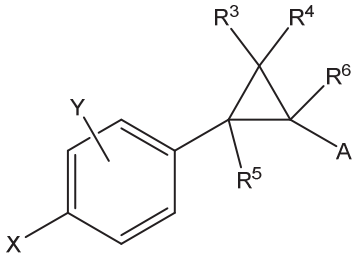
WHAT IS CLAIMED IS:

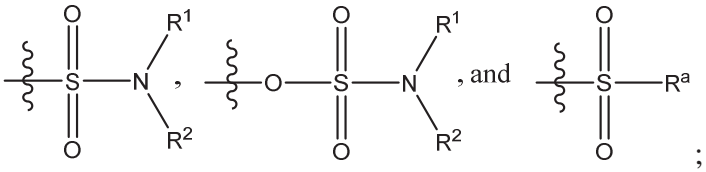
1. A compound having the formula I:



(I),

or a pharmaceutically acceptable salt thereof, wherein:

X is selected from



;

Y is 4 substituents, each independently selected from H, $(C_1$-$C_4)$alkyl, halogen, and OH, wherein said alkyl is optionally substituted with one or more halogen or OH;

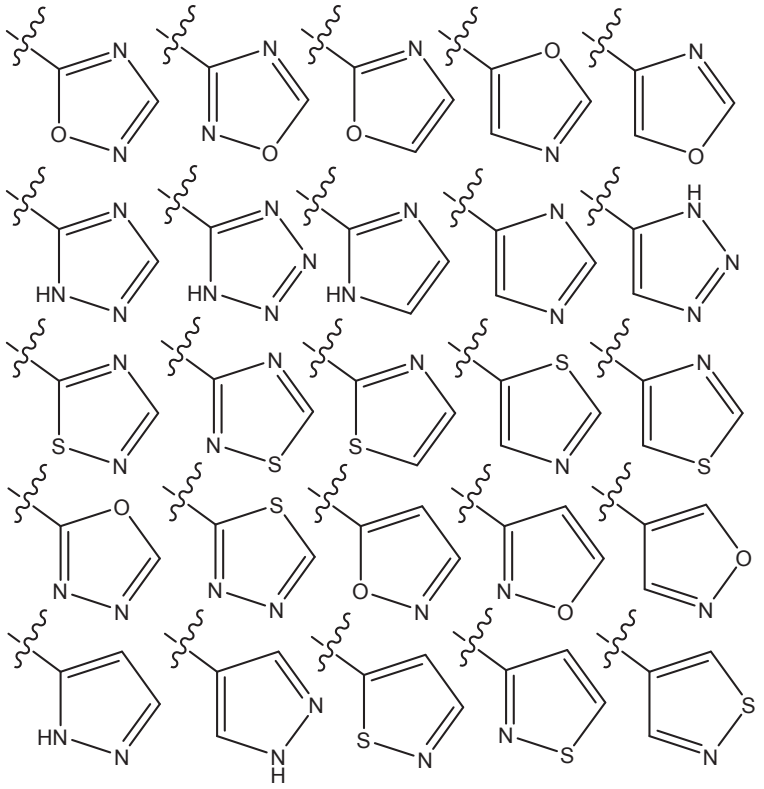
A is a 5-membered heteroaryl ring which is substituted with 1 to 3 R groups each independently selected from OH, oxo, NR^7R^8, CN, alkoxy, halogen, aminoalkyl, hydroxyalkyl, alkyl, cycloalkyl, aryl, heteroaryl, and heterocyclyl, wherein said alkoxy, aminoalkyl, hydroxyalkyl, alkyl, cycloalkyl, aryl, heteroaryl and heterocyclyl are optionally substituted with one or more substituents independently selected from F, Cl, Br, OH, oxo, CF_3, OCF_3, CN, $(C_1$-$C_6)$alkyl, $O(C_1$-$C_4)$alkyl, $S(C_1$-$C_4)$alkyl, $C{=}O(C_1$-$C_4)$alkyl, $(C{=}O)NR^7R^8$, $(C{=}O)OR^7$, $(C_2$-$C_4)$alkynyl, $(C_3$-$C_6)$cycloalkyl, $O(C_3$-$C_6)$cycloalkyl, $C{=}O(C_3$-$C_6)$cycloalkyl, aryl, heteroaryl and heterocyclyl, wherein said alkyl, aryl, heteroaryl and heterocyclyl are optionally independently substituted with one or more halogen, CF_3, OH and oxo;

R^1 is H or $(C_1$-$C_4)$alkyl;

R^2 is H or $(C_1$-$C_4)$alkyl;

R^3 is H, halogen or $(C_1$-$C_4)$alkyl, wherein said alkyl is optionally substituted with one or more halogen;

R^4 is H, halogen or $(C_1$-$C_4)$alkyl, wherein said alkyl is optionally substituted with one or more halogen;



each substituted with 1 to 3 R groups independently selected from $(C_1$-$C_4)$alkyl, $(C_3$-$C_6)$cycloalkyl, aryl, heteroaryl and heterocyclyl, wherein each are optionally substituted with one or more substituents independently selected from F, Cl, Br, OH, oxo, CF_3, OCF_3, CN, $(C_1$-$C_4)$alkyl, $O(C_1$-$C_4)$alkyl, $S(C_1$-$C_4)$alkyl, $C{=}O(C_1$-$C_4)$alkyl, $(C_2$-$C_4)$alkynyl, $(C_3$-$C_6)$cycloalkyl, $O(C_3$-$C_6)$cycloalkyl, $C{=}O(C_3$-$C_6)$cycloalkyl, aryl, heteroaryl and heterocyclyl, wherein said alkyl, aryl, heteroaryl and heterocyclyl are optionally independently substituted with one or more F, Cl, CF_3, OH and oxo.

