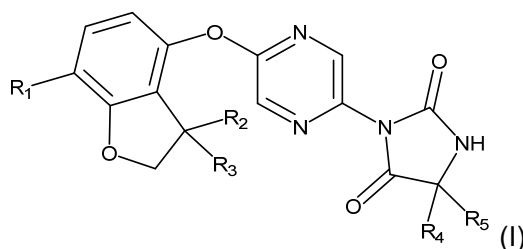


CLAIMS

1. A compound of formula (I):



wherein:

R_1 is H or methyl;

R_2 and R_3 are both methyl, or R_2 and R_3 , together with the carbon atom to which they are attached, are a spirocyclopropyl ring;

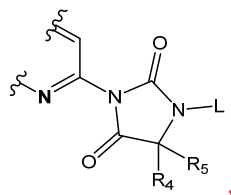
R_4 is methyl or ethyl;

R_5 is H or methyl;

or R_4 and R_5 , together with the carbon atom to which they are attached, form a C₃-C₄ spiro carbocyclyl;

or a salt and/or solvate and/or derivative thereof.

wherein said derivative is functionalised at the secondary nitrogen of the hydantoin with group L as illustrated below:



and wherein L is selected from:

- a) $-\text{PO}(\text{OH})\text{O}^- \cdot \text{M}^+$, wherein M^+ is a pharmaceutically acceptable monovalent counterion.
- b) $-\text{PO}(\text{O}^-)_2 \cdot 2\text{M}^+$.
- c) $-\text{PO}(\text{O}^-)_2 \cdot \text{D}^{2+}$, wherein D^{2+} is a pharmaceutically acceptable divalent counterion.
- d) $-\text{CH}(\text{R}^x)-\text{PO}(\text{OH})\text{O}^- \cdot \text{M}^+$, wherein R^x is hydrogen or C₁₋₃ alkyl.
- e) $-\text{CH}(\text{R}^x)-\text{PO}(\text{O}^-)_2 \cdot 2\text{M}^+$.
- f) $-\text{CH}(\text{R}^x)-\text{PO}(\text{O}^-)_2 \cdot \text{D}^{2+}$.
- g) $-\text{SO}_3^- \cdot \text{M}^+$.
- h) $-\text{CH}(\text{R}^x)-\text{SO}_3^- \cdot \text{M}^+$, and
- i) $-\text{CO}-\text{CH}_2\text{CH}_2-\text{CO}_2 \cdot \text{M}^+$.

2. The salt and/or solvate and/or derivative thereof according to claim 1, which is a pharmaceutically acceptable salt and/or solvate and/or derivative thereof.

3. The pharmaceutically acceptable salt according to claim 2.

4. The pharmaceutically acceptable solvate according to claim 2.

5. The compound according to claim 1.

26. The compound, pharmaceutically acceptable salt and/or solvate and/or derivative thereof according to claim 1 wherein R₁ is H.

37. The compound, pharmaceutically acceptable salt and/or solvate and/or derivative thereof according to claim 1 wherein R₁ is methyl.

48. The compound, pharmaceutically acceptable salt and/or solvate and/or derivative thereof according to any one of claims 24 to 37, wherein R₂ and R₃ are a spiro cyclopropyl.

59. The compound, pharmaceutically acceptable salt and/or solvate and/or derivative thereof according to any one of claims 42 to 37, wherein R₂ is methyl and R₃ is methyl

610. The compound, pharmaceutically acceptable salt and/or solvate and/or derivative thereof according to any one of claims 24 to 59, wherein R₄ is methyl.

711. The compound, pharmaceutically acceptable salt and/or solvate and/or derivative thereof according to any one of claims 42 to 59, wherein R₄ is ethyl.

182. The compound, pharmaceutically acceptable salt and/or solvate and/or derivative thereof according to any one of claims 42 to 711, wherein R₅ is H.

