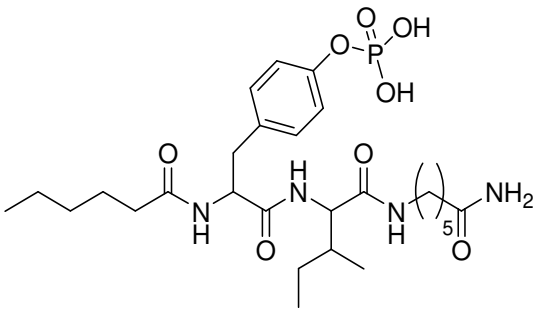
What is claimed is:

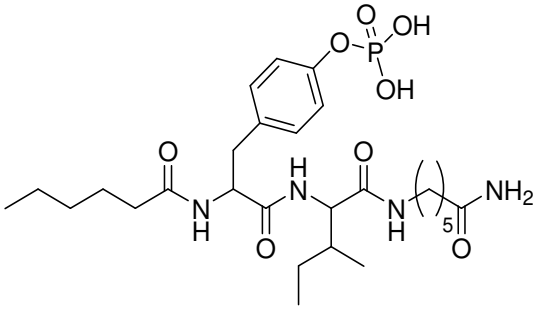
1. Use of a compound of formula A19



A19

or a pharmaceutically acceptable salt thereof, in the manufacture of a medicament for treating Parkinson's disease (PD) and/or Lewy body disease or disorder(s) (LBD), wherein the medicament is to be administered at 2-90 mg per day to a patient in need thereof.

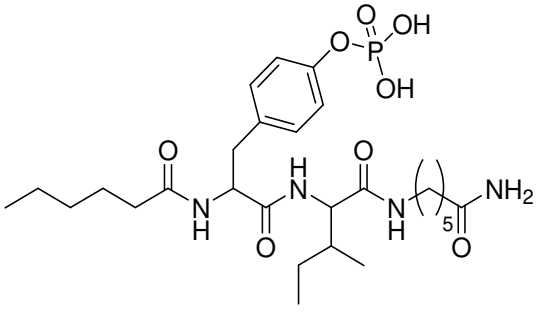
2. Use of a compound of formula A19



A19

or a pharmaceutically acceptable salt thereof, in the manufacture of a medicament for treating Parkinson's Disease Dementia (PDD), wherein the medicament is to be administered at 2-90 mg per day to a patient in need thereof.

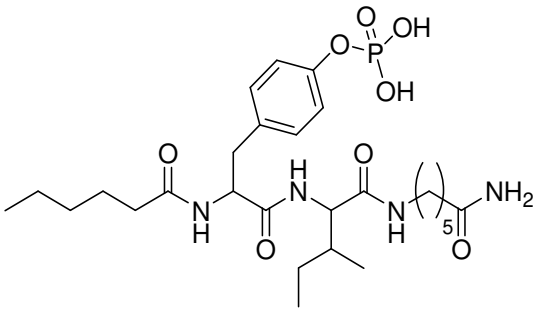
3. Use of a compound of formula A19



A19

or a pharmaceutically acceptable salt thereof, in the manufacture of a medicament for treating dementia with Lewy bodies (DLB), wherein the medicament is to be administered at 2-90 mg per day to a patient in need thereof.

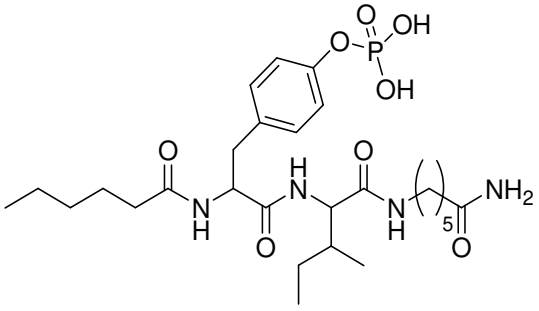
4. Use of a compound of formula A19



A19

or a pharmaceutically acceptable salt thereof, in the manufacture of a medicament for slowing the decline in cognition or improving cognition in a patient diagnosed with PDD and/or DLB, wherein the medicament is to be administered at 2-90 mg per day to the patient.

