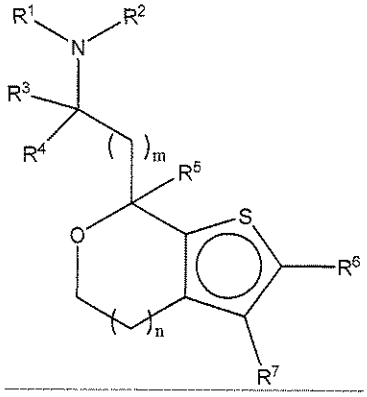
IV. SUMMARY

[0010] In one aspect, there is provided a compound having formula (IVa):



(IVa),

or a pharmaceutically acceptable salt or stereoisomer thereof, wherein:

m is 0;

n is 1;

R^1 is hydrogen, C_1-C_4 alkyl, or C_3-C_6 cycloalkyl;

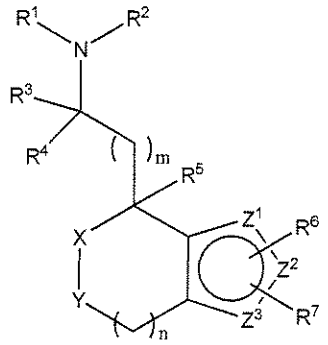
R^2 is C_1-C_4 alkyl, hydrogen, or C_3-C_6 cycloalkyl;

R^3 and R^4 are each independently hydrogen or C_1-C_4 alkyl;

R^5 is hydrogen; and

R^6 and R^7 are each independently hydrogen, halo, C_1-C_4 alkyl, aryl, heteroaryl, heterocyclyl, alkoxyl, or aminoalkyl.

~~Provided~~Also described herein are compounds of formula (I), or pharmaceutically acceptable salts or stereoisomers thereof:



(I),

wherein R^1, R^2, R^3, R^4, R^5, R^6, R^7, X, Y, Z^1, Z^2, Z^3, m, and n are defined herein elsewhere. The compounds are useful for treating various disorders, such as neurological disorders including, but not limited to, psychosis and schizophrenia.

[0011] Also ~~provided~~described herein are compositions and dosage forms, comprising a compound provided herein, and one or more pharmaceutically acceptable excipients. Compositions and dosage forms provided herein may further comprise one or more additional active ingredients.

[0012] Also ~~provided~~described herein are methods for the treatment, prevention, and/or management of various neurological disorders, including those of the central nervous system (CNS) using the compounds and compositions

provided herein. In one ~~embodiment~~example, provided herein is a method of treating or managing one or more symptoms of a neurological disorder provided herein. Such neurological disorders include, but are not limited to, schizophrenia, schizophrenia spectrum disorder, acute schizophrenia, chronic schizophrenia, NOS schizophrenia, schizoid personality disorder, schizotypal personality disorder, delusional disorder, psychosis, psychotic disorder, brief psychotic disorder, shared psychotic disorder, psychotic disorder due to a general medical condition, drug-induced psychosis (*e.g.*, cocaine, alcohol, amphetamine), psychoaffective disorder, aggression, delirium, Parkinson's psychosis, excitative psychosis, Tourette's syndrome, organic or NOS psychosis, seizure, agitation, post-traumatic stress disorder, behavior disorder, neurodegenerative disease, Alzheimer's disease, Parkinson's disease, dyskinesias, Huntington's disease, dementia, mood disorder, anxiety, affective disorders (*e.g.*, depression, *e.g.*, major depressive disorder and dysthymia; bipolar disorder, *e.g.*, bipolar depressive disorder; manic disorder; seasonal affective disorder; and attention deficit disorder (ADD) and attention deficit hyperactivity disorder (ADHD)), obsessive-compulsive disorder, vertigo, epilepsy, pain (*e.g.*, neuropathic pain, sensitization accompanying neuropathic pain, and inflammatory pain),

fibromyalgia, migraine, cognitive impairment, movement disorder, restless leg syndrome (RLS), multiple sclerosis, sleep disorder, sleep apnea, narcolepsy, excessive daytime sleepiness, jet lag, drowsy side effect of medications, insomnia, substance abuse or dependency (*e.g.*, nicotine, cocaine), addiction, eating disorder, sexual dysfunction, hypertension, emesis, Lesche-Nyhane disease, Wilson's disease, autism, Huntington's chorea, and premenstrual dysphoria.

[0013] In one aspect, there is provided use of a compound of any one of claims 1 to 47, or a pharmaceutically acceptable salt or stereoisomer thereof in the manufacture of a medicament for treating, preventing, or managing a neurological disorder.

In one ~~embodiment~~example, ~~provided~~described herein is a method of treating, preventing, and/or managing psychosis or schizophrenia. In one ~~embodiment~~example, provided herein is a method of treating or managing one or more symptoms of psychosis or schizophrenia. In one ~~embodiment~~example, provided herein is a method of treating, preventing, and/or managing psychosis or schizophrenia in a subject, such as a mammal, such as, *e.g.*, human, rodent (such as, *e.g.*, mice and rats), cat, dog, non-human primate, among others. In one ~~embodiment~~example, the method comprises contacting a compound provided herein with one or more receptors of the central nervous system. In one ~~embodiment~~example, the method comprises contacting a cell with a compound provided herein. In an exemplary ~~embodiment~~example, the cell is a brain cell, such as, *e.g.*, a neuronal cell or a glial cell.

V. DETAILED DESCRIPTION

[0014] Unless defined otherwise, all technical and scientific terms used herein have the same meaning as those commonly understood by one of ordinary skill in the art. In certain embodiments, abbreviations are as defined in *J. Org. Chem.* 2007, *72*, 23A. All publications and patents referred to herein are incorporated by reference herein in their entireties.

A. Definitions

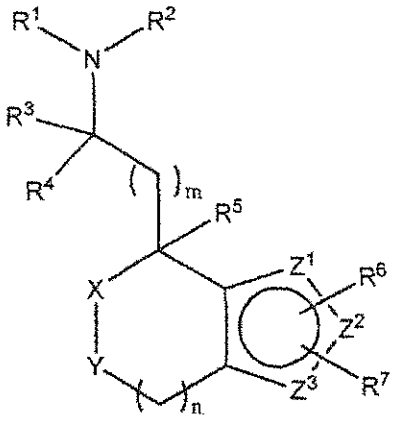
[0015] As used in the specification and the accompanying claims, the indefinite articles "a" and "an" and the definite article "the" include plural as well as singular referents, unless the context clearly dictates otherwise.

[0016] As used herein, and unless otherwise indicated, the term "alkyl" refers to a linear or branched saturated monovalent hydrocarbon radical, wherein the alkyl may optionally be substituted with one or more substituents. In certain embodiments, the alkyl is a linear saturated monovalent hydrocarbon radical that has 1 to 20 (C_{1-20}), 1 to 15 (C_{1-15}), 1 to 12 (C_{1-12}), 1 to 10 (C_{1-10}), or 1 to 6 (C_{1-6}) carbon atoms, or branched saturated monovalent hydrocarbon radical of 3 to 20 (C_{3-20}), 3 to 15 (C_{3-15}), 3 to 12 (C_{3-12}), 3 to 10 (C_{3-10}), or 3 to 6 (C_{3-6}) carbon atoms. As used herein, linear C_{1-6} and branched C_{3-6} alkyl groups are also referred as "lower alkyl." Examples of alkyl groups include, but are not limited to, methyl, ethyl, propyl (including all isomeric forms, *e.g.*, *n*-propyl and isopropyl), butyl (including all isomeric forms,

e.g, *n*-butyl, isobutyl, and *t*-butyl), pentyl (including all isomeric forms), and hexyl (including all isomeric forms). For example, C_{1-6} alkyl refers to a linear saturated monovalent hydrocarbon radical of 1 to 6 carbon

WHAT IS CLAIMED:

1. A compound of formula (I):



(I),

or a pharmaceutically acceptable salt or stereoisomer thereof, wherein

one of X and Y is O, and the other is CH_2; or both X and Y are CH_2;

one of Z^1, Z^2, and Z^3 is S; and (i) two of Z^1, Z^2, and Z^3 are C; or (ii) one of Z^1, Z^2, and Z^3 is C and one of Z^1, Z^2, and Z^3 is N;

R^1 and R^2 are each independently (i) hydrogen, alkyl, alkoxyl, aminoalkyl, alkenyl, alkynyl, cycloalkyl, cycloalkylalkyl, aryl, or aralkyl, each of which is optionally substituted; or (ii) $-(CH_2)_p-R^8$, wherein R^8 is SO_2alkyl or SO_2aryl, each of which is optionally substituted; or (iii) R^1 and R^2 together with the nitrogen atom to which they are attached form an optionally substituted heterocyclyl or heteroaryl;

R^3 and R^4 are each independently (i) hydrogen, alkyl, alkoxyl, aminoalkyl, alkenyl, alkynyl, cycloalkyl, cycloalkylalkyl, aryl, or aralkyl, each of which is optionally substituted; or (ii) $-(CH_2)_p-R^9$, wherein R^9 is CF_3, CN, nitro, amino, hydroxyl, or cycloalkoxyl, each of which is optionally substituted; or (iii) R^3 and R^4 together with the carbon atom to which they are attached form an optionally substituted cycloalkyl or heterocyclyl; or (iv) R^3 and R^1 together with the atoms to which they are attached form an optionally substituted heterocyclyl, and R^4 is (i) or (ii); or (v) R^3 and R^4 are combined together to form a double bond and together with R^1 and/or R^2 and the atoms to which they are attached form an optionally substituted heteroaryl;

R^5 is (i) hydrogen, alkyl, alkoxyl, aminoalkyl, alkenyl, alkynyl, cycloalkyl, cycloalkylalkyl, aryl, or aralkyl, each of which is optionally substituted; or (ii) $-(CH_2)_p-R^{10}$, wherein R^{10} is CF_3, CN, nitro, amino, hydroxyl, or cycloalkoxyl, each of which is optionally substituted; or (iii) R^5 and R^1 together with the atoms to which they are attached form an optionally substituted heterocyclyl;

R^6 and R^7 are each independently (i) hydrogen, halo, alkyl, alkoxyl, aminoalkyl, alkenyl, alkynyl, cycloalkyl, cycloalkylalkyl, aryl, or aralkyl, each of which is optionally substituted; or (ii) $-(CH_2)_p-R^{11}$, wherein R^{11} is CF_3, CN, nitro, amino, hydroxyl, cycloalkoxyl, heteroaryl, or heterocyclyl, each of which is optionally substituted; or (iii) R^6 and R^7 together with the atoms to which they are attached form an optionally substituted aryl, heteroaryl, cycloalkyl or heterocyclyl ring; with the proviso that when one of Z^1, Z^2, and Z^3 is N, R^7 is absent;

m is 0, 1, or 2;

n is 0, 1, or 2; and

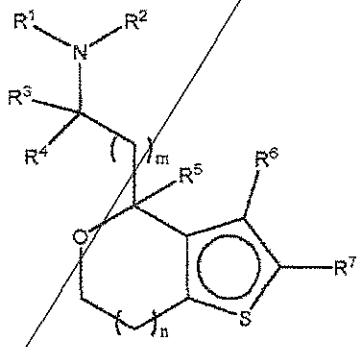
each occurrence of p is independently 0, 1, or 2.

