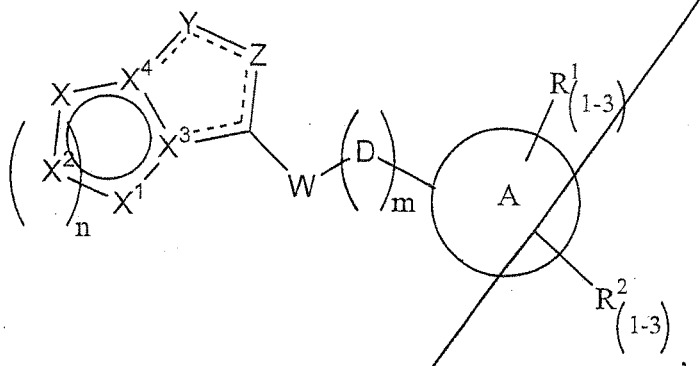
CLAIMS

What is claimed is:

1. The use of a compound having a structure represented by a formula:



wherein: X is selected from S, CR^5, N or NR^5; X^1 is selected from S, CR^5, N or NR^5; X^2 is independently selected from S, CR^5, N or NR^5; X^3 is C or N; X^4 is C or N; m is 0, 1 or 2; n is 1 or 2; D, when present, is CH_2, CR^3R^4, CONH, or $CONR^3$; Y is selected from N, NH or NR^5; Z is N, NR^5, CR^5; W is selected from S, O, NH, or NR^5; A is selected from C_3-C_{12} cycloalkyl or C_3-C_{12} cycloalkenyl or aryl or heteroaryl or C_3-C_{12} heterocycloalkyl or C_3-C_{12} heterocycloalkenyl or 3-8 membered ring comprising C, O, S, and/or N; R^1 is independently selected from hydrogen, halogen, aryl, heteroaryl, C_{1-10} alkyl, C_{3-10} cycloalkyl, OC_{1-10} alkyl (which would contain a C_{3-8} membered ring containing C, O, S and/or N, optionally substituted with one or more R^4), OAryl (optionally substituted with R^1 and/or R^2), OHeteroaryl (optionally substituted with R^1 and/or R^2), NR^3R^4, CR^3R^4, $CONR^3R^4$, $COCR^3R^4$, COAryl (optionally substituted with R^1 and/or R^2), COHeteroaryl (optionally substituted with R^1 and/or R^2), $S(O)_{0-2}NR^3R^4$, $S(O)_{0-2}CR^3R^4$, CN or CF_3; R^2 is independently selected from hydrogen, halogen, aryl, heteroaryl, C_{1-10} alkyl, C_{3-10} cycloalkyl, OC_{1-10} alkyl (which would contain a C_{3-8} membered ring containing C, O, S and/or N, optionally substituted with one or more R_4), OAryl (optionally substituted with R^1 and/or R^2), OHeteroaryl (optionally substituted with R^1 and/or R^2), NR_3R_4, CR^3R^4, $CONR^3R^4$, $COCR^3R^4$, COAryl (optionally substituted with R^1 and/or R^2), COHeteroaryl (optionally substituted with R^1 and/or R^2), $S(O)_{0-2}NR^3R^4$, $S(O)_{0-2}CR^3R^4$, CN or CF_3; R^1 and R^2 can optionally cyclize to form a ring comprising C_3-C_{12} cycloalkyl or C_3-C_{12} cycloalkenyl or aryl or heteroaryl or C_3-C_{12}

heterocycloalkyl or 3-8 membered ring comprising C, O, S, and/or N, optionally substituted with one or more R_4; R^3 is selected from hydrogen, C_{1-6} alkyl, C_{3-10} cycloalkyl, aryl, benzyl, heteroaryl, halogen, CN, CF_3, $CONR^3R^4$, $S(O)_{0-2}NR^3R^4$; R^4 is selected from hydrogen, C_{1-6} alkyl, C_{3-10} cycloalkyl, aryl, benzyl, heteroaryl, halogen, CN, CF_3, $CONR^3R^4$, CO, $S(O)_{0-2}NR^3R^4$; R^3 and R^4 can optionally cyclize to form a ring comprising C_3-C_{12} cycloalkyl or C_3-C_{12} cycloalkenyl or aryl or heteroaryl or C_3-C_{12} heterocycloalkyl or 3-8 membered ring comprising C, O, S, and/or N, optionally substituted with one or more R^5; R^5 is selected from hydrogen, halogen, C_{1-6} alkyl, C_{3-10} cycloalkyl, aryl, heteroaryl, benzyl, OC_{1-10} alkyl (which could contain a C_{3-8} membered ring containing C, O, S or N, optionally substituted with one or more R^4), CN, CF_3; or a pharmaceutically acceptable salt thereof or a pharmaceutically acceptable derivative thereof,

in the manufacture of a medicament for the treatment of a neurotransmission dysfunction and other disease states associated with mGluR4 activity in a mammal.

2. The use of claim 1, wherein the dysfunction is Parkinson's disease.

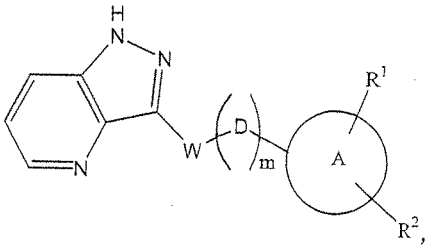
3. The use of claim 1, wherein the dysfunction is schizophrenia, psychosis, "schizophrenia-spectrum" disorder, depression, bipolar disorder, cognitive disorder, delirium, amnestic disorder, anxiety disorder, attention disorder, obesity, eating disorder, or NMDA receptor-related disorder.

4. The use of claim 1, wherein the dysfunction is Parkinson's disease; anxiety; motor effects after alcohol consumption; neurogenic fate commitment and neuronal survival; epilepsy; or certain cancers, for example, medulloblastoma, inflammation (for example, multiple sclerosis) and metabolic disorders (for example, diabetes) and taste enhancing associated with glutamatergic dysfunction and diseases in which mGluR4 receptor is involved.

5. The use of claim 1, wherein the mammal has been diagnosed with the dysfunction.

6. The use of claim 1, further comprising the step of identifying a mammal having a need for treatment of the dysfunction.

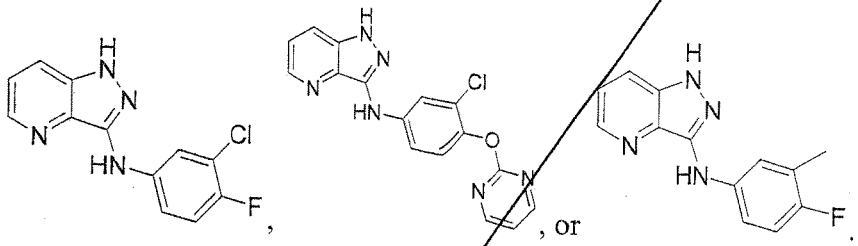
7. The use of claim 1, wherein the compound is of the following formula:



wherein W is NH, A is phenyl, and R^1 is halo.

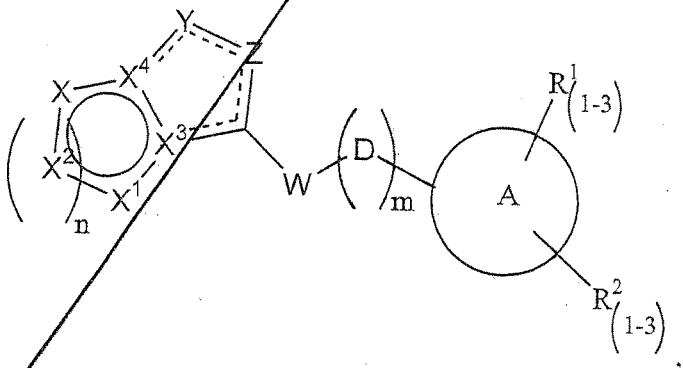
8. The use of claim 7, wherein R^2 is O-heteroaryl.

9. The use of claim 1, wherein the compound is of the following formula:



, or

10. The use of a compound having a structure represented by a formula:

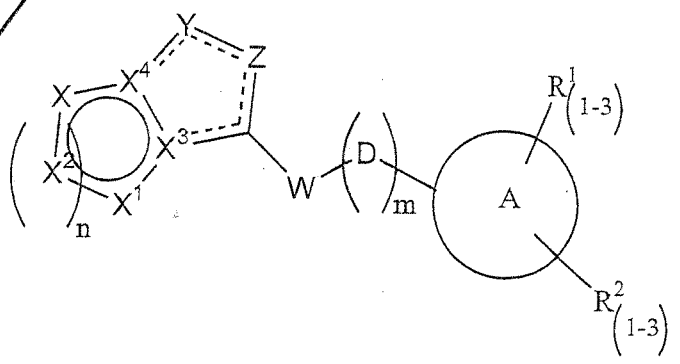


wherein: X is selected from S, CR^5, N or NR^5; X^1 is selected from S, CR^5, N or NR^5; X^2 is independently selected from S, CR^5, N or NR^5; X^3 is C or N; X^4 is C or N; m is 0, 1 or 2; n is 1 or 2; D, when present, is CH_2, CR^3R^4, CONH, or $CONR^3$; Y is selected from N, NH or NR^5; Z is N, NR^5, CR^5; W is selected from S, O, NH, or NR^5; A is selected from C_3-C_{12} cycloalkyl or C_3-C_{12} cycloalkenyl or aryl or heteroaryl or C_3-C_{12} heterocycloalkyl or C_3-C_{12} heterocycloalkenyl or 3-8 membered ring comprising C, O, S, and/or N; R^1 is independently selected from hydrogen, halogen, aryl, heteroaryl, $C_{1\text{-}10}$ alkyl, $C_{3\text{-}10}$ cycloalkyl, $OC_{1\text{-}10}$ alkyl (which would contain a $C_{3\text{-}8}$

membered ring containing C, O, S and/or N, optionally substituted with one or more R^4), OAryl (optionally substituted with R^1 and/or R^2), OHeteroaryl (optionally substituted with R^1 and/or R^2), NR^3R^4, CR^3R^4, $CONR^3R^4$, $COCR^3R^4$, COAryl (optionally substituted with R^1 and/or R^2), COHeteroaryl (optionally substituted with R^1 and/or R^2), $S(O)_{0-2}NR^3R^4$, $S(O)_{0-2}CR^3R^4$, CN or CF_3; R^2 is independently selected from hydrogen, halogen, aryl, heteroaryl, C_{1-10} alkyl, C_{3-10} cycloalkyl, OC_{1-10} alkyl (which would contain a C_{3-8} membered ring containing C, O, S and/or N, optionally substituted with one or more R_4), OAryl (optionally substituted with R^1 and/or R^2), OHeteroaryl (optionally substituted with R^1 and/or R^2), NR_3R_4, CR^3R^4, $CONR^3R^4$, $COCR^3R^4$, COAryl (optionally substituted with R^1 and/or R^2), COHeteroaryl (optionally substituted with R^1 and/or R^2), $S(O)_{0-2}NR^3R^4$, $S(O)_{0-2}CR^3R^4$, CN or CF_3; R^1 and R^2 can optionally cyclize to form a ring comprising C_3-C_{12} cycloalkyl or C_3-C_{12} cycloalkenyl or aryl or heteroaryl or C_3-C_{12} heterocycloalkyl or 3-8 membered ring comprising C, O, S, and/or N, optionally substituted with one or more R_4; R^3 is selected from hydrogen, C_{1-6} alkyl, C_{3-10} cycloalkyl, aryl, benzyl, heteroaryl, halogen, CN, CF_3, $CONR^3R^4$, $S(O)_{0-2}NR^3R^4$; R^4 is selected from hydrogen, C_{1-6} alkyl, C_{3-10} cycloalkyl, aryl, benzyl, heteroaryl, halogen, CN, CF_3, $CONR^3R^4$, CO, $S(O)_{0-2}NR^3R^4$; R^3 and R^4 can optionally cyclize to form a ring comprising C_3-C_{12} cycloalkyl or C_3-C_{12} cycloalkenyl or aryl or heteroaryl or C_3-C_{12} heterocycloalkyl or 3-8 membered ring comprising C, O, S, and/or N, optionally substituted with one or more R^5; R^5 is selected from hydrogen, halogen, C_{1-6} alkyl, C_{3-10} cycloalkyl, aryl, heteroaryl, benzyl, OC_{1-10} alkyl (which could contain a C_{3-8} membered ring containing C, O, S or N, optionally substituted with one or more R^4), CN, CF_3;

or a pharmaceutically acceptable salt thereof or a pharmaceutically acceptable derivative thereof, in the manufacture of a medicament to potentiate mGluR4 activity in a subject.

