1,2-SUBSTITUTED CYCLOPENTANES AS OREXIN RECEPTOR ANTAGONISTS

The present invention relates to amide derivatives, processes for their preparation, pharmaceutical compositions containing them and their use in therapy, particularly in the treatment or prevention of conditions having an association with the orexin sub-type 1 receptor.

The orexin peptides (orexin A and orexin B, OxA and OxB), also known as hypocretins, were discovered in 1998 by two groups (Sakurai *et al.*, *Cell*, **1998**, 92, 573 and De Lecea *et al.*, *Proc. Nat. Acad. Sci.*, **1998**, 95, 322). These neuropeptides are both derived from the common precursor pre-pro-orexin and are produced in the lateral hypothalamus. OxA is a 33 amino acid residue which has similar potency at both the Ox1R (orexin 1 receptors) and Ox2R (orexin 2 receptors) whereas OxB is made up of 28 amino acids and binds selectively to the Ox2R.

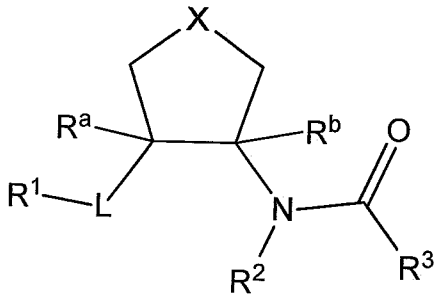
Orexin receptors are believed to be implicated in both feeding behaviour (Sakurai *et al.*, *Cell*, **1998**, 92, 573) and also in regulating sleep architecture (Chemelli *et al.*, *Cell*, **1999**, 98, 437). More recently, it has been shown that orexin receptors are implicated in arousal, reward, learning and memory (Harris *et al.*, *Trends Neurosci.*, **2006**, 29, 571).

WO 2003/099276 describes a broad class of compounds, including certain amides, which are useful as factor Xa inhibitors for treating thromboembolic disorders.

We have now discovered a class of compounds that are orexin receptor antagonists. Furthermore, certain compounds of the invention show selectivity for the orexin 1 receptor over the orexin 2 receptor.

SUMMARY

In one aspect, the present invention refers to a compound of formula



(I)

wherein

R^1 represents a 5- or 6-membered heteroaryl group optionally substituted by at least one substituent selected from halogen, cyano, hydroxyl, C_3-C_6 cycloalkyl, C_1-C_3 alkyl, C_1-C_3 alkoxy, C_1-C_3 alkoxycarbonyl, C_1-C_3 alkoxycarbonylamino, C_1-C_3 haloalkyl, C_1-C_3 haloalkoxy, $-NR^4R^5$, C_3-C_6 cycloalkylamino, C_1-C_3 alkylcarbonyloxy, C_1-C_3 alkylcarbonylamino, sulphonamido, C_1-C_3 alkylsulphonyl, C_1-C_3 alkylsulphonylamino and $-C(O)NR^6R^7$;

L represents a bond, CH_2, O or NR^{12};

R^a represents a hydrogen atom or a C_1-C_3 alkyl or C_1-C_3 haloalkyl group;

R^b represents a hydrogen atom or a C_1-C_3 alkyl or C_1-C_3 haloalkyl group;

X represents CH_2, CHF or CF_2;

R^2 represents a hydrogen atom or a C_1-C_6 alkyl or C_3-C_6 cycloalkyl group;

R^3 represents a phenyl group or a 5- or 6-membered heteroaryl group, all optionally substituted by at least one substituent independently selected from halogen, hydroxyl, cyano, C_1-C_3 alkyl, C_1-C_3 haloalkyl, C_1-C_3 hydroxyalkyl, C_1-C_3 alkoxy, C_1-C_3 haloalkoxy, C_2-C_4 alkenyl, C_1-C_3 alkylcarbonyloxy, C_1-C_3 alkoxycarbonyl, $-NR^8R^9$, $-C(O)NR^{10}R^{11}$, C_3-C_6 cycloalkyl, C_3-C_6 cycloalkyloxy, C_3-C_6 cycloalkylmethyl or a 5- or 6-membered heteroaryl group, the heteroaryl group itself being optionally substituted by at least one substituent independently selected from C_1-C_6 alkyl, C_1-C_6 alkoxy and C_1-C_6 haloalkoxy;

R^4 and R^5 each independently represent a hydrogen atom or a C_1-C_3 alkyl or C_3-C_6 cycloalkyl group, or R^4 and R^5 may together with the nitrogen atom to which they are attached form a 4- to 7-membered saturated heterocyclic ring optionally substituted by at least one substituent independently selected from halogen, hydroxyl and C_1-C_3 alkoxy;

R^6 and R^7 each independently represent a hydrogen atom or a C_1-C_3 alkyl or C_3-C_6 cycloalkyl group, or R^6 and R^7 may together with the nitrogen atom to which they are attached form a 4- to 7-membered saturated heterocyclic ring optionally substituted by at least one substituent independently selected from halogen and hydroxyl;

R^8 and R^9 each independently represent a hydrogen atom or a C_1-C_3 alkyl or C_3-C_6 cycloalkyl group, or R^8 and R^9 may together with the nitrogen atom to which they are attached form a 4- to 7-membered saturated heterocyclic ring optionally substituted by at least one substituent independently selected from halogen, hydroxyl and C_1-C_3 alkoxy;

R^{10} and R^{11} each independently represent a hydrogen atom or a C_1-C_3 alkyl or C_3-C_6 cycloalkyl group, or R^{10} and R^{11} may together with the nitrogen atom to which they are attached form a 4- to 7-membered saturated heterocyclic ring optionally substituted by at least one substituent independently selected from halogen and hydroxyl; and

R^{12} represents a hydrogen atom, methyl group or a C_2-C_3 alkylene chain that links to R^1 to form a 5- or 6-membered ring;

or a pharmaceutically acceptable salt thereof.

In another aspect, the present invention refers to a compound of formula (I) as defined in the present invention selected from the group consisting of:

2,6-Dimethoxy-*N*-[(*1S,2S*)-2-{[5-(trifluoromethyl)pyridin-2-yl]amino}cyclopentyl]benzamide;

2,6-Dimethoxy-*N*-[(*1S,2S*)-2-{[5-(trifluoromethyl)pyrimidin-2-yl]amino}cyclopentyl]benzamide;

5-Methyl-2-(2H-1,2,3-triazol-2-yl)-*N*-[(*1S,2S*)-2-{[5-(trifluoromethyl)pyrimidin-2-yl]amino}cyclopentyl]benzamide;

N-[(*1S,2S*)-2-[(5-Ethylpyrimidin-2-yl)amino]cyclopentyl]-5-methyl-2-(2H-1,2,3-triazol-2-yl)benzamide;

N-[(*1S,2S*)-2-[(5-Chloropyridin-2-yl)amino]cyclopentyl]-5-methyl-2-(2H-1,2,3-triazol-2-yl)benzamide;

5-Methyl-2-(2H-1,2,3-triazol-2-yl)-*N*-[(*1S,2S*)-2-{[5-(trifluoromethyl)pyridin-2-yl]amino}cyclopentyl]benzamide;

5-Methyl-2-(2H-1,2,3-triazol-2-yl)-*N*-[(*1S,2S*)-2-{[5-(trifluoromethyl)pyrazin-2-yl]amino}cyclopentyl]benzamide;

2-(3-Methyl-1,2,4-oxadiazol-5-yl)-*N*-[(*1S,2S*)-2-{[5-(trifluoromethyl)pyridin-2-yl]amino}cyclopentyl]benzamide;

N-[(*1S,2S*)-2-[(5-Chloropyrazin-2-yl)amino]cyclopentyl]-5-methyl-2-(2H-1,2,3-triazol-2-yl)benzamide;

5-Fluoro-2-(2H-1,2,3-triazol-2-yl)-*N*-[(*1S,2S*)-2-{[5-(trifluoromethyl)pyridin-2-yl]amino}cyclopentyl]benzamide;

2-(1H-Pyrazol-1-yl)-*N*-[(*1S,2S*)-2-{[5-(trifluoromethyl)pyridin-2-yl]amino}cyclopentyl]benzamide;

2-(2H-1,2,3-Triazol-2-yl)-*N*-[(*1S,2S*)-2-{[5-(trifluoromethyl)pyridin-2-yl]amino}cyclopentyl]benzamide;

2-(Pyrimidin-2-yl)-*N*-[(*1S,2S*)-2-{[5-(trifluoromethyl)pyridin-2-yl]amino}cyclopentyl]benzamide;

5-Fluoro-2-(pyrimidin-2-yl)-*N*-[(*1S,2S*)-2-{[5-(trifluoromethyl)pyridin-2-yl]amino}cyclopentyl]benzamide;

2-(3-Methyl-1,2,4-oxadiazol-5-yl)-*N*-[(*1S,2S*)-2-{[5-(trifluoromethyl)pyrazin-2-yl]amino}cyclopentyl]benzamide;

2-(3-Methyl-1,2,4-oxadiazol-5-yl)-*N*-[(*1S,2S*)-2-{[5-(trifluoromethyl)pyrimidin-2-yl]amino}cyclopentyl]benzamide;

2-(2H-1,2,3-Triazol-2-yl)-*N*-[(*1S,2S*)-2-{[5-(trifluoromethyl)pyrazin-2-yl]amino}cyclopentyl]benzamide;

2-(2H-1,2,3-Triazol-2-yl)-*N*-[(*1S,2S*)-2-{[5-(trifluoromethyl)pyrimidin-2-yl]amino}cyclopentyl]benzamide;

2-(2H-1,2,3-Triazol-2-yl)-*N*-[(*1S,2R*)-2-{[5-(trifluoromethyl)pyrazin-2-yl]oxy}cyclopentyl]benzamide;

2-(2H-1,2,3-Triazol-2-yl)-*N*-[(*1S,2S*)-2-{[4-(trifluoromethyl)pyridin-2-yl]oxy}cyclopentyl]benzamide;

2,6-Dimethoxy-*N*-[(*1S,2S*)-2-{[4-(trifluoromethyl)pyridin-2-yl]oxy}cyclopentyl]benzamide;

2-(2H-1,2,3-Triazol-2-yl)-*N*-(2-{[4-(trifluoromethyl)pyridin-2-yl]methyl}cyclopentyl)benzamide;

2-(2H-1,2,3-Triazol-2-yl)-*N*-(2-{[5-(trifluoromethyl)pyridin-2-yl]methyl}cyclopentyl)benzamide;

5-Methyl-2-(2H-1,2,3-triazol-2-yl)-*N*-(2-{[5-(trifluoromethyl)pyridin-2-yl]methyl}cyclopentyl)benzamide;

2,6-Dimethoxy-*N*-[(*1S,2S*)-2-{[6-(trifluoromethyl)pyridin-2-yl]amino}cyclopentyl]benzamide;

