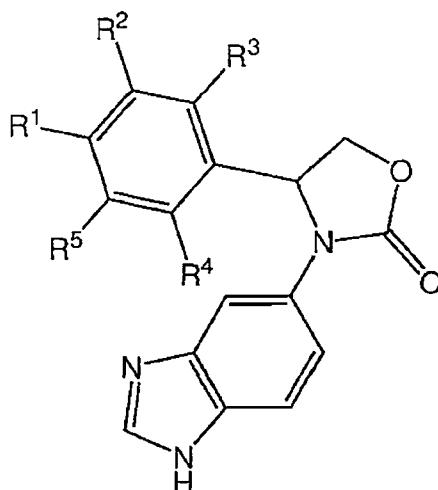


CLAIMS:

1. A compound according to formula I:



Formula I

or a pharmaceutically acceptable salt or solvate thereof, including all tautomers and stereoisomers thereof wherein:

R¹ represents alkyl, -O-alkyl, heterocyclyl or cycloalkyl;

R² and R³ independently represent hydrogen, halogen or CN;

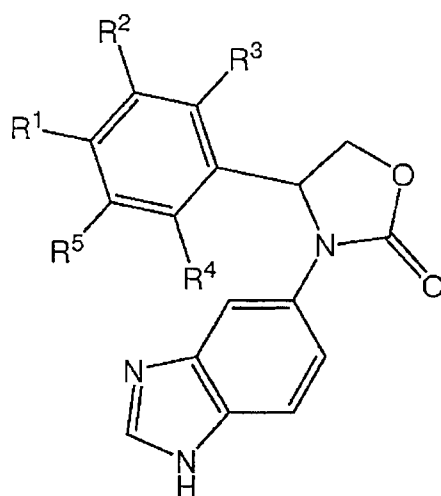
R⁴ and R⁵ independently represent hydrogen or halogen;

wherein at least one of R², R³, R⁴ and R⁵ is halogen or CN;

and

wherein the above alkyl, -O-alkyl, heterocyclyl or cycloalkyl groups are substituted by one or more halogen.

2. A compound according to formula I:



Formula I

or a pharmaceutically acceptable salt or solvate thereof, including all tautomers and stereoisomers thereof wherein:

R¹ represents alkyl, -O- alkyl, heterocyclyl or cycloalkyl;

R² and R³ independently represent hydrogen, fluorine or CN;

R⁴ and R⁵ independently represent hydrogen or fluorine;

wherein at least one of R², R³, R⁴ and R⁵ is fluorine or CN;

and

wherein the above alkyl, -O-alkyl, heterocyclyl or cycloalkyl groups are substituted by one or more fluorine.

3. The compound of formula I according to claim 1 or 2, wherein R¹ represents -O-C₂₋₆alkyl substituted by one or more halogen, preferably fluorine.

4. The compound of formula I according to any one of the preceding claims, wherein R¹ represents -O-C₃₋₄alkyl substituted by one or more halogen, preferably fluorine.

5. The compound of formula I according to any one of the preceding claims, wherein R¹ is selected from difluoropropoxy such as 2,2-difluoropropoxy or 3,3-difluoropropoxy; and difluorobutoxy such as 3,3-difluorobutoxy.

6. The compound of formula I according to claim 1, wherein R^1 represents pyrrolidinyl substituted by one or more halogen, preferably fluorine.
7. The compound of formula I according to claim 1 or 6, wherein R^1 is difluoropyrrolidinyl, such as 3,3-difluoropyrrolidin-1-yl.
8. The compound of formula I according to claim 1, wherein R^1 represents cyclohexyl substituted by one or more halogen, preferably fluorine.
9. The compound of formula I according to claim 1 or 8, wherein R^1 is difluorocyclohexyl, such as 4,4-difluorocyclohexyl.
10. The compound of formula I according to claim 1, wherein R^1 represents $-C_{2-6}$ alkyl substituted by one or more halogen, preferably fluorine.
11. The compound of formula I according to claim 1 or 10, wherein R^1 represents $-C_{3-4}$ alkyl substituted by one or more halogen, preferably fluorine.
12. The compound of formula I according to any one of claims 1, 10 or 11, wherein R^1 is difluorobutyl such as 3,3-difluorobutyl.
13. The compound of formula I according to any one of claims 1 to 12, wherein R^2 and R^5 are halogen such as fluorine, and R^3 and R^4 are hydrogen.
14. The compound of formula I according to any one of claims 1 to 12, wherein R^2 is halogen such as fluorine, and R^3 , R^4 and R^5 are hydrogen.
15. The compound of formula I according to any one of claims 1 to 12, wherein R^3 and R^4 are halogen such as fluorine, and R^2 and R^5 are hydrogen.
16. The compound of formula I according to any one of claims 1 to 12, wherein R^3 is halogen such as fluorine, and R^2 , R^4 and R^5 are hydrogen.
17. The compound of formula I according to any one of claims 1 to 12, wherein R^2 and R^3 are halogen, such as fluorine, and R^4 and R^5 are hydrogen.

