oxy]propyl}-4-[hydroxy(diphenyl)methyl]-1-azoniabicyclo[2.2.2]octane bromide

4-[bis(4-fluorophenyl)(hydroxy)methyl]-1-[3-(phenyloxy)propyl]-1-azoniabicyclo[2.2.2]octane bromide

1-{3-[(4-fluorophenyl)oxy]propyl}-4-[hydroxy(diphenyl)methyl]-1-azoniabicyclo[2.2.2]octane bromide

4-[hydroxy(diphenyl)methyl]-1-{2-[(1-methyl-1-phenylethyl)oxy]ethyl}-1-azoniabicyclo[2.2.2]octane bromide

4-[hydroxy(diphenyl)methyl]-1-{2-[(2-naphthalenylmethyl)oxy]ethyl}-1-azoniabicyclo[2.2.2]octane bromide

4-[hydroxy(di-3-thienyl)methyl]-1-[3-(phenyloxy)propyl]-1-azoniabicyclo[2.2.2]octane bromide

4-[hydroxy(diphenyl)methyl]-1-[2-(phenyloxy)ethyl]-1-azoniabicyclo[2.2.2]octane bromide

4-{hydroxy[bis(3-methylphenyl)]methyl}-1-[3-(phenyloxy)propyl]-1-azoniabicyclo[2.2.2]octane bromide

4-{hydroxy[bis(4-methylphenyl)]methyl}-1-[3-(phenyloxy)propyl]-1-azoniabicyclo[2.2.2]octane bromide

4-[hydroxy(diphenyl)methyl]-1-(3-{[4-(methyloxy)phenyl]oxy}propyl)-1-azoniabicyclo[2.2.2]octane bromide

4-[hydroxy(diphenyl)methyl]-1-[3-(2-naphthalenyloxy)propyl]-1-azoniabicyclo[2.2.2]octane bromide

4-[hydroxy(diphenyl)methyl]-1-[2-({[3-(methyloxy)phenyl]methyl}oxy)ethyl]-1-azoniabicyclo[2.2.2]octane bromide

4-[hydroxy(diphenyl)methyl]-1-(2-naphthalenylmethyl)-1-azoniabicyclo[2.2.2]octane bromide

4-[bis(3-fluorophenyl)(hydroxy)methyl]-1-[3-(phenyloxy)propyl]-1-azoniabicyclo[2.2.2]octane bromide

4-[hydroxy(di-2-thienyl)methyl]-1-[2-(phenyloxy)ethyl]-1-azoniabicyclo[2.2.2]octane bromide

4-(hydroxy{bis[3-(methyloxy)phenyl]}methyl)-1-{2-[(phenylmethyl)oxy]ethyl}-1-azoniabicyclo[2.2.2]octane bromide

4-[hydroxy(diphenyl)methyl]-1-{3-[(4-nitrophenyl)oxy]propyl}-1-azoniabicyclo[2.2.2]octane bromide; and

1-{3-[(2-fluorophenyl)oxy]propyl}-4-[hydroxy(diphenyl)methyl]-1-azoniabicyclo[2.2.2]octane bromide.

5. A compound according to claim 4 selected from the group consisting of:
The more preferred compounds useful in the present invention include:

1-(2-{[(3-fluorophenyl)methyl]oxy}ethyl)-4-[hydroxy(diphenyl)methyl]-1-azoniabicyclo[2.2.2]octane bromide
1-(2-{[(4-bromophenyl)methyl]oxy}ethyl)-4-[hydroxy(diphenyl)methyl]-1-azoniabicyclo[2.2.2]octane bromide
1-(2-{[(4-chlorophenyl)methyl]oxy}ethyl)-4-[hydroxy(diphenyl)methyl]-1-azoniabicyclo[2.2.2]octane bromide
4-[bis(4-fluorophenyl)(hydroxy)methyl]-1-{2-[(phenylmethyl)oxy]ethyl}-1-azoniabicyclo[2.2.2]octane bromide
4-{hydroxy[bis(3-methylphenyl)]methyl}-1-{2-[(phenylmethyl)oxy]ethyl}-1-azoniabicyclo[2.2.2]octane bromide
1-(2-{[(4-fluorophenyl)methyl]oxy}ethyl)-4-[hydroxy(diphenyl)methyl]-1-azoniabicyclo[2.2.2]octane bromide
4-[hydroxy(diphenyl)methyl]-1-{2-[(phenylcarbonyl)oxy]ethyl}-1-azoniabicyclo[2.2.2]octane bromide
1-{3-[(3-fluorophenyl)oxy]propyl}-4-[hydroxy(diphenyl)methyl]-1-azoniabicyclo[2.2.2]octane bromide
4-{hydroxy[bis(4-methylphenyl)]methyl}-1-{2-[(phenylmethyl)oxy]ethyl}-1-azoniabicyclo[2.2.2]octane bromide
4-[hydroxy(diphenyl)methyl]-1-{3-[(methylsulfonyl)amino]propyl}-1-azoniabicyclo[2.2.2]octane bromide
4-[bis(3-fluorophenyl)(hydroxy)methyl]-1-{2-[(phenylmethyl)oxy]ethyl}-1-azoniabicyclo[2.2.2]octane bromide
1-{3-[(3-chlorophenyl)oxy]propyl}-4-[hydroxy(diphenyl)methyl]-1-azoniabicyclo[2.2.2]octane bromide
4-[hydroxy(di-2-thienyl)methyl]-1-[3-(phenyloxy)propyl]-1-azoniabicyclo[2.2.2]octane bromide
4-[hydroxy(diphenyl)methyl]-1-[3-(phenyloxy)propyl]-1-azoniabicyclo[2.2.2]octane bromide