~~9. The compound according to any one of claims 1 to 7, wherein R₅ is methyl.~~

~~10. The compound according to any one of claims 1 to 5, wherein R₄ and R₅, together with the carbon atom to which they are attached, form a spirocyclopropyl.~~

~~11. The compound according to any one of claims 1 to 5, wherein R₄ and R₅, together with the carbon atom to which they are attached, form a spirocyclobutyl.~~

~~12~~13. The compound, pharmaceutically acceptable salt and/or solvate thereof according to any one of claims ~~42~~ to 12 selected from the group consisting of:

5,5-dimethyl-3-[5-(7-methylspiro[2H-benzofuran-3,1'-cyclopropane]-4-yl)oxy]pyrazin-2-yl]imidazolidine-2,4-dione;
 3-[5-[(3,3-dimethyl-2H-benzofuran-4-yl)oxy]pyrazin-2-yl]-5,5-dimethyl-imidazolidine-2,4-dione;
 (5R)-5-ethyl-5-methyl-3-(5-spiro[2H-benzofuran-3,1'-cyclopropane]-4-yloxy)pyrazin-2-yl]imidazolidine-2,4-dione;
 5,5-dimethyl-3-(5-spiro[2H-benzofuran-3,1'-cyclopropane]-4-yloxy)pyrazin-2-yl]imidazolidine-2,4-dione;
 (5R)-5-ethyl-5-methyl-3-[5-(7-methylspiro[2H-benzofuran-3,1'-cyclopropane]-4-yl)oxy]pyrazin-2-yl]imidazolidine-2,4-dione;
 (5R)-3-[5-[(3,3-dimethyl-2H-benzofuran-4-yl)oxy]pyrazin-2-yl]-5-ethyl-5-methyl-imidazolidine-2,4-dione;
 5,5-dimethyl-3-[5-[(3,3,7-trimethyl-2H-benzofuran-4-yl)oxy]pyrazin-2-yl]imidazolidine-2,4-dione;
 (5R)-5-ethyl-5-methyl-3-[5-[(3,3,7-trimethyl-2H-benzofuran-4-yl)oxy]pyrazin-2-yl]imidazolidine-2,4-dione;
 (5R)-5-ethyl-3-[5-(7-methylspiro[2H-benzofuran-3,1'-cyclopropane]-4-yl)oxy]pyrazin-2-yl]imidazolidine-2,4-dione;
 (5R)-5-ethyl-3-(5-spiro[2H-benzofuran-3,1'-cyclopropane]-4-yloxy)pyrazin-2-yl]imidazolidine-2,4-dione;
 (5R)-3-[5-[(3,3-dimethyl-2H-benzofuran-4-yl)oxy]pyrazin-2-yl]-5-ethyl-imidazolidine-2,4-dione;
 (5R)-5-ethyl-3-[5-[(3,3,7-trimethyl-2H-benzofuran-4-yl)oxy]pyrazin-2-yl]imidazolidine-2,4-dione;
 7-[5-(7-methylspiro[2H-benzofuran-3,1'-cyclopropane]-4-yl)oxy]pyrazin-2-yl]-5,7-diazaspiro[3.4]octane-6,8-dione;
 6-[5-(7-methylspiro[2H-benzofuran-3,1'-cyclopropane]-4-yl)oxy]pyrazin-2-yl]-4,6-diazaspiro[2.4]heptane-5,7-dione; and
 (5S)-5-ethyl-3-[5-(7-methylspiro[2H-benzofuran-3,1'-cyclopropane]-4-yl)oxy]pyrazin-2-yl]imidazolidine-2,4-dione.

or a pharmaceutically acceptable salt and/or solvate thereof ~~and/or derivative thereof~~.

~~13~~4. The compound according to claim 1 which is:

5,5-dimethyl-3-[5-(7-methylspiro[2H-benzofuran-3,1'-cyclopropane]-4-yl)oxypyrazin-2-yl]imidazolidine-2,4-dione.

15. The pharmaceutically acceptable salt according to claim 2 which is a pharmaceutically acceptable salt of:

5,5-dimethyl-3-[5-(7-methylspiro[2H-benzofuran-3,1'-cyclopropane]-4-yl)oxypyrazin-2-yl]imidazolidine-2,4-dione.