2. The compound of claim 1, wherein two of Z^1, Z^2, and Z^3 are C, and one of Z^1, Z^2, and Z^3 is S.

3. The compound of claim 1 or 2, wherein m is 0 or 1.

4. The compound of any one of claims 1 to 3, wherein n is 0 or 1.

5. The compound of claim 1, having formula (IIa):

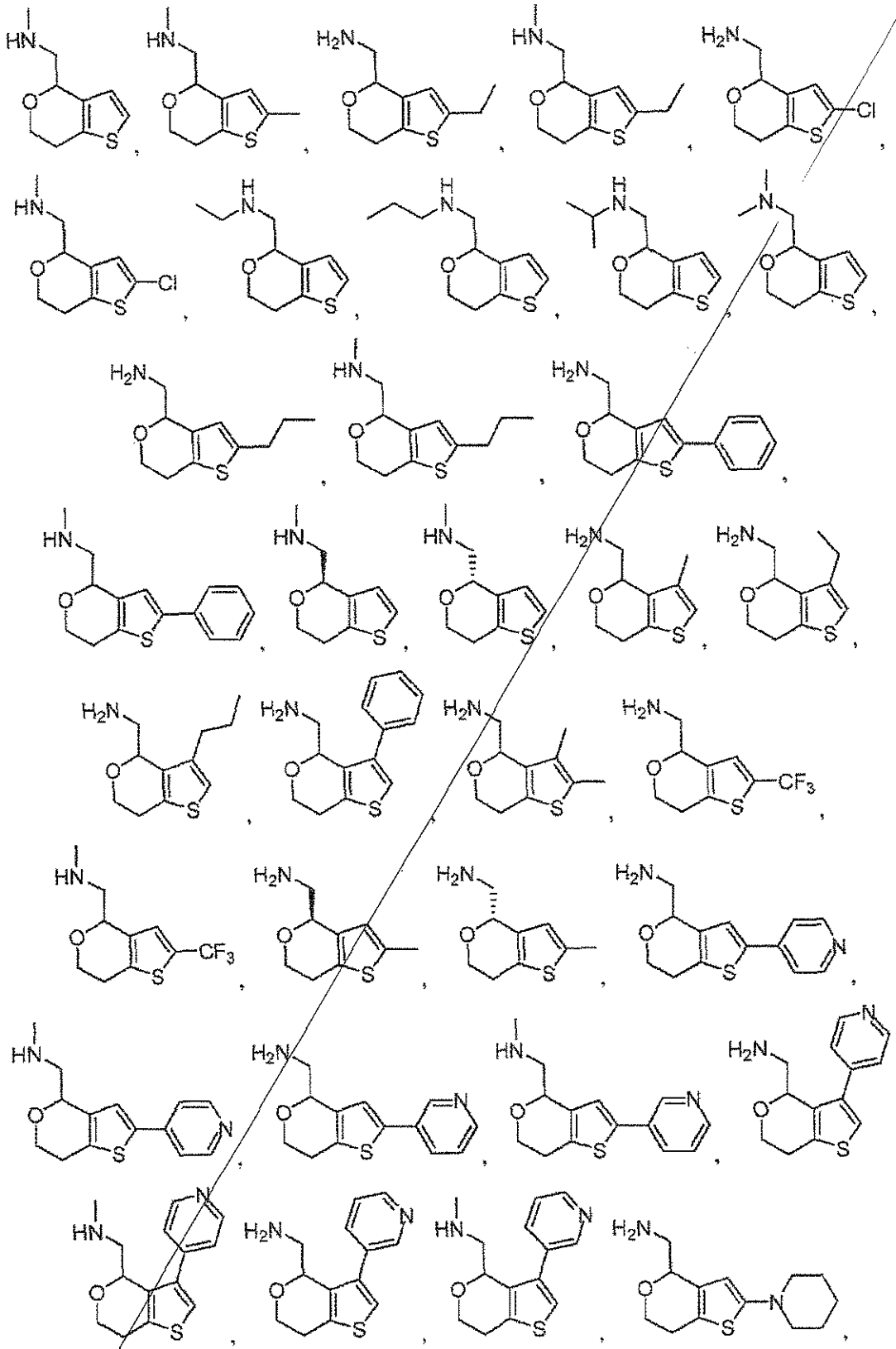


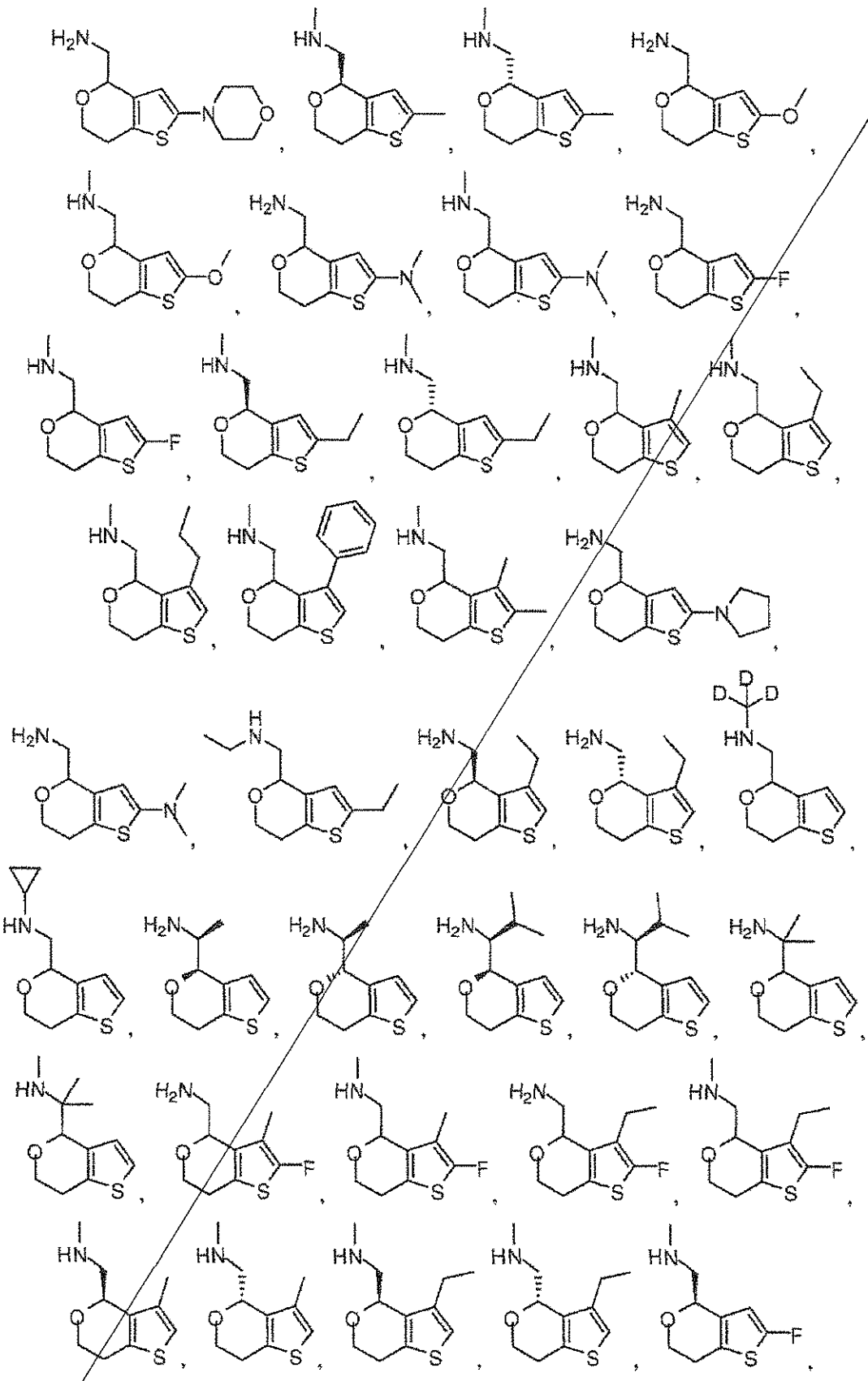
(IIa),

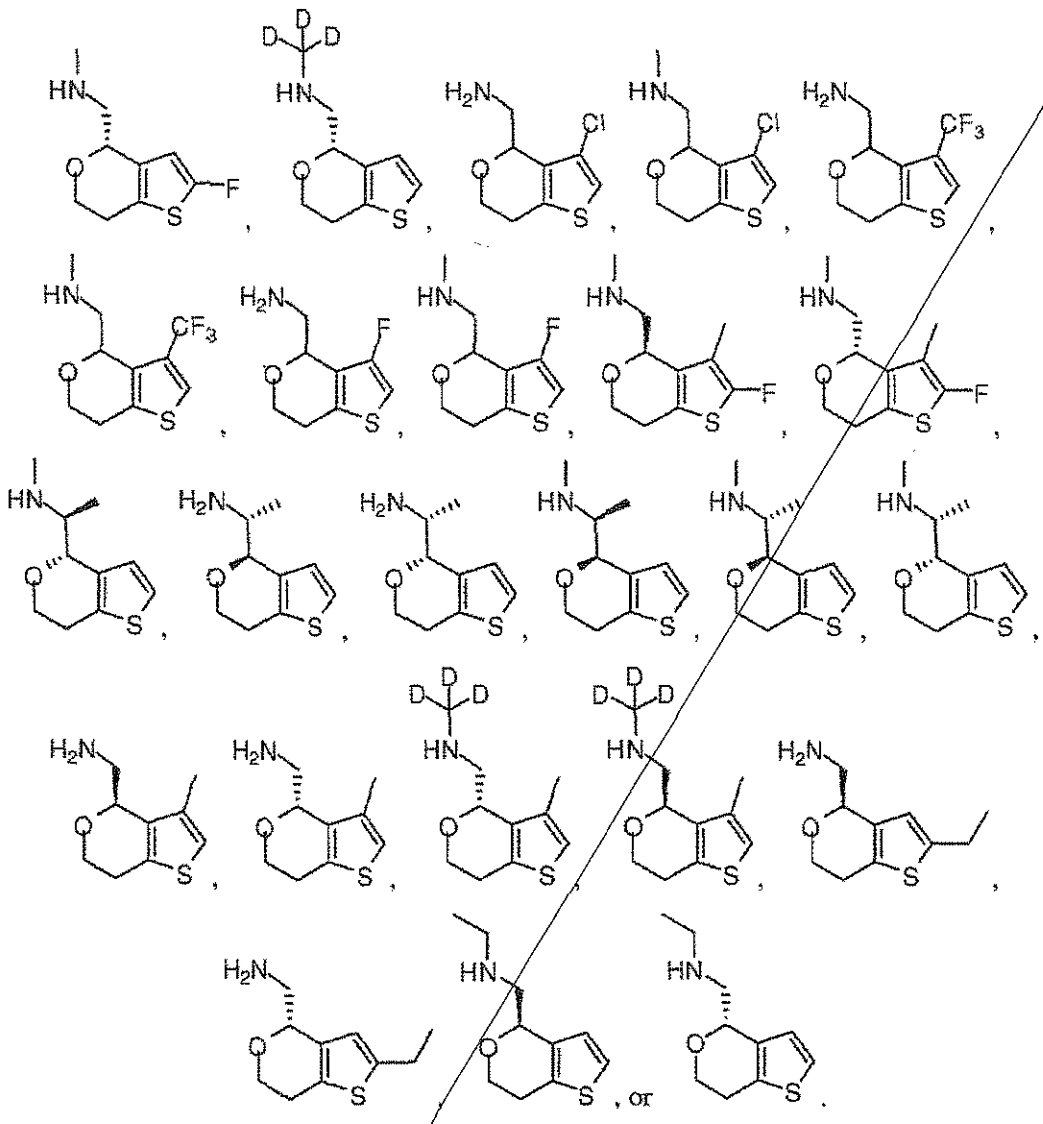
or a pharmaceutically acceptable salt or stereoisomer thereof.

6. The compound of claim 5, wherein m is 0; n is 1; R^1 and R^2 are each independently hydrogen, optionally substituted C_1-C_4 alkyl, or optionally substituted C_3-C_6 alkyl; R^3 and R^4 are each independently hydrogen or optionally substituted C_1-C_4 alkyl; R^5 is hydrogen; and R^6 and R^7 are each independently hydrogen, halo, C_1-C_4 alkyl, aryl, heteroaryl, heterocyclyl, alkoxyl, or aminoalkyl, each of which is optionally substituted.