1-(2-{[(4-cyanophenyl)methyl]oxy}ethyl)-4-[hydroxy(diphenyl)methyl]-1-azoniabicyclo[2.2.2]octane bromide

1-{3-[(4-bromophenyl)oxy]propyl}-4-[hydroxy(diphenyl)methyl]-1-azoniabicyclo[2.2.2]octane bromide

4-[bis(4-fluorophenyl)(hydroxy)methyl]-1-[3-(phenyloxy)propyl]-1-azoniabicyclo[2.2.2]octane bromide

1-{3-[(4-fluorophenyl)oxy]propyl}-4-[hydroxy(diphenyl)methyl]-1-azoniabicyclo[2.2.2]octane bromide

4-[hydroxy(diphenyl)methyl]-1-{2-[(1-methyl-1-phenylethyl)oxy]ethyl}-1-azoniabicyclo[2.2.2]octane bromide

4-[hydroxy(diphenyl)methyl]-1-{2-[(2-naphthalenylmethyl)oxy]ethyl}-1-azoniabicyclo[2.2.2]octane bromide

4-[hydroxy(di-3-thienyl)methyl]-1-[3-(phenyloxy)propyl]-1-azoniabicyclo[2.2.2]octane bromide

4-[hydroxy(diphenyl)methyl]-1-[2-(phenyloxy)ethyl]-1-azoniabicyclo[2.2.2]octane bromide; and

4-{hydroxy[bis(3-methylphenyl)]methyl}-1-[3-(phenyloxy)propyl]-1-azoniabicyclo[2.2.2]octane bromide.

6. A compound according to claim 5 selected from the group consisting of:

The most preferred compounds useful in the present invention include:

1-(2-{[(3-fluorophenyl)methyl]oxy}ethyl)-4-[hydroxy(diphenyl)methyl]-1-azoniabicyclo[2.2.2]octane bromide

1-(2-{[(4-bromophenyl)methyl]oxy}ethyl)-4-[hydroxy(diphenyl)methyl]-1-azoniabicyclo[2.2.2]octane bromide

1-(2-{[(4-chlorophenyl)methyl]oxy}ethyl)-4-[hydroxy(diphenyl)methyl]-1-azoniabicyclo[2.2.2]octane bromide

4-[bis(4-fluorophenyl)(hydroxy)methyl]-1-{2-[(phenylmethyl)oxy]ethyl}-1-azoniabicyclo[2.2.2]octane bromide

4-{hydroxy[bis(3-methylphenyl)]methyl}-1-{2-[(phenylmethyl)oxy]ethyl}-1-azoniabicyclo[2.2.2]octane bromide

1-(2-{[(4-fluorophenyl)methyl]oxy}ethyl)-4-[hydroxy(diphenyl)methyl]-1-azoniabicyclo[2.2.2]octane bromide; and

4-[hydroxy(diphenyl)methyl]-1-{2-[(phenylcarbonyl)oxy]ethyl}-1-azoniabicyclo[2.2.2]octane bromide.

7. A pharmaceutical composition for the treatment of muscarinic acetylcholine receptor mediated diseases comprising a compound according to claim 1 and a pharmaceutically acceptable carrier thereof.

8. Use of a safe and effective amount of a compound according to claim 1 in the manufacture of a medicament for inhibiting the binding of acetylcholine to its receptors in a mammal.

9. Use of a safe and effective amount of a compound according to claim 1 in the manufacture of a medicament for treating a muscarinic acetylcholine receptor mediated disease.

