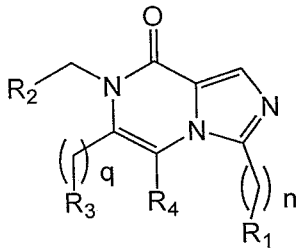
Claims

1. Use of a compound of Formula (I)



(I)

wherein

n is 0 or 1;

q is 0 or 1;

R1 is selected from the group consisting of benzyl, indanyl, indoline and 5-membered heteroaryls; all of which can be substituted with a substituent selected from the group consisting of halogen and C_1-C_3 alkyl; or

R1 is selected from the group consisting of saturated monocyclic rings containing 4-6 carbon atoms and 1-2 nitrogen atoms; all of which can be substituted one or more times with one or more substituents selected from the group consisting of methyl, fluorine and sulfonamide; or

R1 is selected from the group consisting of lactams containing 4-6 carbon atoms; all of which can be substituted one or more times with one or more substituents selected from the group consisting of methyl and fluorine; or

R1 is selected from the group consisting of bicyclic ethers such as, 7-oxabicyclo[2.2.1]heptane; all of which can be substituted one or more times with one or more substituents selected from the group consisting of methyl and fluorine; or

R1 is selected from the group consisting of linear or branched C_1-C_8 alkyl, saturated monocyclic C_3-C_8 cycloalkyl, oxetanyl, tetrahydrofuranyl and tetrahydropyranyl; all of which can be substituted one or more times with one or more substituents selected from the group consisting of methyl, fluorine, hydroxy, cyano or methoxy; or

R1 is a linear or branched C_1-C_3 alkyl, which is substituted with a substituent selected from phenyl and 5-membered heteroaryl, wherein said 5-membered heteroaryl can be substituted with one or more C_1-C_3 alkyls; or

R1 is selected from the group consisting of morpholine, tetrahydrofuran-3-amine, hexahydro-2*H*-furo[3,2-b]pyrrole and homomorpholine; all of which can be subsituted with one or more substituents selected from the group consisting of C_1-C_3 alkyl;

R2 is selected from the group consisting of hydrogen, linear or branched C_1-C_8 alkyl, phenyl, saturated monocyclic C_3-C_8 cycloalkyl, oxetanyl, benzo[*d*][1,3]dioxolyl, tetrahydrofuranyl and tetrahydropyranyl; or

R2 is phenyl or pyridyl substituted with one or more substituents selected from the group consisting of hydroxyl, amino, cyano, halogen, C_1-C_3 alkyl, C_1-C_3 alkoxy, C_3-C_5 cycloalkoxy, C_3-C_5 cycloalkyl-methoxy, C_1-C_3 fluoroalkoxy, and -NC(O)CH_3; or

R2 is a 5-membered heteroaryl which can be substituted with one or more C_1-C_3 alkyl;

R3 is selected from the group consisting of hydrogen, halogen, C_1-C_5 alkyl, C_3-C_5 cycloalkyl and phenyl; or

R3 is selected from the group consisting of phenyl substituted one or more times with C_1-C_3 alkyl; methyl substituted one, two or three times with fluorine; ethyl substituted one, two or three times with fluorine;

R4 is hydrogen;

and tautomers and pharmaceutically acceptable addition salts thereof;

with the proviso that R2 and R3 cannot be hydrogen at the same time; in the manufacture of a medicament for treatment of a neurodegenerative and/or cognitive disorder; wherein said compound of Formula (I) is to be administered in combination with 2) a compound useful in active or passive Tau immunotherapy, a compound useful in active or passive Aβ peptide immunotherapy, an NMDA receptor antagonist, an acetylcholine esterase inhibitor, a BACE inhibitor, a 5-HT6 receptor antagonist, an antiepileptic, an anti-inflammatory drug or an anti-N3-pGlu Abeta monoclonal antibody.

2. The use according to claim 1, wherein

R1 is selected from the group consisting of linear or branched C_1-C_8 alkyl, saturated monocyclic C_3-C_8 cycloalkyl, oxetanyl, tetrahydrofuranyl, and tetrahydropyranyl;

R2 is selected from the group consisting of, linear or branched C_1-C_8 alkyl, phenyl, and saturated monocyclic C_3-C_8 cycloalkyl; or

R2 is selected from the group consisting of phenyl substituted with a substituent selected from the group consisting of halogen, C_1-C_3 alkyl and methoxy;

R3 is selected from the group consisting of hydrogen, C_1-C_3 alkyl and halogen;

R4 is hydrogen.

3. The use according to claim 1, wherein said compound of formula (I) is selected from the group consisting of:

7-(3-Fluorobenzyl)-3-propylimidazo[1,5-a]pyrazin-8(7*H*)-one;

6-Benzyl-7-(3-fluorobenzyl)-3-(tetrahydro-2*H*-pyran-4-yl)imidazo[1,5-a]pyrazin-8(7*H*)-one;

6-Benzyl-7-(cyclohexylmethyl)-3-(tetrahydro-2*H*-pyran-4-yl)imidazo[1,5-a]pyrazin-8(7*H*)-one;

7-(Cyclohexylmethyl)-6-methyl-3-(tetrahydro-2*H*-pyran-4-yl)imidazo[1,5-a]pyrazin-8(7*H*)-one;

7-(3-Fluorobenzyl)-6-methyl-3-(tetrahydro-2*H*-pyran-4-yl)imidazo[1,5-a]pyrazin-8(7*H*)-one;

3-Cyclopropyl-7-(3-fluorobenzyl)imidazo[1,5-a]pyrazin-8(7*H*)-one;