11. The use of at least one compound having a structure represented by a formula:



,

wherein: X is selected from S, CR^5, N or NR^5; X^1 is selected from S, CR^5, N or NR^5; X^2 is independently selected from S, CR^5, N or NR^5; X^3 is C or N; X^4 is C or N; m is 0, 1 or 2; n is 1 or 2; D, when present, is CH_2, CR^3R^4, CONH, or $CONR^3$; Y is selected from N, NH or NR^5; Z is N, NR^5, CR^5; W is selected from S, O, NH, or NR^5; A is selected from C_3-C_{12} cycloalkyl or C_3-C_{12} cycloalkenyl or aryl or heteroaryl or C_3-C_{12} heterocycloalkyl or C_3-C_{12} heterocycloalkenyl or 3-8 membered ring comprising C, O, S, and/or N; R^1 is independently selected from hydrogen, halogen, aryl, heteroaryl, C_{1-10} alkyl, C_{3-10} cycloalkyl, OC_{1-10} alkyl (which would contain a C_{3-8} membered ring containing C, O, S and/or N, optionally substituted with one or more R^4), OAryl (optionally substituted with R^1 and/or R^2), OHeteroaryl (optionally substituted with R^1 and/or R^2), NR^3R^4, CR^3R^4, $CONR^3R^4$, $COCR^3R^4$, COAryl (optionally substituted with R^1 and/or R^2), COHeteroaryl (optionally substituted with R^1 and/or R^2), $S(O)_{0-2}NR^3R^4$, $S(O)_{0-2}CR^3R^4$, CN or CF_3; R^2 is independently selected from hydrogen, halogen, aryl, heteroaryl, C_{1-10} alkyl, C_{3-10} cycloalkyl, OC_{1-10} alkyl (which would contain a C_{3-8} membered ring containing C, O, S and/or N, optionally substituted with one or more R_4), OAryl (optionally substituted with R^1 and/or R^2), OHeteroaryl (optionally substituted with R^1 and/or R^2), NR_3R_4, CR^3R^4, $CONR^3R^4$, $COCR^3R^4$, COAryl (optionally substituted with R^1 and/or R^2), COHeteroaryl (optionally substituted with R^1 and/or R^2), $S(O)_{0-2}NR^3R^4$, $S(O)_{0-2}CR^3R^4$, CN or CF_3; R^1 and R^2 can optionally cyclize to form a ring comprising C_3-C_{12} cycloalkyl or C_3-C_{12} cycloalkenyl or aryl or heteroaryl or C_3-C_{12} heterocycloalkyl or 3-8 membered ring comprising C, O, S, and/or N, optionally substituted with one or more R_4; R^3 is selected from hydrogen, C_{1-6} alkyl, C_{3-10} cycloalkyl, aryl, benzyl, heteroaryl, halogen, CN, CF_3, $CONR^3R^4$, $S(O)_{0-2}NR^3R^4$; R^4 is selected from hydrogen, C_{1-6} alkyl, C_{3-10} cycloalkyl, aryl, benzyl, heteroaryl, halogen, CN, CF_3, $CONR^3R^4$, CO, $S(O)_{0-2}NR^3R^4$; R^3 and R^4 can optionally cyclize to form a ring comprising C_3-C_{12} cycloalkyl or C_3-C_{12} cycloalkenyl or aryl or heteroaryl or C_3-C_{12} heterocycloalkyl or 3-8 membered ring comprising C, O, S, and/or N, optionally substituted with one or more R^5; R^5 is selected from hydrogen, halogen, C_{1-6} alkyl, C_{3-10} cycloalkyl, aryl, heteroaryl, benzyl, OC_{1-10} alkyl (which could contain a C_{3-8} membered ring containing C, O, S or N, optionally substituted with one or more R^4), CN, CF_3;

or a pharmaceutically acceptable salt thereof or a pharmaceutically acceptable derivative thereof, in the manufacture of a medicament in an amount effective for potentiating mGluR4 receptor activity in at least one cell.

12. The use of claim 11, wherein the cell is a mammalian cell.

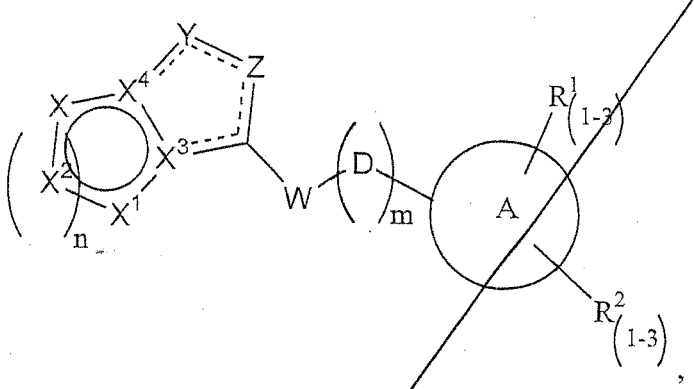
13. The use of claim 11, wherein the cell is a human cell.

14. The use of claim 11, wherein the cell has been isolated from a subject.

15. The use of claim 14, wherein the subject is a mammal.

16. The use of claim 14, wherein the subject is a human.

17. A compound having a structure represented by a formula:



wherein:

X is selected from S, CR^5, N or NR^5;

X^1 is selected from S, CR^5, N or NR^5;

X^2 is independently selected from S, CR^5, N or NR^5;

X^3 is C or N;

X^4 is C or N;

m is 0, 1 or 2;

n is 1 or 2;

D, when present, is CH_2, CR^3R^4, CONH, or $CONR^3$;

Y is selected from N, NH or NR^5;

Z is N, NR^5, CR^5;

W is selected from S, O, NH, or NR^5;

A is selected from C_3-C_{12} cycloalkyl or C_3-C_{12} cycloalkenyl or aryl or heteroaryl or C_3-C_{12} heterocycloalkyl or C_3-C_{12} heterocycloalkenyl or 3-8 membered ring comprising C, O, S, and/or N;

R^1 is independently selected from hydrogen, halogen, aryl, heteroaryl, C_{1-10} alkyl, C_{3-10} cycloalkyl, OC_{1-10} alkyl (which would contain a C_{3-8} membered ring containing C, O, S and/or N,

optionally substituted with one or more R^4), OAryl (optionally substituted with R^1 and/or R^2), OHeteroaryl (optionally substituted with R^1 and/or R^2), NR^3R^4, CR^3R^4, $CONR^3R^4$, $COCR^3R^4$, COAryl (optionally substituted with R^1 and/or R^2), COHeteroaryl (optionally substituted with R^1 and/or R^2), $S(O)_{0-2}NR^3R^4$, $S(O)_{0-2}CR^3R^4$, CN or CF_3;

R^2 is independently selected from hydrogen, halogen, aryl, heteroaryl, C_{1-10} alkyl, C_{3-10} cycloalkyl, OC_{1-10} alkyl (which would contain a C_{3-8} membered ring containing C, O, S and/or N, optionally substituted with one or more R_4), OAryl (optionally substituted with R^1 and/or R^2), OHeteroaryl (optionally substituted with R^1 and/or R^2), NR_3R_4, CR^3R^4, $CONR^3R^4$, $COCR^3R^4$, COAryl (optionally substituted with R^1 and/or R^2), COHeteroaryl (optionally substituted with R^1 and/or R^2), $S(O)_{0-2}NR^3R^4$, $S(O)_{0-2}CR^3R^4$, CN or CF_3;

R^1 and R^2 can optionally cyclize to form a ring comprising C_3-C_{12} cycloalkyl or C_3-C_{12} cycloalkenyl or aryl or heteroaryl or C_3-C_{12} heterocycloalkyl or 3-8 membered ring comprising C, O, S, and/or N, optionally substituted with one or more R_4;

R^3 is selected from hydrogen, C_{1-6} alkyl, C_{3-10} cycloalkyl, aryl, benzyl, heteroaryl, halogen, CN, CF_3, $CONR^3R^4$, $S(O)_{0-2}NR^3R^4$;

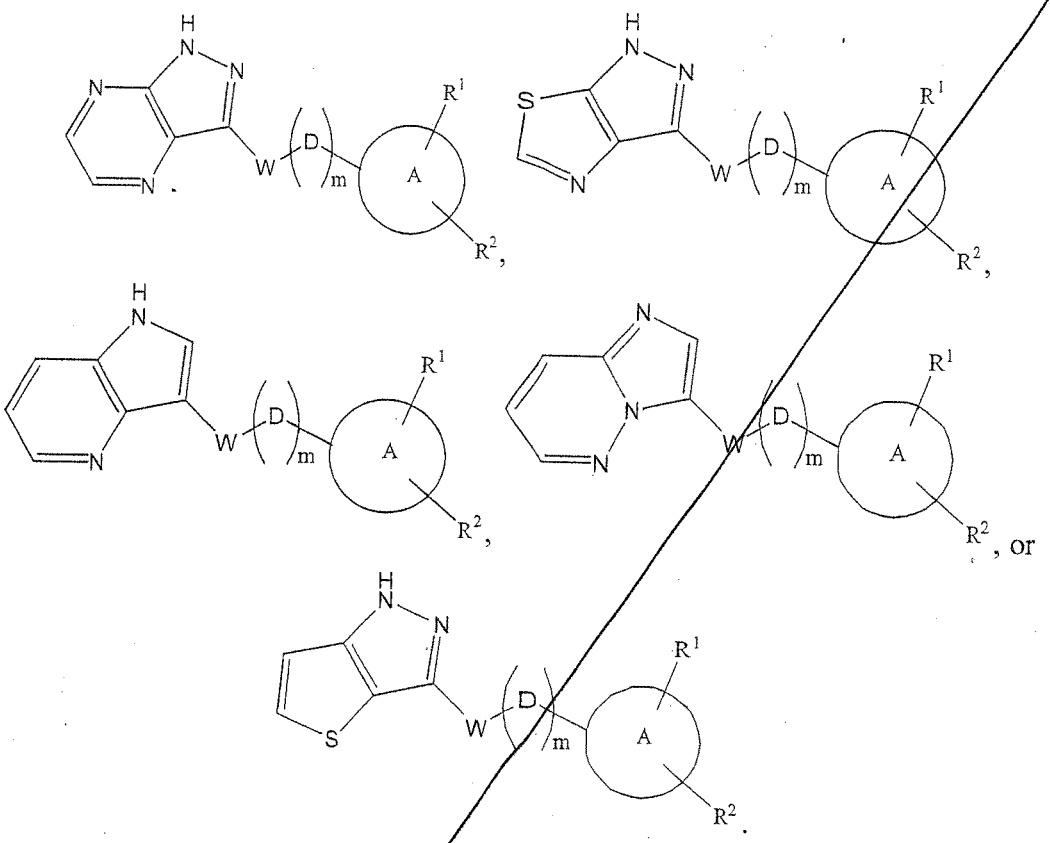
R^4 is selected from hydrogen, C_{1-6} alkyl, C_{3-10} cycloalkyl, aryl, benzyl, heteroaryl, halogen, CN, CF_3, $CONR^3R^4$, CO, $S(O)_{0-2}NR^3R^4$;

R^3 and R^4 can optionally cyclize to form a ring comprising C_3-C_{12} cycloalkyl or C_3-C_{12} cycloalkenyl or aryl or heteroaryl or C_3-C_{12} heterocycloalkyl or 3-8 membered ring comprising C, O, S, and/or N, optionally substituted with one or more R^5;

R^5 is selected from hydrogen, halogen, C_{1-6} alkyl, C_{3-10} cycloalkyl, aryl, heteroaryl, benzyl, OC_{1-10} alkyl (which could contain a C_{3-8} membered ring containing C, O, S or N, optionally substituted with one or more R^4), CN, CF_3;

or a pharmaceutically acceptable salt thereof or a pharmaceutically acceptable derivative thereof.