~~14. The compound according to claim 1 which is:~~

~~3-[5-[(3,3-dimethyl-2H-benzofuran-4-yl)oxy]pyrazin-2-yl]-5,5-dimethyl-imidazolidine-2,4-dione.~~

~~15. The compound according to claim 1 which is:~~

~~(5R)-5-ethyl-5-methyl-3-(5-spiro[2H-benzofuran-3,1'-cyclopropane]-4-yloxy)pyrazin-2-yl]imidazolidine-2,4-dione.~~

~~16. The compound according to claim 1 which is:~~

~~5,5-dimethyl-3-(5-spiro[2H-benzofuran-3,1'-cyclopropane]-4-yloxy)pyrazin-2-yl]imidazolidine-2,4-dione.~~

~~17. The compound according to claim 1 which is:~~

~~(5R)-5-ethyl-5-methyl-3-[5-(7-methylspiro[2H-benzofuran-3,1'-cyclopropane]-4-yl)oxypyrazin-2-yl]imidazolidine-2,4-dione.~~

~~18. The compound according to claim 1 which is:~~

~~(5R)-3-[5-[(3,3-dimethyl-2H-benzofuran-4-yl)oxy]pyrazin-2-yl]-5-ethyl-5-methyl-imidazolidine-2,4-dione.~~

~~19. The compound according to claim 1 which is:~~

~~5,5-dimethyl-3-[5-[(3,3,7-trimethyl-2H-benzofuran-4-yl)oxy]pyrazin-2-yl]imidazolidine-2,4-dione.~~

~~20. The compound according to claim 1 which is:~~

~~(5R)-5-ethyl-5-methyl-3-[5-[(3,3,7-trimethyl-2H-benzofuran-4-yl)oxy]pyrazin-2-yl]imidazolidine-2,4-dione.~~

~~24~~16. The compound according to claim 1 which is:

(5R)-5-ethyl-3-[5-(7-methylspiro[2H-benzofuran-3,1'-cyclopropane]-4-yl)oxypyrazin-2-yl]imidazolidine-2,4-dione.

17. The pharmaceutically acceptable salt according to claim 2 which is a pharmaceutically acceptable salt of:

(5R)-5-ethyl-3-[5-(7-methylspiro[2H-benzofuran-3,1'-cyclopropane]-4-yl)oxypyrazin-2-yl]imidazolidine-2,4-dione.

~~22~~18. The compound according to claim 1 which is:

(5R)-5-ethyl-3-(5-spiro[2H-benzofuran-3,1'-cyclopropane]-4-yloxy)pyrazin-2-yl]imidazolidine-2,4-dione.

19. The pharmaceutically acceptable salt according to claim 2 which is a pharmaceutically acceptable salt of:

(5R)-5-ethyl-3-(5-spiro[2H-benzofuran-3,1'-cyclopropane]-4-yloxy)pyrazin-2-yl]imidazolidine-2,4-dione.

~~23. The compound according to claim 1 which is:~~

~~(5R)-3-[5-[(3,3-dimethyl-2H-benzofuran-4-yl)oxy]pyrazin-2-yl]-5-ethyl-imidazolidine-2,4-dione.~~

~~24. The compound according to claim 1 which is:~~

~~(5R)-5-ethyl-3-[5-[(3,3,7-trimethyl-2H-benzofuran-4-yl)oxy]pyrazin-2-yl]imidazolidine-2,4-dione.~~

~~25. The compound according to claim 1 which is:~~

~~7-[5-(7-methylspiro[2H-benzofuran-3,1'-cyclopropane]-4-yl)oxypyrazin-2-yl]-5,7-diazaspiro[3.4]octane-6,8-dione.~~

~~26. The compound according to claim 1 which is:~~

~~6-[5-(7-methylspiro[2H-benzofuran-3,1'-cyclopropane]-4-yl)oxypyrazin-2-yl]-4,6-diazaspiro[2.4]heptane-5,7-dione.~~

~~27. The compound according to claim 1 which is:~~

~~(5S)-5-ethyl-3-[5-(7-methylspiro[2H-benzofuran-3,1'-cyclopropane]-4-yl)oxypyrazin-2-yl]imidazolidine-2,4-dione.~~

~~2820.~~ The compound, pharmaceutically acceptable salt and/or solvate and/or derivative thereof according to any one of claims 42 to 2719 for use as a medicament.

