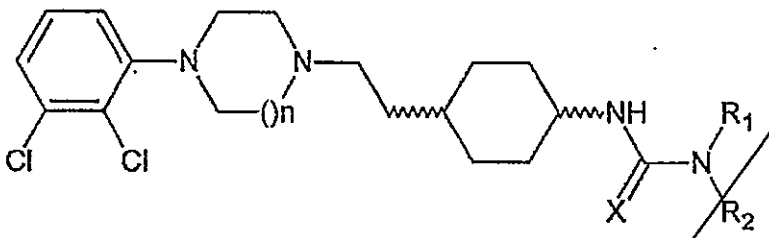
Claims:

1. A (thio-carbomoyl-cyclohexane derivative of formula (I)



(I)

wherein

R_1 and R_2 are each, independently hydrogen, alkyl, alkenyl, aryl, cycloalkyl, aroyl, or R_1 and R_2 form a heterocyclic ring with the adjacent nitrogen atom;

X is O or S;

n is 1 or 2;

and/or geometric isomers and/or stereoisomers and/or diastereomers and/or salts and/or hydrates and/or solvates and/or polymorphs thereof for use in the treatment of schizophrenia.

2. The use according to claim 1 , wherein the compound of formula (I) is trans-4- {2- [4-(2,3 -dichlorophenyl)-piperazin- 1-yl] -ethyl } -N,N-dimethylcarbamoyl- cyclohexylamine and/or salts and/or hydrates and/or solvates and/or polymorphs thereof.

3. The use according to claim 1, wherein the compound of formula (I) is trans-4- {2- [4-(2,3-dichlorophenyl)-piperazin-l-yl]-ethyl}-N,N-dimethylcarbamoyl- cyclohexylamine hydrochloride and/or hydrates and/or solvates and/or polymorphs thereof.

4. The use according to claim 1 wherein the therapeutically effective amount of a compound of formula (I) is about 0.1 to 12 mg.

5. The use according to claim 4 wherein the therapeutically effective amount of a compound of formula (I) is about 0.5 mg.

6. The use according to claim 4 wherein the therapeutically effective amount of a compound of formula (I) is about 1.0 mg.

7. The use according to claim 4 wherein the therapeutically effective amount of a compound of formula (I) is about 1.5 mg.

8. The use according to claim 4 wherein the therapeutically effective amount of a compound of formula (I) is about 3 mg.

9. The use according to claim 4 wherein the therapeutically effective amount of a compound of formula (I) is about 4.5 mg.

10. The use according to claim 4 wherein the therapeutically effective amount of a compound of formula (I) is about 6 mg.

11. The use according to claim 4 wherein the therapeutically effective amount of a compound of formula (I) is about 9 mg.

12. The use according to claim 4 wherein the therapeutically effective amount of a compound of formula (I) is about 12 mg.

13. The use according to any one of claims 4-12, wherein a compound of formula (I) is administered in one, two, three or four divided daily doses.

14. The use according to any one of claims 4-13, wherein a compound of formula (I) provides therapeutic effects in the treatment of cognitive symptoms of schizophrenia.

15. The use according to any one of claims 4-13, wherein a compound of formula (I) provides therapeutic effects in the treatment of negative symptoms of schizophrenia.

16. The use according to any one of claims 4-13, wherein a compound of formula (I) provides therapeutic effects in the treatment of positive symptoms of schizophrenia.

17. The use according to any one of claims 4-13, wherein a compound of formula (I) provides therapeutic effects in the treatment of affective and residual symptoms of schizophrenia.

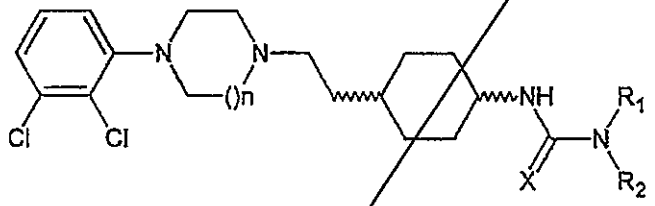
18. The use according to any one of claims 4-13, wherein a compound of formula (I) provides therapeutic effects in the treatment of secondary social and occupational dysfunctions of schizophrenia.

19. The use according to any one of claims 4-13, wherein a compound of formula (I) provides therapeutic effects in the treatment of schizophreniform disorder and schizoaffective disorders.

20. The use according to any one of claims 4-19, wherein a compound of formula (I) is administered as an adjunctive treatment to one or more additional therapeutic agents.

21. The use according to any one of claims 4-19, wherein a compound of formula (I) is co-administered as a combination therapy with one or more one or more additional therapeutic agents.

22. The use of (thio)-carbamoyl-cyclohexane derivatives of formula (I)



(I)

wherein

R_1 and R_2 are each, independently hydrogen, alkyl, alkenyl, aryl, cycloalkyl, aroyl, or Ri and R_2 form a heterocyclic ring with the adjacent nitrogen atom;

X is O or S;

n is 1 or 2;

and/or geometric isomers and/or stereoisomers and/or diastereomers and/or salts and/or hydrates and/or solvates and/or polymorphs thereof in a therapeutically effective amount in the manufacture of a medicament for the treatment of schizophrenia.

23. The use according to claim 22 characterized by that the compound of formula (I) is trans-4-{2-[4-(2,3-dichlorophenyl)-piperazin-l-yl]-ethyl}-N,N-dimethylcarbamoyl-cyclohexylamine and/or salts and/or hydrates and/or solvates and/or polymorphs thereof.