18. The compound of claim 17, of the following formula:



19. The compound of claim 17, wherein n is 2.

20. The compound of claim 17, wherein X is N, S, or CR^5.

21. The compound of claim 17, wherein Y is N, or NH .

22. The compound of claim 17, wherein Z is N, NR^5, or C.

23. The compound of claim 17, wherein W is NH, or NR^5.

24. The compound of claim 17, wherein X^1 is N, or S.

25. The compound of claim 17, wherein X^2 and X^3 are independently C or N.

26. The compound of claim 17, wherein X^4 is C.

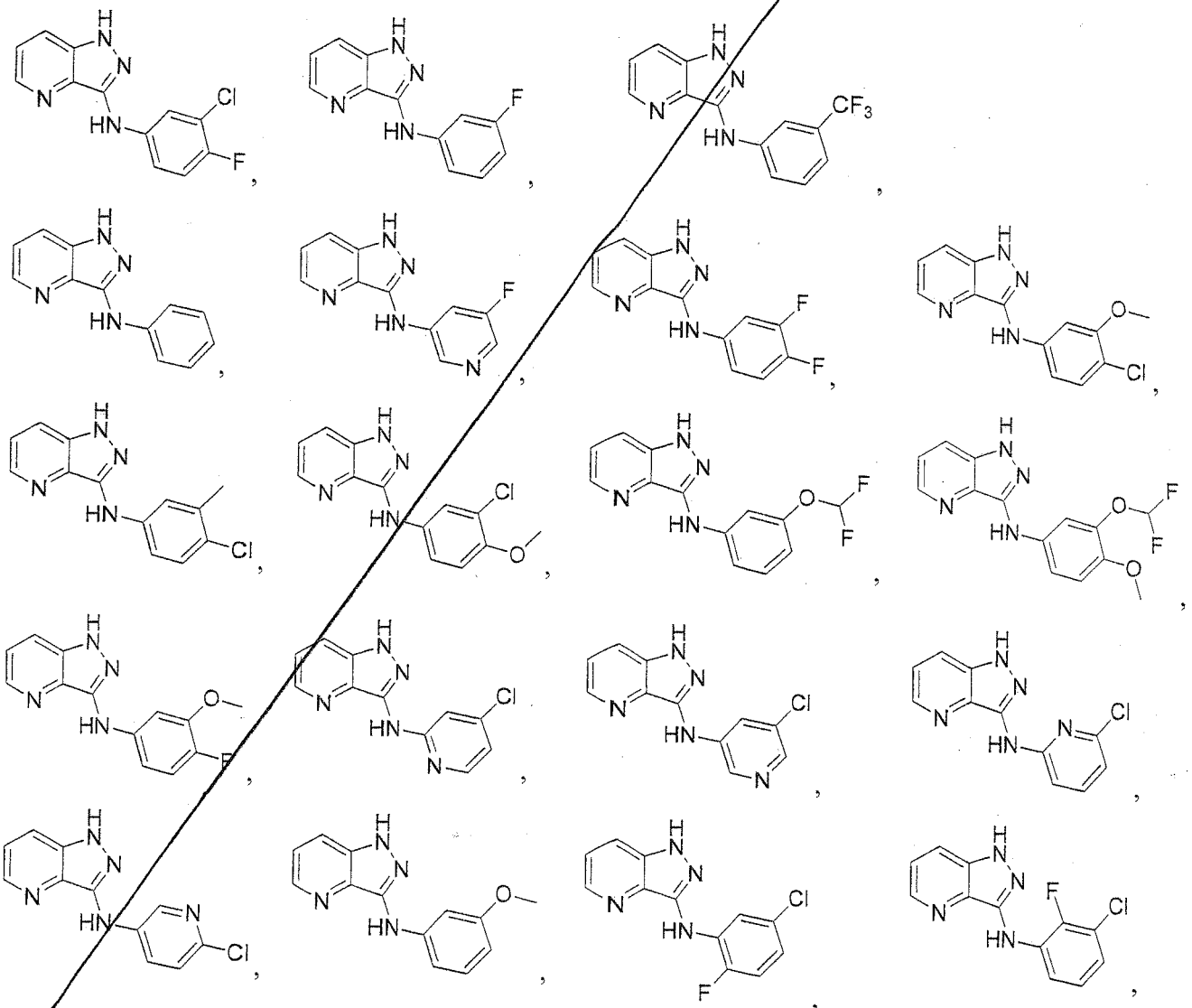
27. The compound of claim 17, wherein A is substituted or unsubstituted and selected from phenyl, cyclohexane, pyrazine, pyrimidine, quinoline, thiazole, or pyridine.

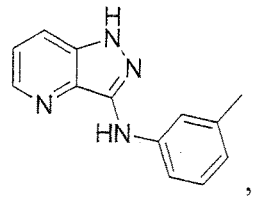
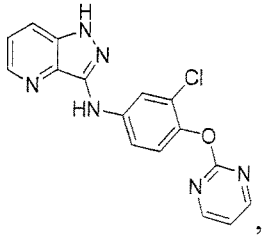
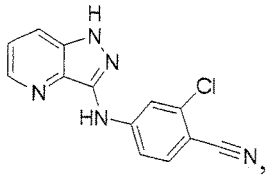
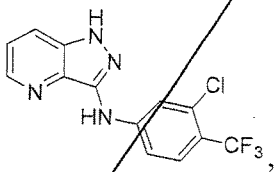
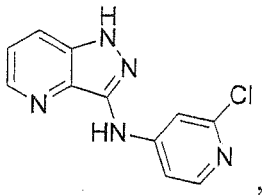
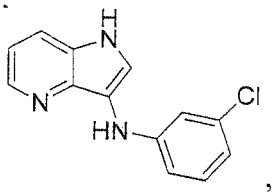
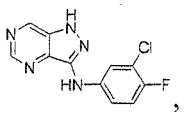
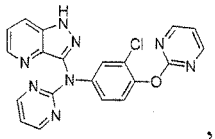
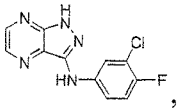
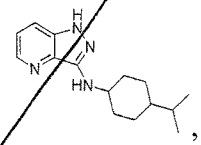
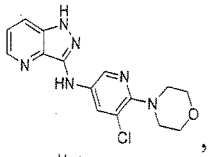
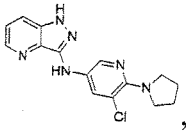
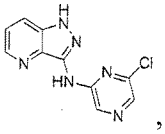
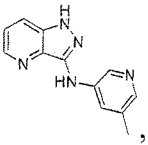
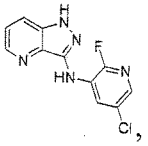
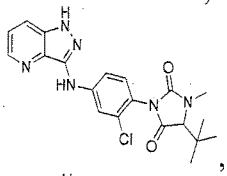
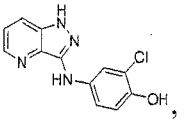
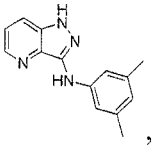
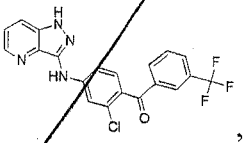
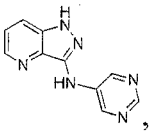
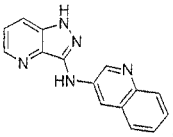
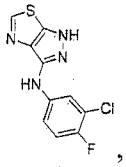
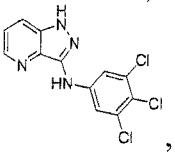
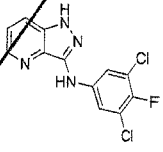
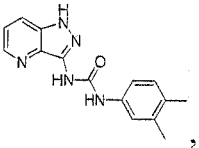
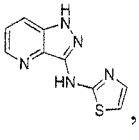
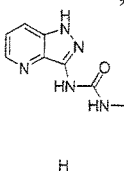
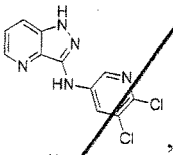
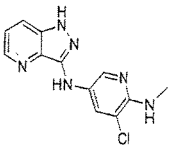
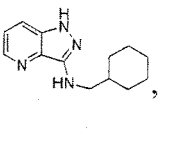
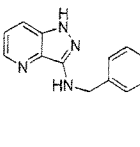
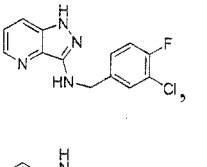
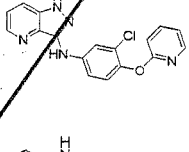
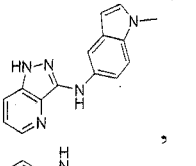
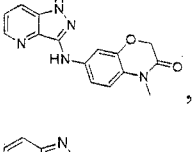
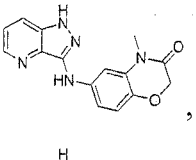
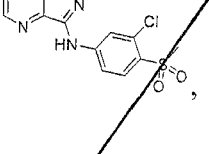
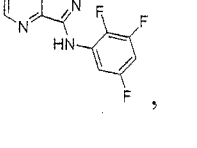
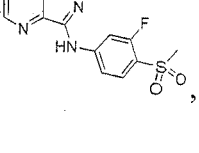
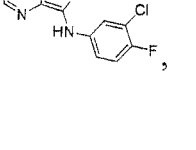
28. The compound of claim 27, wherein R^1 and R^2 are independently hydrogen, halogen, methoxy, difluoromethoxy, nitrile, optionally substituted O-aryl, optionally substituted O-heteroaryl.

29. The compound of claim 28, wherein O-aryl is O-phenyl or O-benzyl; and O-heteroaryl is O-pyrimidine, O-pyrazine, or O-pyridine.

30. The compound of claim 28, wherein O-aryl or O-heteroaryl is optionally substituted with at least one halogen, at least one methyl, and/or CF_3.

31. The compound of claim 17, of the following formula:




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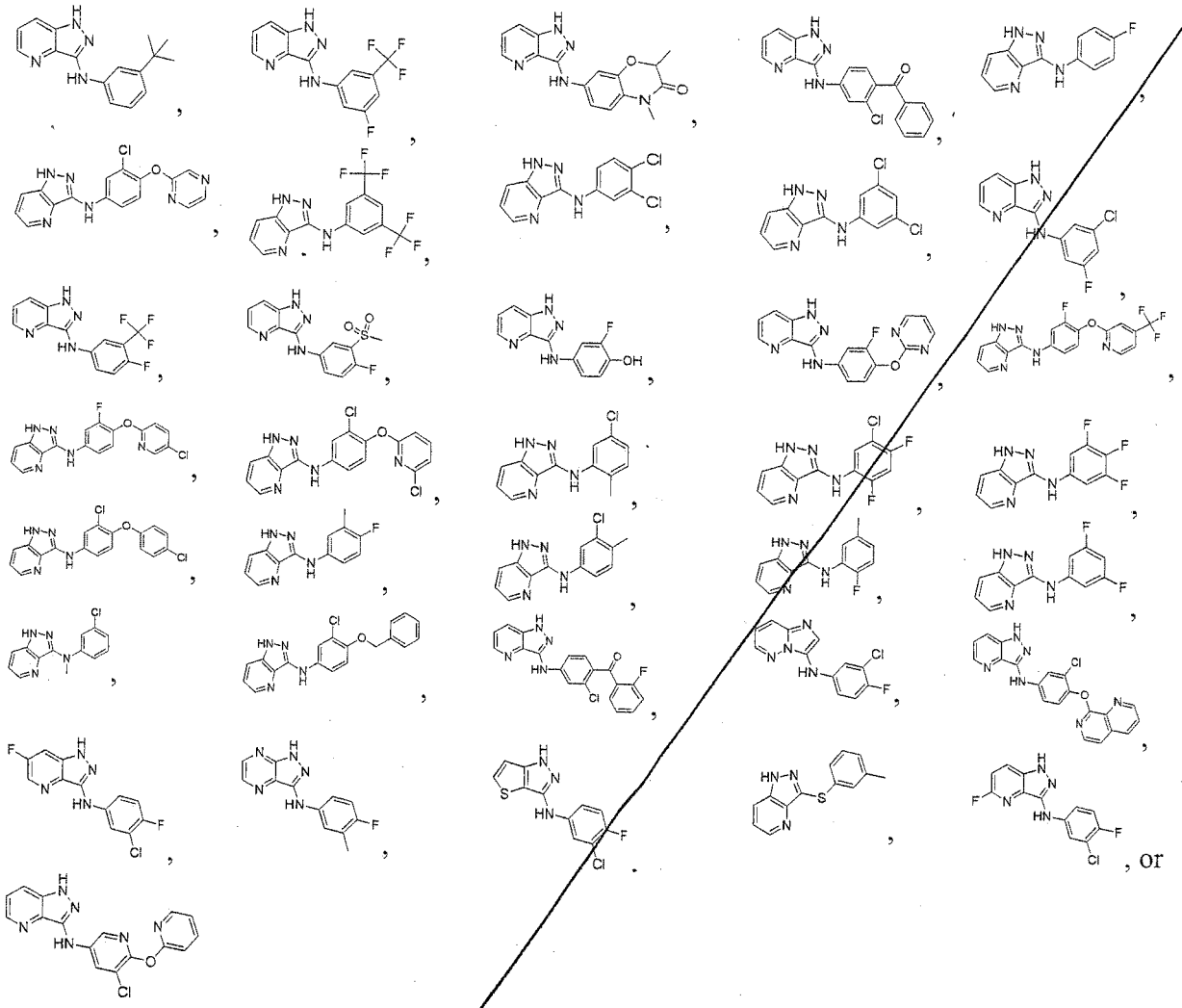
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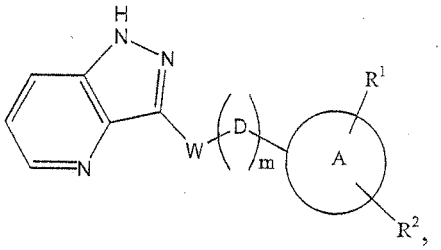
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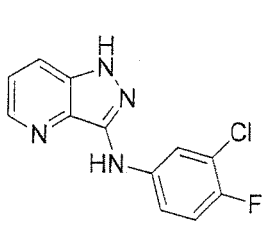
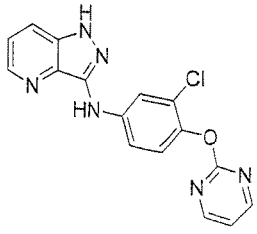
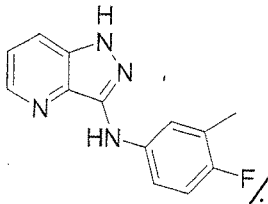
32. A compound of claim 17, of the following formula:



