

C L A I M S

1. A conjugated molecule comprising a peptide and a *N*-methyl-D-aspartate receptor (NMDAR) antagonist, wherein the peptide has at least 85% amino acid sequence identity to SEQ ID NO:1 or wherein the peptide is according to SEQ ID NO:1, SEQ ID NO:5, SEQ ID NO:6, SEQ ID NO:7 or SEQ ID NO:8, the peptide being linked to the NMDAR antagonist either directly or through a chemical linker, wherein the NMDAR antagonist is selected from memantine, neramexane, and dizocilpine.
2. The conjugated molecule according to claim 1, wherein the peptide is an incretin hormone.
3. The conjugated molecule according to claim 1 or 2, wherein the peptide is a glucagon-like peptide 1 (GLP-1), a gastric inhibitory peptide (GIP), a combination thereof, and/or any derivatives or analogues thereof.
4. The conjugated molecule according to any one of the preceding claims, wherein the NMDAR antagonist in its free form has a dissociation constant K_d with an NMDA receptor in the range of about 0.5 nM to 1000 nM.
5. The conjugated molecule according to any one of the preceding claims, wherein the NMDAR antagonist is linked to the peptide via a cleavable chemical linker, the cleavable chemical linker being selected from acid-cleavable linkers, enzyme-cleavable linkers, peptide-cleavable linkers, and linkers comprising a disulfide group, preferably wherein the peptide is according to SEQ ID NO:1, wherein the amino acid on position 2 counted from the N-terminal of the peptide is alpha-aminoisobutyric acid, and the NMDAR is memantine.
6. The conjugated molecule according to claim 5, wherein the cleavable chemical linker is selected from linkers comprising a disulfide group.
7. The conjugated molecule according to any one of the preceding claims for use in therapy.

8. Use of the conjugated molecule according to any one of claims 1 to 6 in the manufacture of a medicament for the treatment and/or prevention of a neurodegenerative disease in a subject in need thereof.

9. The use according to claim 7, wherein the neurodegenerative disease is selected from dementia, mild cognitive impairment, Alzheimer's disease, Parkinson's disease, stroke, traumatic brain injury, Huntington's disease, schizophrenia and depression.

10. The use according to claim 8 or 9, wherein the conjugated molecule is to be administered at least once a week for 12 months or more.

11. A pharmaceutical composition comprising a conjugated molecule according to any one of claims 1 to 6, and a pharmaceutically acceptable carrier.

12. The pharmaceutical composition according to claim 11, wherein the pharmaceutically acceptable carrier is a solid pharmaceutically acceptable carrier selected from excipients, diluents, solubilisers, lubricants, suspending agents, binders, preservatives, wetting agents, tablet disintegrating agents and an encapsulating material.

13. The pharmaceutical composition according to claim 11 or 12, wherein the pharmaceutical composition is in the form of a powder, a tablet, a pill, a capsule, a cachet, a suppository, and a dispersible granule.

14. The pharmaceutical composition according to any one of claims 11 to 13, wherein the pharmaceutical composition is configured for subcutaneous administration, intramuscular administration, intraperitoneal administration, intravenous administration or oral administration.

15. The pharmaceutical composition according to any one of claims 11 to 14, wherein the pharmaceutical composition is provided in a unit dose form in an ampoule, a pre-filled syringe, a small volume infusion or in a multi-dose container.

16. The pharmaceutical composition according to any one of claims 11 to 15, wherein the pharmaceutical composition is selected from a suspension, a solution, an emulsion in an oily vehicle, and an emulsion in an aqueous vehicle.