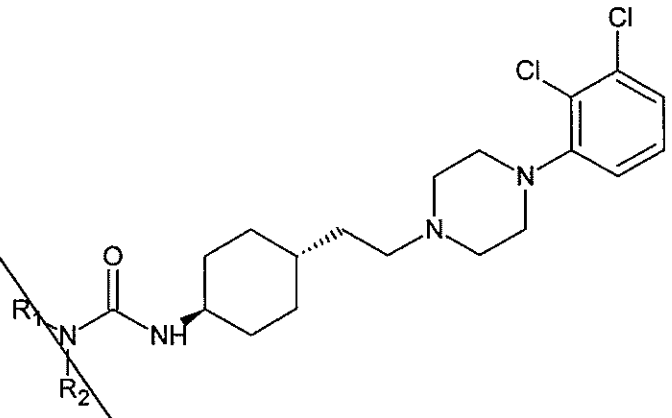
Claims

1. Process for the preparation of compounds of general formula (I)

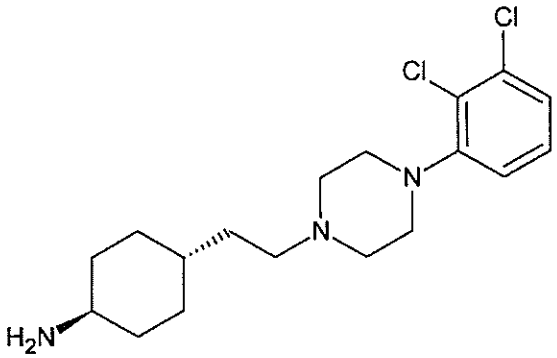


(I)

wherein R_1 and R_2 represent independently

- hydrogen or
- C_{1-6} alkyl with straight or branched chain optionally substituted with aryl group, or
- C_{2-7} alkenyl containing 1-3 double bonds, or
- monocyclic, bicyclic or tricyclic aryl optionally substituted with one or more C1-6 alkoxy, trifluoro-C_{1-6} alkoxy, C_{1-6}-alkoxycarbonil, C_{1-6}alkanoyl, aryl, C_{1-6} alkylthio, halogen or cyano, or
- optionally substituted monocyclic, bicyclic or tricyclic C_{3-14} cycloalkyl group,
- R_1 and R_2 together with the adjacent nitrogen form a saturated or unsaturated optionally substituted monocyclic or bicyclic heterocyclic ring which may contain further heteroatoms selected from oxygen, nitrogen, or sulphur atoms

and hydrochloric acid alts and/or hydrates and/or solvates thereof characterized in that dissolving or suspending trans 4-{2-[4-(2,3-dichlorophenyl)-piperazine-1-il]-ethyl}-cyclohexylamine of formula (III)



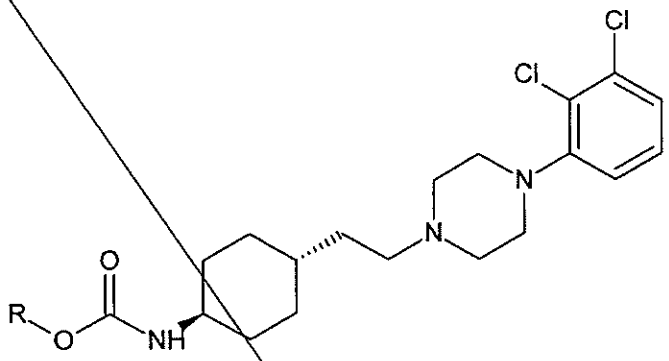
(III)

or a salt or a hydrate or a solvate thereof in an inert solvent in the presence a base then adding a carbonic acid derivative of general formula (VI)

R–O–CO–Z (VI)

wherein R is alkyl with C $_{1-6}$ straight or branched chain or C_{1-2} fully halogenated alkyl, Z is –O–R or –X, wherein R is as described above, X is halogen, and

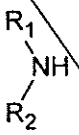
reacting the compound of general formula (IV) obtained



(IV)

wherein R is as described above,

in situ or, optionally in isolated state with an amine of general formula (V)



wherein R_1 and R_2 are as described above to obtain the compound of general formula (I) and then optionally

forming the hydrochloride salts and/or hydrates and/or solvates thereof.

