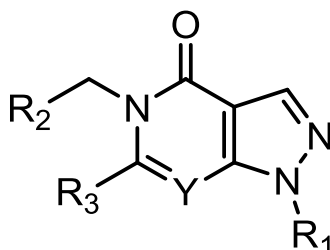


CLAIMS

1. A compound of formula (I)



(I)

- 5 wherein

Y is N or CH;

R1 is selected from the group consisting of linear or branched C₂-C₈ alkyl, saturated monocyclic C₃-C₈ cycloalkyl, oxetanyl, tetrahydrofuranyl and tetrahydropyranyl; all of which can be substituted one or more times with one or more substituents selected from the group consisting of methyl, fluorine, hydroxy, cyano and methoxy;

R2 is selected from the group consisting of, linear or branched C₁-C₈ alkyl, phenyl, benzo[1,3]dioxole and saturated monocyclic C₃-C₈ cycloalkyl; or

R2 is phenyl substituted one or more times with one or more substituents selected from the group consisting of halogen, C₁-C₃ alkyl and methoxy; or

R2 is pyridine substituted with a substituent selected from the group consisting of halogen, C₁-C₃ alkyl, C₁-C₃ alkoxy, C₁-C₃ fluoroalkoxy, C₃-C₄ cycloalkoxy and C₄-C₅ methylcycloalkoxy; or

R2 is selected from the group consisting of 5-membered heteroaryls substituted with C₁-C₃ alkyl;

R3 is selected from the group consisting of linear or branched C₁-C₃ alkyl and saturated monocyclic C₃-C₈ cycloalkyl; which can each be optionally substituted with a substituent selected from halogen, C₁-C₃ alkoxy, phenyl, dialkylamine and oxetane;

and tautomers and pharmaceutically acceptable salts thereof.

2. The compound of claim 1, wherein Y is N.

3. The compound of claim 1, wherein Y is CH.

4. The compound of any one of claims 1-3, wherein R1 is a linear or branched C₂-C₈ alkyl, or a saturated monocyclic C₃-C₈ cycloalkyl such as cyclopropyl

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5. The compound of any one of claims 1-3, wherein R1 is selected from oxetanyl, tetrahydrofuranyl and tetrathiodipyranyl.

6. The compound of any one of claims 1-5, wherein R2 is phenyl optionally substituted with one or more substituents selected from methyl, methoxy, fluorine or chlorine; or wherein R2 is pyridine substituted with a substituent selected from the group consisting of methyl, methoxy, fluorine and chlorine.

7. The compound of any one of claims 1-5, wherein R2 is a saturated monocyclic C₃-C₈ cycloalkyl.

8. The compound of any one of claims 1-7, wherein R3 is C₁₋₃ alkyl such as methyl.

9. The compound of any one of claims 1-7, wherein R3 is methyl substituted with a phenyl.

10. The compound of any one of claims 1-7, wherein R3 is methyl substituted with a methoxy or oxetane

11. The compound of claim 1, wherein

Y is N or CH;

R1 is selected from the group consisting of linear or branched C₂-C₈ alkyl, saturated monocyclic C₃-C₈ cycloalkyl, oxetanyl, tetrahydrofuranyl, and tetrathiodipyranyl; all of which can be substituted one or more times with one or more substituents selected from the group consisting of methyl, fluorine, hydroxy, cyano and methoxy;

R2 is selected from the group consisting of phenyl, benzo[1,3]dioxole, and saturated monocyclic C₃-C₈ cycloalkyl; or

R2 is phenyl substituted one or more times with one or more substituents selected from the group consisting of halogen, C₁-C₃ alkyl and C₁-C₃ alkoxy; or

- 5 R2 is pyridyl substituted with a substituent selected from the group consisting of halogen, C₁-C₃ alkyl and C₁-C₃ alkoxy, C₁-C₃ fluoroalkoxy, C₃-C₄ cycloalkoxy and C₄-C₅ methylcycloalkoxy;

R3 is C₁-C₃ alkyl such as methyl; which can each be optionally substituted with a substituent selected from halogen, C₁-C₃ alkoxy, phenyl and oxetane.

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12. The compound of claim 1, wherein the compound is selected from the group consisting of:

6-benzyl-5-(cyclohexylmethyl)-1-tetrahydropyran-4-yl-pyrazolo[3,4-d]pyrimidin-4-one;

- 15 *5-(4-methoxybenzyl)-6-methyl-1-(tetrahydro-2H-pyran-4-yl)-1H-pyrazolo[3,4-d]pyrimidin-4(5H)-one;*

5-(cyclohexylmethyl)-6-methyl-1-tetrahydropyran-4-yl-pyrazolo[3,4-d]pyrimidin-4-one;

5-[(4-methoxyphenyl)methyl]-6-methyl-1-propyl-pyrazolo[3,4-d]pyrimidin-4-one;

5-(cyclohexylmethyl)-6-methyl-1-propyl-pyrazolo[3,4-d]pyrimidin-4-one;