7. The compound of claim 6, wherein the compound is:

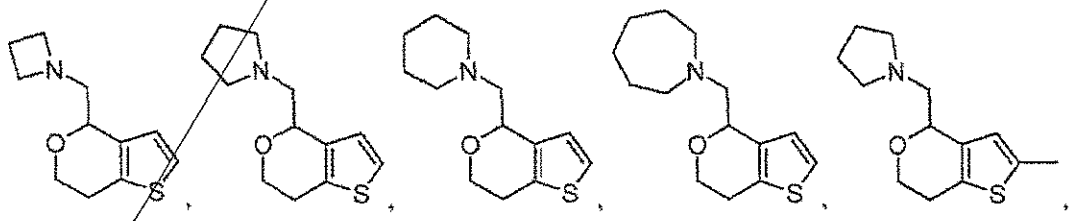


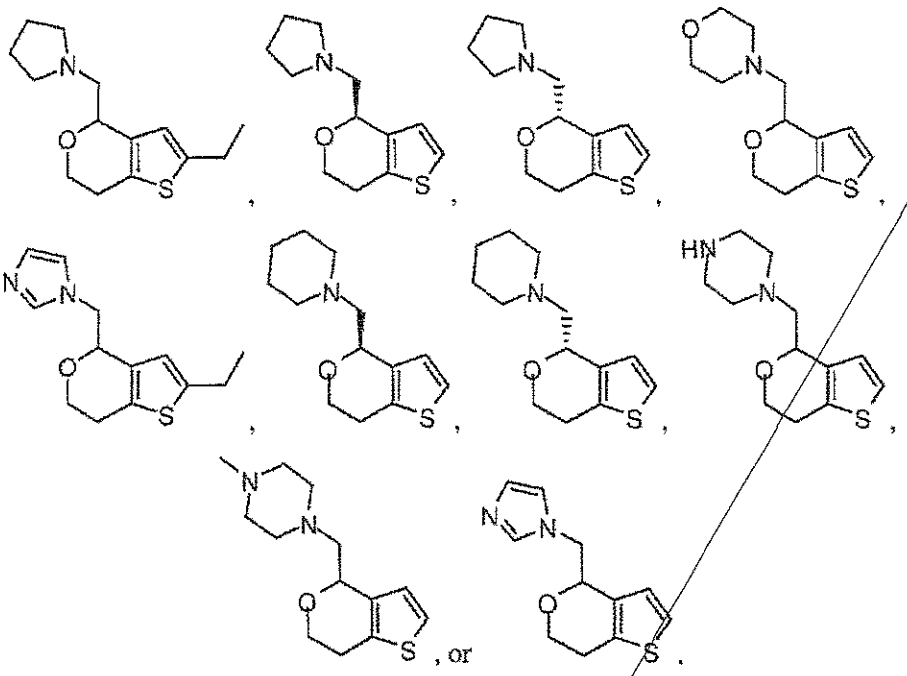




8. The compound of claim 5, wherein R^1 and R^2 together with the nitrogen atom to which they are attached form a heteroaryl or heterocyclyl, each of which is optionally substituted.

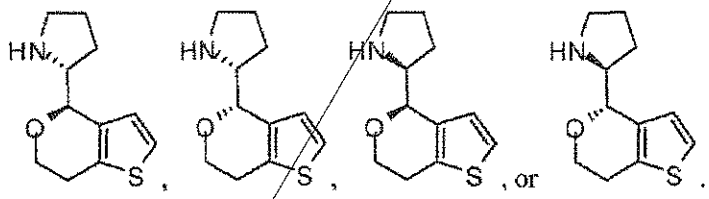
9. The compound of claim 8, wherein the compound is:





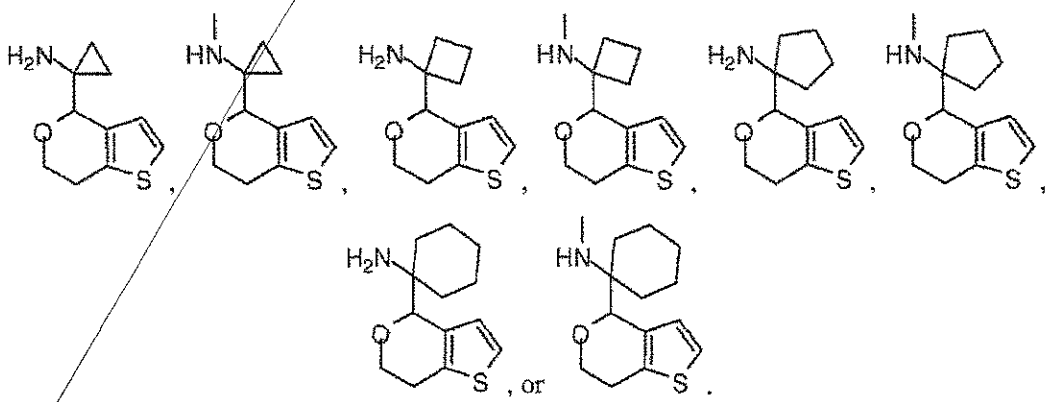
10. The compound of claim 5, wherein R^1 and R^5 together with the atoms to which they are attached form an optionally substituted heterocyclyl ring.

11. The compound of claim 10, wherein the compound is:



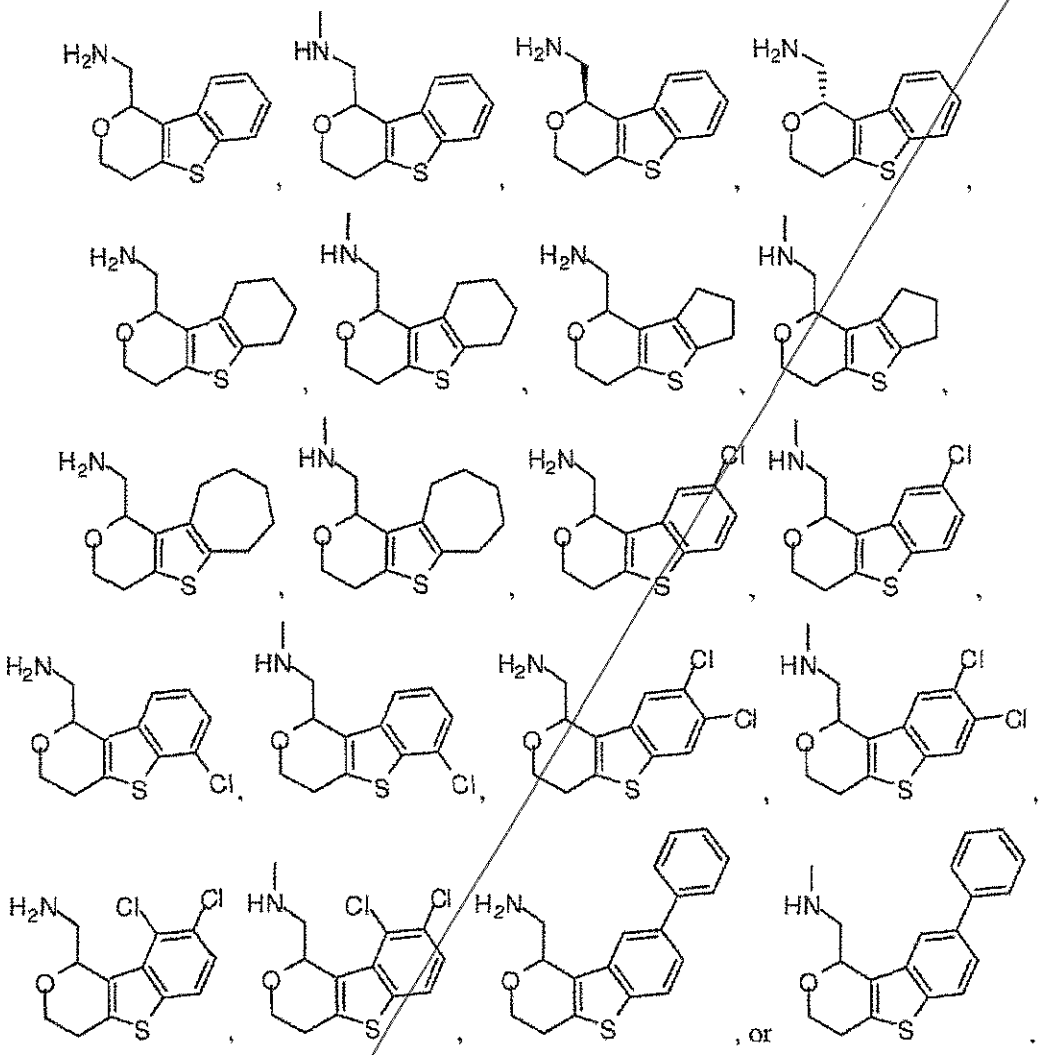
12. The compound of claim 5, wherein R^3 and R^4 together with the atom to which they are attached form a cycloalkyl or heterocyclyl ring, each of which is optionally substituted.