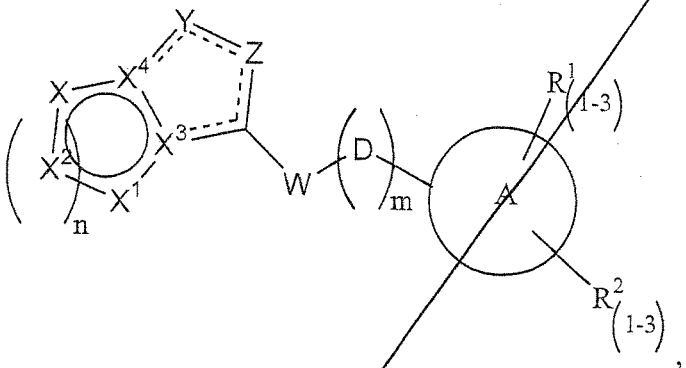
wherein W is NH, A is phenyl, and R^1 is halo.

33. A compound of claim 32, wherein R^2 is O-heteroaryl.

34. A compound of claim 17, of the following formula:



, or

.

35. A pharmaceutical composition comprising a compound having a structure represented by a formula:


,

wherein:

X is selected from S, CR^5, N or NR^5;

X^1 is selected from S, CR^5, N or NR^5;

X^2 is independently selected from S, CR^5, N or NR^5;

X^3 is C or N;

X^4 is C or N;

m is 0, 1 or 2;

n is 1 or 2;

D, when present, is CH_2, CR^3R^4, CONH, or $CONR^3$;

Y is selected from N, NH or NR^5;

Z is N, NR^5, CR^5;

W is selected from S, O, NH, or NR^5;

A is selected from C_3-C_{12} cycloalkyl or C_3-C_{12} cycloalkenyl or aryl or heteroaryl or C_3-C_{12} heterocycloalkyl or C_3-C_{12} heterocycloalkenyl or 3-8 membered ring comprising C, O, S, and/or N;

R^1 is independently selected from hydrogen, halogen, aryl, heteroaryl, $C_{1\text{-}10}$ alkyl, $C_{3\text{-}10}$ cycloalkyl, $OC_{1\text{-}10}$ alkyl (which would contain a $C_{3\text{-}8}$ membered ring containing C, O, S and/or N,

optionally substituted with one or more R^4), OAryl (optionally substituted with R^1 and/or R^2), OHeteroaryl (optionally substituted with R^1 and/or R^2), NR^3R^4, CR^3R^4, $CONR^3R^4$, $COCR^3R^4$, COAryl (optionally substituted with R^1 and/or R^2), COHeteroaryl (optionally substituted with R^1 and/or R^2), $S(O)_{0-2}NR^3R^4$, $S(O)_{0-2}CR^3R^4$, CN or CF_3;

R^2 is independently selected from hydrogen, halogen, aryl, heteroaryl, C_{1-10} alkyl, C_{3-10} cycloalkyl, OC_{1-10} alkyl (which would contain a C_{3-8} membered ring containing C, O, S and/or N, optionally substituted with one or more R_4), OAryl (optionally substituted with R^1 and/or R^2), OHeteroaryl (optionally substituted with R^1 and/or R^2), NR_3R_4, CR^3R^4, $CONR^3R^4$, $COCR^3R^4$, COAryl (optionally substituted with R^1 and/or R^2), COHeteroaryl (optionally substituted with R^1 and/or R^2), $S(O)_{0-2}NR^3R^4$, $S(O)_{0-2}CR^3R^4$, CN or CF_3;

R^1 and R^2 can optionally cyclize to form a ring comprising C_3-C_{12} cycloalkyl or C_3-C_{12} cycloalkenyl or aryl or heteroaryl or C_3-C_{12} heterocycloalkyl or 3-8 membered ring comprising C, O, S, and/or N, optionally substituted with one or more R_4;

R^3 is selected from hydrogen, C_{1-6} alkyl, C_{3-10} cycloalkyl, aryl, benzyl, heteroaryl, halogen, CN, CF_3, $CONR^3R^4$, $S(O)_{0-2}NR^3R^4$;

R^4 is selected from hydrogen, C_{1-6} alkyl, C_{3-10} cycloalkyl, aryl, benzyl, heteroaryl, halogen, CN, CF_3, $CONR^3R^4$, CO, $S(O)_{0-2}NR^3R^4$;

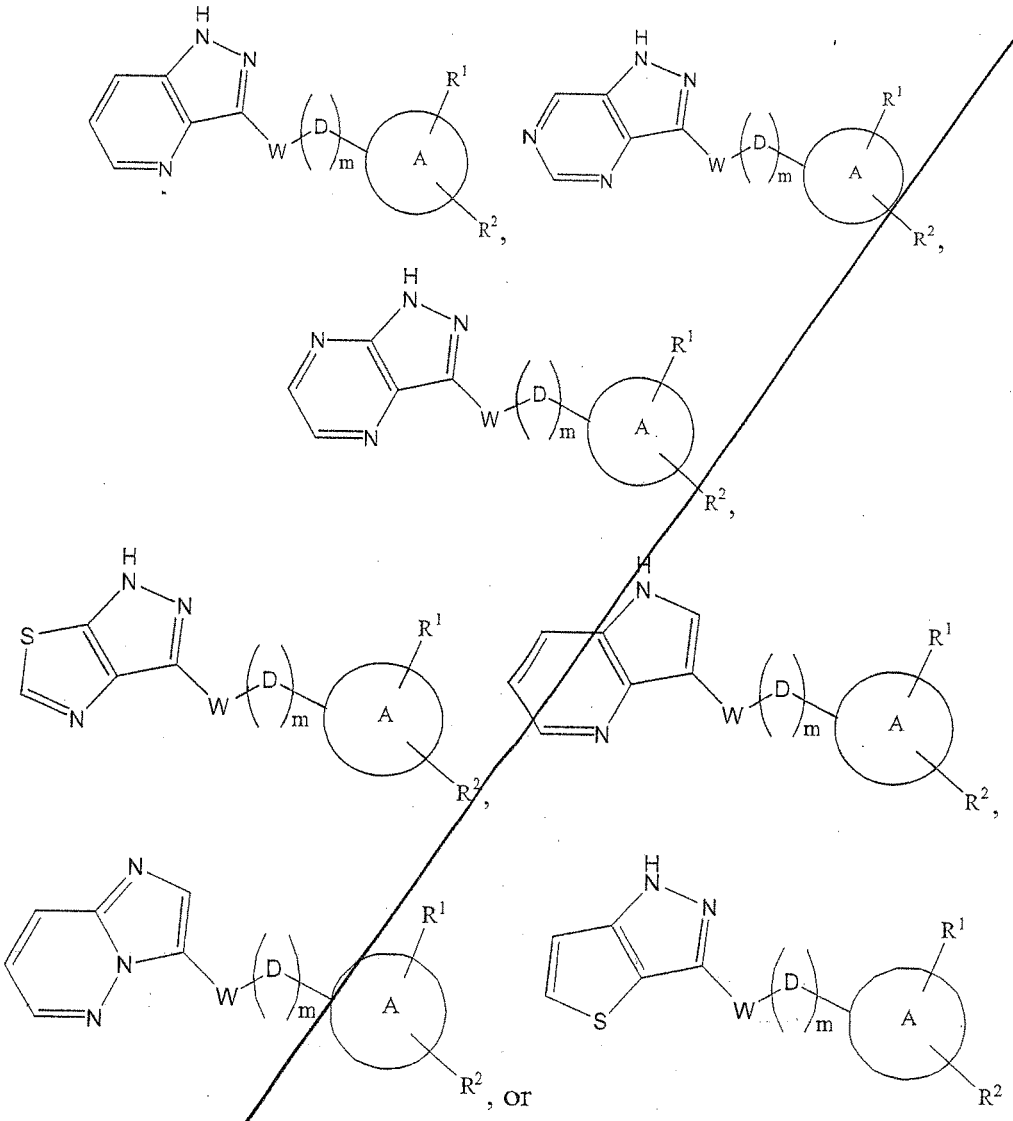
R^3 and R^4 can optionally cyclize to form a ring comprising C_3-C_{12} cycloalkyl or C_3-C_{12} cycloalkenyl or aryl or heteroaryl or C_3-C_{12} heterocycloalkyl or 3-8 membered ring comprising C, O, S, and/or N, optionally substituted with one or more R^5;

R^5 is selected from hydrogen, halogen, C_{1-6} alkyl, C_{3-10} cycloalkyl, aryl, heteroaryl, benzyl, OC_{1-10} alkyl (which could contain a C_{3-8} membered ring containing C, O, S or N, optionally substituted with one or more R^4), CN, CF_3;

or a pharmaceutically acceptable salt thereof or a pharmaceutically acceptable derivative thereof, and

a pharmaceutically acceptable carrier.

36. The composition of claim 35, of the following formula:



37. The composition of claim 36, wherein n is 2.

38. The composition of claim 36, wherein X is N, S, or CR^5.

39. The composition of claim 36, wherein Y is N, or NH .

40. The composition of claim 36, wherein Z is N, NR^5, or C.

41. The composition of claim 36, wherein W is NH, or NR^5.

42. The composition of claim 36, wherein X^1 is N, or S.

43. The composition of claim 36, wherein X^2 and X^3 are independently C ,or N.

44. The composition of claim 36, wherein X^4 is C.

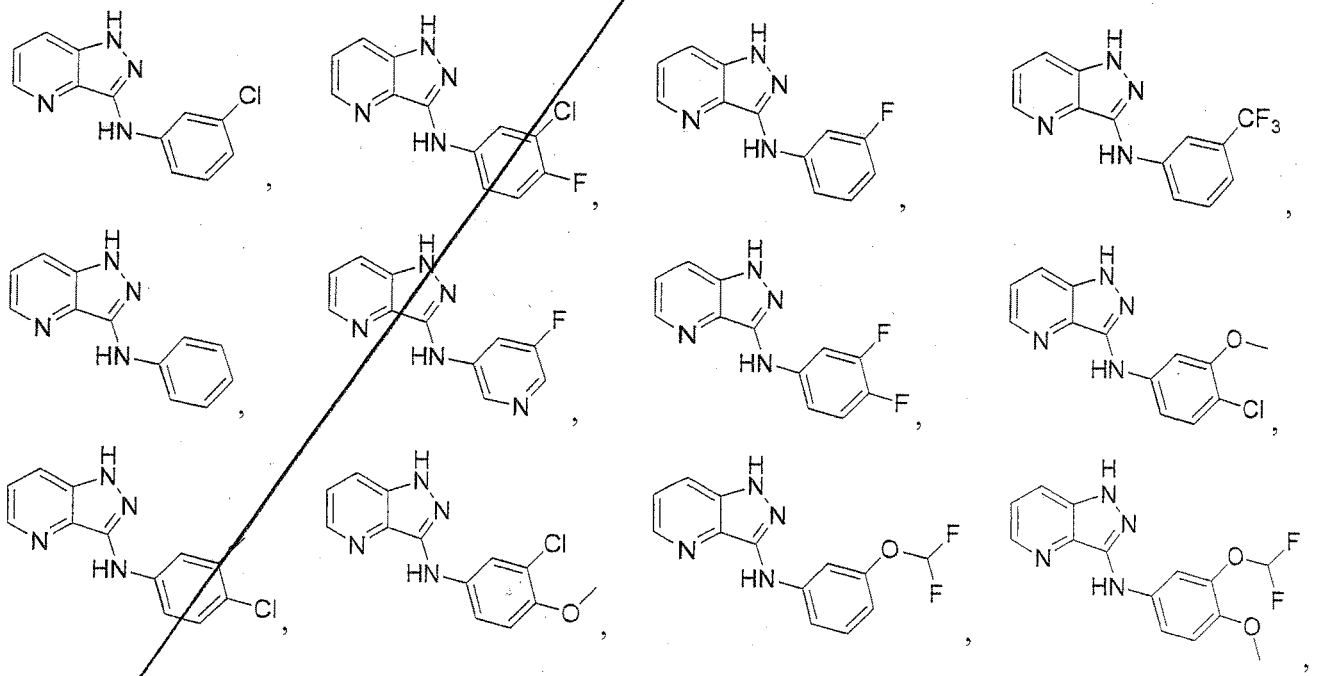
45. The composition of claim 36, wherein A is substituted or unsubstituted and selected from phenyl, cyclohexane, pyrazine, pyrimidine, quinoline, thiazole, or pyridine.