3-Bromo-*N*-[(*1S,2S*)-2-{[5-(trifluoromethyl)pyrazin-2-yl]amino}cyclopentyl]pyridine-2-carboxamide;

2-Ethoxy-5-methyl-*N*-[(*1S,2S*)-2-{[5-(trifluoromethyl)pyrazin-2-yl]amino}cyclopentyl]benzamide;

3-Ethoxy-6-methyl-*N*-[(*1S,2S*)-2-{[5-(trifluoromethyl)pyrazin-2-yl]amino}cyclopentyl]pyridine-2-carboxamide;

2-(1H-Pyrazol-1-yl)-*N*-[(*1S,2S*)-2-{[5-(trifluoromethyl)pyrazin-2-yl]amino}cyclopentyl]benzamide;

2-Fluoro-6-(2H-1,2,3-triazol-2-yl)-*N*-[(*1S,2S*)-2-{[5-(trifluoromethyl)pyrazin-2-yl]amino}cyclopentyl]benzamide;

2,6-Difluoro-*N*-[(*1S,2S*)-2-{[5-(trifluoromethyl)pyrazin-2-yl]amino}cyclopentyl]benzamide;

2,6-Dimethoxy-*N*-[(*1S,2S*)-2-{[5-(trifluoromethyl)pyrazin-2-yl]amino}cyclopentyl]benzamide;

2-(1H-1,2,3-Triazol-1-yl)-*N*-[(*1S,2S*)-2-{[5-(trifluoromethyl)pyrazin-2-yl]amino}cyclopentyl]benzamide;

5-Fluoro-2-(2H-1,2,3-triazol-2-yl)-*N*-[(*1S,2S*)-2-{[5-(trifluoromethyl)pyrazin-2-yl]amino}cyclopentyl]benzamide;

2-Methoxy-5-methyl-*N*-[(*1S,2S*)-2-{[5-(trifluoromethyl)pyrazin-2-yl]amino}cyclopentyl]benzamide;

2-(Pyrimidin-2-yl)-*N*-[(*1S,2S*)-2-{[5-(trifluoromethyl)pyrazin-2-yl]amino}cyclopentyl]benzamide;

5-Fluoro-2-(pyrimidin-2-yl)-*N*-[(*1S,2S*)-2-{[5-(trifluoromethyl)pyrazin-2-yl]amino}cyclopentyl]benzamide;

2-Chloro-6-(2H-1,2,3-triazol-2-yl)-*N*-[(*1S,2S*)-2-{[5-(trifluoromethyl)pyrazin-2-yl]amino}cyclopentyl]benzamide;

5-Fluoro-2-(1H-1,2,3-triazol-1-yl)-*N*-[(*1S,2S*)-2-{[5-(trifluoromethyl)pyrazin-2-yl]amino}cyclopentyl]benzamide;

5-Methyl-2-(1H-1,2,3-triazol-1-yl)-*N*-[(*1S,2S*)-2-{[5-(trifluoromethyl)pyrazin-2-yl]amino}cyclopentyl]benzamide;

3-(1H-Pyrazol-1-yl)-*N*-[(*1S,2S*)-2-{[5-(trifluoromethyl)pyrazin-2-yl]amino}cyclopentyl]pyridine-2-carboxamide;

2-(5-Methyl-1,3,4-oxadiazol-2-yl)-*N*-[(*1S,2S*)-2-{[5-(trifluoromethyl)pyrazin-2-yl]amino}cyclopentyl]benzamide;

2-(2H-1,2,3-Triazol-2-yl)-5-(trifluoromethyl)-*N*-[(*1S,2S*)-2-{[5-(trifluoromethyl)pyrazin-2-yl]amino}cyclopentyl]benzamide;

2-Fluoro-6-(1H-pyrazol-1-yl)-*N*-[(*1S,2S*)-2-{[5-(trifluoromethyl)pyrazin-2-yl]amino}cyclopentyl]benzamide;

5-Fluoro-2-(1H-pyrazol-1-yl)-*N*-[(*1S,2S*)-2-{[5-(trifluoromethyl)pyrazin-2-yl]amino}cyclopentyl]benzamide;

5-Methyl-2-(1H-pyrazol-1-yl)-*N*-[(*1S,2S*)-2-{[5-(trifluoromethyl)pyrazin-2-yl]amino}cyclopentyl]benzamide;

2-Bromo-6-methoxy-*N*-[(*1S,2S*)-2-{[5-(trifluoromethyl)pyrazin-2-yl]amino}cyclopentyl]benzamide;

2-Methoxy-6-(1H-pyrazol-1-yl)-*N*-[(*1S,2S*)-2-{[5-(trifluoromethyl)pyrazin-2-yl]amino}cyclopentyl]benzamide;

3-(Piperidin-1-yl)-*N*-[(*1S,2S*)-2-{[5-(trifluoromethyl)pyrazin-2-yl]amino}cyclopentyl]pyridine-2-carboxamide;

5-Chloro-2-(2H-1,2,3-triazol-2-yl)-*N*-[(*1S,2S*)-2-{[5-(trifluoromethyl)pyrazin-2-yl]amino}cyclopentyl]benzamide;

3-Fluoro-2-(2H-1,2,3-triazol-2-yl)-*N*-[(*1S,2S*)-2-{[5-(trifluoromethyl)pyrazin-2-yl]amino}cyclopentyl]benzamide;

2-(1H-1,2,3-Triazol-1-yl)-5-(trifluoromethyl)-*N*-[(*1S,2S*)-2-{[5-(trifluoromethyl)pyrazin-2-yl]amino}cyclopentyl]benzamide;

5-Chloro-2-(1H-1,2,3-triazol-1-yl)-*N*-[(*1S,2S*)-2-{[5-(trifluoromethyl)pyrazin-2-yl]amino}cyclopentyl]benzamide;

2,3-Difluoro-6-(2H-1,2,3-triazol-2-yl)-*N*-[(*1S,2S*)-2-{[5-(trifluoromethyl)pyrazin-2-yl]amino}cyclopentyl]benzamide;

5-Cyclopropyl-2-(2H-1,2,3-triazol-2-yl)-*N*-[(*1S,2S*)-2-{[5-(trifluoromethyl)pyrazin-2-yl]amino}cyclopentyl]benzamide;

3-(Trifluoromethoxy)-*N*-[(*1S,2S*)-2-{[5-(trifluoromethyl)pyrazin-2-yl]amino}cyclopentyl]pyridine-2-carboxamide;

5-Chloro-2-(1H-pyrazol-1-yl)-*N*-[(*1S,2S*)-2-{[5-(trifluoromethyl)pyrazin-2-yl]amino}cyclopentyl]benzamide;

3-Ethoxy-*N*-[(*1S,2S*)-2-{[5-(trifluoromethyl)pyrazin-2-yl]amino}cyclopentyl]pyridine-2-carboxamide;

3,5-Difluoro-2-(2H-1,2,3-triazol-2-yl)-*N*-[(*1S,2S*)-2-{[5-(trifluoromethyl)pyrazin-2-yl]amino}cyclopentyl]benzamide;

2-(Trifluoromethyl)-*N*-[(*1S,2S*)-2-{[5-(trifluoromethyl)pyrazin-2-yl]amino}cyclopentyl]benzamide;

3-Cyclopropyl-*N*-[(*1S,2S*)-2-{[5-(trifluoromethyl)pyrazin-2-yl]amino}cyclopentyl]pyridine-2-carboxamide;

3,6-Difluoro-2-(2H-1,2,3-triazol-2-yl)-*N*-[(*1S,2S*)-2-{[5-(trifluoromethyl)pyrazin-2-yl]amino}cyclopentyl]benzamide;

2-(Difluoromethyl)-*N*-[(*1S,2S*)-2-{[5-(trifluoromethyl)pyrazin-2-yl]amino}cyclopentyl]benzamide;

2-Cyclopropyl-6-fluoro-*N*-[(*1S,2S*)-2-{[5-(trifluoromethyl)pyrazin-2-yl]amino}cyclopentyl]benzamide;

5-Methyl-2-(2H-1,2,3-triazol-2-yl)-*N*-[(*1S,2S*)-2-{[6-(trifluoromethyl)pyridin-3-yl]amino}cyclopentyl]benzamide;

N-Cyclobutyl-2,6-dimethoxy-*N*-[(*1S,2S*)-2-{[5-(trifluoromethyl)pyridin-2-yl]amino}cyclopentyl]benzamide;

2-Chloro-*N*-[(*1S,2S*)-2-{[5-(trifluoromethyl)pyridin-2-yl]amino}cyclopentyl]benzamide;

2-Chloro-*N*-[(*1S,2S*)-2-{[5-(trifluoromethyl)pyrimidin-2-yl]amino}cyclopentyl]benzamide;

2-Fluoro-6-methoxy-*N*-[(*1S,2S*)-2-{[5-(trifluoromethyl)pyridin-2-yl]amino}cyclopentyl]benzamide;

2,6-Difluoro-*N*-[(*1S,2S*)-2-{[5-(trifluoromethyl)pyridin-2-yl]amino}cyclopentyl]benzamide;

N-[(*1S,2S*)-2-{Methyl[5-(trifluoromethyl)pyrazin-2-yl]amino}cyclopentyl]-2-(2H-1,2,3-triazol-2-yl)benzamide;

5-Fluoro-*N*-[(*1S,2S*)-2-{methyl[5-(trifluoromethyl)pyrazin-2-yl]amino}cyclopentyl]-2-(2H-1,2,3-triazol-2-yl)benzamide;

2-Fluoro-*N*-[(*1S,2S*)-2-{methyl[5-(trifluoromethyl)pyrazin-2-yl]amino}cyclopentyl]-6-(2H-1,2,3-triazol-2-yl)benzamide;

N-[(*1S,2S*)-2-{[3-Methyl-5-(trifluoromethyl)pyrazin-2-yl]amino}cyclopentyl]-3-(2H-1,2,3-triazol-2-yl)pyridine-2-carboxamide;

N-[(*1S,2S*)-2-Methyl-2-{[5-(trifluoromethyl)pyrazin-2-yl]amino}cyclopentyl]-3-(2H-1,2,3-triazol-2-yl)pyridine-2-carboxamide;

N-[(*1S,2S*)-2-{[3-Methyl-5-(trifluoromethyl)pyrazin-2-yl]amino}cyclopentyl]-2-(2H-1,2,3-triazol-2-yl)benzamide;

N-[(*1S,2S*)-2-{[3-Methyl-5-(trifluoromethyl)pyrazin-2-yl]amino}cyclopentyl]-2-(pyrimidin-2-yl)benzamide;

5-Fluoro-*N*-[(*1S,2S*)-2-{[3-methyl-5-(trifluoromethyl)pyrazin-2-yl]amino}cyclopentyl]-2-(pyrimidin-2-yl)benzamide;