13. The compound of claim 12, wherein the compound is:



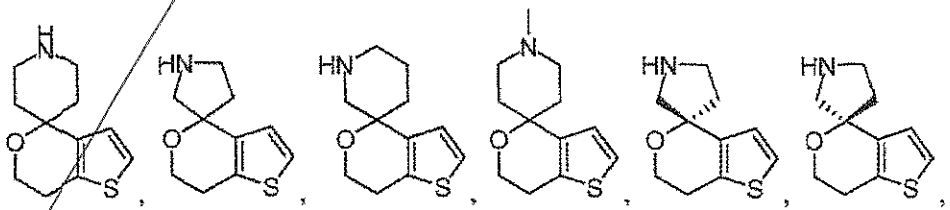
14. The compound of claim 5, wherein R^6 and R^7 together with the atoms to which they are attached form an aryl or cycloalkyl ring, each of which is optionally substituted.

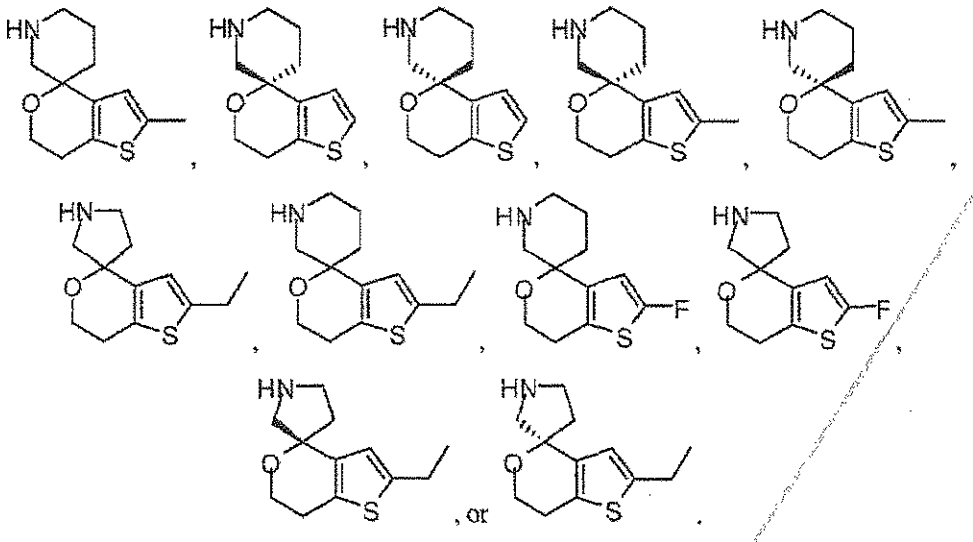
15. The compound of claim 14, wherein the compound is:



16. The compound of claim 5, wherein R^1 and R^5 together with the atoms to which they are attached form an optionally substituted heterocyclyl.

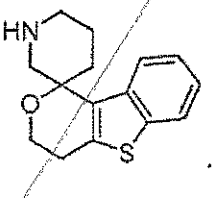
17. The compound of claim 16, wherein the compound is:





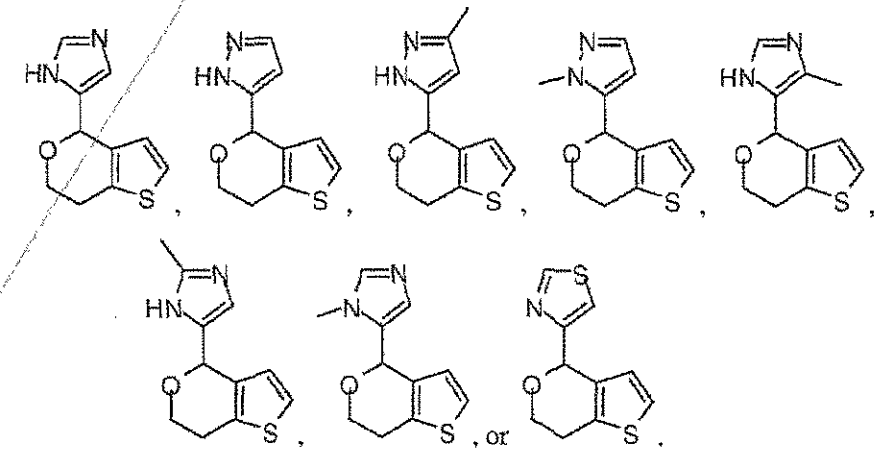
18. The compound of claim 5, wherein R^1 and R^5 together with the atoms to which they are attached form an optionally substituted heterocyclyl and R^6 and R^7 together with the nitrogen atom to which they are attached form an optionally substituted aryl.

19. The compound of claim 18, wherein the compound is:



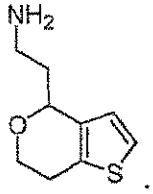
20. The compound of claim 5, wherein m is 0, and R^3 and R^4 are combined together to form a double bond and together with R^1 and/or R^2 and the atoms to which they are attached form an optionally substituted heteroaryl.

21. The compound of claim 20, wherein the compound is:



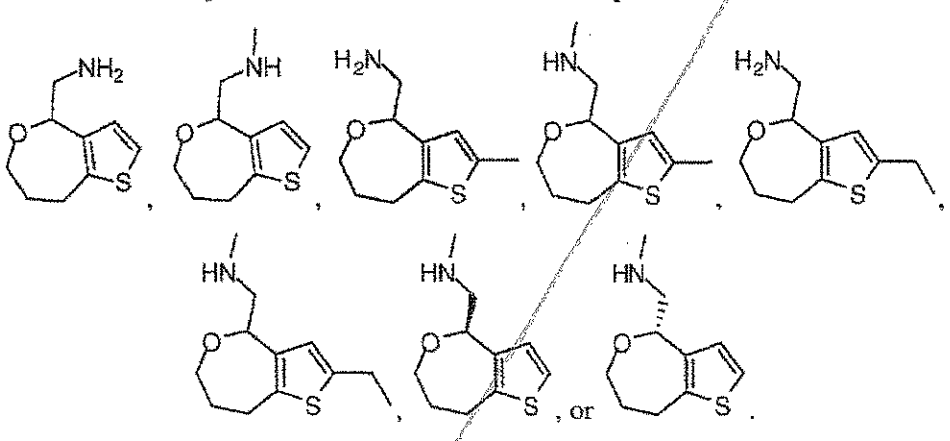
22. The compound of claim 5, wherein m is 1.

23. The compound of claim 22, wherein the compound is:



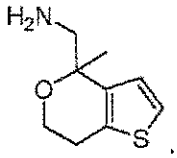
24. The compound of claim 5, wherein n is 2.

25. The compound of claim 24, wherein the compound is:

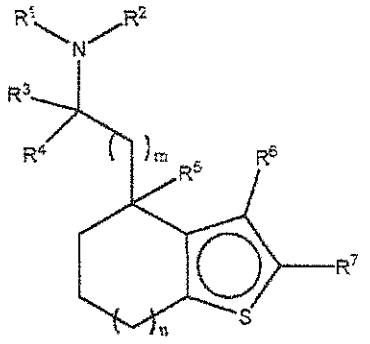


26. The compound of claim 5, wherein R^5 is alkyl.

27. The compound of claim 26, wherein the compound is:



28. The compound of claim 1, having formula (IIc):

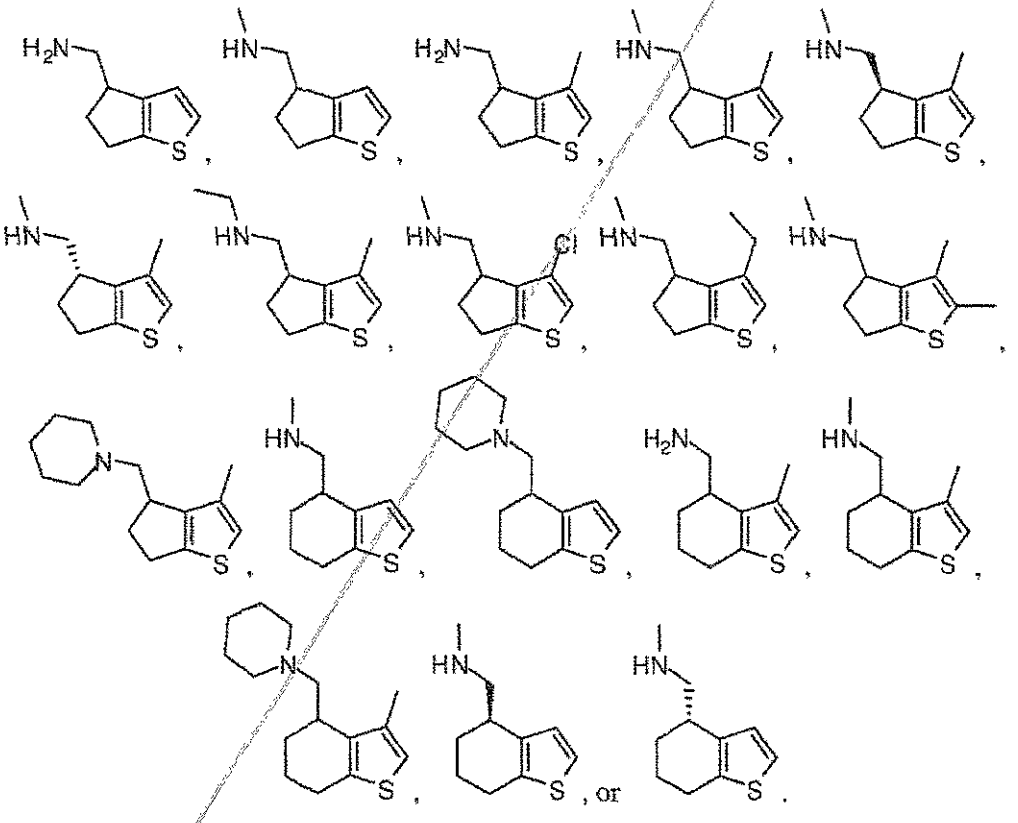


(IIc),

or a pharmaceutically acceptable salt or stereoisomer thereof.