24. The use according to claim 22 characterized by that the compound of formula (I) is trans-4- {2-[4-(2,3 -dichlorophenyl)-piperazin- 1 -yl] -ethyl} -N,N-dimethylcarbamoyl-

cyclohexylamine hydrochloride and/or hydrates and/or solvates and/or polymorphs thereof.

25. The use according to any one of the claims 22-24 characterized by that the therapeutically effective amount of a compound of formula (I) is about 0.1 to 12 mg.

26. The use according to claim 25 characterized by that the therapeutically effective amount of a compound of formula (I) is about 0.5 mg.

27. The use according to claim 25 characterized by that the therapeutically effective amount of a compound of formula (I) is about 1.0 mg.

28. The use according to claim 25 characterized by that the therapeutically effective amount of a compound of formula (I) is about 1.5 mg.

29. The use according to claim 25 characterized by that the therapeutically effective amount of a compound of formula (I) is about 3.0 mg.

30. The use according to claim 25 characterized by that the therapeutically effective amount of a compound of formula (I) is about 4.5 mg.

31. The use according to claim 25 characterized by that the therapeutically effective amount of a compound of formula (I) is about 6 mg.

32. The use according to claim 25 characterized by that the therapeutically effective amount of a compound of formula (I) is about 9 mg.

33. The use according to claim 25 characterized by that the therapeutically effective amount of a compound of formula (I) is about 12 mg.

34. The use according to any one of claims 25-33 characterized by that the therapeutically effective amount of a compound of formula (I) is divided into one, two, three or four daily doses.

35. The use according to any one of claims 25-34 characterized by that it is for the treatment of cognitive symptoms of schizophrenia.

36. The use according to any one of claims 25-34 characterized by that it is for the treatment of negative symptoms of schizophrenia.

37. The use according to any one of claims 25-34 characterized by that it is for the treatment of positive symptoms of schizophrenia.

38. The use according to any one of claims 25-34 characterized by that it is for the treatment of cognitive symptoms of schizophrenia.

39. The use according to any one of claims 25-34 characterized by that it is for the treatment of affective and residual symptoms of schizophrenia.

40. The use according to any one of claims 25-34 characterized by that it is for the treatment of secondary social and occupational dysfunctions of schizophrenia.

41. The use according to any one of claims 25-34 characterized by that it is for the treatment of schizophreniform disorder and schizoaffective disorders.

Claims

1. Trans-4-{2-[4-(2,3-dichlorophenyl)-piperazin-1-yl]-ethyl}-N,N-dimethylcarbamoyl-cyclohexylamine and/or salts and/or hydrates and/or solvates and/or polymorphs thereof for use in a method of treating schizophrenia with the therapeutically effective amount of 1.5, 3.0 or 4.5 mg/day.

2. Trans-4-{2-[4-(2,3-dichlprophenyl)-piperazin-1-yl]-ethyl}-N,N-dimethylcarbamoyl-cyclohexylamine for use according to claim 1, in the form of trans-4-{2-[4-(2,3-dichlorophenyl)-piperazin-1-yl]-ethyl}-N,N-dimethylcarbamoyl-cyclohexylamine hydrochloride and/or hydrates and/or solvates and/or polymorphs thereof.

3. Trans-4-{2-[4-(2,3-dichlorophenyl)-piperazin-l-yl]-ethyl}-N,N-dimethylcarbamoyl-cyclohexylamine for use according to claim 1 or 2, wherein the therapeutically effective amount is divided into one, two, three or four daily doses.

4. Trans-4-{2-[4-(2,3-dichlorophenyl)-piperazin-1-yl]-ethyl}-N,N-dimethylcarbamoyl-cyclohexylamine for use according to any one of claims 1-3, wherein it is for use in a method of treating cognitive symptoms of schizophrenia.

5. Trans-4-{2-[4-(2,3-dichlorophenyl)-piperazin-l-yl]-ethyl}-N,N-dimethylcarbamoyl-cyclohexylamine for use according to any one of claims 1-3, wherein it is for use in a method of treating negative symptoms of schizophrenia.

6. Trans-4-{2-[4-(2,3-dichlorophenyl)-piperazin-1-yl]-ethyl}-N,N-dimethylcarbamoyl-cyclohexylamine for use according to any one of claims 1-3, wherein it is for use in a method of treating positive symptoms of schizophrenia.

7. Trans-4-{2-[4-(2,3-dichlorophenyl)-piperazin-1-yl]-ethyl}-N,N-dimethylcarbamoyl-cyclohexylamine for use according to any one of claims 1-3, wherein it is for use in a method of treating affective and residual symptoms of schizophrenia.

8. (Trans-4-{2-[4-(2,3-dichlorophenyl)-piperazin-l-yl]-ethyl}-N,N-dimethylcarbamoyl-cyclohexylamine for use according to any one of claims 1-3, wherein it is for use in a method of treating secondary social and occupational dysfunctions of schizophrenia.

9. Trans-4-{2-[4-(2,3-dichlorophenyl)-piperazin-1-yl]-ethyl}-N,N-dimethylcarbamoyl-cyclohexylamine for use according to any one of claims 1-3, wherein it is for use in a method of treating schizophrenifonn disorder and schizoaffective disorders.