7-(Cyclopentylmethyl)-3-cyclopropylimidazo[1,5-a]pyrazin-8(7*H*)-one;

7-(Cyclohexylmethyl)-3-cyclopropylimidazo[1,5-a]pyrazin-8(7*H*)-one;

7-(3-Fluorobenzyl)-3-(tetrahydro-2*H*-pyran-4-yl)imidazo[1,5-a]pyrazin-8(7*H*)-one;

7-(Cyclopentylmethyl)-3-(tetrahydro-2*H*-pyran-4-yl)imidazo[1,5-a]pyrazin-8(7*H*)-one;

7-(Cyclohexylmethyl)-3-(tetrahydro-2*H*-pyran-4-yl)imidazo[1,5-a]pyrazin-8(7*H*)-one;

7-(Cycloheptylmethyl)-3-(tetrahydro-2*H*-pyran-4-yl)imidazo[1,5-a]pyrazin-8(7*H*)-one;

7-(Cycloheptylmethyl)-3-cyclopropylimidazo[1,5-a]pyrazin-8(7*H*)-one;

7-(4-Chlorobenzyl)-6-methyl-3-(tetrahydro-2*H*-pyran-4-yl)imidazo[1,5-a]pyrazin-8(7*H*)-one;

6-Bromo-7-(3-fluorobenzyl)-3-(tetrahydro-2*H*-pyran-4-yl)imidazo[1,5-a]pyrazin-8(7*H*)-one;

7-Benzyl-6-methyl-3-(tetrahydro-2*H*-pyran-4-yl)imidazo[1,5-a]pyrazin-8(7*H*)-one;

7-(2-Fluorobenzyl)-6-methyl-3-(tetrahydro-2*H*-pyran-4-yl)imidazo[1,5-a]pyrazin-8(7*H*)-one;

7-(3-Chlorobenzyl)-6-methyl-3-(tetrahydro-2*H*-pyran-4-yl)imidazo[1,5-a]pyrazin-8(7*H*)-one;

7-(2-Chlorobenzyl)-6-methyl-3-(tetrahydro-2*H*-pyran-4-yl)imidazo[1,5-a]pyrazin-8(7*H*)-one;

7-(3-Methoxybenzyl)-6-methyl-3-(tetrahydro-2*H*-pyran-4-yl)imidazo[1,5-a]pyrazin-8(7*H*)-one;

6-Methyl-7-(2-methylbenzyl)-3-(tetrahydro-2*H*-pyran-4-yl)imidazo[1,5-a]pyrazin-8(7*H*)-one;

6-Methyl-7-(4-methylbenzyl)-3-(tetrahydro-2*H*-pyran-4-yl)imidazo[1,5-a]pyrazin-8(7*H*)-one;

7-(4-Methoxybenzyl)-6-methyl-3-(tetrahydro-2*H*-pyran-4-yl)imidazo[1,5-a]pyrazin-8(7*H*)-one;

7-(4-Fluorobenzyl)-6-methyl-3-(tetrahydro-2*H*-pyran-4-yl)imidazo[1,5-a]pyrazin-8(7*H*)-one;

6-Methyl-7-(3-methylbenzyl)-3-(tetrahydro-2*H*-pyran-4-yl)imidazo[1,5-a]pyrazin-8(7*H*)-one;

7-(4-methoxybenzyl)-6-methyl-3-((tetrahydrofuran-3-yl)amino)imidazo[1,5-a]pyrazin-8(7*H*)-one;

(*R*)-7-(4-methoxybenzyl)-6-methyl-3-(3-methylmorpholino)imidazo[1,5-a]pyrazin-8(7*H*)-one;

(S)-7-(4-methoxybenzyl)-6-methyl-3-(3-methylmorpholino)imidazo[1,5-a]pyrazin-8(7*H*)-one;

7-(4-methoxybenzyl)-6-methyl-3-(1,4-oxazepan-4-yl)imidazo[1,5-a]pyrazin-8(7*H*)-one;

3-(2,2-dimethylmorpholino)-7-(4-methoxybenzyl)-6-methylimidazo[1,5-a]pyrazin-8(7*H*)-one;

7-(3-fluorobenzyl)-3-((3a*S*,6a*S*)-hexahydro-4*H*-furo[3,2-b]pyrrol-4-yl)-6-methylimidazo[1,5-a]pyrazin-8(7*H*)-one;

7-(3-fluorobenzyl)-3-((3a*R*,6a*R*)-hexahydro-4*H*-furo[3,2-b]pyrrol-4-yl)-6-methylimidazo[1,5-a]pyrazin-8(7*H*)-one;

(*R*)-7-(3-fluorobenzyl)-6-methyl-3-(tetrahydro-2*H*-pyran-3-yl)imidazo[1,5-a]pyrazin-8(7*H*)-one;

(*S*)-7-(3-fluorobenzyl)-6-methyl-3-(tetrahydro-2*H*-pyran-3-yl)imidazo[1,5-a]pyrazin-8(7*H*)-one;

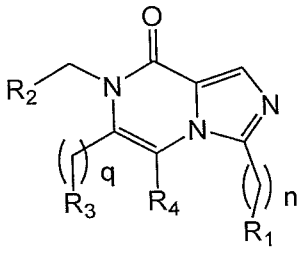
or a pharmaceutically acceptable salt of any of these compounds.

4. The use according to any of claims 1-3, wherein said neurodegenerative and/or cognitive disorder is selected from the group comprising Alzheimer's Disease, Parkinson's Disease and Huntington's Disease.

5. The use according to claim 4, wherein said neurodegenerative and/or cognitive disorder is Alzheimer's Disease.

6. A pharmaceutical composition comprising:

1) a compound of Formula (I)



(I)