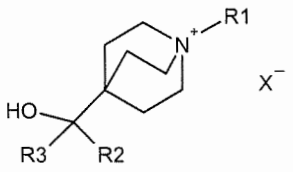
10. A use according to claim 9 wherein the disease is selected from the group consisting of chronic obstructive lung disease, chronic bronchitis, asthma, chronic respiratory obstruction, pulmonary fibrosis, pulmonary emphysema and allergic rhinitis.

11. A use according to claim 8 wherein administration is via inhalation via the mouth or nose.

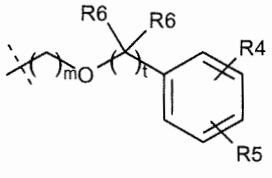
12. A use according to claim 8 wherein administration is via a medicament dispenser selected from a reservoir dry powder inhaler, a multi-dose dry powder inhaler or a metered dose inhaler.

## CLAIMS

1. A compound of formula (I) as indicated below:

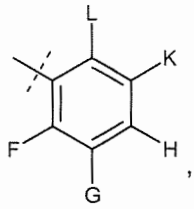


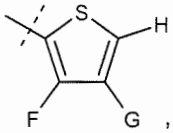

(I)

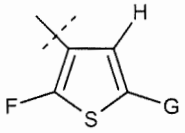
R1 is 

;

R2 and R3 are, independently, selected from the group consisting of:



, 

, and 


F, G, H, K and L are independently selected from the group consisting of hydrogen, halogen, C1-4 alkyl, halosubstituted C1-4 alkyl, hydroxysubstituted C1-4 alkyl, and C1-4 alkoxy;

R4 and R5 are independently selected from the group consisting of hydrogen, halogen, C1-4 alkyl, aryl, C1-4 alkyl aryl, cyano, nitro, (CR7R7)pORb, (CR7R7)pNRbRb, or R4 and R5 together may form a 5 to 6 membered saturated or unsaturated ring;

m is an integer having a value of 1 to 5;

p is 0, 1 or 2;

t is 0, 1 or 2;

R6 is selected from the group consisting of hydrogen, C1-4 alkyl;

Rb is selected from the group consisting of hydrogen, C1-4 alkyl, and aryl C1-4 alkyl;

R7 is selected from the group consisting of hydrogen, and C1-4 alkyl;

X- is a physiologically acceptable anion selected from the group consisting of chloride, bromide, iodide, hydroxide, sulfate, nitrate, phosphate, acetate, trifluoroacetate, fumarate, citrate, tartrate, oxalate, succinate, mandelate, methanesulfonate and p-toluenesulfonate; and

further wherein 4-[hydroxy(diphenyl)methyl]-1-{2-[(phenylmethyl)oxy]ethyl}-1-azoniabicyclo[2.2.2]octane bromide is excluded.

2. A compound according to claim 1 selected from the group of:

1-(2-{[(3-fluorophenyl)methyl]oxy}ethyl)-4-[hydroxy(diphenyl)methyl]-1-azoniabicyclo[2.2.2]octane bromide
1-(2-{[(4-bromophenyl)methyl]oxy}ethyl)-4-[hydroxy(diphenyl)methyl]-1-azoniabicyclo[2.2.2]octane bromide
1-(2-{[(4-chlorophenyl)methyl]oxy}ethyl)-4-[hydroxy(diphenyl)methyl]-1-azoniabicyclo[2.2.2]octane bromide
4-[bis(4-fluorophenyl)(hydroxy)methyl]-1-{2-[(phenylmethyl)oxy]ethyl}-1-azoniabicyclo[2.2.2]octane bromide
4-{hydroxy[bis(3-methylphenyl)]methyl}-1-{2-[(phenylmethyl)oxy]ethyl}-1-azoniabicyclo[2.2.2]octane bromide
1-(2-{[(4-fluorophenyl)methyl]oxy}ethyl)-4-[hydroxy(diphenyl)methyl]-1-azoniabicyclo[2.2.2]octane bromide
1-{3-[(3-fluorophenyl)oxy]propyl}-4-[hydroxy(diphenyl)methyl]-1-azoniabicyclo[2.2.2]octane bromide
4-{hydroxy[bis(4-methylphenyl)]methyl}-1-{2-[(phenylmethyl)oxy]ethyl}-1-azoniabicyclo[2.2.2]octane bromide
4-[bis(3-fluorophenyl)(hydroxy)methyl]-1-{2-[(phenylmethyl)oxy]ethyl}-1-azoniabicyclo[2.2.2]octane bromide
1-{3-[(3-chlorophenyl)oxy]propyl}-4-[hydroxy(diphenyl)methyl]-1-azoniabicyclo[2.2.2]octane bromide
4-[hydroxy(di-2-thienyl)methyl]-1-[3-(phenyloxy)propyl]-1-azoniabicyclo[2.2.2]octane bromide
4-[hydroxy(diphenyl)methyl]-1-[3-(phenyloxy)propyl]-1-azoniabicyclo[2.2.2]octane bromide
1-(2-{[(4-cyanophenyl)methyl]oxy}ethyl)-4-[hydroxy(diphenyl)methyl]-1-azoniabicyclo[2.2.2]octane bromide
1-{3-[(4-bromophenyl)oxy]propyl}-4-[hydroxy(diphenyl)methyl]-1-azoniabicyclo[2.2.2]octane bromide

