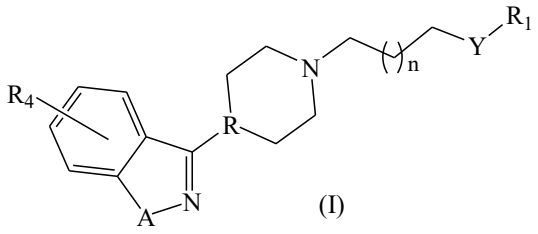
We claim:

1. A compound of formula (I),



(I)

or an isotopic form, a stereoisomer, or a pharmaceutically acceptable salt thereof, wherein,

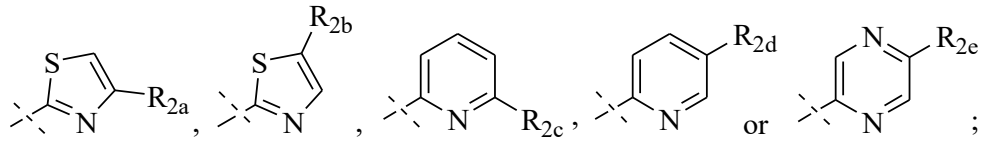
A is O or S;

R is N or CH;

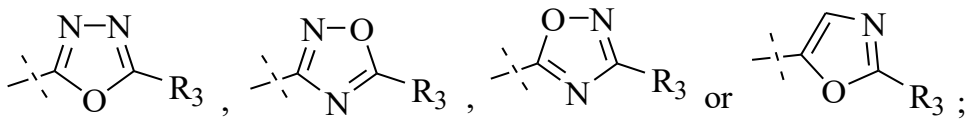
Y is selected from $–CH_2–$, –O–, NH, or $–N(C_{1\text{-}4}$ alkyl)–;

n is an integer from 0 to 2;

R_1 is selected from:



wherein, R_{2a}, R_{2b}, R_{2c}, R_{2d} and R_{2e} are each independently selected from:



"------" represents the point of attachment;

R_3 at each occurrence is independently selected from hydrogen, $–(C_{1\text{-}4})$alkyl, or $–(C_{3\text{-}6})$cycloalkyl; and

R_4 is selected from hydrogen, halogen, $–(C_{1\text{-}4})$alkyl, $–(C_{3\text{-}6})$cycloalkyl or hydroxy–$(C_{1\text{-}4})$alkyl.

2. The compound of formula (I) or an isotopic form, a stereoisomer, or a pharmaceutically acceptable salt thereof as claimed in claim 1, is selected from:
3-(4-{3-[4-(5-Methyl-[1,3,4]oxadiazol-2-yl)-thiazol-2-yloxy]-propyl}-piperazin-1-yl)-benzo[d]isothiazole;
3-(4-{2-[4-(5-Methyl-[1,3,4]oxadiazol-2-yl)-thiazol-2-yloxy]-ethyl}-piperazin-1-yl)-benzo[d]isothiazole;
3-(4-{3-[4-(5-Cyclopropyl-[1,3,4]oxadiazol-2-yl)-thiazol-2-yloxy]-propyl}-piperazin-1-yl)-benzo[d]isothiazole;
3-(4-{3-[5-(5-Methyl-[1,3,4]oxadiazol-2-yl)-thiazol-2-yloxy]-propyl}-piperazin-1-yl)-benzo[d]isothiazole;
3-(4-{3-[4-(5-Methyl-[1,2,4]oxadiazol-3-yl)-thiazol-2-yloxy]-propyl}-piperazin-1-yl)-benzo[d]isothiazole;
3-(4-{3-[4-(3-Methyl-[1,2,4]oxadiazol-5-yl)-thiazol-2-yloxy]-propyl}-piperazin-1-yl)-benzo[d]isothiazole;
3-{4-[3-(4-Oxazol-5-yl-thiazol-2-yloxy)-propyl]-piperazin-1-yl}-benzo[d]isothiazole;
3-(4-{3-[6-(5-Methyl-[1,2,4]oxadiazol-3-yl)-pyridin-2-yloxy]-propyl}-piperazin-1-yl)-benzo[d]isothiazole;
3-(4-{3-[5-(5-Methyl-[1,2,4]oxadiazol-3-yl)-pyridin-2-yloxy]-propyl}-piperazin-1-yl)-benzo[d]isothiazole;
3-(4-{3-[5-(5-Methyl-[1,2,4]oxadiazol-3-yl)-pyrazin-2-yloxy]-propyl}-piperazin-1-yl)-benzo[d]isothiazole;
3-{4-[3-(5-Oxazol-5-yl-pyridin-2-yloxy)-propyl]-piperazin-1-yl}-benzo[d]isothiazole;
6-Fluoro-3-(1-{3-[4-(5-methyl-[1,3,4]oxadiazol-2-yl)-thiazol-2-yloxy]-propyl}-piperidin-4-yl)-benzo[d]isoxazole;
6-Fluoro-3-(1-{3-[5-(5-methyl-[1,3,4]oxadiazol-2-yl)-thiazol-2-yloxy]-propyl}-piperidin-4-yl)-benzo[d]isoxazole;
6-Fluoro-3-(1-{3-[4-(5-methyl-[1,2,4]oxadiazol-3-yl)-thiazol-2-yloxy]-propyl}-piperidin-4-yl)-benzo[d]isoxazole;
6-Fluoro-3-(1-{3-[4-(3-methyl-[1,2,4]oxadiazol-5-yl)-thiazol-2-yloxy]-propyl}-piperidin-4-yl)-benzo[d]isoxazole;