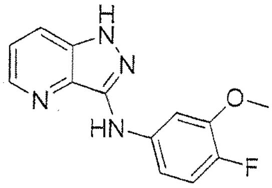
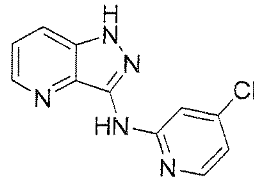
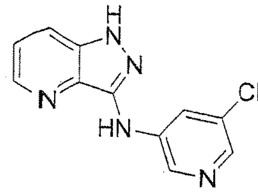
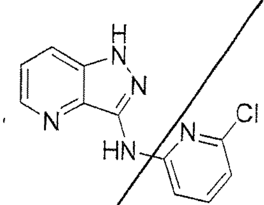
46. The composition of claim 45, wherein R^1 and R^2 are independently hydrogen, halogen, methoxy, difluoromethoxy, nitrile, optionally substituted O-aryl, optionally substituted O-heteroaryl.

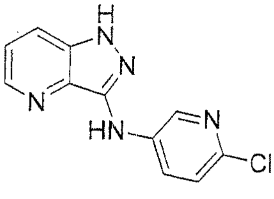
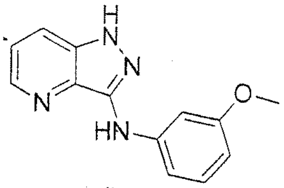
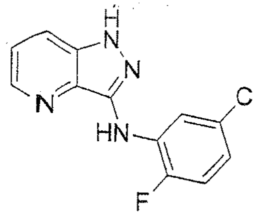
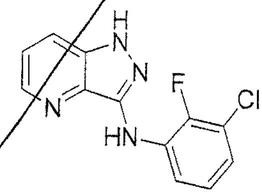
47. The composition of claim 46, wherein O-aryl is O-phenyl or O-benzyl; and O-heteroaryl is O-pyrimidine, O-pyrazine, or O-pyridine.

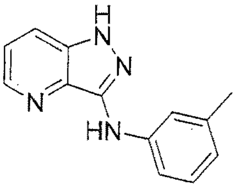
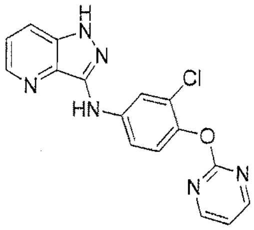
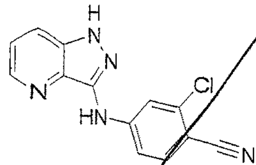
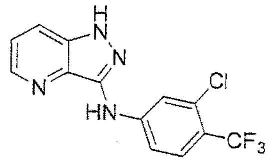
48. The composition of claim 46, wherein O-aryl or O-heteroaryl is optionally substituted with at least one halogen, at least one methyl, and/or CF_3.

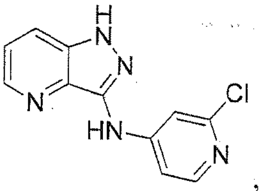
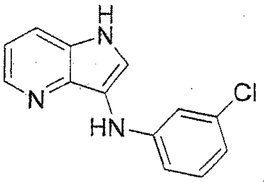
49. The composition of claim 36, of the following formula:

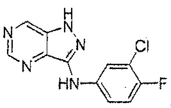
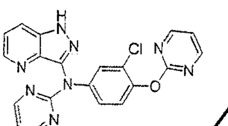
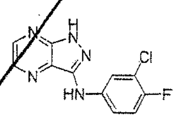
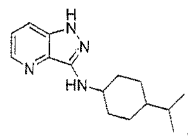
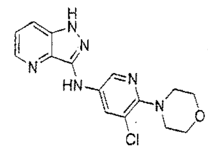


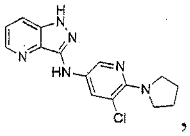
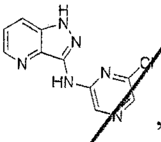
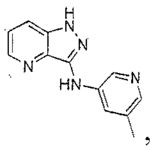
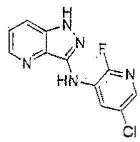
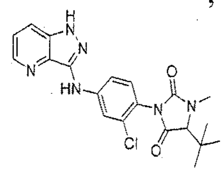
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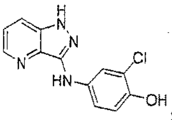
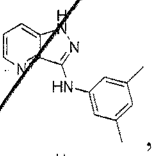
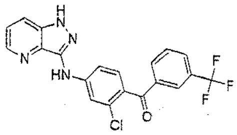
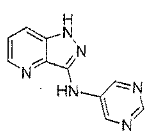
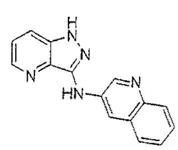
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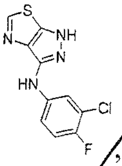
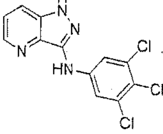
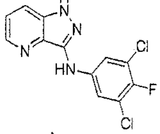
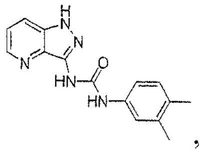
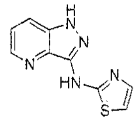
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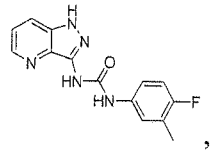
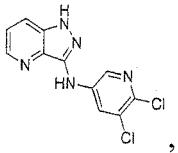
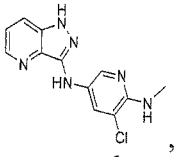
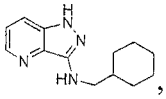
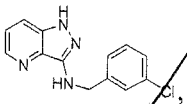
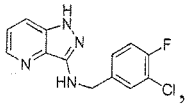
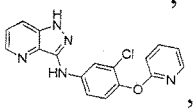
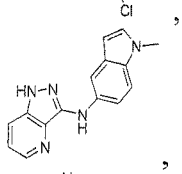
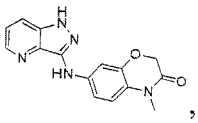
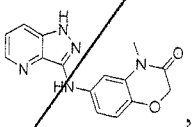
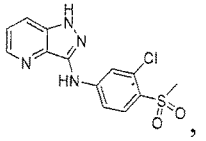
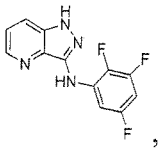
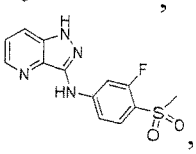
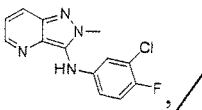
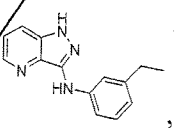
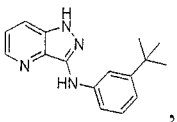
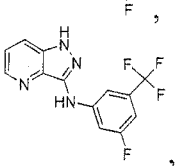
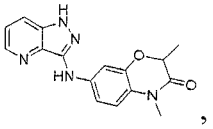
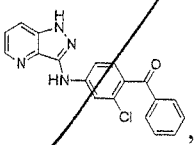
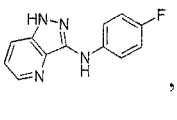
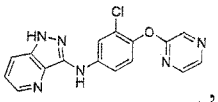
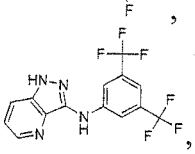
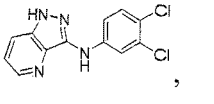
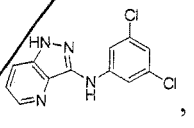
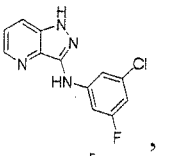
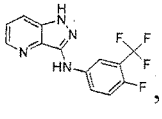
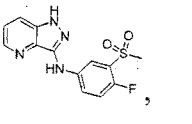
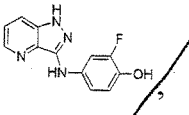
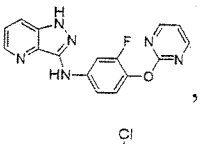
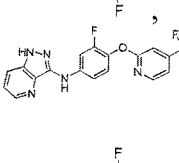
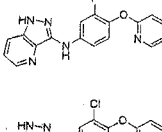
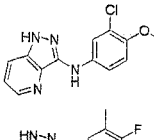
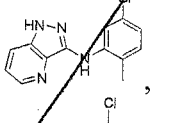
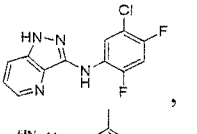
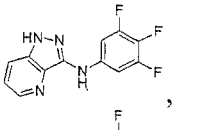
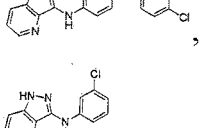
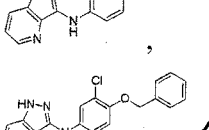
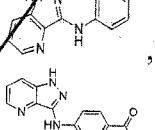
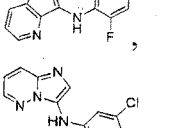
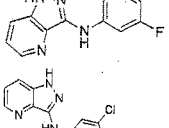
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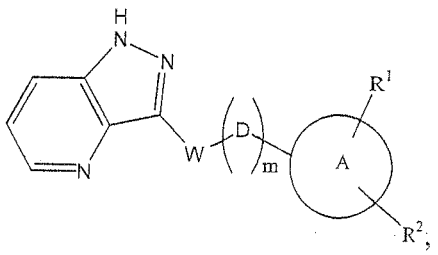
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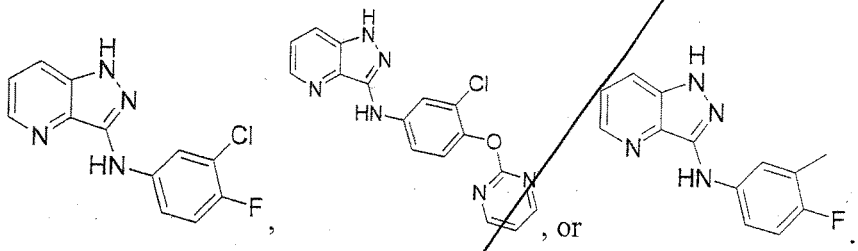
50. The composition of claim 36, wherein the compound is of the following formula:



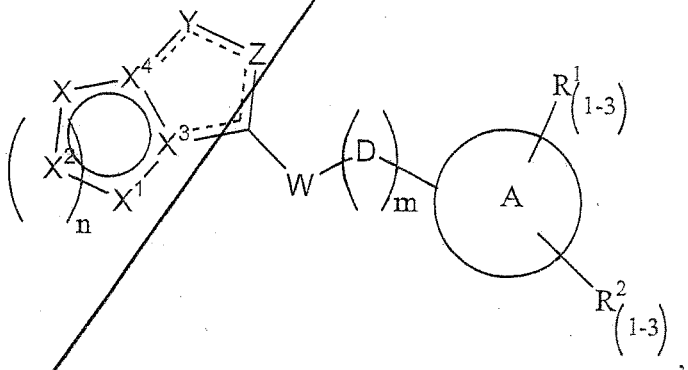
wherein W is NH, A is phenyl, and R^1 is halo.