N-[(*1S,2S*)-2-Methyl-2-{[5-(trifluoromethyl)pyrazin-2-yl]amino}cyclopentyl]-2-(2H-1,2,3-triazol-2-yl)benzamide;

N-(2-Methyl-2-{[5-(trifluoromethyl)pyrazin-2-yl]amino}cyclopentyl)-2-(2H-1,2,3-triazol-2-yl)benzamide;

N-[(*1R,2R*)-2-Methyl-2-{[5-(trifluoromethyl)pyrazin-2-yl]amino}cyclopentyl]-2-(2H-1,2,3-triazol-2-yl)benzamide;

5-Fluoro-*N*-[(*1S,2S*)-2-methyl-2-{[5-(trifluoromethyl)pyrazin-2-yl]amino}cyclopentyl]-2-(2H-1,2,3-triazol-2-yl)benzamide;

N-[(*1S,2S*)-2-Methyl-2-{[5-(trifluoromethyl)pyrazin-2-yl]amino}cyclopentyl]-3-(1H-pyrazol-1-yl)pyridine-2-carboxamide;

3-Ethoxy-*N*-[(*1S,2S*)-2-methyl-2-{[5-(trifluoromethyl)pyrazin-2-yl]amino}cyclopentyl]pyridine-2-carboxamide,

2-Chloro-*N*-[(*1S,2S*)-2-methyl-2-{[5-(trifluoromethyl)pyrazin-2-yl]amino}cyclopentyl]-6-(2H-1,2,3-triazol-2-yl)benzamide;

2,6-Difluoro-*N*-[(*1S,2S*)-2-methyl-2-{[5-(trifluoromethyl)pyrazin-2-yl]amino}cyclopentyl]benzamide;

3-Cyclopropyl-*N*-[(*1S,2S*)-2-methyl-2-{[5-(trifluoromethyl)pyrazin-2-yl]amino}cyclopentyl]pyridine-2-carboxamide;

N-[(*1S,2S*)-2-Methyl-2-{[5-(trifluoromethyl)pyrazin-2-yl]amino}cyclopentyl]-3-(trifluoromethoxy)pyridine-2-carboxamide;

N-[(*1S,2S*)-2-Methyl-2-{[5-(trifluoromethyl)pyrazin-2-yl]amino}cyclopentyl]-2-(pyrimidin-2-yl)benzamide;

5-Chloro-*N*-[(*1S,2S*)-2-methyl-2-{[5-(trifluoromethyl)pyrazin-2-yl]amino}cyclopentyl]-2-(2H-1,2,3-triazol-2-yl)benzamide;

N-(2-Methyl-2-{[5-(trifluoromethyl)pyrimidin-2-yl]amino}cyclopentyl)-2-(2H-1,2,3-triazol-2-yl)benzamide;

N-(2-Methyl-2-{[5-(trifluoromethyl)pyridin-2-yl]amino}cyclopentyl)-2-(2H-1,2,3-triazol-2-yl)benzamide;

N-(2-Methyl-2-{[5-(trifluoromethoxy)pyridin-2-yl]amino}cyclopentyl)-2-(2H-1,2,3-triazol-2-yl)benzamide;

5-Chloro-2-(2H-1,2,3-triazol-2-yl)-*N*-[(*1S,2S*)-2-{[5-(trifluoromethyl)pyridin-2-yl]amino}cyclopentyl]benzamide;

3-Fluoro-2-(2H-1,2,3-triazol-2-yl)-*N*-[(*1S,2S*)-2-{[5-(trifluoromethyl)pyridin-2-yl]amino}cyclopentyl]benzamide;

3,5-Difluoro-2-(2H-1,2,3-triazol-2-yl)-*N*-[(*1S,2S*)-2-{[5-(trifluoromethyl)pyridin-2-yl]amino}cyclopentyl]benzamide;

3-(2H-1,2,3-Triazol-2-yl)-*N*-[(*1S,2S*)-2-{[5-(trifluoromethyl)pyridin-2-yl]amino}cyclopentyl]pyridine-2-carboxamide;

3-(1H-Pyrazol-1-yl)-*N*-[(*1S,2S*)-2-{[5-(trifluoromethyl)pyridin-2-yl]amino}cyclopentyl]pyridine-2-carboxamide;

2-Fluoro-6-(2H-1,2,3-triazol-2-yl)-*N*-[(*1S,2S*)-2-{[5-(trifluoromethyl)pyridin-2-yl]amino}cyclopentyl]benzamide;

N-(2-{[3-Fluoro-5-(trifluoromethyl)pyridin-2-yl]amino}-2-methylcyclopentyl)-3-(2H-1,2,3-triazol-2-yl)pyridine-2-carboxamide;

N-[(*1S,2S*)-2-{[3-Fluoro-5-(trifluoromethyl)pyridin-2-yl]amino}cyclopentyl]-2-(2H-1,2,3-triazol-2-yl)benzamide;

N-[(*1S,2S*)-2-{[3-Chloro-5-(trifluoromethyl)pyridin-2-yl]amino}cyclopentyl]-2-(2H-1,2,3-triazol-2-yl)benzamide;

N-[(*1S,2S*)-2-{[3-Bromo-5-(trifluoromethyl)pyridin-2-yl]amino}cyclopentyl]-2-(2H-1,2,3-triazol-2-yl)benzamide;

N-[(*1S,2S*)-2-{[3-Methyl-5-(trifluoromethyl)pyridin-2-yl]amino}cyclopentyl]-2-(2H-1,2,3-triazol-2-yl)benzamide;

N-[(*1S,2S*)-2-{[3-Cyclopropyl-5-(trifluoromethyl)pyrazin-2-yl]amino}cyclopentyl]-2-(2H-1,2,3-triazol-2-yl)benzamide;

N-[(*1S,2S*)-2-{[3-(Propan-2-yl)-5-(trifluoromethyl)pyrazin-2-yl]amino}cyclopentyl]-2-(2H-1,2,3-triazol-2-yl)benzamide;

N-[(*1S,2S*)-2-{[3-Ethyl-5-(trifluoromethyl)pyrazin-2-yl]amino}cyclopentyl]-2-(2H-1,2,3-triazol-2-yl)benzamide;

N-[(*1S,2S*)-2-[(5-Cyclopropylpyrazin-2-yl)amino]cyclopentyl]-2-(2H-1,2,3-triazol-2-yl)benzamide;

N-[(*1S,2S*)-2-{[5-(Propan-2-yl)pyrazin-2-yl]amino}cyclopentyl]-2-(2H-1,2,3-triazol-2-yl)benzamide;

N-[(*1S,2S*)-2-[(5-Ethylpyrazin-2-yl)amino]cyclopentyl]-2-(2H-1,2,3-triazol-2-yl)benzamide;

2-(2H-1,2,3-Triazol-2-yl)-*N*-[(*1S,2S*)-2-{[5-(trifluoromethoxy)pyridin-2-yl]amino}cyclopentyl]benzamide;

5-Chloro-2-(2H-1,2,3-triazol-2-yl)-*N*-[(*1S,2S*)-2-{[5-(trifluoromethoxy)pyridin-2-yl]amino}cyclopentyl]benzamide;

N-[(*1S,2S*)-2-[(5-Bromopyridin-2-yl)amino]cyclopentyl]-2-(2H-1,2,3-triazol-2-yl)benzamide;

N-[(*1S,2S*)-2-[(5-Bromo-3-methoxypyridin-2-yl)amino]cyclopentyl]-2-(2H-1,2,3-triazol-2-yl)benzamide;

2-(2H-1,2,3-Triazol-2-yl)-*N*-[(*1S,2S*)-2-{[4-(trifluoromethyl)pyridin-2-yl]amino}cyclopentyl]benzamide;

N-[(*1S,2S*)-2-{[3-Chloro-5-(trifluoromethyl)pyridin-2-yl]amino}cyclopentyl]-3-(2H-1,2,3-triazol-2-yl)pyridine-2-carboxamide;

N-[(*1S,2S*)-2-{[3-Fluoro-5-(trifluoromethyl)pyridin-2-yl]amino}cyclopentyl]-3-(2H-1,2,3-triazol-2-yl)pyridine-2-carboxamide;

N-[(*1S,2S*)-2-{[3-Methyl-5-(trifluoromethyl)pyridin-2-yl]amino}cyclopentyl]-3-(2H-1,2,3-triazol-2-yl)pyridine-2-carboxamide;

N-[(*1S,2S*)-2-{[3-Ethyl-5-(trifluoromethyl)pyrazin-2-yl]amino}cyclopentyl]-3-(2H-1,2,3-triazol-2-yl)pyridine-2-carboxamide;

N-(4,4-Difluoro-2-{[5-(trifluoromethyl)pyrazin-2-yl]amino}cyclopentyl)-2-(2H-1,2,3-triazol-2-yl)benzamide;

N-(4,4-Difluoro-2-{[5-(trifluoromethyl)pyrimidin-2-yl]amino}cyclopentyl)-2-(2H-1,2,3-triazol-2-yl)benzamide;

N-(4,4-Difluoro-2-{[5-(trifluoromethyl)pyridin-2-yl]amino}cyclopentyl)-2-(2H-1,2,3-triazol-2-yl)benzamide;

N-[(*1S,2S*)-4,4-Difluoro-2-{[5-(trifluoromethoxy)pyridin-2-yl]amino}cyclopentyl]-2-(2H-1,2,3-triazol-2-yl)benzamide;

N-[(*1S,2S*)-4,4-Difluoro-2-{[3-fluoro-5-(trifluoromethyl)pyridin-2-yl]amino}cyclopentyl]-2-(2H-1,2,3-triazol-2-yl)benzamide;

2-(5-Ethoxypyrimidin-2-yl)-*N*-[(*1S,2S*)-2-{[5-(trifluoromethyl)pyrazin-2-yl]amino}cyclopentyl]benzamide;

2-Fluoro-6-methoxy-*N*-[(*1S,2S*)-2-{[5-(trifluoromethyl)pyrazin-2-yl]amino}cyclopentyl]benzamide;

N-[(*1S,2S*)-2-{[3-Methyl-5-(trifluoromethyl)pyridin-2-yl]amino}cyclopentyl]-3-(pyrimidin-2-yl)pyridine-2-carboxamide;

N-[(*1S,2S*)-2-{[3-Fluoro-5-(trifluoromethyl)pyridin-2-yl]amino}cyclopentyl]-2-(pyrimidin-2-yl)benzamide;

5-Fluoro-*N*-[(*1S,2S*)-2-{[3-fluoro-5-(trifluoromethyl)pyridin-2-yl]amino}cyclopentyl]-2-(pyrimidin-2-yl)benzamide;

N-[(*1S,2S*)-2-{[3-Fluoro-5-(trifluoromethyl)pyridin-2-yl]amino}cyclopentyl]-2-(3-methyl-1,2,4-oxadiazol-5-yl)benzamide;