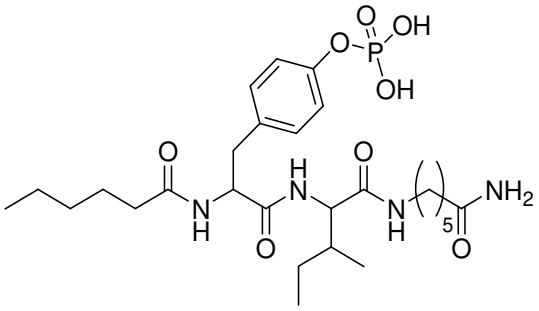
5. Use of a compound of formula A19



A19

or a pharmaceutically acceptable salt thereof, in the manufacture of a medicament for slowing the decline in the ability to perform activities of daily living and verbal fluency or improving the ability to perform activities of daily living and verbal fluency in a patient diagnosed with PDD and/or DLB, wherein the medicament is to be administered at 2-90 mg per day to the patient.

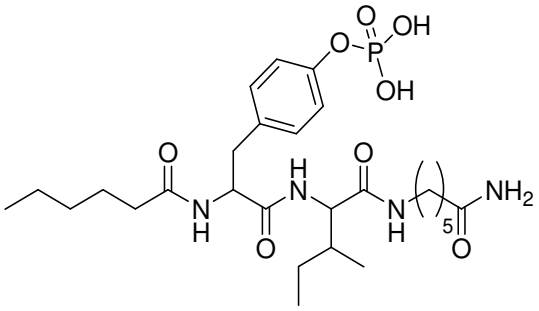
6. Use of a compound of formula A19



A19

or a pharmaceutically acceptable salt thereof, in the manufacture of a medicament for slowing the decline in functional or cognitive capacity in a patient diagnosed with PDD and/or DLB, wherein the medicament is to be administered at 2-90 mg per day to the patient.

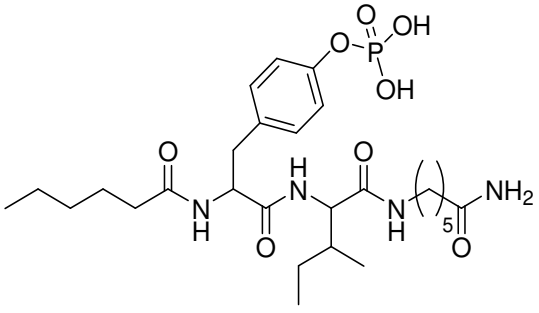
7. Use of a compound of formula A19



A19

or a pharmaceutically acceptable salt thereof, in the manufacture of a medicament for slowing clinical decline in a patient diagnosed with PDD and/or DLB, wherein the medicament is to be administered at 2-90 mg per day to the patient.

8. Use of a compound of formula A19



A19

or a pharmaceutically acceptable salt thereof, in the manufacture of a medicament for

improving executive memory function in a patient diagnosed with PDD and/or DLB, wherein the medicament is to be administered at 2-90 mg per day to the patient.

9. The use of any one of claims 1-8, wherein the medicament is for treating dementia.
10. The use of any one of claims 1-9, wherein the treating comprises improving one or more symptoms of dementia or one or more symptoms of a motor disorder.
11. The use of any one of claims 1-10, wherein the patient is not concurrently treated with an acetylcholinesterase inhibitor (AChEI), for example, wherein the patient received an AChEI in the past and preferably discontinued AChEI therapy at least 4 weeks prior to administration of the compound.
12. The use of any one of claims 1-11, wherein the patient has a Montreal Cognitive Assessment (MOCA) score between 11 and 23, between 12 and 23, between 13 and 23, between 14 and 23, between 15 and 23, between 16 and 23, between 17 and 23, between 18 and 23, between 19 and 23, between 20 and 23, between 21 and 23, between 22 and 23, between 11 and 22, between 11 and 21, between 11 and 20, between 11 and 19, between 11 and 18, between 11 and 17, between 11 and 16, between 11 and 15, between 11 and 14, between 11 and 13, between 11 and 12, prior to the start of treatment with the compound of formula A19.
13. The use of any one of claims 1-10 and 12, wherein the patient is concurrently treated with an acetylcholinesterase inhibitor (AChEI) other than high dose donepezil.
14. The use of any one of claims 1-13, wherein the patient is between age 40 and 85.
15. The use of any one of claims 1-14, wherein the patient is at Hoehn-Yahr stage 1 to 4, for example, at Hoehn-Yahr stage 2 or Hoehn-Yahr stage 3.
16. The use of any one of claims 1-15, wherein the compound of formula A19 or the pharmaceutically acceptable salt thereof is to be administered by subcutaneous injection.
17. The use of any one of claims 1-16, wherein the compound of formula A19 or the pharmaceutically acceptable salt thereof is to be administered at a dose of 2 mg, 10 mg, 20 mg, 30 mg, 40 mg, 50 mg, 60 mg, 70 mg, 80 mg, or 90 mg, for example, at a dose of 40 mg or 70 mg.
18. The use of any one of claims 1-17, wherein the compound of formula A19 or the pharmaceutically acceptable salt thereof is to be administered at a dose of 40 mg.

