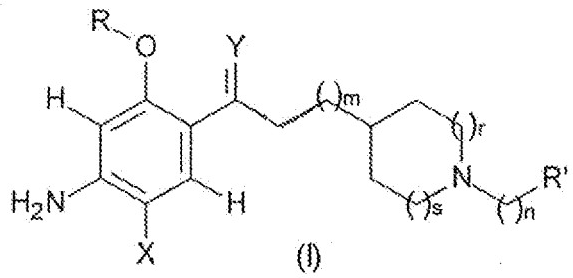
CLAIMS

1. Compound of the following formula (I):



(I)

wherein:

X represents

a hydrogen atom, or

a halogen atom (Hal), where (Hal) is fluorine, chlorine, bromine or iodine, or

a straight- or branched-chain $C_p(Hal)_{2p+1}$ polyhalogenoalkyl group, where p=1, 2, 3 or 4, (Hal) having the same meaning as indicated above;

Y represents

an oxygen atom, or

a sulfur atom, or

an N-R″ radical where R″ represents a hydrogen atom, an -OH radical, an –O-A radical where A represents a straight- or branched-chain C_1-C_6 alkyl group, in particular where A represents a methyl group, or a straight- or branched-chain C_qH_{2q+1} alkyl radical, where q=1, 2, 3 or 4;

m is an integer selected from 1, 2 and 3;

n is an integer selected from 0, 1, 2 and 3;

r and s are integers whose values are: r=s=0; or r=s=1; or r=s=2; or r=0 and s=1; or lastly r=0 and s=2;

R represents

a hydrogen atom, or

a straight- or branched-chain C_1-C_5 alkyl group capable of carrying one or more F atoms;

R′ represents

a branched-chain C_1-C_6 alkyl radical, or

a C_3-C_{10} cycloalkyl or C_5-C_{13} bicyclic group, capable of carrying one or more R groups and of possessing an oxygen atom, or a nitrogen atom that can be substituted by R, or a sulfur atom or a radical -SO_2- or –SO-,

as well as its enantiomers or diastereoisomers and its racemics, its acid salts, its hydrates or its solvation products,

for use as neuroprotective agent in the prevention of a neurodegenerative disease.

2. Compound for use according to claim 1, wherein Y in the formula (I) represents:

an oxygen atom, or

a sulfur atom, or

an N-R″ radical where R″ represents a hydrogen atom, an -OH radical or a straight- or branched-chain CqH2q+1 alkyl radical, where q=1, 2, 3 or 4.

3. Compound for use according to claim 1 or 2, wherein X in the formula (I) represents a halogen atom.

4. Compound for use according to any one of claims 1 to 3, wherein Y in the formula (I) represents an oxygen atom.

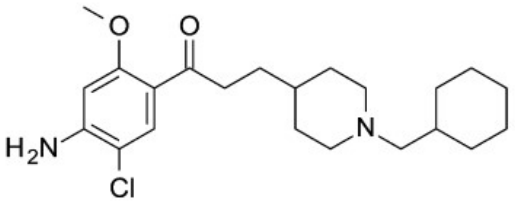
5. Compound for use according to any one of claims 1 to 4, wherein all of m, n, r and s in the formula (I) have the value 1.

6. Compound for use according to any one of claims 1 to 5, wherein R in the formula (I) represents H, CH_3, CH_2CH_3 or CH_2-CH_2F.

7. Compound for use according to any one of claims 1 to 6, wherein R′ in the formula (I) represents a radical selected from the group consisting in the radicals cyclopropyl, cyclobutyl, cyclopentyl, cyclohexyl, cycloheptyl and 4-piperidine.

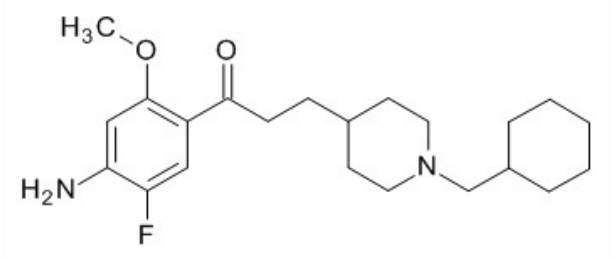
8. Compound for use according to claims 3 to 7, wherein R in the formula (I) represents a methyl radical and R′ a C_4-C_7 cycloalkyl radical.

9. Compound for use according to any one of claims 1 to 8, wherein the compound is the Donecopride compound of the following formula (II):



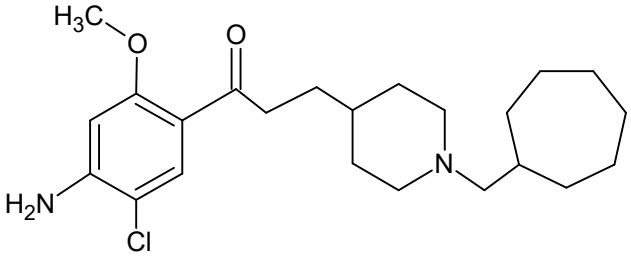
(II).

10. Compound for use according to any one of claims 1 to 8, wherein the compound is the Flucopride compound of the following formula (III):



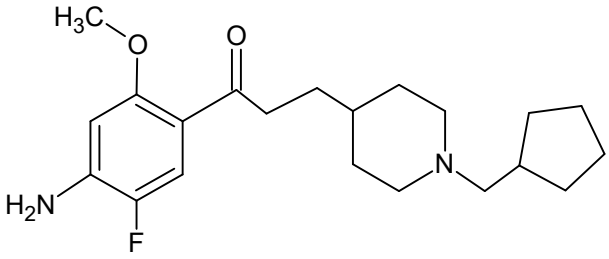
(III).

11. Compound for use according to any one of claims 1 to 8, wherein the compound is the MR31192 compound of the following formula (VIII):



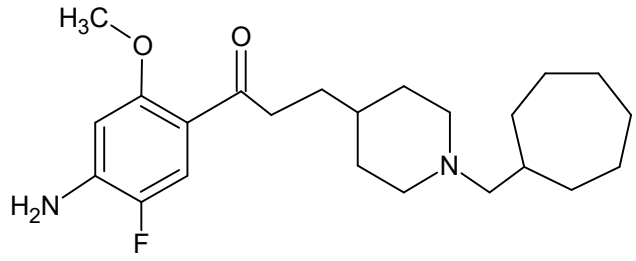
(VIII).

12. Compound for use according to any one of claims 1 to 8, wherein the compound is the MR33583 compound of the following formula (V):



(V).

13. Compound for use according to any one of claims 1 to 8, wherein the compound is the MR36014 compound of the following formula (VII):



(VII).

14. Compound for use according to any one of claims 1 to 13, wherein said acids salts are fumarates or dihydrochlorates.

15. Compound for use according to any one of claims 1 to 14, wherein the neurogenerative disease is selected from the group consisting in Alzheimer's disease, Parkinson's disease, Huntington's disease, multiple system atrophy, motor neurone diseases including amyotrophic lateral sclerosis, Down syndrome and frontotemporal degenerations.

16. Compound for use according to claim 15, wherein the neurodegenerative disease is selected from the group consisting in Alzheimer's disease, Parkinson's disease, Huntington's disease and amyotrophic lateral sclerosis.