2-(3-Methyl-1,2,4-oxadiazol-5-yl)-*N*-[(*1S,2S*)-2-{[3-methyl-5-(trifluoromethyl)pyrazin-2-yl]amino}cyclopentyl]benzamide;

N-[(*1S,2S*)-2-{[3-Cyclopropyl-5-(trifluoromethyl)pyrazin-2-yl]amino}cyclopentyl]-3-(2H-1,2,3-triazol-2-yl)pyridine-2-carboxamide;

N-[(*1S,2S*)-2-{[3-Cyclopropyl-5-(trifluoromethyl)pyrazin-2-yl]amino}cyclopentyl]-3-(pyrimidin-2-yl)pyridine-2-carboxamide;

N-[(*1S,2S*)-2-Methyl-2-{[5-(trifluoromethyl)pyrazin-2-yl]amino}cyclopentyl]-3-(pyrimidin-2-yl)pyridine-2-carboxamide;

2-(3-Methyl-1,2,4-oxadiazol-5-yl)-*N*-[(*1S,2S*)-2-methyl-2-{[5-(trifluoromethyl)pyrazin-2-yl]amino}cyclopentyl]benzamide;

N-(2-{[3-Fluoro-5-(trifluoromethyl)pyridin-2-yl]amino}-2-methylcyclopentyl)-3-(pyrimidin-2-yl)pyridine-2-carboxamide;

N-[(*1S,2S*)-2-{[3-Fluoro-5-(trifluoromethyl)pyridin-2-yl]amino}cyclopentyl]-3-(pyrimidin-2-yl)pyridine-2-carboxamide;

N-[(*1S,2S*)-2-{[3-Chloro-5-(trifluoromethyl)pyridin-2-yl]amino}cyclopentyl]-3-(pyrimidin-2-yl)pyridine-2-carboxamide;

N-[(*1S,2S*)-2-{[3-Ethyl-5-(trifluoromethyl)pyrazin-2-yl]amino}cyclopentyl]-2-(3-methyl-1,2,4-oxadiazol-5-yl)benzamide;

N-[(*1S,2S*)-2-{[3-Ethyl-5-(trifluoromethyl)pyrazin-2-yl]amino}cyclopentyl]-3-(pyrimidin-2-yl)pyridine-2-carboxamide;

N-[(*1S,2S*)-2-{[3-Ethyl-5-(trifluoromethyl)pyrazin-2-yl]amino}cyclopentyl]-2-(pyrimidin-2-yl)benzamide;

N-(2-Methyl-2-{[5-(trifluoromethyl)pyrimidin-2-yl]amino}cyclopentyl)-3-(pyrimidin-2-yl)pyridine-2-carboxamide;

N-(2-Methyl-2-{[5-(trifluoromethyl)pyrimidin-2-yl]amino}cyclopentyl)-3-(2H-1,2,3-triazol-2-yl)pyridine-2-carboxamide;

N-(2-Methyl-2-{[5-(trifluoromethyl)pyridin-2-yl]amino}cyclopentyl)-3-(2H-1,2,3-triazol-2-yl)pyridine-2-carboxamide;

N-(2-Methyl-2-{[5-(trifluoromethyl)pyridin-2-yl]amino}cyclopentyl)-3-(pyrimidin-2-yl)pyridine-2-carboxamide;

N-[(*1S,2S*)-2-{[5-(Difluoromethoxy)pyridin-2-yl]amino}-4,4-difluorocyclopentyl]-2-(2H-1,2,3-triazol-2-yl)benzamide;

N-[(*1S,2S*)-2-{[3-Ethyl-5-(trifluoromethyl)pyrazin-2-yl]amino}cyclopentyl]-5-fluoro-2-(pyrimidin-2-yl)benzamide;

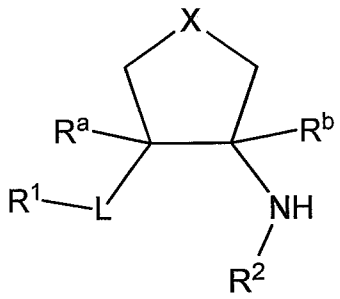
N-[(*1S,2S*)-2-{[3-Methyl-5-(trifluoromethyl)pyrazin-2-yl]amino}cyclopentyl]-3-(pyrimidin-2-yl)pyridine-2-carboxamide;

2-(5-Methyl-1,3,4-oxadiazol-2-yl)-*N*-[(*1S,2S*)-2-methyl-2-{[5-(trifluoromethyl)pyrazin-2-yl]amino}cyclopentyl]benzamide;

enantiomers thereof and pharmaceutically acceptable salts of any of the foregoing.

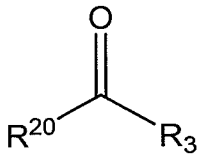
In yet another aspect, the present invention refers to a process for the preparation of a compound of formula (I) or a pharmaceutically acceptable salt thereof as defined in the present invention, which comprises

(i) reacting a compound of formula



(II)

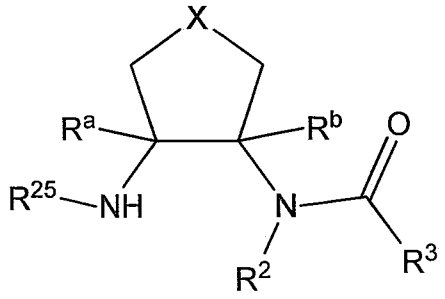
wherein L, X, R^a, R^b, R^1 and R^2 are as defined in formula (I), with a compound of formula



(III)

wherein R^{20} represents a halogen atom or a hydroxyl group and R^3 is as defined in formula (I), or a salt thereof; or

(ii) when L represents NH or $N(CH_3)$, reacting a compound of formula



(IV)

wherein R^{25} represents a hydrogen atom or methyl group and X, R^a, R^b, R^2 and R^3 are as defined in formula (I), with a compound of formula (V), $R^1 - LG^1$, wherein LG^1 represents a leaving group and R^1 is as defined in formula (I);

and optionally thereafter carrying out one or more of the following procedures:

- converting a compound of formula (I) into another compound of formula (I)
- removing any protecting groups
- forming a pharmaceutically acceptable salt.

In yet another aspect, the present invention refers to a pharmaceutical composition comprising a compound of formula (I) or a pharmaceutically acceptable salt thereof as claimed in the present invention, in association with a pharmaceutically acceptable adjuvant, diluent or carrier, and optionally one or more other therapeutic agents.

In yet another aspect, the present invention refers to the use of a compound of formula (I) or a pharmaceutically acceptable salt thereof as claimed in the present invention in the manufacture of a medicament for treating schizophrenia, schizophreniform disorder, schizoaffective disorder, cognitive disorders or pain.

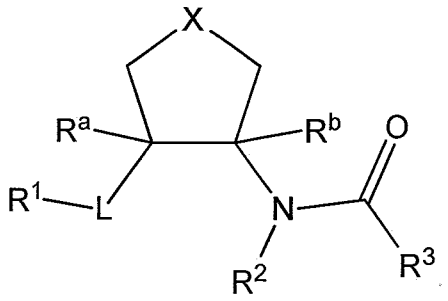
In yet another aspect, the present invention refers to the use of a compound of formula (I) or a pharmaceutically acceptable salt thereof as claimed the present invention in the manufacture of a medicament for treating post-traumatic stress disorder, panic disorders or addiction.

DETAILED DESCRIPTION

In accordance with the present disclosure, there is therefore provided a compound of formula

CLAIMS

1. A compound of formula



(I)

wherein

R^1 represents a 5- or 6-membered heteroaryl group optionally substituted by at least one substituent selected from halogen, cyano, hydroxyl, C_3-C_6 cycloalkyl, C_1-C_3 alkyl, C_1-C_3 alkoxy, C_1-C_3 alkoxycarbonyl, C_1-C_3 alkoxycarbonylamino, C_1-C_3 haloalkyl, C_1-C_3 haloalkoxy, $-NR^4R^5$, C_3-C_6 cycloalkylamino, C_1-C_3 alkylcarbonyloxy, C_1-C_3 alkylcarbonylamino, sulphonamido, C_1-C_3 alkylsulphonyl, C_1-C_3 alkylsulphonylamino and $-C(O)NR^6R^7$;

L represents a bond, CH_2, O or NR^{12};

R^a represents a hydrogen atom or a C_1-C_3 alkyl or C_1-C_3 haloalkyl group;

R^b represents a hydrogen atom or a C_1-C_3 alkyl or C_1-C_3 haloalkyl group;

X represents CH_2, CHF or CF_2;

R^2 represents a hydrogen atom or a C_1-C_6 alkyl or C_3-C_6 cycloalkyl group;

R^3 represents a phenyl group or a 5- or 6-membered heteroaryl group, all optionally substituted by at least one substituent independently selected from halogen, hydroxyl, cyano, C_1-C_3 alkyl, C_1-C_3 haloalkyl, C_1-C_3 hydroxyalkyl, C_1-C_3 alkoxy, C_1-C_3 haloalkoxy, C_2-C_4 alkenyl, C_1-C_3 alkylcarbonyloxy, C_1-C_3 alkoxycarbonyl, $-NR^8R^9$, $-C(O)NR^{10}R^{11}$, C_3-C_6 cycloalkyl, C_3-C_6 cycloalkyloxy, C_3-C_6 cycloalkylmethyl or a 5- or 6-membered heteroaryl group,

the heteroaryl group itself being optionally substituted by at least one substituent independently selected from C_1-C_6 alkyl, C_1-C_6 alkoxy and C_1-C_6 haloalkoxy;

R^4 and R^5 each independently represent a hydrogen atom or a C_1-C_3 alkyl or C_3-C_6 cycloalkyl group, or R^4 and R^5 may together with the nitrogen atom to which they are attached form a 4- to 7-membered saturated heterocyclic ring optionally substituted by at least one substituent independently selected from halogen, hydroxyl and C_1-C_3 alkoxy;

R^6 and R^7 each independently represent a hydrogen atom or a C_1-C_3 alkyl or C_3-C_6 cycloalkyl group, or R^6 and R^7 may together with the nitrogen atom to which they are attached form a 4- to 7-membered saturated heterocyclic ring optionally substituted by at least one substituent independently selected from halogen and hydroxyl;

R^8 and R^9 each independently represent a hydrogen atom or a C_1-C_3 alkyl or C_3-C_6 cycloalkyl group, or R^8 and R^9 may together with the nitrogen atom to which they are attached form a 4- to 7-membered saturated heterocyclic ring optionally substituted by at least one substituent independently selected from halogen, hydroxyl and C_1-C_3 alkoxy;

R^{10} and R^{11} each independently represent a hydrogen atom or a C_1-C_3 alkyl or C_3-C_6 cycloalkyl group, or R^{10} and R^{11} may together with the nitrogen atom to which they are attached form a 4- to 7-membered saturated heterocyclic ring optionally substituted by at least one substituent independently selected from halogen and hydroxyl; and

R^{12} represents a hydrogen atom, methyl group or a C_2-C_3 alkylene chain that links to R^1 to form a 5- or 6-membered ring;

or a pharmaceutically acceptable salt thereof.