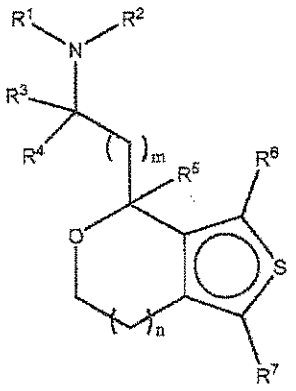
29. The compound of claim 28, wherein R^5 is H.

30. The compound of claim 29, wherein the compound is:



31. The compound of claim 28, wherein R^5 is OH.

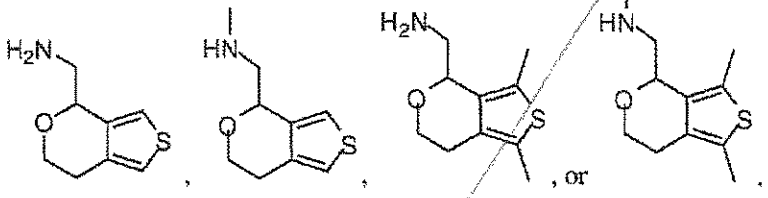
32. The compound of claim 1, having formula (IIIa):



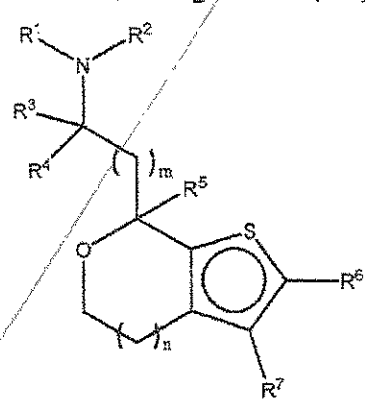
(IIIa),

or a pharmaceutically acceptable salt or stereoisomer thereof, wherein.

33. The compound of claim 32, wherein the compound is:



34. The compound of claim 1, having formula (IVa):

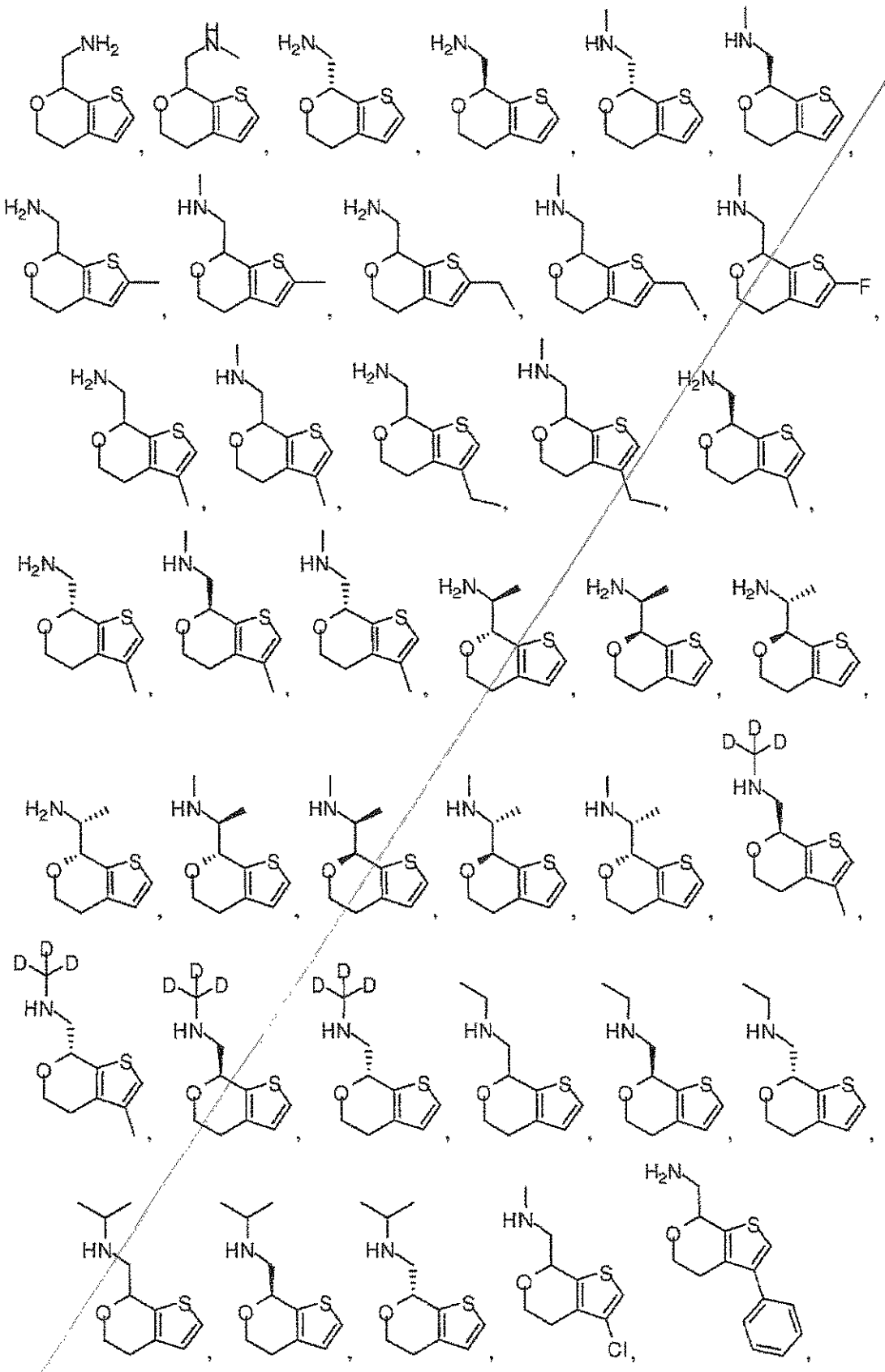


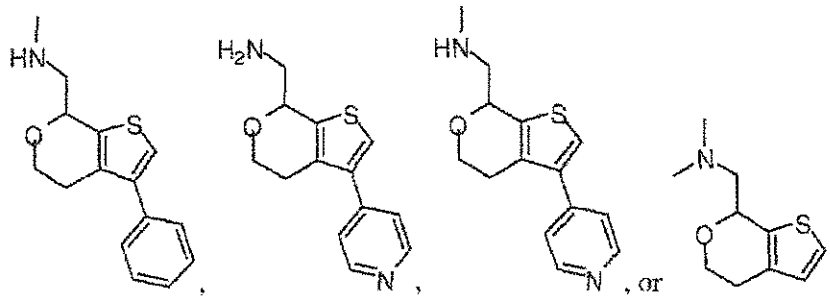
(IVa),

or a pharmaceutically acceptable salt or stereoisomer thereof.

35. The compound of claim 34, wherein m is 0; n is 1; R^1 and R^2 are each independently hydrogen, optionally substituted C_1-C_4 alkyl, or optionally substituted C_3-C_6 alkyl; R^3 and R^4 are each independently hydrogen or optionally substituted C_1-C_4 alkyl; R^5 is hydrogen; and R^6 and R^7 are each independently hydrogen, halo, C_1-C_4 alkyl, aryl, heteroaryl, heterocyclyl, alkoxyl, or aminoalkyl, each of which is optionally substituted.

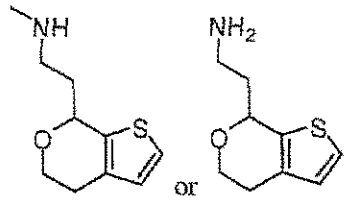
36. The compound of claim 35, wherein the compound is:





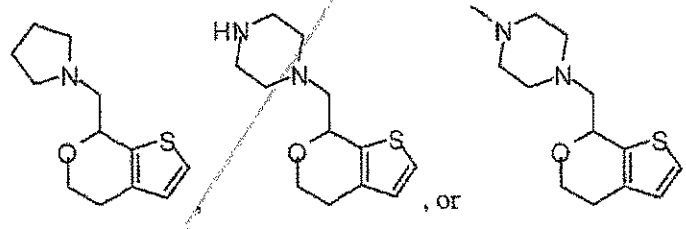
37. The compound of claim 34, wherein m is 1.

38. The compound of claim 37, wherein the compound is:



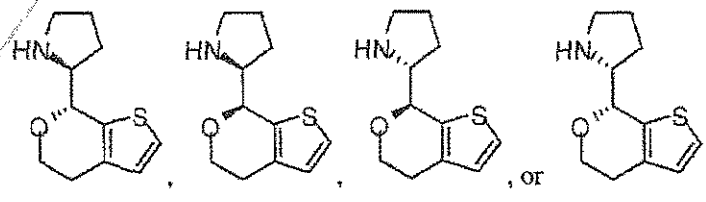
39. The compound of claim 34, wherein R^1 and R^2 together with the nitrogen atom to which they are attached form a heteroaryl or heterocyclyl, each of which is optionally substituted.

40. The compound of claim 39, wherein the compound is:



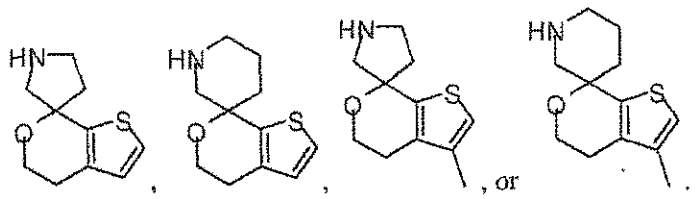
41. The compound of claim 34, wherein R^1 and R^3 together with the atoms to which they are attached form an optionally substituted heterocyclyl ring.