4-[bis(4-fluorophenyl)(hydroxy)methyl]-1-[3-(phenyloxy)propyl]-1-azoniabicyclo[2.2.2]octane bromide

1-{3-[(4-fluorophenyl)oxy]propyl}-4-[hydroxy(diphenyl)methyl]-1-azoniabicyclo[2.2.2]octane bromide

4-[hydroxy(diphenyl)methyl]-1-{2-[(1-methyl-1-phenylethyl)oxy]ethyl}-1-azoniabicyclo[2.2.2]octane bromide

4-[hydroxy(di-3-thienyl)methyl]-1-[3-(phenyloxy)propyl]-1-azoniabicyclo[2.2.2]octane bromide

4-[hydroxy(diphenyl)methyl]-1-[2-(phenyloxy)ethyl]-1-azoniabicyclo[2.2.2]octane bromide

4-{hydroxy[bis(3-methylphenyl)]methyl}-1-[3-(phenyloxy)propyl]-1-azoniabicyclo[2.2.2]octane bromide

4-{hydroxy[bis(4-methylphenyl)]methyl}-1-[3-(phenyloxy)propyl]-1-azoniabicyclo[2.2.2]octane bromide

4-[hydroxy(diphenyl)methyl]-1-(3-{[4-(methyloxy)phenyl]oxy}propyl)-1-azoniabicyclo[2.2.2]octane bromide

4-[hydroxy(diphenyl)methyl]-1-[2-({[3-(methyloxy)phenyl]methyl}oxy)ethyl]-1-azoniabicyclo[2.2.2]octane bromide

4-[bis(3-fluorophenyl)(hydroxy)methyl]-1-[3-(phenyloxy)propyl]-1-azoniabicyclo[2.2.2]octane bromide

4-[hydroxy(di-2-thienyl)methyl]-1-[2-(phenyloxy)ethyl]-1-azoniabicyclo[2.2.2]octane bromide

4-(hydroxy{bis[3-(methyloxy)phenyl]}methyl)-1-{2-[(phenylmethyl)oxy]ethyl}-1-azoniabicyclo[2.2.2]octane bromide

4-[hydroxy(diphenyl)methyl]-1-{3-[(4-nitrophenyl)oxy]propyl}-1-azoniabicyclo[2.2.2]octane bromide

1-{3-[(2-fluorophenyl)oxy]propyl}-4-[hydroxy(diphenyl)methyl]-1-azoniabicyclo[2.2.2]octane bromide

4-[hydroxy(diphenyl)methyl]-1-{3-[(3-nitrophenyl)oxy]propyl}-1-azoniabicyclo[2.2.2]octane bromide

1-[3-(4-biphenylyloxy)propyl]-4-[hydroxy(diphenyl)methyl]-1-azoniabicyclo[2.2.2]octane bromide

4-[hydroxy(diphenyl)methyl]-1-{3-[(2-methylphenyl)oxy]propyl}-1-azoniabicyclo[2.2.2]octane bromide

4-[hydroxy(diphenyl)methyl]-1-{3-[(phenylmethyl)oxy]propyl}-1-azoniabicyclo[2.2.2]octane bromide

4-[hydroxy(diphenyl)methyl]-1-[4-(phenyloxy)butyl]-1-azoniabicyclo[2.2.2]octane bromide

4-[hydroxy(diphenyl)methyl]-1-{3-[(2-hydroxyphenyl)oxy]propyl}-1-azoniabicyclo[2.2.2]octane bromide

4-[hydroxy(di-3-thienyl)methyl]-1-[2-(phenyloxy)ethyl]-1-azoniabicyclo[2.2.2]octane bromide

4-(hydroxy{bis[4-(methyloxy)phenyl]}methyl)-1-{2-[(phenylmethyl)oxy]ethyl}-1-azoniabicyclo[2.2.2]octane bromide