2. A compound according to claim 1, wherein R^1 represents a 5- or 6-membered heteroaryl group containing one or two ring heteroatoms independently selected from nitrogen, oxygen and sulphur, the heteroaryl group being optionally substituted by one or two substituents independently selected from halogen, C_1-C_3 alkyl and C_1-C_3 haloalkyl.

3. A compound according to claim 1, wherein R^1 represents a 5- or 6-membered heteroaryl group selected from pyridinyl, pyrimidinyl and pyrazinyl, all optionally substituted as defined in claim 1.

4. A compound according to claim 3, wherein R^1 represents a group selected from:

(i) 4-(trifluoromethyl)pyridin-2-yl,
(ii) 5-(trifluoromethyl)pyridin-2-yl,
(iii) 5-(trifluoromethoxy)pyridin-2-yl,
(iv) 6-(trifluoromethyl)pyridin-2-yl,
(v) 6-(trifluoromethyl)pyridin-3-yl,
(vi) 5-chloropyridin-2-yl,
(vii) 5-bromopyridin-2-yl,
(viii) 3-fluoro-5-(trifluoromethyl)pyridin-2-yl,
(ix) 3-chloro-5-(trifluoromethyl)pyridin-2-yl,
(x) 3-bromo-5-(trifluoromethyl)pyridin-2-yl,
(xi) 5-bromo-3-methoxypyridin-2-yl,
(xii) 3-methyl-5-(trifluoromethyl)pyridin-2-yl,
(xiii) 5-(trifluoromethyl)pyrimidin-2-yl,
(xiv) 5-ethylpyrimidin-2-yl,
(xv) 5-(trifluoromethyl)pyrazin-2-yl,
(xvi) 5-chloropyrazin-2-yl,
(xvii) 5-(ethyl)pyrazin-2-yl,
(xviii) 5-(cyclopropyl)pyrazin-2-yl,
(xix) 5-(isopropyl)pyrazin-2-yl,
(xx) 3-methyl-5-(trifluoromethyl)pyrazin-2-yl,
(xxi) 3-ethyl-5-(trifluoromethyl)pyrazin-2-yl,
(xxii) 3-cyclopropyl-5-(trifluoromethyl)pyrazin-2-yl, and
3-isopropyl-5-(trifluoromethyl)pyrazin-2-yl.

5. A compound according to claim 1, wherein X represents CH_2.

6. A compound according to claim 1, wherein L represents NH.

7. A compound according to claim 1, wherein R^2 represents a hydrogen atom.

8. A compound according to claim 1, wherein R^3 represents a 5- or 6-membered heteroaryl group selected from pyridinyl, pyrimidinyl and pyrazinyl, all optionally substituted as defined in claim 1.

9. A compound according to claim 1, wherein R^3 represents a phenyl group optionally substituted by at least one substituent independently selected from fluorine, chlorine, C_1-C_3 alkyl, C_1-C_3 alkoxy or a 5- or 6-membered heteroaryl group, the heteroaryl group itself being optionally substituted by one or two substituents independently selected from C_1-C_2 alkyl, C_1-C_2 alkoxy and C_1-C_2 haloalkoxy.

10. A compound according to claim 1, wherein R^3 represents a group selected from:

(i) 2-fluorophenyl,
(ii) 2-chlorophenyl,
(iii) 2-methylphenyl,
(iv) 2-cyclopropylphenyl,
(v) 2-methoxyphenyl,
(vi) 2-ethoxyphenyl,
(vii) 2-(difluoromethoxy)phenyl,
(viii) 3-methylphenyl,
(ix) 3-methoxyphenyl,
(x) 2,6-difluorophenyl,
(xi) 2,6-dichlorophenyl,
(xii) 2,6-dimethoxyphenyl,
(xiii) 2,6-diethoxyphenyl,
(xiv) 2-ethoxy-5-methylphenyl,

(xv) 2,5-dimethoxyphenyl,

(xvi) 2-fluoro-6-methoxyphenyl,

(xvii) 5-fluoro-2-methoxyphenyl,

(xviii) 3-fluoro-2-methoxyphenyl,

(xix) 2-(1*H*-1,2,4-triazol-1-yl)phenyl,

(xx) 2-(2*H*-1,2,3-triazol-2-yl)phenyl,

(xxi) 5-methyl-2-(1*H*-1,2,3-triazol-1-yl)phenyl,

(xxii) 5-methyl-2-(2*H*-1,2,3-triazol-2-yl)phenyl,

(xxiii) 5-fluoro-2-(1*H*-1,2,3-triazol-1-yl)phenyl,

(xxiv) 5-fluoro-2-(2*H*-1,2,3-triazol-2-yl)phenyl,

(xxv)2-(3-methyl-1,2,4-oxadiazol-5-yl)phenyl,

(xxvi) 2-(pyrimidin-2-yl)phenyl,

(xxvii) 5-fluoro-2-(pyrimidin-2-yl)phenyl,

(xxviii) 2-(1*H*-pyrazol-1-yl)phenyl,

(xxix) 2-(1*H*-imidazol-1-yl)phenyl,

(xxx) 2-(1*H*-1,2,3-triazol-1-yl)phenyl,

(xxxi) 2-(pyrimidin-2-yl)-5-fluorophenyl,

(xxxii) 2-fluoro-6-(2*H*-1,2,3-triazol-2-yl)phenyl,

(xxxiii) 2-methoxy-5-methylphenyl,

(xxxiv) 2-chloro-6-(2*H*-1,2,3-triazol-2-yl)phenyl,

(xxxv) 2-(5-methyl-1,3,4-oxadiazol-2-yl)phenyl,

(xxxvi) 5-trifluoromethyl-2-(2*H*-1,2,3-triazol-2-yl)phenyl,

(xxxvii) 2-fluoro-6-(pyrazol-1-yl)phenyl,

(xxxviii) 5-fluoro-2-(pyrazol-1-yl)phenyl,

(xxxix) 5-methyl-2-(pyrazol-1-yl)phenyl,

(xl) 2-bromo-6-methoxyphenyl,

(xli) 2-methoxy-6-(pyrazol-1-yl)phenyl,

(xlii) 5-chloro-2-(2*H*-1,2,3-triazol-2-yl)phenyl,

(xliii) 3-fluoro-2-(2*H*-1,2,3-triazol-2-yl)phenyl,

(xliv) 5-trifluoromethyl-2-(1*H*-1,2,3-triazol-1-yl)phenyl,

(xlv) 5-chloro-2-(1*H*-1,2,3-triazol-1-yl)phenyl,

(xlvi) 2,3-difluoro-6-(2*H*-1,2,3-triazol-2-yl)phenyl,

(xlvii) 5-cyclopropyl-2-(2*H*-1,2,3-triazol-2-yl)phenyl,

(xlviii) 5-chloro-2-(pyrazol-1-yl)phenyl,

(xlix) 3,5-difluoro-2-(2*H*-1,2,3-triazol-2-yl)phenyl,

(l) 2-(difluoromethyl)phenyl,

(li) 2-(trifluoromethyl)phenyl,

(lii) 3,6-difluoro-2-(2*H*-1,2,3-triazol-2-yl)phenyl,

(liii) 2-cyclopropyl-6-fluorophenyl,

(liv) 2-(5-ethoxypyrimidin-2-yl)phenyl,

(lv) 3-(pyrimidin-2-yl)pyridin-2-yl,

(lvi) 3-ethoxy-6-methylpyridin-2-yl,

(lvii) 3-(pyrazol-1-yl)pyridin-2-yl,

(lviii) 3-(piperidin-1-yl)pyridin-2-yl,

(lix) 3-(trifluoromethoxy)pyridin-2-yl,

(lx) 3-(ethoxy)pyridin-2-yl,

(lxi) 3-(cyclopropyl)pyridin-2-yl,

(lxii) 3-chloropyridin-2-yl,

(lxiii) 3-bromopyridin-2-yl,

(lxiv) 3-methoxypyridin-2-yl,

(lxv) 3-(propan-2-yloxy)pyridin-2-yl,

(lxvi) 6-bromo-3-methoxypyridin-2-yl,

(lxvii) 3-methoxy-6-methylpyridin-2-yl, and

(lxviii) 3-(2*H*-1,2,3-triazol-2-yl)pyridin-2-yl.

11. A compound of formula (I) as defined in claim 1 selected from the group consisting of:

2,6-Dimethoxy-*N*-[(*1S,2S*)-2-{[5-(trifluoromethyl)pyridin-2-yl]amino}cyclopentyl]benzamide;

2,6-Dimethoxy-*N*-[(*1S,2S*)-2-{[5-(trifluoromethyl)pyrimidin-2-yl]amino}cyclopentyl]benzamide;

5-Methyl-2-(2H-1,2,3-triazol-2-yl)-*N*-[(*1S,2S*)-2-{[5-(trifluoromethyl)pyrimidin-2-yl]amino}cyclopentyl]benzamide;

N-[(*1S,2S*)-2-[(5-Ethylpyrimidin-2-yl)amino]cyclopentyl]-5-methyl-2-(2H-1,2,3-triazol-2-yl)benzamide;

N-[(*1S,2S*)-2-[(5-Chloropyridin-2-yl)amino]cyclopentyl]-5-methyl-2-(2H-1,2,3-triazol-2-yl)benzamide;

5-Methyl-2-(2H-1,2,3-triazol-2-yl)-*N*-[(*1S,2S*)-2-{[5-(trifluoromethyl)pyridin-2-yl]amino}cyclopentyl]benzamide;

5-Methyl-2-(2H-1,2,3-triazol-2-yl)-*N*-[(*1S,2S*)-2-{[5-(trifluoromethyl)pyrazin-2-yl]amino}cyclopentyl]benzamide;

2-(3-Methyl-1,2,4-oxadiazol-5-yl)-*N*-[(*1S,2S*)-2-{[5-(trifluoromethyl)pyridin-2-yl]amino}cyclopentyl]benzamide;

N-[(*1S,2S*)-2-[(5-Chloropyrazin-2-yl)amino]cyclopentyl]-5-methyl-2-(2H-1,2,3-triazol-2-yl)benzamide;

5-Fluoro-2-(2H-1,2,3-triazol-2-yl)-*N*-[(*1S,2S*)-2-{[5-(trifluoromethyl)pyridin-2-yl]amino}cyclopentyl]benzamide;

2-(1H-Pyrazol-1-yl)-*N*-[(*1S,2S*)-2-{[5-(trifluoromethyl)pyridin-2-yl]amino}cyclopentyl]benzamide;

2-(2H-1,2,3-Triazol-2-yl)-*N*-[(*1S,2S*)-2-{[5-(trifluoromethyl)pyridin-2-yl]amino}cyclopentyl]benzamide;