19. The use of any one of claims 1-18, wherein the compound of formula A19 or the pharmaceutically acceptable salt thereof is to be administered for 26 weeks or more.
20. The use of any one of claims 1-19, which:
    i) slows the decline in functional or cognitive capacity in the patient;
    ii) slows the decline in cognition in the patient;
    iii) improves cognition in the patient;
    iv) slows the decline in the ability to perform activities of daily living and verbal fluency in the patient; and/or
    (v) improves the ability to perform activities of daily living and verbal fluency in the patient.
21. The use of claim 20, wherein the slowing of the decline or the improvement is determined after administration of the treatment for at least 2 weeks, at least 4 weeks, at least 6 weeks, at least 8 weeks, at least 10 weeks, at least 12 weeks, at least 16 weeks, at least 18 weeks, at least 20 weeks, at least 22 weeks, at least 24 weeks, or at least 26 weeks.
22. The use of any one of claims 1-21, wherein cognitive capacity is assessed by determining the patient's score before and after administration of the compound of formula A19 or the pharmaceutically acceptable salt thereof using a 13-item Alzheimer's Disease Assessment Scale – cognitive subscale (ADAS-Cog13).
23. The use of claim 22, wherein cognitive capacity is assessed prior to the start of treatment and at least 2 weeks, at least 4 weeks, at least 6 weeks, at least 8 weeks, at least 10 weeks, at least 12 weeks, at least 16 weeks, at least 18 weeks, at least 20 weeks, at least 22 weeks, at least 24 weeks, or at least 26 weeks after the start of treatment.
24. The use of any one of claims 1-23, which reduces the rate of decline, stabilizes, or improves:
    i) ADAS-Cog13;
    ii) a Clinician Global Impression of Change (CGI-C) score;
    iii) a Clinician Global Impression of Severity (CGI-S) score;
    iv) an Alzheimer's disease cooperative study-activities of daily living, 23-item version (ADCS-ADL23) score;

v) a Movement Disorder Society-Unified Parkinson's Disease Rating Scale (MDS-UPDRS) score; for example, an MDS-UPDRS, Part I score; for example, an MDS-UPDRS, Part I, domains 1.2, 1.5, and/or 1.8 score;

vi) a Caregiver Global Impression of Change (CaGI-C) score;

vii) a Non-Motor Symptom Scale (NMSS) score; for example, a NMSS domain 2 and/or domain 4 score;

viii) a Mini-Mental State Examination (MMSE) score;

ix) a Controlled Oral Word Association Test (COWAT) score;

x) a non-motor symptom in the patient, preferably wherein the non-motor symptom includes delusions, apathy, hallucinations, daytime sleepiness, and/or depression; and/or

xi) a motor symptom in the patient.

25. The use of any one of claims 22 to 24, wherein the onset of the effect on ADAS-Cog13 begins by 2 weeks, or by 4 weeks, or by 6 weeks, or by 8 weeks, or by 10 weeks, or by 12 weeks, or by 14 weeks, or by 16 weeks, or by 18 weeks, or by 20 weeks, or by 22 weeks, or by 24 weeks, or by 26 weeks after the start of treatment; optionally, wherein the effect on ADAS-Cog13 is maintained for at least 2 weeks or at least 4 weeks after the end of treatment.

26. The use of claim 24, wherein the reduction in the rate of decline, stabilization, or improvement occurs by at least 2 weeks, at least 4 weeks, at least 6 weeks, at least 8 weeks, at least 10 weeks, at least 12 weeks, at least 16 weeks, at least 18 weeks, at least 20 weeks, at least 22 weeks, at least 24 weeks, or at least 26 weeks after the start of treatment; optionally, wherein reducing the rate of decline, stabilizing, or improving is assessed by determining the patient's symptom(s) prior to the start of treatment and at least 2 weeks, at least 4 weeks, at least 6 weeks, at least 8 weeks, at least 10 weeks, at least 12 weeks, at least 16 weeks, at least 18 weeks, at least 20 weeks, at least 22 weeks, at least 24 weeks, or at least 26 weeks after the start of treatment.

27. The use of any one of claims 1-26, which

i) is not associated with an increase in nausea, vomiting or tremor;

ii) does not produce drug-drug interactions with a drug administered for Parkinson's disease; and/or

iii) does not prolong the QT interval.

28. The use of any one of claims 1-27, wherein the compound or pharmaceutically acceptable salt thereof is ATH-1017.