42. The compound of claim 41, wherein the compound is:



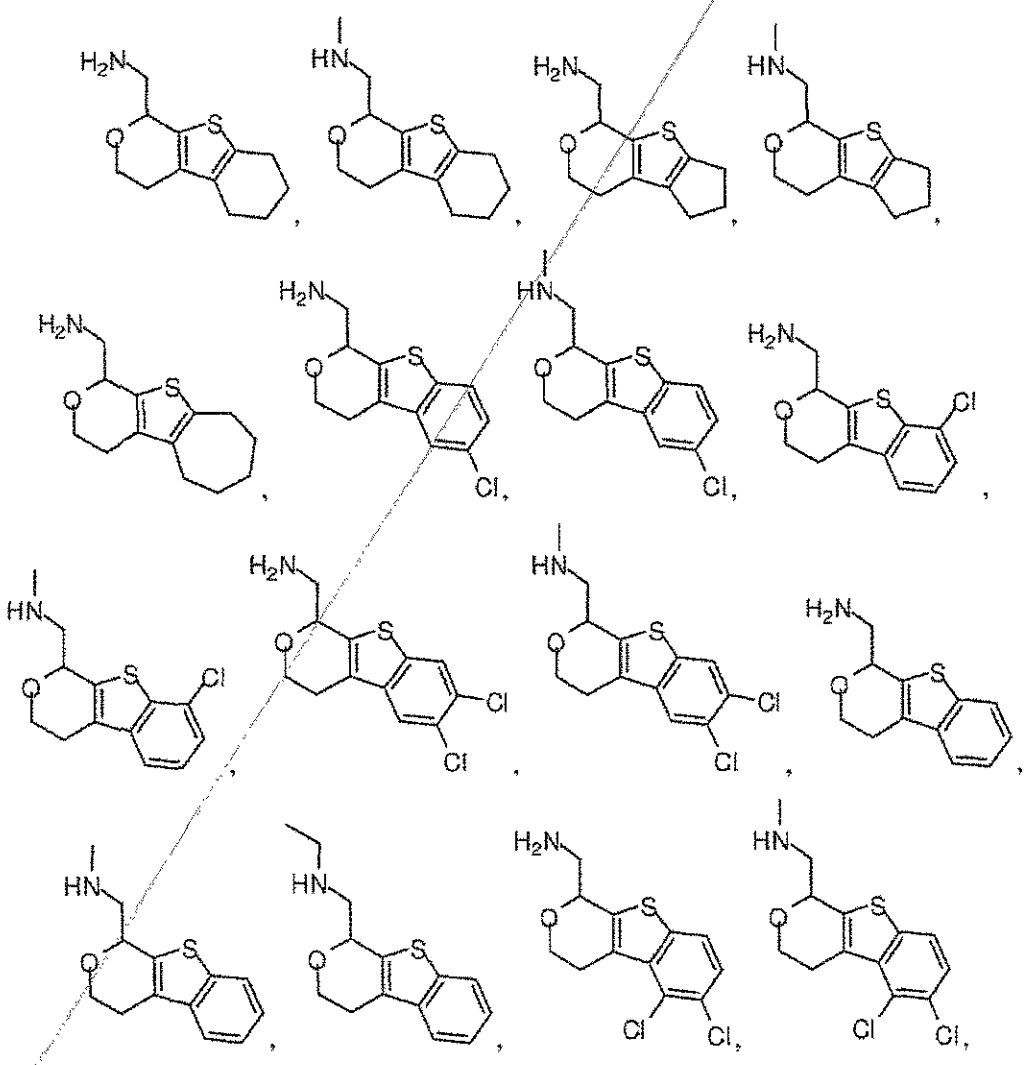
43. The compound of claim 34, wherein R^1 and R^5 together with the atoms to which they are attached form an optionally substituted heterocyclyl.

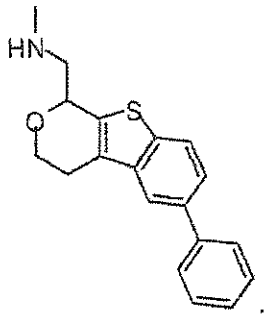
44. The compound of claim 43, wherein the compound is:



45. The compound of claim 34, wherein R^6 and R^7 together with the atoms to which they are attached form an aryl or cycloalkyl ring, each of which is optionally substituted.

46. The compound of claim 45, wherein the compound is:

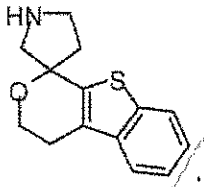




or .

47. The compound of claim 34, wherein R^1 and R^5 together with the atoms to which they are attached form an optionally substituted heterocyclyl and R^6 and R^7 together with the atoms to which they are attached form an optionally substituted aryl.

48. The compound of claim 47, wherein the compound is:



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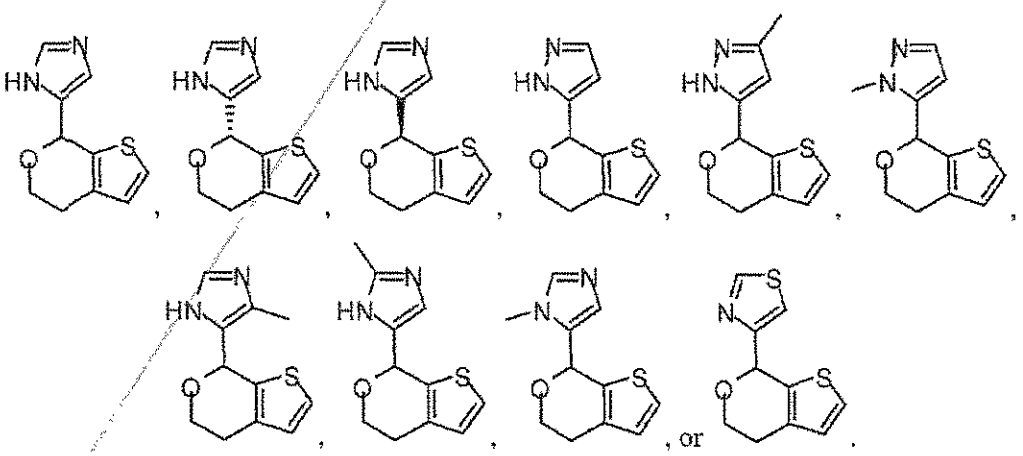
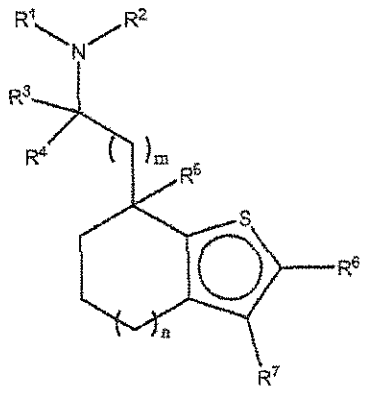
49. The compound of claim 34, wherein m is 0 and R^3 and R^4 are combined together to form a double bond and together with R^1 and/or R^2 and the atoms to which they are attached form an optionally substituted heteroaryl.

50. The compound of claim 49, wherein the compound is:



, or .

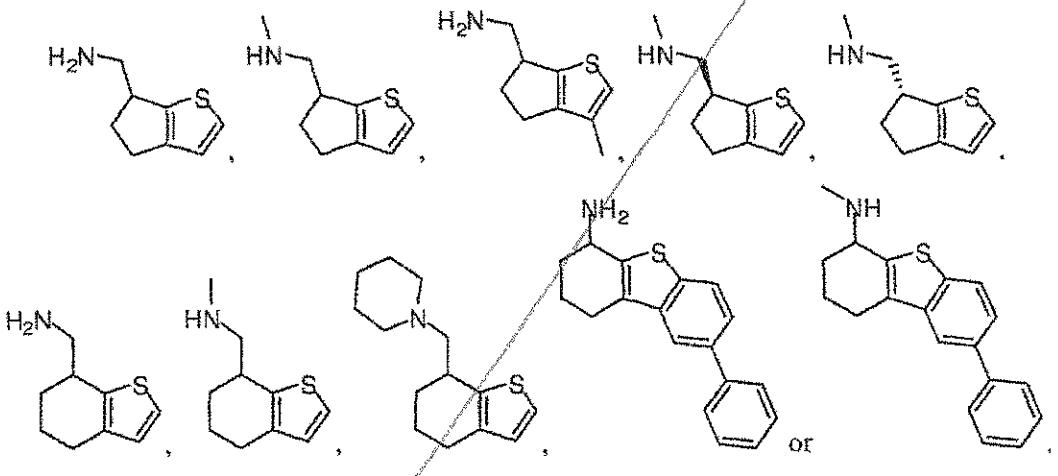
51. The compound of claim 1, having formula (IVc):



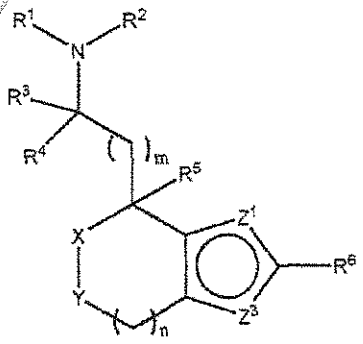
(IVc),

or a pharmaceutically acceptable salt or stereoisomer thereof.

52. The compound of claim 51, wherein the compound is:



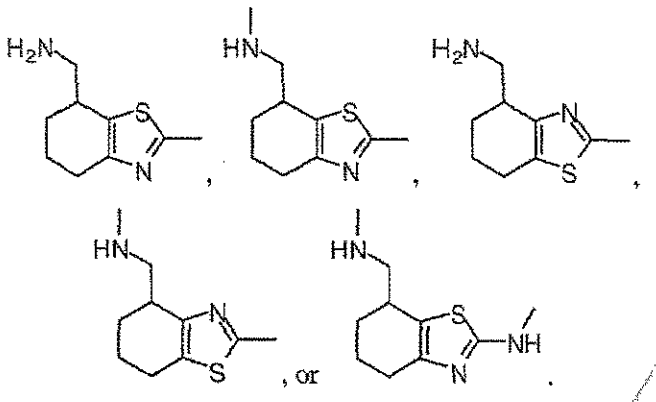
53. The compound of claim 1, having formula (V):



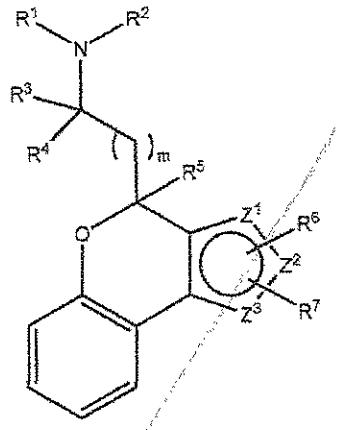
(V),

or a pharmaceutically acceptable salt or stereoisomer thereof.