18. The compound of formula I according to any one of claims 1 to 12, wherein R² is CN and R³, R⁴ and R⁵ are hydrogen.

19. The compound of formula I according to any one of claims 1 to 12, wherein R³ is CN and R², R⁴ and R⁵ are hydrogen.

20. The compound of formula I according to any one of the preceding claims or a pharmaceutically acceptable salt or solvate thereof, including all tautomers and stereoisomers, wherein the compound of formula I is a compound selected from the group consisting of

- 1 (S)-3-(1H-benzo[d]imidazol-5-yl)-4-(4-(3,3-difluorobutoxy)-2,3-difluorophenyl)-oxazolidin-2-one
- 2 (S)-3-(1H-benzo[d]imidazol-5-yl)-4-(4-(3,3-difluoropropoxy)-2-fluorophenyl)oxazolidin-2-one
- 3 (S)-3-(1H-benzo[d]imidazol-5-yl)-4-(4-(3,3-difluorobutoxy)-2-fluorophenyl)oxazolidin-2-one
- 5 (S)-3-(1H-benzo[d]imidazol-5-yl)-4-(4-(2,2-difluoropropoxy)-3-fluorophenyl)oxazolidin-2-one
- 6 (S)-3-(1H-benzo[d]imidazol-5-yl)-4-(4-(2,2-difluoropropoxy)-2,3-difluorophenyl)oxazolidin-2-one
- 7 (S)-3-(1H-benzo[d]imidazol-5-yl)-4-(4-(2,2-difluoropropoxy)-2-fluorophenyl)oxazolidin-2-one
- 8 (S)-3-(1H-benzo[d]imidazol-5-yl)-4-(4-(2,2-difluoropropoxy)-3,5-difluorophenyl)oxazolidin-2-one
- 10 (S)-3-(1H-benzo[d]imidazol-5-yl)-4-(4-(3,3-difluorobutoxy)-3-fluorophenyl)oxazolidin-2-one
- 11 (S)-3-(1H-benzo[d]imidazol-5-yl)-4-(4-(3,3-difluoropropoxy)-2,3-difluorophenyl)oxazolidin-2-one
- 12 (S)-3-(1H-benzo[d]imidazol-5-yl)-4-(4-(3,3-difluoropropoxy)-3-fluorophenyl)oxazolidin-2-one
- 13 S)-3-(1H-benzo[d]imidazol-6-yl)-4-(4-(3,3-difluoropropoxy)-3,5-difluorophenyl)oxazolidin-2-one
- 14 (S)-5-(3-(1H-benzo[d]imidazol-5-yl)-2-oxooxazolidin-4-yl)-2-(2,2-difluoropropoxy) benzonitrile
- 15 (S)-2-(3-(1H-benzo[d]imidazol-5-yl)-2-oxooxazolidin-4-yl)-5-(2,2-difluoropropoxy) benzonitrile