2-(Pyrimidin-2-yl)-*N*-[(*1S,2S*)-2-{[5-(trifluoromethyl)pyridin-2-yl]amino}cyclopentyl]benzamide;

5-Fluoro-2-(pyrimidin-2-yl)-*N*-[(*1S,2S*)-2-{[5-(trifluoromethyl)pyridin-2-yl]amino}cyclopentyl]benzamide;

2-(3-Methyl-1,2,4-oxadiazol-5-yl)-*N*-[(*1S,2S*)-2-{[5-(trifluoromethyl)pyrazin-2-yl]amino}cyclopentyl]benzamide;

2-(3-Methyl-1,2,4-oxadiazol-5-yl)-*N*-[(*1S,2S*)-2-{[5-(trifluoromethyl)pyrimidin-2-yl]amino}cyclopentyl]benzamide;

2-(2H-1,2,3-Triazol-2-yl)-*N*-[(*1S,2S*)-2-{[5-(trifluoromethyl)pyrazin-2-yl]amino}cyclopentyl]benzamide;

2-(2H-1,2,3-Triazol-2-yl)-*N*-[(*1S,2S*)-2-{[5-(trifluoromethyl)pyrimidin-2-yl]amino}cyclopentyl]benzamide;

2-(2H-1,2,3-Triazol-2-yl)-*N*-[(*1S,2R*)-2-{[5-(trifluoromethyl)pyrazin-2-yl]oxy}cyclopentyl]benzamide;

2-(2H-1,2,3-Triazol-2-yl)-*N*-[(*1S,2S*)-2-{[4-(trifluoromethyl)pyridin-2-yl]oxy}cyclopentyl]benzamide;

2,6-Dimethoxy-*N*-[(*1S,2S*)-2-{[4-(trifluoromethyl)pyridin-2-yl]oxy}cyclopentyl]benzamide;

2-(2H-1,2,3-Triazol-2-yl)-*N*-(2-{[4-(trifluoromethyl)pyridin-2-yl]methyl}cyclopentyl)benzamide;

2-(2H-1,2,3-Triazol-2-yl)-*N*-(2-{[5-(trifluoromethyl)pyridin-2-yl]methyl}cyclopentyl)benzamide;

5-Methyl-2-(2H-1,2,3-triazol-2-yl)-*N*-(2-{[5-(trifluoromethyl)pyridin-2-yl]methyl}cyclopentyl)benzamide;

2,6-Dimethoxy-*N*-[(*1S,2S*)-2-{[6-(trifluoromethyl)pyridin-2-yl]amino}cyclopentyl]benzamide;

3-Bromo-*N*-[(*1S,2S*)-2-{[5-(trifluoromethyl)pyrazin-2-yl]amino}cyclopentyl]pyridine-2-carboxamide;

2-Ethoxy-5-methyl-*N*-[(*1S,2S*)-2-{[5-(trifluoromethyl)pyrazin-2-yl]amino}cyclopentyl]benzamide;

3-Ethoxy-6-methyl-*N*-[(*1S,2S*)-2-{[5-(trifluoromethyl)pyrazin-2-yl]amino}cyclopentyl]pyridine-2-carboxamide;

2-(1H-Pyrazol-1-yl)-*N*-[(*1S,2S*)-2-{[5-(trifluoromethyl)pyrazin-2-yl]amino}cyclopentyl]benzamide;

2-Fluoro-6-(2H-1,2,3-triazol-2-yl)-*N*-[(*1S,2S*)-2-{[5-(trifluoromethyl)pyrazin-2-yl]amino}cyclopentyl]benzamide;

2,6-Difluoro-*N*-[(*1S,2S*)-2-{[5-(trifluoromethyl)pyrazin-2-yl]amino}cyclopentyl]benzamide;

2,6-Dimethoxy-*N*-[(*1S,2S*)-2-{[5-(trifluoromethyl)pyrazin-2-yl]amino}cyclopentyl]benzamide;

2-(1H-1,2,3-Triazol-1-yl)-*N*-[(*1S,2S*)-2-{[5-(trifluoromethyl)pyrazin-2-yl]amino}cyclopentyl]benzamide;

5-Fluoro-2-(2H-1,2,3-triazol-2-yl)-*N*-[(*1S,2S*)-2-{[5-(trifluoromethyl)pyrazin-2-yl]amino}cyclopentyl]benzamide;

2-Methoxy-5-methyl-*N*-[(*1S,2S*)-2-{[5-(trifluoromethyl)pyrazin-2-yl]amino}cyclopentyl]benzamide;

2-(Pyrimidin-2-yl)-*N*-[(*1S,2S*)-2-{[5-(trifluoromethyl)pyrazin-2-yl]amino}cyclopentyl]benzamide;

5-Fluoro-2-(pyrimidin-2-yl)-*N*-[(*1S,2S*)-2-{[5-(trifluoromethyl)pyrazin-2-yl]amino}cyclopentyl]benzamide;

2-Chloro-6-(2H-1,2,3-triazol-2-yl)-*N*-[(*1S,2S*)-2-{[5-(trifluoromethyl)pyrazin-2-yl]amino}cyclopentyl]benzamide;

5-Fluoro-2-(1H-1,2,3-triazol-1-yl)-*N*-[(*1S,2S*)-2-{[5-(trifluoromethyl)pyrazin-2-yl]amino}cyclopentyl]benzamide;

5-Methyl-2-(1H-1,2,3-triazol-1-yl)-*N*-[(*1S,2S*)-2-{[5-(trifluoromethyl)pyrazin-2-yl]amino}cyclopentyl]benzamide;

3-(1H-Pyrazol-1-yl)-*N*-[(*1S,2S*)-2-{[5-(trifluoromethyl)pyrazin-2-yl]amino}cyclopentyl]pyridine-2-carboxamide;

2-(5-Methyl-1,3,4-oxadiazol-2-yl)-*N*-[(*1S,2S*)-2-{[5-(trifluoromethyl)pyrazin-2-yl]amino}cyclopentyl]benzamide;

2-(2H-1,2,3-Triazol-2-yl)-5-(trifluoromethyl)-*N*-[(*1S,2S*)-2-{[5-(trifluoromethyl)pyrazin-2-yl]amino}cyclopentyl]benzamide;

2-Fluoro-6-(1H-pyrazol-1-yl)-*N*-[(*1S,2S*)-2-{[5-(trifluoromethyl)pyrazin-2-yl]amino}cyclopentyl]benzamide;

5-Fluoro-2-(1H-pyrazol-1-yl)-*N*-[(*1S,2S*)-2-{[5-(trifluoromethyl)pyrazin-2-yl]amino}cyclopentyl]benzamide;

5-Methyl-2-(1H-pyrazol-1-yl)-*N*-[(*1S,2S*)-2-{[5-(trifluoromethyl)pyrazin-2-yl]amino}cyclopentyl]benzamide;

2-Bromo-6-methoxy-*N*-[(*1S,2S*)-2-{[5-(trifluoromethyl)pyrazin-2-yl]amino}cyclopentyl]benzamide;

2-Methoxy-6-(1H-pyrazol-1-yl)-*N*-[(*1S,2S*)-2-{[5-(trifluoromethyl)pyrazin-2-yl]amino}cyclopentyl]benzamide;

3-(Piperidin-1-yl)-*N*-[(*1S,2S*)-2-{[5-(trifluoromethyl)pyrazin-2-yl]amino}cyclopentyl]pyridine-2-carboxamide;

5-Chloro-2-(2H-1,2,3-triazol-2-yl)-*N*-[(*1S,2S*)-2-{[5-(trifluoromethyl)pyrazin-2-yl]amino}cyclopentyl]benzamide;

3-Fluoro-2-(2H-1,2,3-triazol-2-yl)-*N*-[(*1S,2S*)-2-{[5-(trifluoromethyl)pyrazin-2-yl]amino}cyclopentyl]benzamide;

2-(1H-1,2,3-Triazol-1-yl)-5-(trifluoromethyl)-*N*-[(*1S,2S*)-2-{[5-(trifluoromethyl)pyrazin-2-yl]amino}cyclopentyl]benzamide;

5-Chloro-2-(1H-1,2,3-triazol-1-yl)-*N*-[(*1S,2S*)-2-{[5-(trifluoromethyl)pyrazin-2-yl]amino}cyclopentyl]benzamide;

2,3-Difluoro-6-(2H-1,2,3-triazol-2-yl)-*N*-[(*1S,2S*)-2-{[5-(trifluoromethyl)pyrazin-2-yl]amino}cyclopentyl]benzamide;

5-Cyclopropyl-2-(2H-1,2,3-triazol-2-yl)-*N*-[(*1S,2S*)-2-{[5-(trifluoromethyl)pyrazin-2-yl]amino}cyclopentyl]benzamide;

3-(Trifluoromethoxy)-*N*-[(*1S,2S*)-2-{[5-(trifluoromethyl)pyrazin-2-yl]amino}cyclopentyl]pyridine-2-carboxamide;

5-Chloro-2-(1H-pyrazol-1-yl)-*N*-[(*1S,2S*)-2-{[5-(trifluoromethyl)pyrazin-2-yl]amino}cyclopentyl]benzamide;

3-Ethoxy-*N*-[(*1S,2S*)-2-{[5-(trifluoromethyl)pyrazin-2-yl]amino}cyclopentyl]pyridine-2-carboxamide;

3,5-Difluoro-2-(2H-1,2,3-triazol-2-yl)-*N*-[(*1S,2S*)-2-{[5-(trifluoromethyl)pyrazin-2-yl]amino}cyclopentyl]benzamide;

2-(Trifluoromethyl)-*N*-[(*1S,2S*)-2-{[5-(trifluoromethyl)pyrazin-2-yl]amino}cyclopentyl]benzamide;

3-Cyclopropyl-*N*-[(*1S,2S*)-2-{[5-(trifluoromethyl)pyrazin-2-yl]amino}cyclopentyl]pyridine-2-carboxamide;

3,6-Difluoro-2-(2H-1,2,3-triazol-2-yl)-*N*-[(*1S,2S*)-2-{[5-(trifluoromethyl)pyrazin-2-yl]amino}cyclopentyl]benzamide;

2-(Difluoromethyl)-*N*-[(*1S,2S*)-2-{[5-(trifluoromethyl)pyrazin-2-yl]amino}cyclopentyl]benzamide;

2-Cyclopropyl-6-fluoro-*N*-[(*1S,2S*)-2-{[5-(trifluoromethyl)pyrazin-2-yl]amino}cyclopentyl]benzamide;

5-Methyl-2-(2H-1,2,3-triazol-2-yl)-*N*-[(*1S,2S*)-2-{[6-(trifluoromethyl)pyridin-3-yl]amino}cyclopentyl]benzamide;

N-Cyclobutyl-2,6-dimethoxy-*N*-[(*1S,2S*)-2-{[5-(trifluoromethyl)pyridin-2-yl]amino}cyclopentyl]benzamide;