51. The composition of claim 50, wherein R^2 is O-heteroaryl.

52. The composition of claim 50, of the following formula:



53. A method for the manufacture of a medicament for potentiating mGluR4 receptor activity in a mammal comprising combining a compound having a structure represented by a formula:



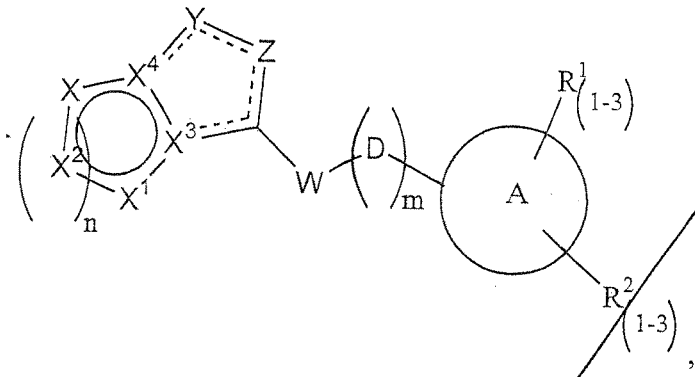
wherein: X is selected from S, CR^5, N or NR^5; X^1 is selected from S, CR^5, N or NR^5; X^2 is independently selected from S, CR^5, N or NR^5; X^3 is C or N; X^4 is C or N; m is 0, 1 or 2; n is 1 or 2; D, when present, is CH_2, CR^3R^4, CONH, or $CONR^3$; Y is selected from N, NH or NR^5; Z is N, NR^5, CR^5; W is selected from S, O, NH, or NR^5; A is selected from C_3-C_{12} cycloalkyl or C_3-C_{12} cycloalkenyl or aryl or heteroaryl or C_3-C_{12} heterocycloalkyl or C_3-C_{12} heterocycloalkenyl or 3-8 membered ring comprising C, O, S, and/or N; R^1 is independently selected from hydrogen, halogen, aryl, heteroaryl, $C_{1\text{-}10}$ alkyl, $C_{3\text{-}10}$ cycloalkyl, $OC_{1\text{-}10}$ alkyl (which would contain a $C_{3\text{-}8}$ membered ring containing C, O, S and/or N, optionally substituted with one or more R^4), OAryl

(optionally substituted with R^1 and/or R^2), OHeteroaryl (optionally substituted with R^1 and/or R^2), NR^3R^4, CR^3R^4, $CONR^3R^4$, $COCR^3R^4$, COAryl (optionally substituted with R^1 and/or R^2), COHeteroaryl (optionally substituted with R^1 and/or R^2), $S(O)_{0-2}NR^3R^4$, $S(O)_{0-2}CR^3R^4$, CN or CF_3; R^2 is independently selected from hydrogen, halogen, aryl, heteroaryl, C_{1-10} alkyl, C_{3-10} cycloalkyl, OC_{1-10} alkyl (which would contain a C_{3-8} membered ring containing C, O, S and/or N, optionally substituted with one or more R_4), OAryl (optionally substituted with R^1 and/or R^2), OHeteroaryl (optionally substituted with R^1 and/or R^2), NR_3R_4, CR^3R^4, $CONR^3R^4$, $COCR^3R^4$, COAryl (optionally substituted with R^1 and/or R^2), COHeteroaryl (optionally substituted with R^1 and/or R^2), $S(O)_{0-2}NR^3R^4$, $S(O)_{0-2}CR^3R^4$, CN or CF_3; R^1 and R^2 can optionally cyclize to form a ring comprising C_3-C_{12} cycloalkyl or C_3-C_{12} cycloalkenyl or aryl or heteroaryl or C_3-C_{12} heterocycloalkyl or 3-8 membered ring comprising C, O, S, and/or N, optionally substituted with one or more R_4; R^3 is selected from hydrogen, C_{1-6} alkyl, C_{3-10} cycloalkyl, aryl, benzyl, heteroaryl, halogen, CN, CF_3, $CONR^3R^4$, $S(O)_{0-2}NR^3R^4$, R^4 is selected from hydrogen, C_{1-6} alkyl, C_{3-10} cycloalkyl, aryl, benzyl, heteroaryl, halogen, CN, CF_3, $CONR^3R^4$, CO, $S(O)_{0-2}NR^3R^4$; R^3 and R^4 can optionally cyclize to form a ring comprising C_3-C_{12} cycloalkyl or C_3-C_{12} cycloalkenyl or aryl or heteroaryl or C_3-C_{12} heterocycloalkyl or 3-8 membered ring comprising C, O, S, and/or N, optionally substituted with one or more R^5; R^5 is selected from hydrogen, halogen, C_{1-6} alkyl, C_{3-10} cycloalkyl, aryl, heteroaryl, benzyl, OC_{1-10} alkyl (which could contain a C_{3-8} membered ring containing C, O, S or N, optionally substituted with one or more R^4), CN, CF_3;

or a pharmaceutically acceptable salt thereof or a pharmaceutically acceptable derivative thereof,

with a pharmaceutically acceptable carrier.

54. Use of a compound for potentiating mGluR4 receptor activity in a mammal, wherein the compound has a structure represented by a formula:



wherein: X is selected from S, CR^5, N or NR^5; X^1 is selected from S, CR^5, N or NR^5; X^2 is independently selected from S, CR^5, N or NR^5; X^3 is C or N; X^4 is C or N; m is 0, 1 or 2; n is 1 or 2; D, when present, is CH_2, CR^3R^4, CONH, or $CONR^3$; Y is selected from N, NH or NR^5; Z is N, NR^5, CR^5; W is selected from S, O, NH, or NR^5; A is selected from C_3-C_{12} cycloalkyl or C_3-C_{12} cycloalkenyl or aryl or heteroaryl or C_3-C_{12} heterocycloalkyl or C_3-C_{12} heterocycloalkenyl or 3-8 membered ring comprising C, O, S, and/or N; R^1 is independently selected from hydrogen, halogen, aryl, heteroaryl, C_{1-10} alkyl, C_{3-10} cycloalkyl, OC_{1-10} alkyl (which would contain a C_{3-8} membered ring containing C, O, S and/or N, optionally substituted with one or more R^4), OAryl (optionally substituted with R^1 and/or R^2), OHeteroaryl (optionally substituted with R^1 and/or R^2), NR^3R^4, CR^3R^4, $CONR^3R^4$, $COCR^3R^4$, COAryl (optionally substituted with R^1 and/or R^2), COHeteroaryl (optionally substituted with R^1 and/or R^2), $S(O)_{0-2}NR^3R^4$, $S(O)_{0-2}CR^3R^4$, CN or CF_3; R^2 is independently selected from hydrogen, halogen, aryl, heteroaryl, C_{1-10} alkyl, C_{3-10} cycloalkyl, OC_{1-10} alkyl (which would contain a C_{3-8} membered ring containing C, O, S and/or N, optionally substituted with one or more R_4), OAryl (optionally substituted with R^1 and/or R^2), OHeteroaryl (optionally substituted with R^1 and/or R^2), NR_3R_4, CR^3R^4, $CONR^3R^4$, $COCR^3R^4$, COAryl (optionally substituted with R^1 and/or R^2), COHeteroaryl (optionally substituted with R^1 and/or R^2), $S(O)_{0-2}NR^3R^4$, $S(O)_{0-2}CR^3R^4$, CN or CF_3; R^1 and R^2 can optionally cyclize to form a ring comprising C_3-C_{12} cycloalkyl or C_3-C_{12} cycloalkenyl or aryl or heteroaryl or C_3-C_{12} heterocycloalkyl or 3-8 membered ring comprising C, O, S, and/or N, optionally substituted with one or more R_4; R^3 is selected from hydrogen, C_{1-6} alkyl, C_{3-10} cycloalkyl, aryl, benzyl, heteroaryl, halogen, CN, CF_3, $CONR^3R^4$, $S(O)_{0-2}NR^3R^4$; R^4 is selected from hydrogen, C_{1-6} alkyl, C_{3-10} cycloalkyl, aryl, benzyl, heteroaryl, halogen, CN, CF_3, $CONR^3R^4$, CO, $S(O)_{0-2}NR^3R^4$; R^3

and R^4 can optionally cyclize to form a ring comprising C_3-C_{12} cycloalkyl or C_3-C_{12} cycloalkenyl or aryl or heteroaryl or C_3-C_{12} heterocycloalkyl or 3-8 membered ring comprising C, O, S, and/or N, optionally substituted with one or more R^5; R^5 is selected from hydrogen, halogen, C_{1-6} alkyl, C_{3-10} cycloalkyl, aryl, heteroaryl, benzyl, OC_{1-10} alkyl (which could contain a C_{3-8} membered ring containing C, O, S or N, optionally substituted with one or more R^4), CN, CF_3;

or a pharmaceutically acceptable salt thereof or a pharmaceutically acceptable derivative thereof,

or a pharmaceutically acceptable salt thereof or a pharmaceutically acceptable derivative thereof.

55. The use of claim 54, wherein the compound is combined with a pharmaceutically acceptable carrier.

56. The use of claim 54, wherein the mammal is a human.

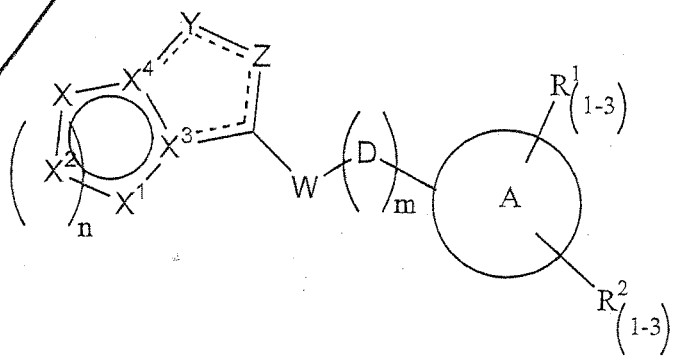
57. The use of claim 56, as a taste enhancer.

58. The use of claim 56, as a treatment of a disorder in a mammal.

59. The use of claim 58, wherein the disorder is a neurological and/or psychiatric disorder or other disease state associated with mGluR4 receptor activity dysfunction.

60. The use of claim 59, wherein the disorder is Parkinson's disease.

61. A kit comprising a compound having a structure represented by a formula:



wherein: X is selected from S, CR^5, N or NR^5; X^1 is selected from S, CR^5, N or NR^5; X^2 is independently selected from S, CR^5, N or NR^5; X^3 is C or N; X^4 is C or N; m is 0, 1 or 2; n is 1 or 2; D, when present, is CH_2, CR^3R^4, CONH, or $CONR^3$; Y is selected from N, NH or NR^5; Z is N, NR^5, CR^5; W is selected from S, O, NH, or NR^5; A is selected from C_3-C_{12} cycloalkyl or C_3-C_{12} cycloalkenyl or aryl or heteroaryl or C_3-C_{12} heterocycloalkyl or C_3-C_{12} heterocycloalkenyl or 3-8 membered ring comprising C, O, S, and/or N; R^1 is independently selected from hydrogen, halogen, aryl, heteroaryl, C_{1-10} alkyl, C_{3-10} cycloalkyl, OC_{1-10} alkyl (which would contain a C_{3-8} membered ring containing C, O, S and/or N, optionally substituted with one or more R^4), OAryl (optionally substituted with R^1 and/or R^2), OHeteroaryl (optionally substituted with R^1 and/or R^2), NR^3R^4, CR^3R^4, $CONR^3R^4$, $COCR^3R^4$, COAryl (optionally substituted with R^1 and/or R^2), COHeteroaryl (optionally substituted with R^1 and/or R^2), $S(O)_{0-2}NR^3R^4$, $S(O)_{0-2}CR^3R^4$, CN or CF_3; R^2 is independently selected from hydrogen, halogen, aryl, heteroaryl, C_{1-10} alkyl, C_{3-10} cycloalkyl, OC_{1-10} alkyl (which would contain a C_{3-8} membered ring containing C, O, S and/or N, optionally substituted with one or more R_4), OAryl (optionally substituted with R^1 and/or R^2), OHeteroaryl (optionally substituted with R^1 and/or R^2), NR_3R_4, CR^3R^4, $CONR^3R^4$, $COCR^3R^4$, COAryl (optionally substituted with R^1 and/or R^2), COHeteroaryl (optionally substituted with R^1 and/or R^2), $S(O)_{0-2}NR^3R^4$, $S(O)_{0-2}CR^3R^4$, CN or CF_3; R^1 and R^2 can optionally cyclize to form a ring comprising C_3-C_{12} cycloalkyl or C_3-C_{12} cycloalkenyl or aryl or heteroaryl or C_3-C_{12} heterocycloalkyl or 3-8 membered ring comprising C, O, S, and/or N, optionally substituted with one or more R_4; R^3 is selected from hydrogen, C_{1-6} alkyl, C_{3-10} cycloalkyl, aryl, benzyl, heteroaryl, halogen, CN, CF_3, $CONR^3R^4$, $S(O)_{0-2}NR^3R^4$; R^4 is selected from hydrogen, C_{1-6} alkyl, C_{3-10} cycloalkyl, aryl, benzyl, heteroaryl, halogen, CN, CF_3, $CONR^3R^4$, CO, $S(O)_{0-2}NR^3R^4$; R^3 and R^4 can optionally cyclize to form a ring comprising C_3-C_{12} cycloalkyl or C_3-C_{12} cycloalkenyl or aryl or heteroaryl or C_3-C_{12} heterocycloalkyl or 3-8 membered ring comprising C, O, S, and/or N, optionally substituted with one or more R^5; R^5 is selected from hydrogen, halogen, C_{1-6} alkyl, C_{3-10} cycloalkyl, aryl, heteroaryl, benzyl, OC_{1-10} alkyl (which could contain a C_{3-8} membered ring containing C, O, S or N, optionally substituted with one or more R^4), CN, CF_3;