5. The compound of any one of claims 1 to 4, or a pharmaceutically acceptable salt thereof, wherein R^5 and R^6 are independently H or methyl.

6. The compound of any one of claims 1 to 5, or a pharmaceutically acceptable salt thereof, wherein R^3 and R^4 are independently H, F or methyl.

7. The compound of claim 1, or a pharmaceutically acceptable salt thereof, having the formula:

4-[(1*R*,3*R*)-2,2-Dimethyl-3-{5-[1-(trifluoromethyl)cyclopropyl]-1,2,4-oxadiazol-3-yl}cyclopropyl]benzenesulfonamide;
4-{(1*R*,3*R*)-2,2-Dimethyl-3-[5-(piperidin-1-yl)-1,2,4-oxadiazol-3-yl]cyclopropyl}benzenesulfonamide;
4-[(1*R*,2*R*)-2-(2-Cyclopentyl-1,3-oxazol-5-yl)cyclopropyl]benzenesulfonamide;
4-[(1*S*,2*S*)-2-(2-Phenyl-1,3-thiazol-5-yl)cyclopropyl]benzenesulfonamide;
4-[*trans*-2,2-Difluoro-3-(5-phenyl-1,3-oxazol-2-yl)cyclopropyl]benzenesulfonamide;
4-[2-Methyl-3-(3-phenyl-1,2,4-oxadiazol-5-yl)cyclopropyl]benzenesulfonamide;
4-[*trans*-2-(3-Phenyl-1,2,4-oxadiazol-5-yl)spiro[2.4]hept-1-yl]benzenesulfonamide;
4-{*trans*-2-[3-(3-Fluorophenyl)-1,2,4-thiadiazol-5-yl]cyclopropyl}benzenesulfonamide;
4-[*trans*-2,2-Dichloro-3-(3-cyclopentyl-1,2,4-oxadiazol-5-yl)cyclopropyl]benzenesulfonamide;
4-{*trans*-3-[5-(3-Fluorophenyl)isoxazol-3-yl]-2,2-dimethylcyclopropyl}benzenesulfonamide;
4-[*trans*-2,2-Dimethyl-3-(3-phenyl-1,2,4-oxadiazol-5-yl)cyclopropyl]-3-fluorobenzenesulfonamide;
4-[*trans*-2,2-Dimethyl-3-(3-phenyl-1,2,4-oxadiazol-5-yl)cyclopropyl]-2-methylbenzenesulfonamide; and
4-[*trans*-2,2-Dichloro-3-(3-phenyl-1,2,4-oxadiazol-5-yl)cyclopropyl]benzenesulfonamide;
or a pharmaceutically acceptable salt thereof.

11. A pharmaceutical composition comprising (i) a pharmaceutically acceptable carrier and (ii) a compound of any one of claims 1-10 or a pharmaceutically acceptable salt thereof.

12. The pharmaceutical composition of claim 11, further comprising a second therapeutic agent selected from the group consisting of acetylcholinesterase inhibitors; NMDA receptor antagonists; antipsychotics; MAO-B inhibitors; and levodopa.

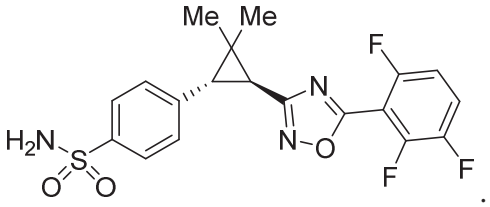
13. A compound of any one of claims 1 to 10, or a pharmaceutically acceptable salt thereof, for use in therapy.

14. A use of the compound of any one of claims 1 to 10, or a pharmaceutically acceptable salt thereof, in the preparation of a medicament for

the treatment of cognitive impairments associated with Alzheimer's disease, Parkinson's disease, and schizophrenia.

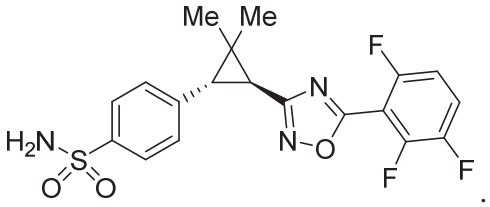
15. A compound according to any one of claims 1 to 10, or a pharmaceutically acceptable salt thereof, for use in treating a patient with cognitive impairments associated with Alzheimer's disease, Parkinson's disease, and schizophrenia.

