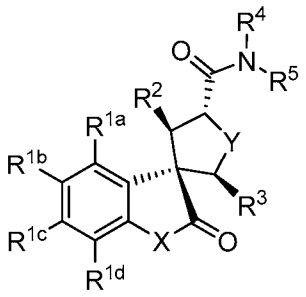
What Is Claimed Is:

1. A compound having Formula **XII**:

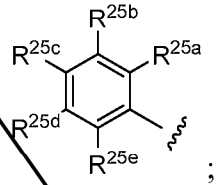


XII

wherein:

R^{1a}, R^{1b}, R^{1c}, and R^{1d} are each independently selected from the group consisting of hydrogen, fluoro, and chloro;

R^2 is selected from the group consisting of aralkyl and:



;

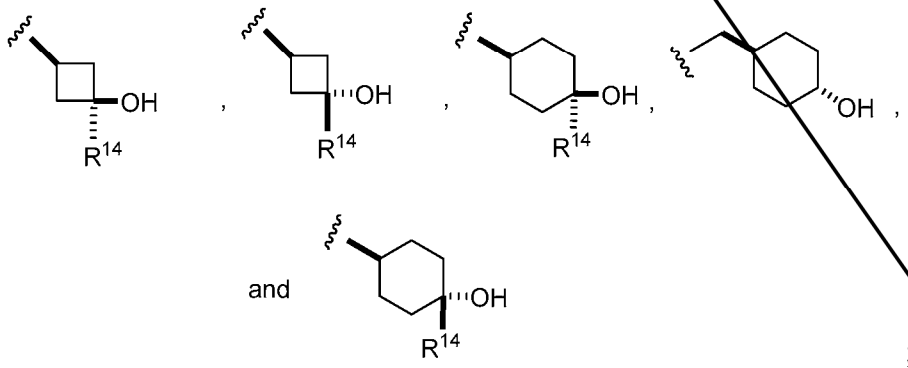
wherein:

R^{25a}, R^{25b}, R^{25c}, R^{25d}, and R^{25e} are each independently selected from the group consisting of hydrogen, fluoro, and chloro;

R^3 is selected from the group consisting of optionally substituted C_1-C_8 alkyl and optionally substituted aryl;

R^4 is selected from the group consisting of hydrogen and optionally substituted C_1-C_6 alkyl;

R^5 is selected from the group consisting of:



;

wherein:

R^{14} is selected from the group consisting of hydrogen and optionally substituted C_1-C_4 alkyl;

X is selected from the group consisting of O, S, and NR';

Y is selected from the group consisting of O, S, and NR'';

R' is selected from the group consisting of hydrogen and optionally substituted C_1-C_4 alkyl; and

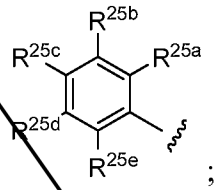
R'' is selected from the group consisting of hydrogen, optionally substituted C_1-C_4 alkyl, and -$COCH_3$,

wherein the compound is substantially free of one or more other stereoisomers,

or a pharmaceutically acceptable salt thereof.

2. The compound of claim 1, wherein:

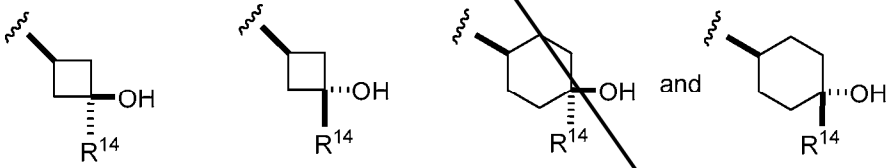
R^2 is:



;

R^3 is optionally substituted C_1-C_8 alkyl;

R^5 is selected from the group consisting of:



; and

R'' is selected from the group consisting of hydrogen and optionally substituted C_1-C_4 alkyl,

or a pharmaceutically acceptable salt thereof.