6-Fluoro-3-{1-[3-(4-oxazol-5-yl-thiazol-2-yloxy)-propyl]-piperidin-4-yl}-benzo[d]isoxazole;
6-Fluoro-3-{1-[3-(5-oxazol-5-yl-pyridin-2-yloxy)-propyl]-piperidin-4-yl}-benzo[d]isoxazole;
3-(4-{3-[6-(5-Methyl-[1,3,4]oxadiazol-2-yl)-pyridin-2-yloxy]-propyl}-piperazin-1-yl)-benzo[d]isothiazole;
3-(4-{3-[6-(3-Methyl-[1,2,4]oxadiazol-5-yl)-pyridin-2-yloxy]-propyl}-piperazin-1-yl)-benzo[d]isothiazole;
3-{4-[3-(4-[1,2,4]oxadiazol-3-yl-thiazol-2-yloxy)-propyl]-piperazin-1-yl}-benzo[d]isothiazole; and
3-{4-[3-(6-[1,2,4]Oxadiazol-3-yl-pyridin-2-yloxy)-propyl]-piperazin-1-yl}-benzo[d]isothiazole.

3. The compound of formula (I), or an isotopic form, a stereoisomer, or a pharmaceutically acceptable salt thereof as claimed in claim 1, is selected from:
3-(4-{3-[4-(5-Methyl-[1,3,4]oxadiazol-2-yl)-thiazol-2-yloxy]-propyl}-piperazin-1-yl)-benzo[d]isothiazole oxalate;
3-(4-{2-[4-(5-Methyl-[1,3,4]oxadiazol-2-yl)-thiazol-2-yloxy]-ethyl}-piperazin-1-yl)-benzo[d]isothiazole oxalate;
3-(4-{3-[4-(5-Cyclopropyl-[1,3,4]oxadiazol-2-yl)-thiazol-2-yloxy]-propyl}-piperazin-1-yl)-benzo[d]isothiazole oxalate;
3-(4-{3-[5-(5-Methyl-[1,3,4]oxadiazol-2-yl)-thiazol-2-yloxy]-propyl}-piperazin-1-yl)-benzo[d]isothiazole oxalate;
3-(4-{3-[4-(5-Methyl-[1,2,4]oxadiazol-3-yl)-thiazol-2-yloxy]-propyl}-piperazin-1-yl)-benzo[d]isothiazole oxalate;
3-(4-{3-[4-(3-Methyl-[1,2,4]oxadiazol-5-yl)-thiazol-2-yloxy]-propyl}-piperazin-1-yl)-benzo[d]isothiazole oxalate;
3-{4-[3-(4-Oxazol-5-yl-thiazol-2-yloxy)-propyl]-piperazin-1-yl}-benzo[d]isothiazole oxalate;
3-(4-{3-[6-(5-Methyl-[1,2,4]oxadiazol-3-yl)-pyridin-2-yloxy]-propyl}-piperazin-1-yl)-benzo[d]isothiazole oxalate;

3-(4-{3-[5-(5-Methyl-[1,2,4]oxadiazol-3-yl)-pyridin-2-yloxy]-propyl}-piperazin-1-yl)-benzo[d]isothiazole oxalate;