~~2921.~~ The compound, pharmaceutically acceptable salt and/or solvate and/or derivative thereof according to any one of claims 42 to 2819 for use in the prophylaxis or treatment of a disease or disorder selected from the group consisting of hearing disorders, schizophrenia, depression and mood disorders, bipolar disorder, substance abuse disorders, anxiety disorders, sleep disorders, hyperacusis and disturbances of loudness perception, Ménière's disease, disorders of balance, and disorders of the inner ear, impulse control disorder, personality disorders, attention-deficit/hyperactivity disorder, autism spectrum disorders, eating disorders, cognition impairment, ataxia, pain such as neuropathic pain, inflammatory pain and miscellaneous pain, Lewy body dementia and Parkinson's disease.

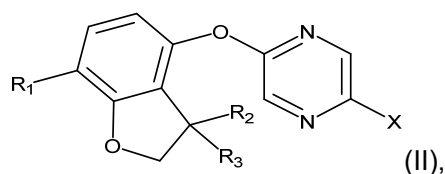
~~3022.~~ Use of ~~-thea~~ compound, pharmaceutically acceptable salt and/or solvate and/or derivative thereof according to any one of claims 42 to 2719 in the manufacture of a medicament for the prophylaxis or treatment of a disease or disorder selected from the group consisting of hearing disorders, schizophrenia, depression and mood disorders, bipolar disorder, substance abuse disorders, anxiety disorders, sleep disorders, hyperacusis and disturbances of loudness perception, Ménière's disease, disorders of balance, and disorders of the inner ear, impulse control disorder, personality disorders, attention-deficit/hyperactivity disorder, autism spectrum disorders, eating disorders, cognition impairment, ataxia, pain such as neuropathic pain, inflammatory pain and miscellaneous pain, Lewy body dementia and Parkinson's disease.

~~31. A method for the prophylaxis or treatment of a disease or disorder selected from the group consisting of hearing disorders, schizophrenia, depression and mood disorders, bipolar disorder, substance abuse disorders, anxiety disorders, sleep disorders, hyperacusis and disturbances of loudness perception, Ménière's disease, disorders of balance, and disorders of the inner ear, impulse control disorder, personality disorders, attention-deficit/hyperactivity disorder, autism spectrum disorders, eating disorders, cognition impairment, ataxia, pain such as neuropathic pain, inflammatory pain and miscellaneous pain, Lewy body dementia and~~

~~Parkinson's disease which comprises administering to a subject in need thereof an effective amount of a compound according to any one of claims 1 to 27.~~

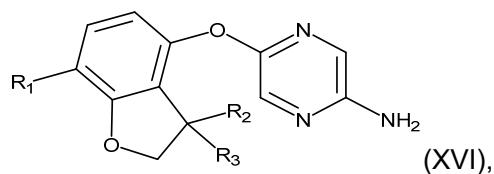
~~32~~23. A pharmaceutical composition comprising a compound, pharmaceutically acceptable salt and/or solvate thereof according to any one of claims ~~4~~2 to ~~27~~19 and a pharmaceutically acceptable carrier or excipient.

~~33~~24. A compound of formula (II) ~~or (XVI)~~:



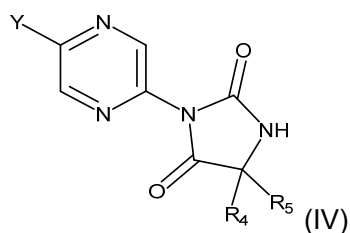
wherein R₁, R₂ and R₃ are as defined in claim 1, X is halo, such as Br; or

a compound of formula (XVI):



wherein R₁, R₂ and R₃ are as defined in claim 1, X is halo, such as Br; ~~or-~~

~~34.~~ Aa compound of formula (IV):



wherein R₄ and R₅ are as defined in claim 1, Y is halo, such as Cl.