- 17 (S)-3-(1H-benzo[d]imidazol-5-yl)-4-(4-(2,2-difluoropropoxy)-2,6-difluorophenyl)oxazolidin-2-one
- 18 (S)-3-(1H-benzo[d]imidazol-5-yl)-4-(4-(3,3-difluoropyrrolidin-1-yl)-2-fluorophenyl)-oxazolidin-2-one
- 19 (S)-3-(1H-benzo[d]imidazol-5-yl)-4-(4-(3,3-difluoropyrrolidin-1-yl)-2,3-difluorophenyl)-oxazolidin-2-one
- 20 (S)-3-(1H-benzo[d]imidazol-5-yl)-4-(4-(3,3-difluoropyrrolidin-1-yl)-2,6-difluorophenyl) oxazolidin-2-one
- 21 (S)-3-(1H-benzo[d]imidazol-5-yl)-4-(4-(3,3-difluoropyrrolidin-1-yl)-3-fluorophenyl) oxazolidin-2-one
- 23 (S)-2-(3-(1H-benzo[d]imidazol-5-yl)-2-oxooxazolidin-4-yl)-5-(3,3-difluoropyrrolidin-1-yl)benzonitrile
- 24 (S)-5-(3-(1H-benzo[d]imidazol-5-yl)-2-oxooxazolidin-4-yl)-2-(3,3-difluoropyrrolidin-1-yl)benzonitrile
- 25 (S)-3-(1H-benzo[d]imidazol-5-yl)-4-(4-(4,4-difluorocyclohexyl)-2-fluorophenyl)oxazolidin-2-one
- 26 (S)-3-(1H-benzo[d]imidazol-5-yl)-4-(4-(4,4-difluorocyclohexyl)-3-fluorophenyl)oxazolidin-2-one
- 28 (S)-3-(1H-benzo[d]imidazol-5-yl)-4-(4-(3,3-difluorobutyl)-2,3-difluorophenyl)oxazolidin-2-one
- 29 (S)-3-(1H-benzo[d]imidazol-5-yl)-4-(4-(3,3-difluorobutyl)-3-fluorophenyl)oxazolidin-2-one
- 30 (S)-3-(1H-benzo[d]imidazol-5-yl)-4-(4-(3,3-difluorobutyl)-2-fluorophenyl)oxazolidin-2-one

21. The compound of formula I according to any one of the preceding claims or a pharmaceutically acceptable salt or solvate thereof, including all tautomers and stereoisomers, wherein the compound of formula I is (S)-3-(1H-benzo[d]imidazol-5-yl)-4-(4-(2,2-difluoropropoxy)-2-fluorophenyl)oxazolidin-2-one.

22. The compound of formula I according to any one of the preceding claims or a pharmaceutically acceptable salt or solvate thereof, including all tautomers and stereoisomers, wherein the compound of formula I is (S)-3-(1H-benzo[d]imidazol-5-yl)-4-(4-(3,3-difluoropropoxy)-2,3-difluorophenyl)oxazolidin-2-one.

23. The compound of formula I according to any of the preceding claims for use as a medicament.

24. A pharmaceutical composition comprising a compound according to any one of claims 1 to 22 optionally in combination with one or more therapeutically acceptable diluents or carriers.

25. The pharmaceutical composition of claim 24, which comprises additionally at least one compound, selected from the group consisting of neuroprotectants, antiparkinsonian drugs, amyloid protein deposition inhibitors, beta amyloid synthesis inhibitors, antidepressants, anxiolytic drugs, antipsychotic drugs and anti-multiple sclerosis drugs.

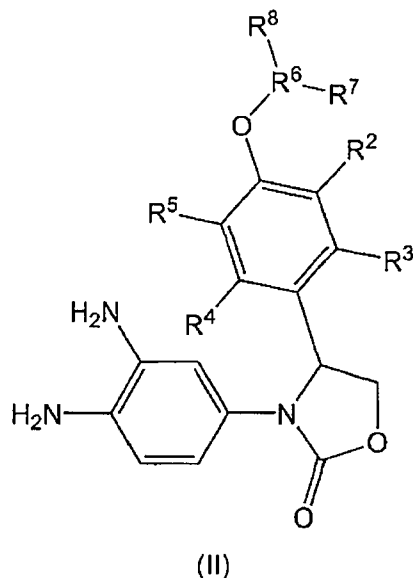
26. The pharmaceutical composition of claim 24 or 25, which comprises additionally at least one compound, selected from the group consisting of PEP-inhibitors, LiCl, inhibitors of inhibitors of DP IV or DP IV-like enzymes, acetylcholinesterase (ACE) inhibitors, PIMT enhancers, inhibitors of beta secretases, inhibitors of gamma secretases, inhibitors of neutral endopeptidase, inhibitors of Phosphodiesterase-4 (PDE-4), TNFalpha inhibitors, muscarinic M1 receptor antagonists, NMDA receptor antagonists, sigma-1 receptor inhibitors, histamine H3 antagonists, immunomodulatory agents, immunosuppressive agents or an agent selected from the group consisting of antegren (natalizumab), Neurelan (fampridine-SR), campath (alemtuzumab), IR 208, NBI 5788/MSP 771 (tiplimotide), paclitaxel, Anergix.MS (AG 284), SH636, Differin (CD 271, adapalene), BAY 361677 (interleukin-4), matrix-metalloproteinase-inhibitors, interferon-tau (trophoblastin) and SAIK-MS.