2-Chloro-*N*-[(*1S,2S*)-2-{[5-(trifluoromethyl)pyridin-2-yl]amino}cyclopentyl]benzamide;

2-Chloro-*N*-[(*1S,2S*)-2-{[5-(trifluoromethyl)pyrimidin-2-yl]amino}cyclopentyl]benzamide;

2-Fluoro-6-methoxy-*N*-[(*1S,2S*)-2-{[5-(trifluoromethyl)pyridin-2-yl]amino}cyclopentyl]benzamide;

2,6-Difluoro-*N*-[(*1S,2S*)-2-{[5-(trifluoromethyl)pyridin-2-yl]amino}cyclopentyl]benzamide;

N-[(*1S,2S*)-2-{Methyl[5-(trifluoromethyl)pyrazin-2-yl]amino}cyclopentyl]-2-(2H-1,2,3-triazol-2-yl)benzamide;

5-Fluoro-*N*-[(*1S,2S*)-2-{methyl[5-(trifluoromethyl)pyrazin-2-yl]amino}cyclopentyl]-2-(2H-1,2,3-triazol-2-yl)benzamide;

2-Fluoro-*N*-[(*1S,2S*)-2-{methyl[5-(trifluoromethyl)pyrazin-2-yl]amino}cyclopentyl]-6-(2H-1,2,3-triazol-2-yl)benzamide;

N-[(*1S,2S*)-2-{[3-Methyl-5-(trifluoromethyl)pyrazin-2-yl]amino}cyclopentyl]-3-(2H-1,2,3-triazol-2-yl)pyridine-2-carboxamide;

N-[(*1S,2S*)-2-Methyl-2-{[5-(trifluoromethyl)pyrazin-2-yl]amino}cyclopentyl]-3-(2H-1,2,3-triazol-2-yl)pyridine-2-carboxamide;

N-[(*1S,2S*)-2-{[3-Methyl-5-(trifluoromethyl)pyrazin-2-yl]amino}cyclopentyl]-2-(2H-1,2,3-triazol-2-yl)benzamide;

N-[(*1S,2S*)-2-{[3-Methyl-5-(trifluoromethyl)pyrazin-2-yl]amino}cyclopentyl]-2-(pyrimidin-2-yl)benzamide;

5-Fluoro-*N*-[(*1S,2S*)-2-{[3-methyl-5-(trifluoromethyl)pyrazin-2-yl]amino}cyclopentyl]-2-(pyrimidin-2-yl)benzamide;

N-[(*1S,2S*)-2-Methyl-2-{[5-(trifluoromethyl)pyrazin-2-yl]amino}cyclopentyl]-2-(2H-1,2,3-triazol-2-yl)benzamide;

N-(2-Methyl-2-{[5-(trifluoromethyl)pyrazin-2-yl]amino}cyclopentyl)-2-(2H-1,2,3-triazol-2-yl)benzamide;

N-[(*1R,2R*)-2-Methyl-2-{[5-(trifluoromethyl)pyrazin-2-yl]amino}cyclopentyl]-2-(2H-1,2,3-triazol-2-yl)benzamide;

5-Fluoro-*N*-[(*1S,2S*)-2-methyl-2-{[5-(trifluoromethyl)pyrazin-2-yl]amino}cyclopentyl]-2-(2H-1,2,3-triazol-2-yl)benzamide;

N-[(*1S,2S*)-2-Methyl-2-{[5-(trifluoromethyl)pyrazin-2-yl]amino}cyclopentyl]-3-(1H-pyrazol-1-yl)pyridine-2-carboxamide;

3-Ethoxy-*N*-[(*1S,2S*)-2-methyl-2-{[5-(trifluoromethyl)pyrazin-2-yl]amino}cyclopentyl]pyridine-2-carboxamide,

2-Chloro-*N*-[(*1S,2S*)-2-methyl-2-{[5-(trifluoromethyl)pyrazin-2-yl]amino}cyclopentyl]-6-(2H-1,2,3-triazol-2-yl)benzamide;

2,6-Difluoro-*N*-[(*1S,2S*)-2-methyl-2-{[5-(trifluoromethyl)pyrazin-2-yl]amino}cyclopentyl]benzamide;

3-Cyclopropyl-*N*-[(*1S,2S*)-2-methyl-2-{[5-(trifluoromethyl)pyrazin-2-yl]amino}cyclopentyl]pyridine-2-carboxamide;

N-[(*1S,2S*)-2-Methyl-2-{[5-(trifluoromethyl)pyrazin-2-yl]amino}cyclopentyl]-3-(trifluoromethoxy)pyridine-2-carboxamide;

N-[(*1S,2S*)-2-Methyl-2-{[5-(trifluoromethyl)pyrazin-2-yl]amino}cyclopentyl]-2-(pyrimidin-2-yl)benzamide;

5-Chloro-*N*-[(*1S,2S*)-2-methyl-2-{[5-(trifluoromethyl)pyrazin-2-yl]amino}cyclopentyl]-2-(2H-1,2,3-triazol-2-yl)benzamide;

N-(2-Methyl-2-{[5-(trifluoromethyl)pyrimidin-2-yl]amino}cyclopentyl)-2-(2H-1,2,3-triazol-2-yl)benzamide;

N-(2-Methyl-2-{[5-(trifluoromethyl)pyridin-2-yl]amino}cyclopentyl)-2-(2H-1,2,3-triazol-2-yl)benzamide;

N-(2-Methyl-2-{[5-(trifluoromethoxy)pyridin-2-yl]amino}cyclopentyl)-2-(2H-1,2,3-triazol-2-yl)benzamide;

5-Chloro-2-(2H-1,2,3-triazol-2-yl)-*N*-[(*1S,2S*)-2-{[5-(trifluoromethyl)pyridin-2-yl]amino}cyclopentyl]benzamide;

3-Fluoro-2-(2H-1,2,3-triazol-2-yl)-*N*-[(*1S,2S*)-2-{[5-(trifluoromethyl)pyridin-2-yl]amino}cyclopentyl]benzamide;

3,5-Difluoro-2-(2H-1,2,3-triazol-2-yl)-*N*-[(*1S,2S*)-2-{[5-(trifluoromethyl)pyridin-2-yl]amino}cyclopentyl]benzamide;

3-(2H-1,2,3-Triazol-2-yl)-*N*-[(*1S,2S*)-2-{[5-(trifluoromethyl)pyridin-2-yl]amino}cyclopentyl]pyridine-2-carboxamide;

3-(1H-Pyrazol-1-yl)-*N*-[(*1S,2S*)-2-{[5-(trifluoromethyl)pyridin-2-yl]amino}cyclopentyl]pyridine-2-carboxamide;

2-Fluoro-6-(2H-1,2,3-triazol-2-yl)-*N*-[(*1S,2S*)-2-{[5-(trifluoromethyl)pyridin-2-yl]amino}cyclopentyl]benzamide;

N-(2-{[3-Fluoro-5-(trifluoromethyl)pyridin-2-yl]amino}-2-methylcyclopentyl)-3-(2H-1,2,3-triazol-2-yl)pyridine-2-carboxamide;

N-[(*1S,2S*)-2-{[3-Fluoro-5-(trifluoromethyl)pyridin-2-yl]amino}cyclopentyl]-2-(2H-1,2,3-triazol-2-yl)benzamide;

N-[(*1S,2S*)-2-{[3-Chloro-5-(trifluoromethyl)pyridin-2-yl]amino}cyclopentyl]-2-(2H-1,2,3-triazol-2-yl)benzamide;

N-[(*1S,2S*)-2-{[3-Bromo-5-(trifluoromethyl)pyridin-2-yl]amino}cyclopentyl]-2-(2H-1,2,3-triazol-2-yl)benzamide;

N-[(*1S,2S*)-2-{[3-Methyl-5-(trifluoromethyl)pyridin-2-yl]amino}cyclopentyl]-2-(2H-1,2,3-triazol-2-yl)benzamide;

N-[(*1S,2S*)-2-{[3-Cyclopropyl-5-(trifluoromethyl)pyrazin-2-yl]amino}cyclopentyl]-2-(2H-1,2,3-triazol-2-yl)benzamide;

N-[(*1S,2S*)-2-{[3-(Propan-2-yl)-5-(trifluoromethyl)pyrazin-2-yl]amino}cyclopentyl]-2-(2H-1,2,3-triazol-2-yl)benzamide;

N-[(*1S,2S*)-2-{[3-Ethyl-5-(trifluoromethyl)pyrazin-2-yl]amino}cyclopentyl]-2-(2H-1,2,3-triazol-2-yl)benzamide;

N-[(*1S,2S*)-2-[(5-Cyclopropylpyrazin-2-yl)amino]cyclopentyl]-2-(2H-1,2,3-triazol-2-yl)benzamide;

N-[(*1S,2S*)-2-{[5-(Propan-2-yl)pyrazin-2-yl]amino}cyclopentyl]-2-(2H-1,2,3-triazol-2-yl)benzamide;

N-[(*1S,2S*)-2-[(5-Ethylpyrazin-2-yl)amino]cyclopentyl]-2-(2H-1,2,3-triazol-2-yl)benzamide;

2-(2H-1,2,3-Triazol-2-yl)-*N*-[(*1S,2S*)-2-{[5-(trifluoromethoxy)pyridin-2-yl]amino}cyclopentyl]benzamide;

5-Chloro-2-(2H-1,2,3-triazol-2-yl)-*N*-[(*1S,2S*)-2-{[5-(trifluoromethoxy)pyridin-2-yl]amino}cyclopentyl]benzamide;

N-[(*1S,2S*)-2-[(5-Bromopyridin-2-yl)amino]cyclopentyl]-2-(2H-1,2,3-triazol-2-yl)benzamide;

N-[(*1S,2S*)-2-[(5-Bromo-3-methoxypyridin-2-yl)amino]cyclopentyl]-2-(2H-1,2,3-triazol-2-yl)benzamide;

2-(2H-1,2,3-Triazol-2-yl)-*N*-[(*1S,2S*)-2-{[4-(trifluoromethyl)pyridin-2-yl]amino}cyclopentyl]benzamide;

N-[(*1S,2S*)-2-{[3-Chloro-5-(trifluoromethyl)pyridin-2-yl]amino}cyclopentyl]-3-(2H-1,2,3-triazol-2-yl)pyridine-2-carboxamide;

N-[(*1S,2S*)-2-{[3-Fluoro-5-(trifluoromethyl)pyridin-2-yl]amino}cyclopentyl]-3-(2H-1,2,3-triazol-2-yl)pyridine-2-carboxamide;

N-[(*1S,2S*)-2-{[3-Methyl-5-(trifluoromethyl)pyridin-2-yl]amino}cyclopentyl]-3-(2H-1,2,3-triazol-2-yl)pyridine-2-carboxamide;