2. A process according to claim 1 characterized in that the carbonic acid derivative of general formula (VI) is a chloroformate ester or bis(trichloromethyl)carbonate.

3. A process according to claim 1 characterized in that the reaction of compounds of general formula (IV) and (V) is carried out in situ without isolation of the compound of general formula (IV).

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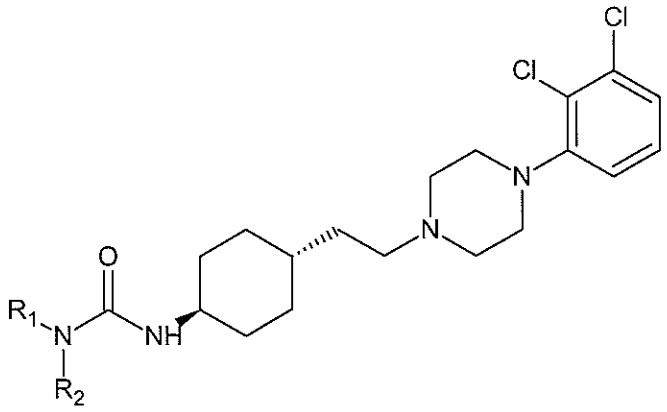

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wherein R_1 and R_2 represent independently

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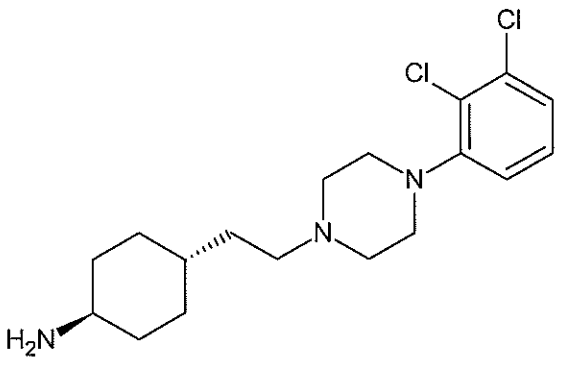
- optionally substituted monocyclic, bicyclic or tricyclic C_{3-14} cycloalkyl group, or
- a tolyl group, or
- R_1 and R_2 together with the adjacent nitrogen form a saturated or unsaturated optionally substituted monocyclic or bicyclic heterocyclic ring which may contain further heteroatoms selected from oxygen, nitrogen, or sulphur atoms

and hydrochloric acid salts and/or hydrates and/or solvates thereof characterized in that dissolving or suspending trans 4-{2-[4-(2,3-dichlorophenyl)-piperazine-1-il]-ethyl}-cyclohexylamine of formula (III)

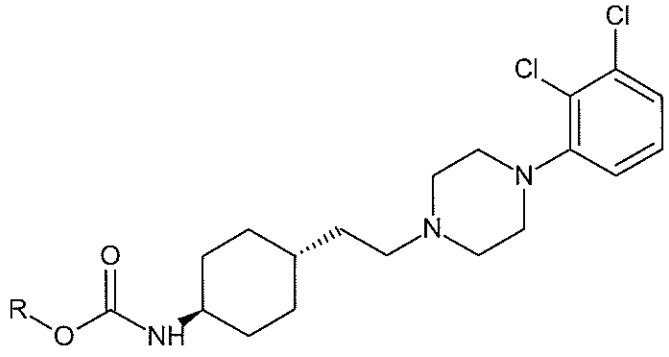


(III)

or a salt or a hydrate or a solvate thereof in an inert solvent in the presence a base then adding a carbonic acid derivative of general formula (VI)

R–O–CO–Z (VI)

wherein R is alkyl with C_{1-6} straight or branched chain or C_{1-2} fully halogenated alkyl, Z is –O–R or –X, wherein R is as described above, X is halogen, and
reacting the compound of general formula (IV) obtained



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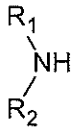

wherein R_1 and R_2 are as described above to obtain the compound of general formula (I) and then optionally
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3. A process according to claim 1 characterized in that the reaction of compounds of general formula (IV) and (V) is carried out in situ without isolation of the compound of general formula (IV).