27. The use of a compound according to any one of claims 1 to 22 in the manufacture of a pharmaceutical composition for use in the treatment of a disease selected from the group consisting of Kennedy's disease, duodenal cancer with or without Helicobacter pylori infections, colorectal cancer, Zollinger-Ellison syndrome, gastric cancer with or without Helicobacter pylori infections, pathogenic psychotic conditions, schizophrenia, infertility, neoplasia, inflammatory host responses, cancer, malign metastasis, melanoma, psoriasis, impaired humoral and cell-mediated immune responses, leukocyte adhesion and migration processes in the endothelium, impaired food intake, impaired sleep-wakefulness, impaired homeostatic regulation of energy metabolism, impaired autonomic function, impaired hormonal balance or impaired regulation of body fluids, multiple

sclerosis, the Guillain-Barré syndrome and chronic inflammatory demyelinating polyradiculoneuropathy, wherein treatment is effected by glutaminy cyclase inhibition.

28. The use of a compound according to any one of claims 1 to 22 in the manufacture of a pharmaceutical composition for use in the treatment of a disease selected from the group consisting of mild cognitive impairment, Alzheimer's disease, Familial British Dementia, Familial Danish Dementia, neurodegeneration in Down Syndrome and Huntington's disease.
29. The use of a compound according to any one of claims 1 to 22 in the manufacture of a pharmaceutical composition for use in the treatment of a disease selected from the group consisting of rheumatoid arthritis, atherosclerosis, pancreatitis and restenosis.
30. A process for the preparation of a compound of formula (I) according to any one of claims 1 to 22, which comprises:

- (a) preparing a compound of formula (I) from a compound of formula (II):



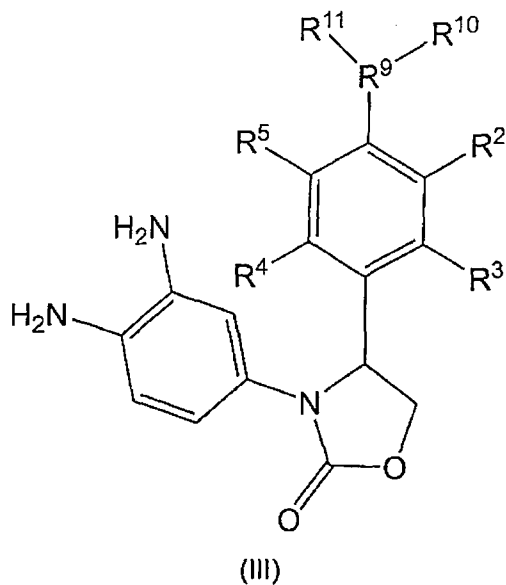
by reacting a compound of formula (II) with formamidine acetate in the presence of a suitable solvent such as acetonitrile,

wherein

R^2 , R^3 , R^4 and R^5 and are as defined above for compounds of formula (I); R^6 is alkyl and R^7 and R^8 are halogen, such as fluorine;

or

- (b) preparing a compound of formula (I) from a compound of formula (III):



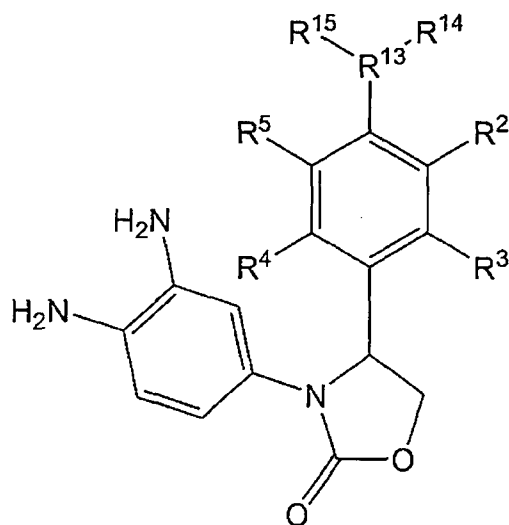
by reacting a compound of formula (III) with formamidine acetate in the presence of a suitable solvent such as acetonitrile,

wherein

R^2 , R^3 , R^4 and R^5 and are as defined above for compounds of formula (I) and R^9 is cycloalkyl or heterocyclyl and R^{10} and R^{11} are halogen, such as fluorine;

or

- (c) preparing a compound of formula (I) from a compound of formula (V):



(V)

by reacting a compound of formula (V) with formamidine acetate in the presence a suitable solvent, such as acetonitrile;

wherein

R^1 , R^2 and R^4 are as defined above for compounds of formula (I), R^{13} is alkyl and R^{14} and R^{15} are halogen such as fluorine.