N-[(*1S,2S*)-2-{[3-Ethyl-5-(trifluoromethyl)pyrazin-2-yl]amino}cyclopentyl]-3-(2H-1,2,3-triazol-2-yl)pyridine-2-carboxamide;

N-(4,4-Difluoro-2-{[5-(trifluoromethyl)pyrazin-2-yl]amino}cyclopentyl)-2-(2H-1,2,3-triazol-2-yl)benzamide;

N-(4,4-Difluoro-2-{[5-(trifluoromethyl)pyrimidin-2-yl]amino}cyclopentyl)-2-(2H-1,2,3-triazol-2-yl)benzamide;

N-(4,4-Difluoro-2-{[5-(trifluoromethyl)pyridin-2-yl]amino}cyclopentyl)-2-(2H-1,2,3-triazol-2-yl)benzamide;

N-[(*1S,2S*)-4,4-Difluoro-2-{[5-(trifluoromethoxy)pyridin-2-yl]amino}cyclopentyl]-2-(2H-1,2,3-triazol-2-yl)benzamide;

N-[(*1S,2S*)-4,4-Difluoro-2-{[3-fluoro-5-(trifluoromethyl)pyridin-2-yl]amino}cyclopentyl]-2-(2H-1,2,3-triazol-2-yl)benzamide;

2-(5-Ethoxypyrimidin-2-yl)-*N*-[(*1S,2S*)-2-{[5-(trifluoromethyl)pyrazin-2-yl]amino}cyclopentyl]benzamide;

2-Fluoro-6-methoxy-*N*-[(*1S,2S*)-2-{[5-(trifluoromethyl)pyrazin-2-yl]amino}cyclopentyl]benzamide;

N-[(*1S,2S*)-2-{[3-Methyl-5-(trifluoromethyl)pyridin-2-yl]amino}cyclopentyl]-3-(pyrimidin-2-yl)pyridine-2-carboxamide;

N-[(*1S,2S*)-2-{[3-Fluoro-5-(trifluoromethyl)pyridin-2-yl]amino}cyclopentyl]-2-(pyrimidin-2-yl)benzamide;

5-Fluoro-*N*-[(*1S,2S*)-2-{[3-fluoro-5-(trifluoromethyl)pyridin-2-yl]amino}cyclopentyl]-2-(pyrimidin-2-yl)benzamide;

N-[(*1S,2S*)-2-{[3-Fluoro-5-(trifluoromethyl)pyridin-2-yl]amino}cyclopentyl]-2-(3-methyl-1,2,4-oxadiazol-5-yl)benzamide;

2-(3-Methyl-1,2,4-oxadiazol-5-yl)-*N*-[(*1S,2S*)-2-{[3-methyl-5-(trifluoromethyl)pyrazin-2-yl]amino}cyclopentyl]benzamide;

N-[(*1S,2S*)-2-{[3-Cyclopropyl-5-(trifluoromethyl)pyrazin-2-yl]amino}cyclopentyl]-3-(2H-1,2,3-triazol-2-yl)pyridine-2-carboxamide;

N-[(*1S,2S*)-2-{[3-Cyclopropyl-5-(trifluoromethyl)pyrazin-2-yl]amino}cyclopentyl]-3-(pyrimidin-2-yl)pyridine-2-carboxamide;

N-[(*1S,2S*)-2-Methyl-2-{[5-(trifluoromethyl)pyrazin-2-yl]amino}cyclopentyl]-3-(pyrimidin-2-yl)pyridine-2-carboxamide;

2-(3-Methyl-1,2,4-oxadiazol-5-yl)-*N*-[(*1S,2S*)-2-methyl-2-{[5-(trifluoromethyl)pyrazin-2-yl]amino}cyclopentyl]benzamide;

N-(2-{[3-Fluoro-5-(trifluoromethyl)pyridin-2-yl]amino}-2-methylcyclopentyl)-3-(pyrimidin-2-yl)pyridine-2-carboxamide;

N-[(*1S,2S*)-2-{[3-Fluoro-5-(trifluoromethyl)pyridin-2-yl]amino}cyclopentyl]-3-(pyrimidin-2-yl)pyridine-2-carboxamide;

N-[(*1S,2S*)-2-{[3-Chloro-5-(trifluoromethyl)pyridin-2-yl]amino}cyclopentyl]-3-(pyrimidin-2-yl)pyridine-2-carboxamide;

N-[(*1S,2S*)-2-{[3-Ethyl-5-(trifluoromethyl)pyrazin-2-yl]amino}cyclopentyl]-2-(3-methyl-1,2,4-oxadiazol-5-yl)benzamide;

N-[(*1S,2S*)-2-{[3-Ethyl-5-(trifluoromethyl)pyrazin-2-yl]amino}cyclopentyl]-3-(pyrimidin-2-yl)pyridine-2-carboxamide;

N-[(*1S,2S*)-2-{[3-Ethyl-5-(trifluoromethyl)pyrazin-2-yl]amino}cyclopentyl]-2-(pyrimidin-2-yl)benzamide;

N-(2-Methyl-2-{[5-(trifluoromethyl)pyrimidin-2-yl]amino}cyclopentyl)-3-(pyrimidin-2-yl)pyridine-2-carboxamide;

N-(2-Methyl-2-{[5-(trifluoromethyl)pyrimidin-2-yl]amino}cyclopentyl)-3-(2H-1,2,3-triazol-2-yl)pyridine-2-carboxamide;

N-(2-Methyl-2-{[5-(trifluoromethyl)pyridin-2-yl]amino}cyclopentyl)-3-(2H-1,2,3-triazol-2-yl)pyridine-2-carboxamide;

N-(2-Methyl-2-{[5-(trifluoromethyl)pyridin-2-yl]amino}cyclopentyl)-3-(pyrimidin-2-yl)pyridine-2-carboxamide;

N-[(*1S,2S*)-2-{[5-(Difluoromethoxy)pyridin-2-yl]amino}-4,4-difluorocyclopentyl]-2-(2H-1,2,3-triazol-2-yl)benzamide;

N-[(*1S,2S*)-2-{[3-Ethyl-5-(trifluoromethyl)pyrazin-2-yl]amino}cyclopentyl]-5-fluoro-2-(pyrimidin-2-yl)benzamide;

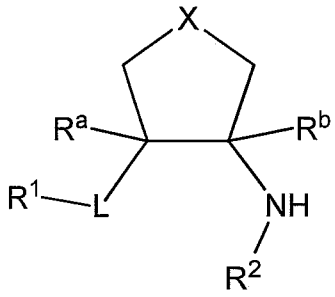
N-[(*1S,2S*)-2-{[3-Methyl-5-(trifluoromethyl)pyrazin-2-yl]amino}cyclopentyl]-3-(pyrimidin-2-yl)pyridine-2-carboxamide;

2-(5-Methyl-1,3,4-oxadiazol-2-yl)-*N*-[(*1S,2S*)-2-methyl-2-{[5-(trifluoromethyl)pyrazin-2-yl]amino}cyclopentyl]benzamide;

enantiomers thereof and pharmaceutically acceptable salts of any of the foregoing.

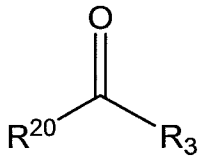
12. A process for the preparation of a compound of formula (I) or a pharmaceutically acceptable salt thereof as defined in claim 1, which comprises

(i) reacting a compound of formula



(II)

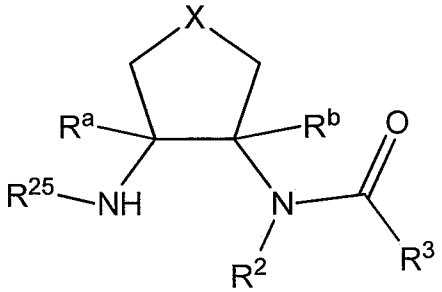
wherein L, X, R^a, R^b, R^1 and R^2 are as defined in formula (I), with a compound of formula



(III)

wherein R^{20} represents a halogen atom or a hydroxyl group and R^3 is as defined in formula (I), or a salt thereof; or

(ii) when L represents NH or $N(CH_3)$, reacting a compound of formula



(IV)

wherein R^{25} represents a hydrogen atom or methyl group and X, R^a, R^b, R^2 and R^3 are as defined in formula (I), with a compound of formula (V), $R^1 - LG^1$, wherein LG^1 represents a leaving group and R^1 is as defined in formula (I);

and optionally thereafter carrying out one or more of the following procedures:

- converting a compound of formula (I) into another compound of formula (I)
- removing any protecting groups
- forming a pharmaceutically acceptable salt.

13. A pharmaceutical composition comprising a compound of formula (I) or a pharmaceutically acceptable salt thereof as claimed in claim 1, in association with a pharmaceutically acceptable adjuvant, diluent or carrier, and optionally one or more other therapeutic agents.

14. A composition according to claim 13, wherein the one or more other therapeutic agents are selected from carbamazepine, olanzapine, quetiapine, verapamil, lamotrigine, oxcarbazepine, risperidone, aripiprazole, ziprasidone and lithium.

15. Use of a compound of formula (I) or a pharmaceutically acceptable salt thereof as claimed in claim 1 in the manufacture of a medicament for treating schizophrenia, schizophreniform disorder, schizoaffective disorder, cognitive disorders or pain.

16. Use of a compound of formula (I) or a pharmaceutically acceptable salt thereof as claimed in claim 1 in the manufacture of a medicament for treating post-traumatic stress disorder, panic disorders or addiction.

17. A compound of formula (I) as defined in claim 1, wherein the compound is N-[(1S,2S)-2-Methyl-2-{[5-(trifluoromethyl)pyrazin-2-yl]amino}cyclopentyl]-3-(2H-1,2,3-triazol-2-yl)pyridine-2-carboxamide, enantiomers thereof and pharmaceutically acceptable salts of any of the foregoing.

18. A compound of formula (I) as defined in claim 1, wherein the compound is N-[(1S,2S)-2-{[3-Ethyl-5-(trifluoromethyl)pyrazin-2-yl]amino}cyclopentyl]-3-(2H-1,2,3-triazol-2-yl)pyridine-2-carboxamide, enantiomers thereof and pharmaceutically acceptable salts of any of the foregoing.

19. A compound of formula (I) as defined in claim 1, wherein the compound is N-[(1S,2S)-2-Methyl-2-{[5-(trifluoromethyl)pyrazin-2-yl]amino}cyclopentyl]-3-(2H-1,2,3-triazol-2-yl)pyridine-2-carboxamide and pharmaceutically acceptable salts thereof.

20. A compound of formula (I) as defined in claim 1, wherein the compound is N-[(1S,2S)-2-{[3-Ethyl-5-(trifluoromethyl)pyrazin-2-yl]amino}cyclopentyl]-3-(2H-1,2,3-triazol-2-yl)pyridine-2-carboxamide and pharmaceutically acceptable salts thereof.