or a pharmaceutically acceptable salt thereof or a pharmaceutically acceptable derivative thereof,

and one or more of:

a. a drug having a known side-effect of increasing metabotropic glutamate receptor activity,

b. a drug known to treat a disorder associated with increasing metabotropic glutamate receptor activity, and/or

c. a drug known to treat the neurotransmission dysfunction or other disease state.

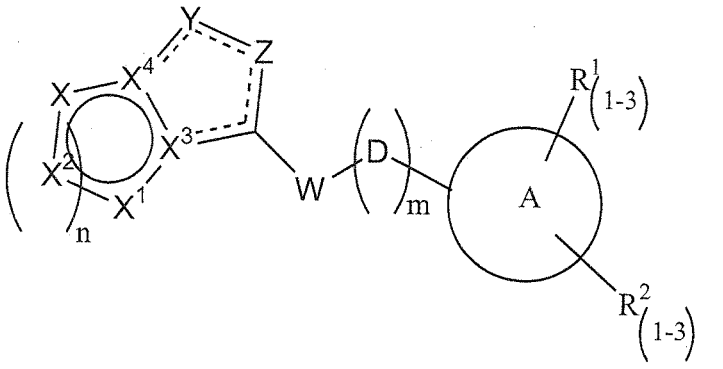
62. The kit of claim 61, wherein the compound(s) and the drug(s) are coformulated.

63. The kit of claim 61, wherein the compound(s) and the drug(s) are copackaged.

CLAIMS

What is claimed is:

1. A compound having a structure represented by a formula:



wherein:

X is selected from CR^5, N or NH;

X^1 is selected from N or NH;

X^2 is independently selected from CR^5, N or NH;

X^3 is C or N;

X^4 is C or N;

m is 0, 1 or 2;

n is 1 or 2;

D, when present, is CH_2, CR^3R^4, CONH, or CO NR^3;

Y is selected from N, NH or NR^5;

Z is N, NR^5;

W is selected from NH, or NR^5;

A is selected from C_3-C_{12} cycloalkyl or C_3-C_{12} cycloalkenyl, or substituted or unsubstituted pyridinyl, or aryl-;

R^1 is independently selected from hydrogen, halogen, aryl, heteroaryl, C_{1-10} alkyl, C_{3-10} cycloalkyl, OC_{1-10} alkyl (which may optionally contain a C_{3-8} membered ring containing C, O, S and/or N, optionally substituted with one or more R^4), OAryl, OHeteroaryl, NR^3R^4, $CONR^3R^4$, $COCR^3R^4$, COAryl, COHeteroaryl, $S(O)_{0-2}NR^3R^4$, $S(O)_{0-2}CR^3R^4$, CN or CF_3; wherein the OAryl, OHeteroaryl, COAryl, and COHeteroaryl are optionally substituted with one or more groups selected from

halogen, and CF_3;

R^2 is independently selected from hydrogen, halogen, aryl, heteroaryl, C_{1-10} alkyl, C_{3-10} cycloalkyl, OC_{1-10} alkyl (which may optionally contain a C_{3-8} membered ring containing C, O, S and/or N, optionally substituted with one or more R_4), O-aryl, O-heteroaryl, NR_3R_4, $CONR^3R^4$, $COCR^3R^4$, COAryl, COHeteroaryl, $S(O)_{0-2}NR^3R^4$, $S(O)_{0-2}CR^3R^4$, CN or CF_3; wherein the OAryl, OHeteroaryl, COAryl, and COHeteroaryl are optionally substituted with one or more groups selected from halogen, and CF_3;

R^3 is selected from hydrogen, C_{1-6} alkyl, C_{3-10} cycloalkyl, aryl, benzyl, heteroaryl, halogen, CN, CF_3;

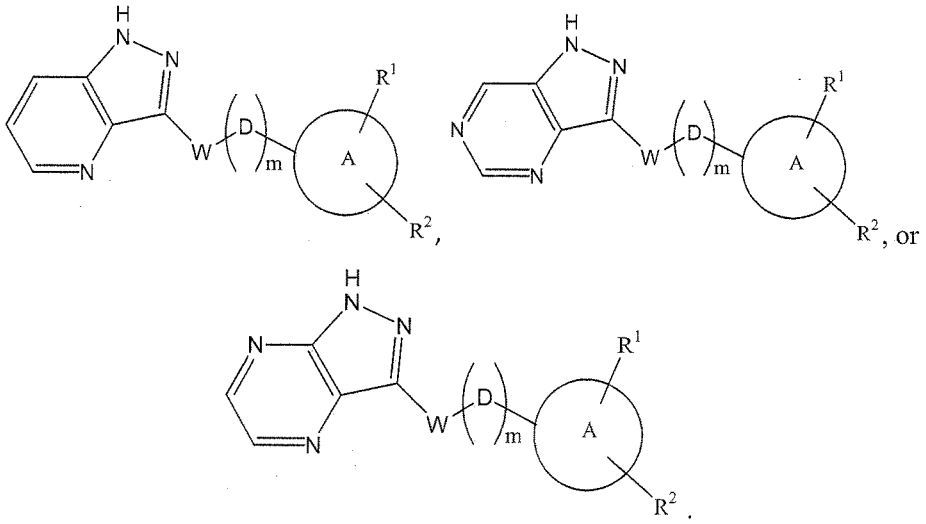
R^4 is selected from hydrogen, C_{1-6} alkyl, C_{3-10} cycloalkyl, aryl, benzyl, heteroaryl, halogen, CN, CF_3;

R^3 and R^4 can optionally cyclize to form a ring comprising C_3-C_{12} cycloalkyl or C_3-C_{12} cycloalkenyl or aryl or heteroaryl or C_3-C_{12} heterocycloalkyl or 3-8 membered ring comprising C, O, S, and/or N, optionally substituted with one or more R^5;

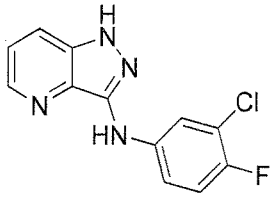
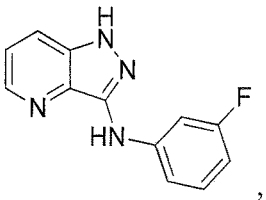
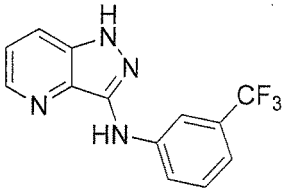
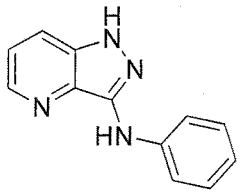
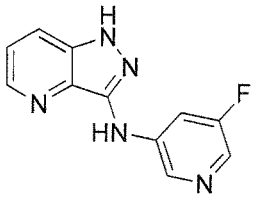
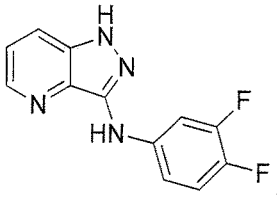
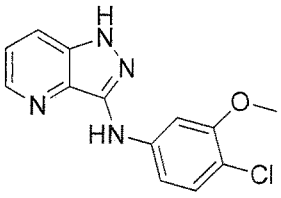
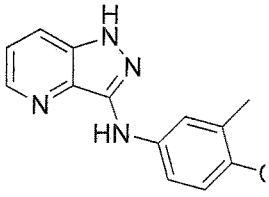
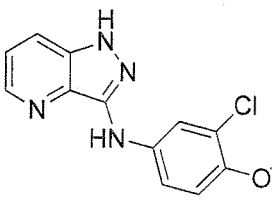
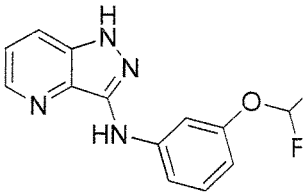
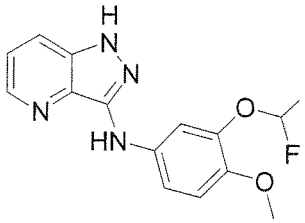
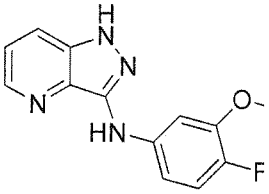
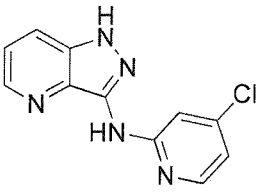
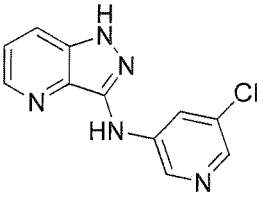
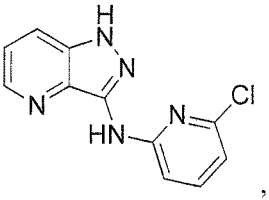
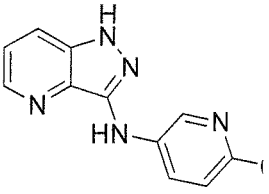
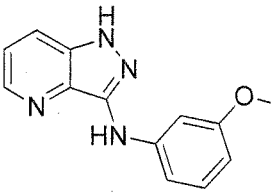
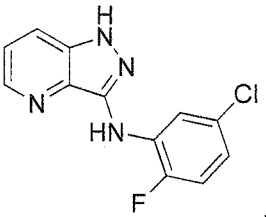
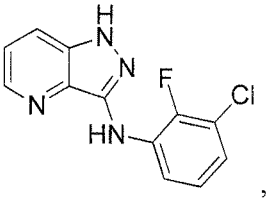
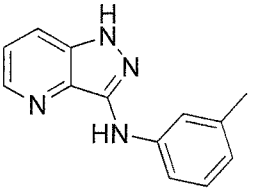
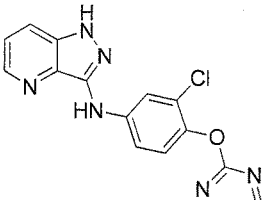
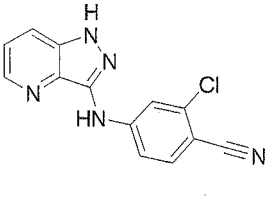
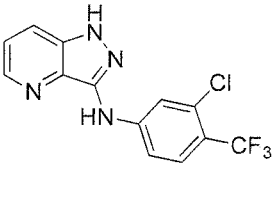
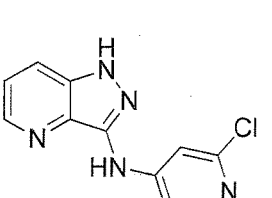
R^5 is selected from hydrogen, halogen, C_{1-6} alkyl, C_{3-10} cycloalkyl, aryl, heteroaryl, benzyl, OC_{1-10} alkyl (which may optionally contain a C_{3-8} membered ring containing C, O, S or N, optionally substituted with one or more R^4), CN, CF_3;

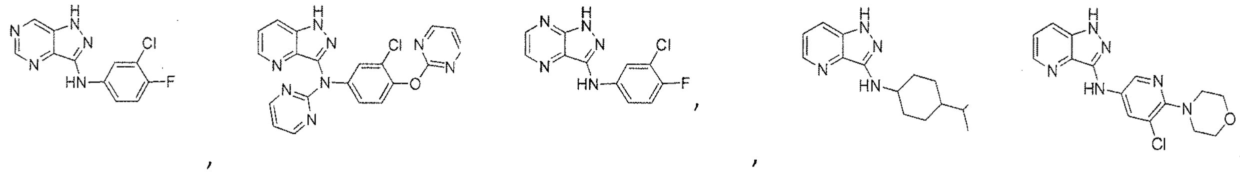
or a pharmaceutically acceptable salt thereof.