16. A compound which is



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17. A pharmaceutically acceptable salt of a compound which is



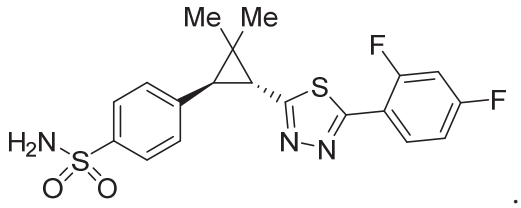
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18. A pharmaceutical composition comprising (i) a pharmaceutically acceptable carrier and (ii) the compound of claim 16.

19. A pharmaceutical composition comprising (i) a pharmaceutically acceptable carrier and (ii) the pharmaceutically acceptable salt of claim 17.

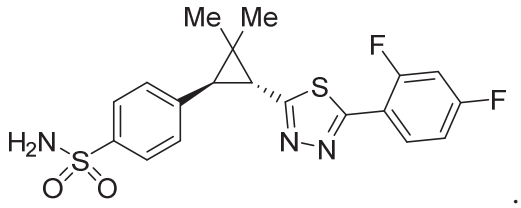
20. Use of a compound of claim 16 in the manufacture of a medicament for the treatment of mild to moderate dementia of the Alzheimer's type.

21. A compound which is



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22. A pharmaceutically acceptable salt of a compound which is



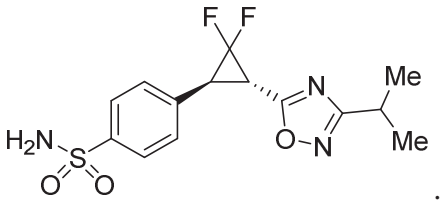
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23. A pharmaceutical composition comprising (i) a pharmaceutically acceptable carrier and (ii) the compound of claim 21.

24. A pharmaceutical composition comprising (i) a pharmaceutically acceptable carrier and (ii) the pharmaceutically acceptable salt of claim 22.

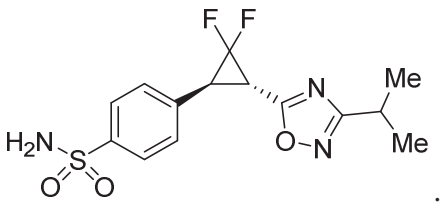
25. Use of a compound of claim 21 in the manufacture of a medicament for the treatment of mild to moderate dementia of the Alzheimer's type.

26. A compound which is



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27. A pharmaceutically acceptable salt of a compound which is



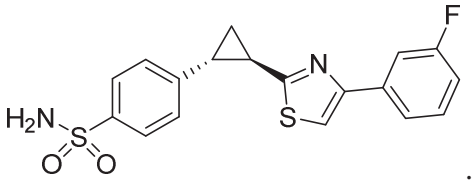
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28. A pharmaceutical composition comprising (i) a pharmaceutically acceptable carrier and (ii) the compound of claim 26.

29. A pharmaceutical composition comprising (i) a pharmaceutically acceptable carrier and (ii) the pharmaceutically acceptable salt of claim 27.

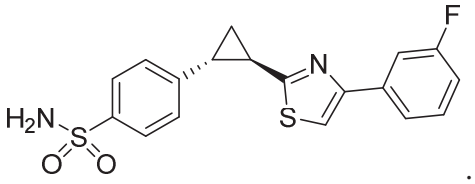
30. Use of a compound of claim 26 in the manufacture of a medicament for the treatment of mild to moderate dementia of the Alzheimer's type.

31. A compound which is



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32. A pharmaceutically acceptable salt of a compound which is



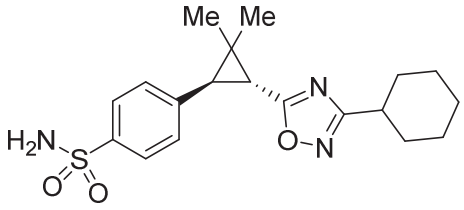
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33. A pharmaceutical composition comprising (i) a pharmaceutically acceptable carrier and (ii) the compound of claim 31.

34. A pharmaceutical composition comprising (i) a pharmaceutically acceptable carrier and (ii) the pharmaceutically acceptable salt of claim 32.

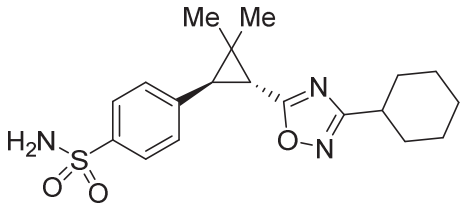
35. Use of a compound of claim 31 in the manufacture of a medicament for the treatment of mild to moderate dementia of the Alzheimer's type.

36. A compound which is



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37. A pharmaceutically acceptable salt of a compound which is



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38. A pharmaceutical composition comprising (i) a pharmaceutically acceptable carrier and (ii) the compound of claim 36.

39. A pharmaceutical composition comprising (i) a pharmaceutically acceptable carrier and (ii) the pharmaceutically acceptable salt of claim 37.

40. Use of a compound of claim 36 in the manufacture of a medicament for the treatment of mild to moderate dementia of the Alzheimer's type.