6-ethyl-5-[(4-methoxyphenyl)methyl]-1-tetrahydropyran-4-yl-pyrazolo[3,4-d]pyrimidin-4-one

- 20 *6-(methoxymethyl)-5-[(4-methoxyphenyl)methyl]-1-tetrahydropyran-4-yl-pyrazolo[3,4-d]pyrimidin-4-one;*

6-isopropyl-5-[(4-methoxyphenyl)methyl]-1-tetrahydropyran-4-yl-pyrazolo[3,4-d]pyrimidin-4-one;

- 25 *5-[(4-methoxyphenyl)methyl]-6-(oxetan-3-ylmethyl)-1-tetrahydropyran-4-yl-pyrazolo[3,4-d]pyrimidin-4-one;*

5-[(3-fluorophenyl)methyl]-6-methyl-1-tetrahydropyran-4-yl-pyrazolo[4,3-c]pyridin-4-one;

5-[(2-fluorophenyl)methyl]-6-methyl-1-tetrahydropyran-4-yl-pyrazolo[4,3-c]pyridin-4-one;

5-[(4-chlorophenyl)methyl]-6-methyl-1-tetrahydropyran-4-yl-pyrazolo[4,3-c]pyridin-4-one;

5-benzyl-6-methyl-1-tetrahydropyran-4-yl-pyrazolo[4,3-c]pyridin-4-one;

- 30 *5-[(3-chlorophenyl)methyl]-6-methyl-1-tetrahydropyran-4-yl-pyrazolo[4,3-c]pyridin-4-one;*

- 5-[(4-fluorophenyl)methyl]-6-methyl-1-tetrahydropyran-4-yl-pyrazolo[4,3-c]pyridin-4-one;
 6-methyl-5-(p-tolylmethyl)-1-tetrahydropyran-4-yl-pyrazolo[4,3-c]pyridin-4-one;
 5-(1,3-benzodioxol-5-ylmethyl)-6-methyl-1-tetrahydropyran-4-yl-pyrazolo[4,3-c]pyridin-4-one;
 5-[(6-methoxy-3-pyridyl)methyl]-6-methyl-1-tetrahydropyran-4-yl-pyrazolo[4,3-c]pyridin-4-one;
 5-(4-methoxybenzyl)-6-methyl-1-(tetrahydro-2H-pyran-4-yl)-1,5-dihydro-4H-pyrazolo[4,3-c]pyridin-4-one;
 5-(4-methoxybenzyl)-6-methyl-1-propyl-1,5-dihydro-4H-pyrazolo[4,3-c]pyridin-4-one;
 1-isopropyl-5-[(4-methoxyphenyl)methyl]-6-methyl-pyrazolo[4,3-c]pyridin-4-one;
 5-[(4-methoxyphenyl)methyl]-6-methyl-1-tetrahydrofuran-3-yl-pyrazolo[4,3-c]pyridin-4-one;
 1-cyclopropyl-5-[(4-methoxyphenyl)methyl]-6-methyl-pyrazolo[4,3-c]pyridin-4-one;
 1-ethyl-5-[(4-methoxyphenyl)methyl]-6-methyl-pyrazolo[4,3-c]pyridin-4-one;
 5-[(4-methoxyphenyl)methyl]-6-methyl-1-tetrahydropyran-3-yl-pyrazolo[4,3-c]pyridin-4-one;
 5-[(4-methoxyphenyl)methyl]-6-methyl-1-[(2S,3R)-2-methyltetrahydrofuran-3-yl]pyrazolo[4,3-c]pyridin-4-one;
 5-[(4-methoxyphenyl)methyl]-6-methyl-1-[(2R,3R)-2-methyltetrahydrofuran-3-yl]pyrazolo[4,3-c]pyridin-4-one;
 5-[(4-methoxyphenyl)methyl]-6-methyl-1-(oxetan-3-yl)pyrazolo[4,3-c]pyridin-4-one;
 5-(4-methoxybenzyl)-6-methyl-1-(4-methyltetrahydro-2H-pyran-4-yl)-1,5-dihydro-4H-pyrazolo[4,3-c]pyridin-4-one;
 and pharmaceutically acceptable salts of any of these compounds.

13. A compound of any one of claims 1 to 12 for use in therapy.

14. A pharmaceutical composition comprising a therapeutically effective amount of a compound of any one of claims 1 to 12 and one or more pharmaceutically acceptable carriers, diluents and excipients.

15. Use of a compound according to any of claims 1-12 in the manufacture of a medicament for the treatment of a neurodegenerative disorder, selected from the group consisting of Alzheimer's Disease, Parkinson's Disease and Huntington's Disease; or for the treatment of a psychiatric disorder such as Attention Deficit hyperactivity Disorder (ADHD),
5 depression, anxiety, narcolepsy, cognitive impairment and cognitive impairment associated with schizophrenia (CIAS), or another brain disease like restless leg syndrome.