2. The compound of claim 1, of the following formula:

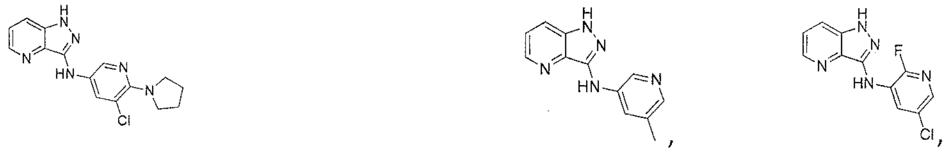


3. A compound of claim 1, selected from

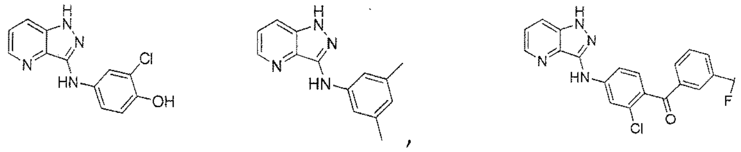



























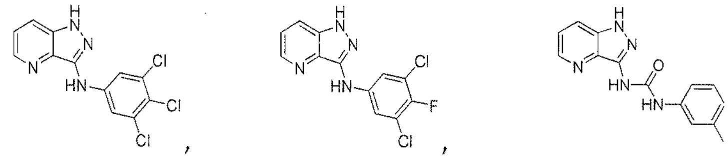
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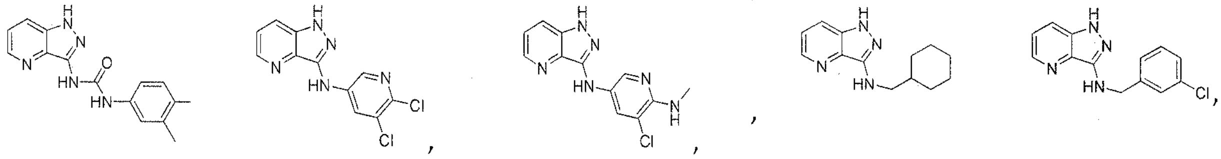
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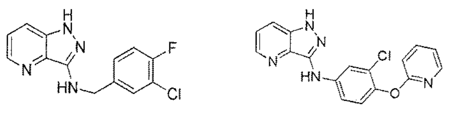
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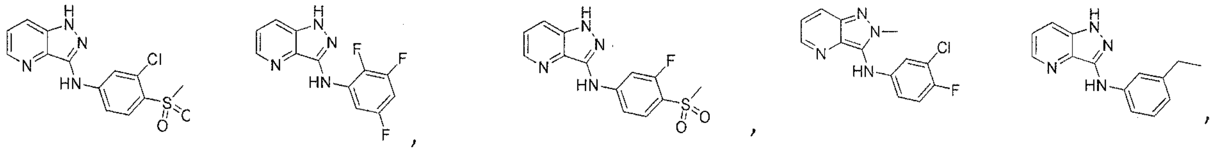
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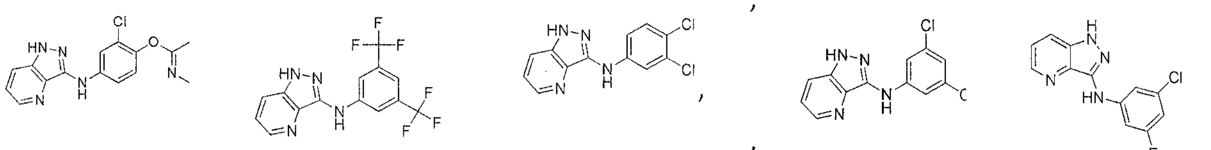
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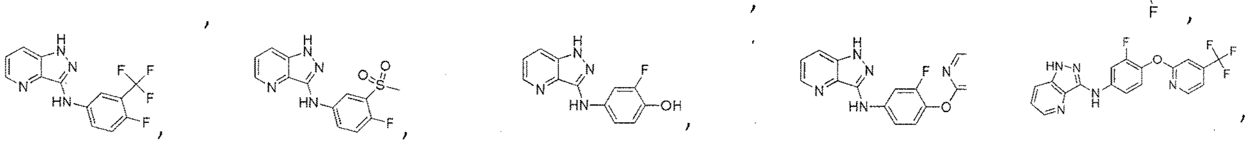
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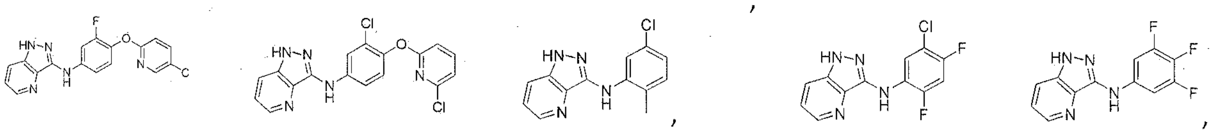
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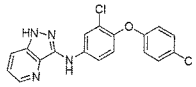
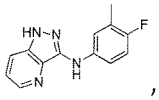
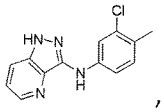
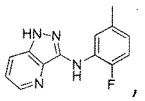
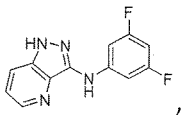
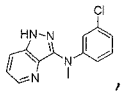
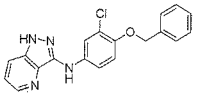
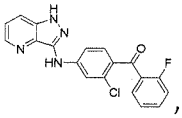
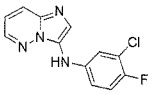
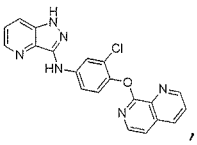
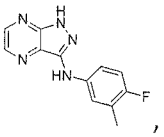
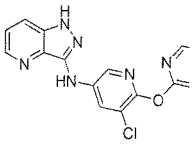
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or

4. The compound of claim 1, wherein A is substituted or unsubstituted and selected from phenyl, cyclohexane, or pyridine; and/or optionally wherein R^1 and R^2 are independently hydrogen, halogen, methoxy, difluoromethoxy, nitrile, optionally substituted O-aryl, optionally substituted O-heteroaryl; and/or optionally wherein O-aryl is O-phenyl or O-benzyl; and O-heteroaryl is O-pyrimidine, O-pyrazine, or O-pyridine; and/or optionally wherein O-aryl or O-heteroaryl is optionally substituted with one halogen, one methyl, and/or CF_3.

5. Use of a compound according to claim 1, or a pharmaceutically acceptable salt thereof, in the manufacture of a medicament for (i) treating a neurotransmission dysfunction and other disease states associated with mGluR4 activity in a mammal; or (ii) potentiating mGluR4 activity in a subject; wherein the dysfunction is any of Parkinson's disease, schizophrenia, psychosis, "schizophrenia-spectrum" disorder, depression, bipolar disorder, cognitive disorder, delirium, amnestic disorder, anxiety disorder, attention disorder, obesity, eating disorder, or NMDA receptor-related disorder, anxiety, motor effects after alcohol consumption, neurogenic fate commitment and neuronal survival, epilepsy, or cancers, for example, medulloblastoma, inflammation (for example, multiple sclerosis) and metabolic disorders (for example, diabetes) and taste enhancing associated with glutamatergic dysfunction.

6. The use according to claim 5, wherein the subject is a mammal; and/or optionally the mammal is a human.

7. A pharmaceutical composition comprising a compound according to any one of claims 1-4; or a pharmaceutically acceptable salt thereof, and a pharmaceutically acceptable carrier.

8. An *in-vitro* method of potentiating mGluR4 activity in at least one cell comprising the step of contacting the at least one cell with at least one compound according to any of claims 1-4, or a pharmaceutically acceptable salt thereof, in an amount effective to potentiate mGluR4 receptor activity in the at least one cell; wherein optionally the cell is a mammalian cell or a human cell.

9. A method for the manufacture of a medicament for potentiating mGluR4 receptor activity in a mammal comprising combining a compound according to any one of claims 1-4, or a pharmaceutically acceptable salt thereof, with a pharmaceutically acceptable carrier.

10. The use according to claim 5, wherein the medicament is in a dosage and amount effective to treat the dysfunction in the mammal; and wherein the medicament is for co-administration with one or more of

(i) a drug having a known side-effect of increasing metabotropic glutamate receptor activity; or

(ii) a drug known to treat a disorder associated with increasing metabotropic glutamate receptor activity; or

(iii) a drug known to treat the neurotransmission dysfunction or other disease state associated with potentiation of mGluR4.

11. The use according to claim 10, wherein the co-administration is substantially simultaneous; and/or optionally
wherein the co-administration is sequential; and/or optionally wherein the mammal is a human; and /or optionally
wherein the dysfunction is any of Parkinson's disease, schizophrenia, psychosis, "schizophrenia-spectrum" disorder, depression, bipolar disorder, cognitive disorder, delirium, amnestic disorder, anxiety disorder, attention disorder, obesity, eating disorder, or NMDA receptor-related disorder.

12. A kit comprising a compound according to claim 1; or a pharmaceutically acceptable salt thereof, and one or more of:

a. a drug having a known side-effect of increasing metabotropic glutamate receptor activity,

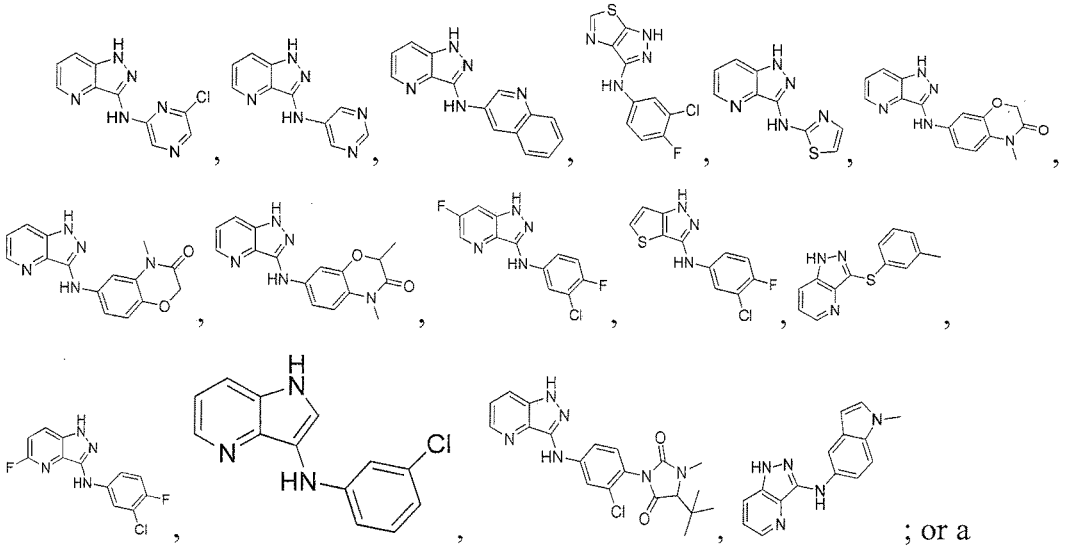
b. a drug known to treat a disorder associated with increasing metabotropic glutamate receptor activity, and/or

c. a drug known to treat the neurotransmission dysfunction or other disease state.

13. The kit of claim 13, wherein the compound(s) and the drug(s) are coformulated; and/or optionally wherein the compound(s) and the drug(s) are copackaged.

14. Use of a compound according to any one of claims 1-4 as a taste enhancer.

15. A compound of the following formula:



; or a pharmaceutically acceptable salt thereof.