54. The compound of claim 53, wherein the compound is:



55. A compound of formula (VI):



(VI),

or a pharmaceutically acceptable salt or stereoisomer thereof, wherein

two of Z^1, Z^2, and Z^3 are C, and one of Z^1, Z^2, and Z^3 is S;

R^1 and R^2 are each independently (i) hydrogen, alkyl, alkoxyl, aminoalkyl, alkenyl, alkynyl, cycloalkyl, cycloalkylalkyl, aryl, or aralkyl, each of which is optionally substituted; or (ii) $-(CH_2)_p-R^8$, wherein R^8 is SO_2alkyl or SO_2aryl, each of which is optionally substituted; or (iii) R^1 and R^2 together with the nitrogen atom to which they are attached form an optionally substituted heterocyclyl or heteroaryl;

R^3 and R^4 are each independently (i) hydrogen, alkyl, alkoxyl, aminoalkyl, alkenyl, alkynyl, cycloalkyl, cycloalkylalkyl, aryl, or aralkyl, each of which is optionally substituted; or (ii) $-(CH_2)_p-R^9$, wherein R^9 is CF_3, CN, nitro, amino, hydroxyl, or cycloalkoxyl, each of which is optionally substituted; or (iii) R^3 and R^4 together with the carbon atom to which they are attached form an optionally substituted cycloalkyl or heterocyclyl; or (iv) R^3 and R^1 together with the atoms to which they are attached form an optionally substituted heterocyclyl, and R^4 is (i) or (ii); or (v) R^3 and R^4 are combined together to form a double bond and together with R^1 and/or R^2 and the atoms to which they are attached form an optionally substituted heteroaryl;

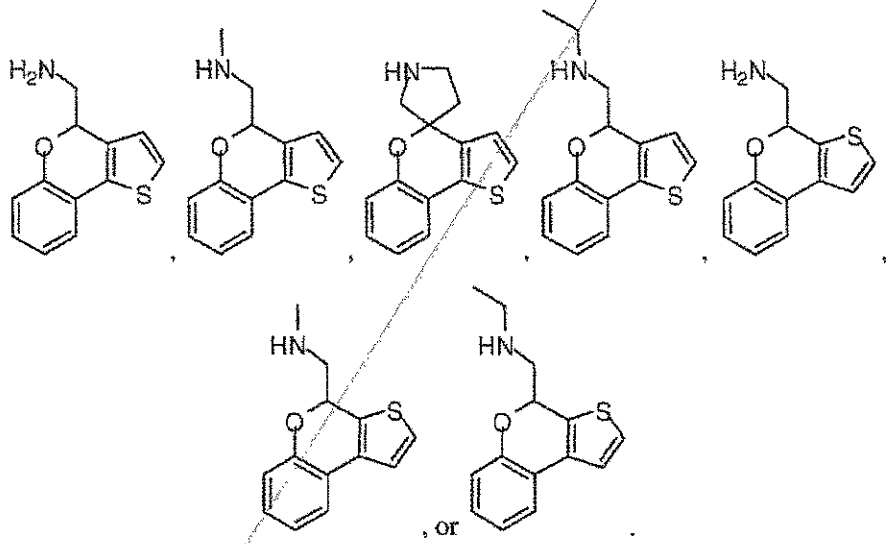
R^5 is (i) hydrogen, alkyl, alkoxyl, aminoalkyl, alkenyl, alkynyl, cycloalkyl, cycloalkylalkyl, aryl, or aralkyl, each of which is optionally substituted; or (ii) $-(CH_2)_p-R^{10}$, wherein R^{10} is CF_3, CN, nitro, amino, hydroxyl, or cycloalkoxyl, each of which is optionally substituted; or (iii) R^5 and R^1 together with the atoms to which they are attached form an optionally substituted heterocyclyl;

R^6 and R^7 are each independently (i) hydrogen, halo, alkyl, alkoxyl, aminoalkyl, alkenyl, alkynyl, cycloalkyl, cycloalkylalkyl, aryl, or aralkyl, each of which is optionally substituted; or (ii) $-(CH_2)_p-R^{11}$, wherein R^{11} is CF_3, CN, nitro, amino, hydroxyl, cycloalkoxyl, heteroaryl, or heterocyclyl, each of which is optionally substituted; or (iii) R^6 and R^7 together with the atoms to which they are attached form an optionally substituted aryl, heteroaryl, cycloalkyl or heterocyclyl ring; and

m is 0, 1, or 2;

each occurrence of p is independently 0, 1, or 2.

56. The compound of claim 55, wherein the compound is:



57. A pharmaceutical composition comprising a compound of any one of claims 1 to 56, or a pharmaceutically acceptable salt or stereoisomer thereof, and a pharmaceutically acceptable excipient or carrier.

58. The pharmaceutical composition of claim 57, which further comprises one or more additional active agents.

59. A method of treating, preventing, or managing a neurological disorder, comprising administering to a subject a therapeutically or prophylactically effective amount of a

compound of any one of claims 1 to 56, or a pharmaceutically acceptable salt or stereoisomer thereof.

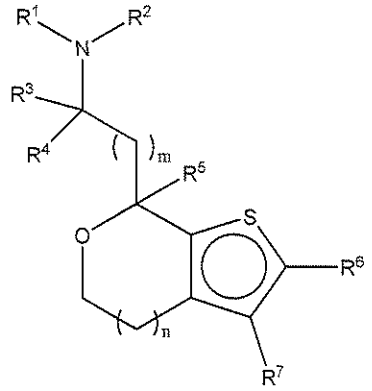
60. The method of claim 59, wherein said subject is a human.

61. The method of claim 59 or 60, wherein the disorder is schizophrenia, schizophrenia spectrum disorder, acute schizophrenia, chronic schizophrenia, NOS schizophrenia, schizoid personality disorder, schizotypal personality disorder, delusional disorder, psychosis, psychotic disorder, brief psychotic disorder, shared psychotic disorder, psychotic disorder due to a general medical condition, drug-induced psychosis, psychoaffective disorder, aggression, delirium, Parkinson's psychosis, excitative psychosis, Tourette's syndrome, organic or NOS psychosis, seizure, agitation, post-traumatic stress disorder, behavior disorder, neurodegenerative disease, Alzheimer's disease, Parkinson's disease, dyskinesias, Huntington's disease, dementia, mood disorder, anxiety, affective disorder, depression, major depressive disorder, dysthymia, bipolar disorder, manic disorder, seasonal affective disorder; attention deficit disorder, attention deficit hyperactivity disorder, obsessive-compulsive disorder, vertigo, epilepsy, pain, neuropathic pain, sensitization accompanying neuropathic pain, inflammatory pain, fibromyalgia, migraine, cognitive impairment, movement disorder, restless leg syndrome, multiple sclerosis, sleep disorder, sleep apnea, narcolepsy, excessive daytime sleepiness, jet lag, drowsy side effect of medications, insomnia, substance abuse or dependency, addiction, eating disorder, sexual dysfunction, hypertension, emesis, Lesche-Nyhane disease, Wilson's disease, autism, Huntington's chorea, and premenstrual dysphoria.

62. The method of claim 59 or 60, wherein the disorder is psychosis or schizophrenia.

WHAT IS CLAIMED:

1. A compound having formula (IVa):



(IVa),

or a pharmaceutically acceptable salt or stereoisomer thereof, wherein:

m is 0;

n is 1;

R^1 is hydrogen, C_1-C_4 alkyl, or C_3-C_6 cycloalkyl;

R^2 is C_1-C_4 alkyl, hydrogen, or C_3-C_6 cycloalkyl;

R^3 and R^4 are each independently hydrogen or C_1-C_4 alkyl;

R^5 is hydrogen; and

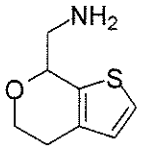
R^6 and R^7 are each independently hydrogen, halo, C_1-C_4 alkyl, aryl, heteroaryl, heterocyclyl, alkoxyl, or aminoalkyl.

2. The compound of claim 1, or a pharmaceutically acceptable salt or stereoisomer thereof, wherein R^1 and R^2 are each independently hydrogen or C_1-C_4 alkyl.

3. The compound of claim 1 or 2, or a pharmaceutically acceptable salt or stereoisomer thereof, wherein R^6 and R^7 are each independently hydrogen, halo, or C_1-C_4 alkyl.

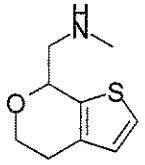
4. The compound of claim 3, or a pharmaceutically acceptable salt or stereoisomer thereof, wherein R^6 and R^7 are each independently hydrogen or C_1-C_4 alkyl.

5. The compound of claim 1, wherein the compound is:



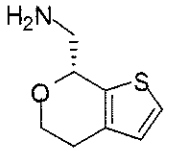
or a pharmaceutically acceptable salt thereof.

6. The compound of claim 1, wherein the compound is:



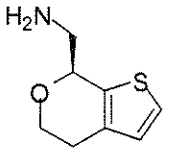
or a pharmaceutically acceptable salt thereof.

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



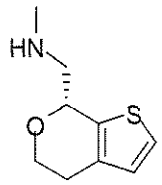
or a pharmaceutically acceptable salt thereof.

8. The compound of claim 1, wherein the compound is:



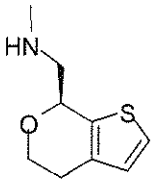
or a pharmaceutically acceptable salt thereof.

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



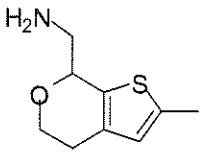
or a pharmaceutically acceptable salt thereof.

10. The compound of claim 1, wherein the compound is:



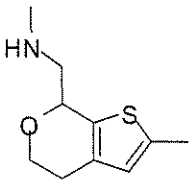
or a pharmaceutically acceptable salt thereof.

11. The compound of claim 1, wherein the compound is:



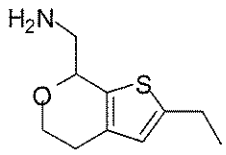
or a pharmaceutically acceptable salt thereof.

12. The compound of claim 1, wherein the compound is:



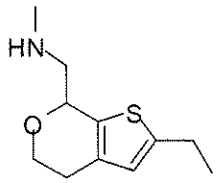
or a pharmaceutically acceptable salt thereof.