3-(4-{3-[5-(5-Methyl-[1,2,4]oxadiazol-3-yl)-pyrazin-2-yloxy]-propyl}-piperazin-1-yl)-benzo[d]isothiazole oxalate;

3-{4-[3-(5-Oxazol-5-yl-pyridin-2-yloxy)-propyl]-piperazin-1-yl}-benzo[d]isothiazole oxalate;

6-Fluoro-3-(1-{3-[4-(5-methyl-[1,3,4]oxadiazol-2-yl)-thiazol-2-yloxy]-propyl}-piperidin-4-yl)-benzo[d]isoxazole oxalate;

6-Fluoro-3-(1-{3-[5-(5-methyl-[1,3,4]oxadiazol-2-yl)-thiazol-2-yloxy]-propyl}-piperidin-4-yl)-benzo[d]isoxazole oxalate;

6-Fluoro-3-(1-{3-[4-(5-methyl-[1,2,4]oxadiazol-3-yl)-thiazol-2-yloxy]-propyl}-piperidin-4-yl)-benzo[d]isoxazole oxalate;

6-Fluoro-3-(1-{3-[4-(3-methyl-[1,2,4]oxadiazol-5-yl)-thiazol-2-yloxy]-propyl}-piperidin-4-yl)-benzo[d]isoxazole oxalate;

6-Fluoro-3-{1-[3-(4-oxazol-5-yl-thiazol-2-yloxy)-propyl]-piperidin-4-yl}-benzo[d]isoxazole oxalate;

6-Fluoro-3-{1-[3-(5-oxazol-5-yl-pyridin-2-yloxy)-propyl]-piperidin-4-yl}-benzo[d]isoxazole oxalate;

3-(4-{3-[6-(5-Methyl-[1,3,4]oxadiazol-2-yl)-pyridin-2-yloxy]-propyl}-piperazin-1-yl)-benzo[d]isothiazole oxalate;

3-(4-{3-[6-(3-Methyl-[1,2,4]oxadiazol-5-yl)-pyridin-2-yloxy]-propyl}-piperazin-1-yl)-benzo[d]isothiazole oxalate;

3-{4-[3-(4-[1,2,4]oxadiazol-3-yl-thiazol-2-yloxy)-propyl]-piperazin-1-yl}-benzo[d]isothiazole oxalate; and

3-{4-[3-(6-[1,2,4]Oxadiazol-3-yl-pyridin-2-yloxy)-propyl]-piperazin-1-yl}-benzo[d]isothiazole oxalate.

4. A pharmaceutical composition comprising a therapeutically effective amount of the compound of formula (I), or a stereoisomer, or a pharmaceutically acceptable salt thereof as claimed in any one of claims 1 to 3, and pharmaceutically acceptable excipients or carriers.

5. The pharmaceutical composition as claimed in claim 4, for use in the treatment of disease or disorder selected from schizophrenia, psychosis, bipolar disorder, mood disorders, depression, anxiety, sleep disorders, sexual disorders, drug dependency withdrawal symptoms, attention deficit hyperactivity disorder, neuropsychiatric disorders associated with Alzheimer’s disease, Parkinson's disease, Lewy body dementia, Frontotemporal dementia, or vascular dementia.

6. A compound of formula (I) or an isotopic form, a stereoisomer or a pharmaceutically acceptable salt thereof as claimed in any one of claims 1 to 3, for use in the treatment of disease or disorder selected from schizophrenia, psychosis, bipolar disorder, mood disorders, depression, anxiety, sleep disorders, sexual disorders, drug dependency withdrawal symptoms, attention deficit hyperactivity disorder, neuropsychiatric disorders associated with Alzheimer’s disease, Parkinson's disease, Lewy body dementia, Frontotemporal dementia, or vascular dementia.

7. Use of the compound of formula (I), or an isotopic form, a stereoisomer, or a pharmaceutically acceptable salt thereof as claimed in any one of claims 1 to 3, in the manufacture of a medicament for the treatment of disease or disorder selected from schizophrenia, psychosis, bipolar disorder, mood disorders, depression, anxiety, sleep disorders, sexual disorders, drug dependency withdrawal symptoms, attention deficit hyperactivity disorder, neuropsychiatric disorders associated with Alzheimer’s disease, Parkinson's disease, Lewy body dementia, Frontotemporal dementia, or vascular dementia.