1-{3-[(4-cyanophenyl)oxy]propyl}-4-[hydroxy(diphenyl)methyl]-1-azoniabicyclo[2.2.2]octane bromide

1-[2-({[4-(1,1-dimethylethyl)phenyl]methyl}oxy)ethyl]-4-[hydroxy(diphenyl)methyl]-1-azoniabicyclo[2.2.2]octane bromide

4-(hydroxy{bis[4-(methyloxy)phenyl]}methyl)-1-[3-(phenyloxy)propyl]-1-azoniabicyclo[2.2.2]octane bromide

1-{3-[(2-bromophenyl)oxy]propyl}-4-[hydroxy(diphenyl)methyl]-1-azoniabicyclo[2.2.2]octane bromide

4-[hydroxy(diphenyl)methyl]-1-{4-[(phenylmethyl)oxy]butyl}-1-azoniabicyclo[2.2.2]octane bromide

4-(hydroxy{bis[3-(methyloxy)phenyl]}methyl)-1-[3-(phenyloxy)propyl]-1-azoniabicyclo[2.2.2]octane bromide

1-(3-{[3-(diethylamino)phenyl]oxy}propyl)-4-[hydroxy(diphenyl)methyl]-1-azoniabicyclo[2.2.2]octane bromide

1-{2-[(2,4-dibromophenyl)oxy]ethyl}-4-[hydroxy(diphenyl)methyl]-1-azoniabicyclo[2.2.2]octane bromide

4-[hydroxy(diphenyl)methyl]-1-[3-({2-[(phenylmethyl)oxy]phenyl}oxy)propyl]-1-azoniabicyclo[2.2.2]octane bromide, and

4-[hydroxy(diphenyl)methyl]-1-(3-{[2-(methyloxy)phenyl]oxy}propyl)-1-azoniabicyclo[2.2.2]octane bromide.

3. A compound according to claim 1 selected from the group consisting of:

1-(2-{[(3-fluorophenyl)methyl]oxy}ethyl)-4-[hydroxy(diphenyl)methyl]-1-azoniabicyclo[2.2.2]octane bromide

1-(2-{[(4-bromophenyl)methyl]oxy}ethyl)-4-[hydroxy(diphenyl)methyl]-1-azoniabicyclo[2.2.2]octane bromide
1-(2-{[(4-chlorophenyl)methyl]oxy}ethyl)-4-[hydroxy(diphenyl)methyl]-1-azoniabicyclo[2.2.2]octane bromide
4-[bis(4-fluorophenyl)(hydroxy)methyl]-1-{2-[(phenylmethyl)oxy]ethyl}-1-azoniabicyclo[2.2.2]octane bromide
4-{hydroxy[bis(3-methylphenyl)]methyl}-1-{2-[(phenylmethyl)oxy]ethyl}-1-azoniabicyclo[2.2.2]octane bromide
1-(2-{[(4-fluorophenyl)methyl]oxy}ethyl)-4-[hydroxy(diphenyl)methyl]-1-azoniabicyclo[2.2.2]octane bromide; and
4-[hydroxy(diphenyl)methyl]-1-{2-[(phenylcarbonyl)oxy]ethyl}-1-azoniabicyclo[2.2.2]octane bromide.

4. A pharmaceutical composition for the treatment of muscarinic acetylcholine receptor mediated diseases comprising a compound according to claim 1, or a pharmaceutically acceptable salt thereof, and a pharmaceutically acceptable carrier.

5. A compound according to any of claims 1 to 3, or a pharmaceutically acceptable salt thereof, for use in the treatment of a muscarinic acetylcholine receptor mediated disease, wherein acetylcholine binds to said receptor.

6. A compound, or a pharmaceutically acceptable salt thereof, for use according to claim 5, wherein the disease is selected from the group consisting of chronic obstructive lung disease, chronic bronchitis, asthma, chronic respiratory obstruction, pulmonary fibrosis, pulmonary emphysema and allergic rhinitis.

7. A compound, or a pharmaceutically acceptable salt thereof, for use according to claim 6, wherein the disease is chronic obstructive lung disease.

8. A compound, or a pharmaceutically acceptable salt thereof, for use according to claim 6, wherein the disease is asthma.

9. A compound, or a pharmaceutically acceptable salt thereof, for use according to claim 5, wherein administration is via inhalation via the mouth or nose.

10. A compound, or a pharmaceutically acceptable salt thereof, for use according to claim 5, wherein administration is via a medicament dispenser selected from a reservoir dry powder inhaler, a multi-dose dry powder inhaler or a metered dose inhaler.