13. The compound of claim 1, wherein the compound is:



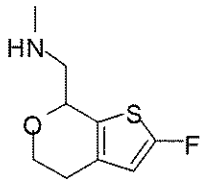
or a pharmaceutically acceptable salt thereof.

14. The compound of claim 1, wherein the compound is:



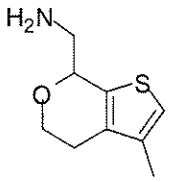
or a pharmaceutically acceptable salt thereof.

15. The compound of claim 1, wherein the compound is:



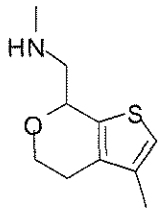
or a pharmaceutically acceptable salt thereof.

16. The compound of claim 1, wherein the compound is:



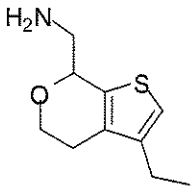
or a pharmaceutically acceptable salt thereof.

17. The compound of claim 1, wherein the compound is:



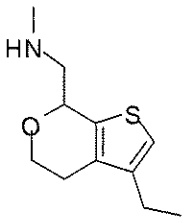
or a pharmaceutically acceptable salt thereof.

18. The compound of claim 1, wherein the compound is:



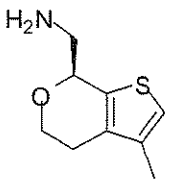
or a pharmaceutically acceptable salt thereof.

19. The compound of claim 1, wherein the compound is:



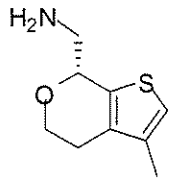
or a pharmaceutically acceptable salt thereof.

20. The compound of claim 1, wherein the compound is:



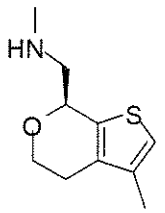
or a pharmaceutically acceptable salt thereof.

21. The compound of claim 1, wherein the compound is:



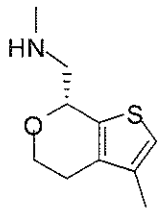
or a pharmaceutically acceptable salt thereof.

22. The compound of claim 1, wherein the compound is:



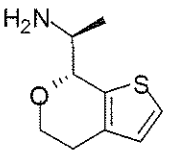
or a pharmaceutically acceptable salt thereof.

23. The compound of claim 1, wherein the compound is:



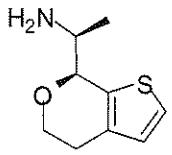
or a pharmaceutically acceptable salt thereof.

24. The compound of claim 1, wherein the compound is:



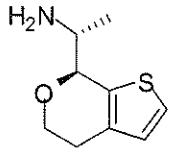
or a pharmaceutically acceptable salt thereof.

25. The compound of claim 1, wherein the compound is:



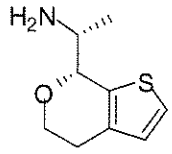
or a pharmaceutically acceptable salt thereof.

26. The compound of claim 1, wherein the compound is:



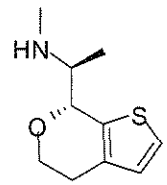
or a pharmaceutically acceptable salt thereof.

27. The compound of claim 1, wherein the compound is:



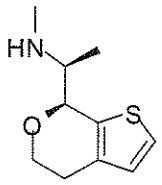
or a pharmaceutically acceptable salt thereof.

28. The compound of claim 1, wherein the compound is:



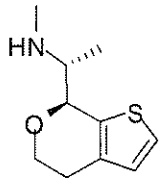
or a pharmaceutically acceptable salt thereof.

29. The compound of claim 1, wherein the compound is:



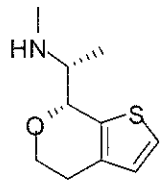
or a pharmaceutically acceptable salt thereof.

30. The compound of claim 1, wherein the compound is:



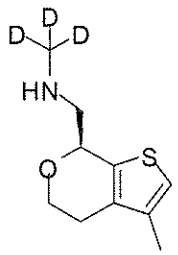
or a pharmaceutically acceptable salt thereof.

31. The compound of claim 1, wherein the compound is:



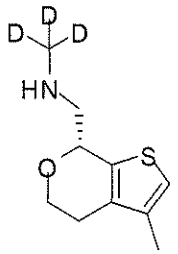
or a pharmaceutically acceptable salt thereof.

32. The compound of claim 1, wherein the compound is:



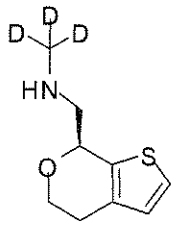
or a pharmaceutically acceptable salt thereof.

33. The compound of claim 1, wherein the compound is:



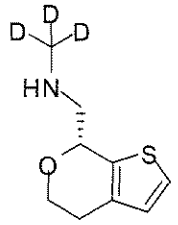
or a pharmaceutically acceptable salt thereof.

34. The compound of claim 1, wherein the compound is:



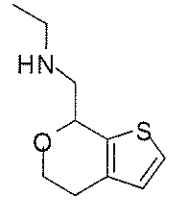
or a pharmaceutically acceptable salt thereof.

35. The compound of claim 1, wherein the compound is:



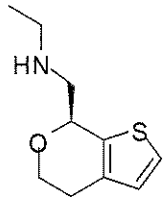
or a pharmaceutically acceptable salt thereof.

36. The compound of claim 1, wherein the compound is:



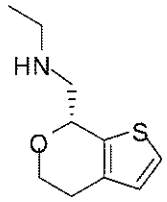
or a pharmaceutically acceptable salt thereof.

37. The compound of claim 1, wherein the compound is:



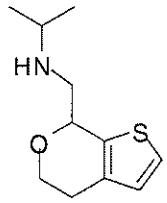
or a pharmaceutically acceptable salt thereof.

38. The compound of claim 1, wherein the compound is:



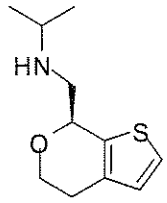
or a pharmaceutically acceptable salt thereof.

39. The compound of claim 1, wherein the compound is:



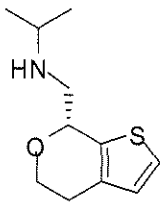
or a pharmaceutically acceptable salt thereof.

40. The compound of claim 1, wherein the compound is:



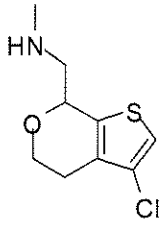
or a pharmaceutically acceptable salt thereof.

41. The compound of claim 1, wherein the compound is:



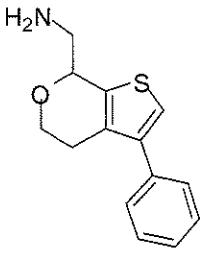
or a pharmaceutically acceptable salt thereof.

42. The compound of claim 1, wherein the compound is:



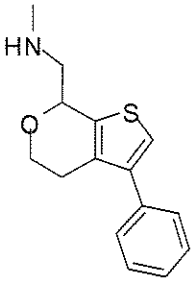
or a pharmaceutically acceptable salt thereof.

43. The compound of claim 1, wherein the compound is:



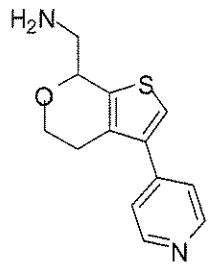
or a pharmaceutically acceptable salt thereof.

44. The compound of claim 1, wherein the compound is:



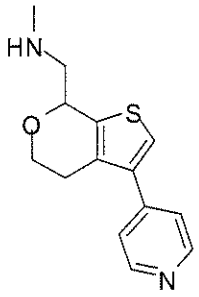
or a pharmaceutically acceptable salt thereof.

45. The compound of claim 1, wherein the compound is:



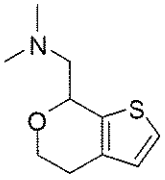
or a pharmaceutically acceptable salt thereof.

46. The compound of claim 1, wherein the compound is:



or a pharmaceutically acceptable salt thereof.

47. The compound of claim 1, wherein the compound is:



or a pharmaceutically acceptable salt thereof.

48. A pharmaceutical composition comprising a compound of any one of claims 1 to 47, or a pharmaceutically acceptable salt or stereoisomer thereof, and a pharmaceutically acceptable excipient or carrier.

49. The pharmaceutical composition of claim 48, which further comprises one or more additional active agents.

50. Use of a compound of any one of claims 1 to 47, or a pharmaceutically acceptable salt or stereoisomer thereof in the manufacture of a medicament for treating, preventing, or managing a neurological disorder.

51. The use of claim 50, wherein said subject is a human.

52. The use of claim 50 or 51, wherein the disorder is schizophrenia, schizophrenia spectrum disorder, acute schizophrenia, chronic schizophrenia, NOS schizophrenia, schizoid personality disorder, schizotypal personality disorder, delusional disorder, psychosis, psychotic disorder, brief psychotic disorder, shared psychotic disorder, psychotic disorder due to a general medical condition, drug-induced psychosis, psychoaffective disorder, aggression, delirium, Parkinson's psychosis, excitative psychosis, Tourette's syndrome, organic or NOS psychosis, seizure, agitation, post-traumatic stress disorder, behavior disorder, neurodegenerative disease, Alzheimer's disease, Parkinson's disease, dyskinesias, Huntington's disease, dementia, mood disorder, anxiety, affective disorder, depression, major depressive disorder, dysthymia, bipolar disorder, manic disorder; seasonal affective disorder; attention deficit disorder, attention deficit hyperactivity disorder, obsessive-compulsive disorder, vertigo, epilepsy, pain, neuropathic pain, sensitization accompanying neuropathic pain, inflammatory pain, fibromyalgia, migraine, cognitive impairment, movement disorder, restless leg syndrome, multiple sclerosis, sleep disorder, sleep apnea, narcolepsy, excessive daytime sleepiness, jet lag, drowsy side effect of medications, insomnia, substance abuse or dependency, addiction, eating disorder, sexual dysfunction, hypertension, emesis, Lesche-Nyhane disease, Wilson's disease, autism, Huntington's chorea, and premenstrual dysphoria.

53. The use of claim 50 or 51, wherein the disorder is psychosis or schizophrenia.

54. The use of claim 50 or 51, wherein the disorder is attention deficit disorder.

55. The use of claim 50 or 51, wherein the disorder is attention deficit hyperactivity disorder.