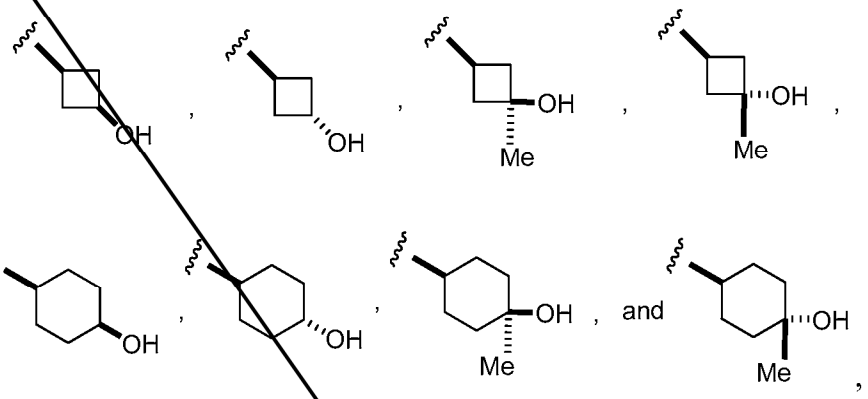
3. The compound of claim 2, wherein R^4 is hydrogen, or a pharmaceutically acceptable salt thereof.

4. The compound of claim 2, wherein X is NH, or a pharmaceutically acceptable salt thereof.

5. The compound of claim 2, wherein Y is NH, or a pharmaceutically acceptable salt thereof.

6 The compound of claim 2, wherein R^3 is $-CH_2C(CH_3)_3$, or a pharmaceutically acceptable salt thereof.

7. The compound of claim 2, wherein R^5 is selected from the group consisting of:



or a pharmaceutically acceptable salt thereof.

8. The compound of claim 2, wherein:

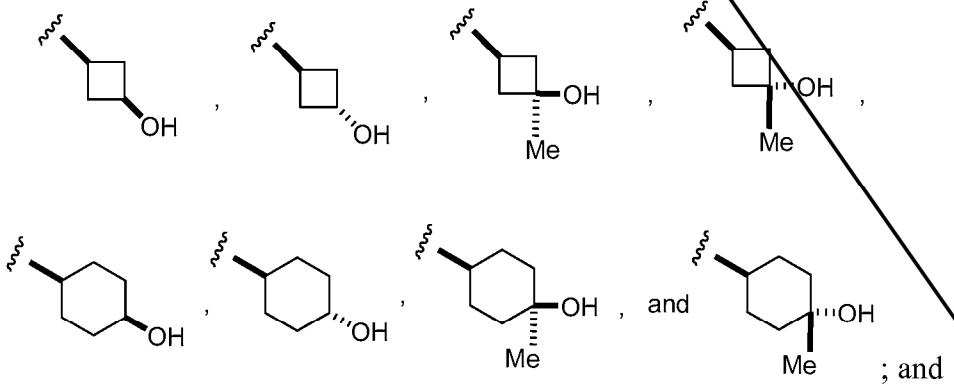
R^{1a} is hydrogen;

R^{1b}, R^{1c}, and R^{1d} are each independently selected from the group consisting of hydrogen, fluoro, and chloro;

R^3 is C_4-C_8 alkyl;

R^4 is hydrogen;

R^5 is selected from the group consisting of:

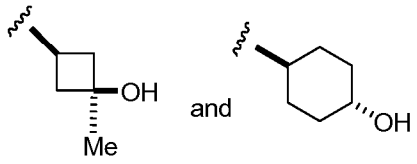


; and

X and Y are NH;

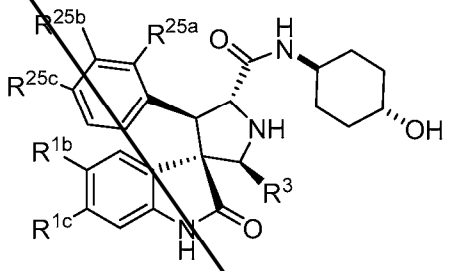
or a pharmaceutically acceptable salt thereof.

9. The compound of claims 7 or 8, wherein R^5 is selected from the group consisting of:



or a pharmaceutically acceptable salt thereof.

10. A compound having Formula **XXXV**:



XXXV

wherein:

R^{1b} and R^{1c} are independently selected from the group consisting of hydrogen, fluoro, and chloro;

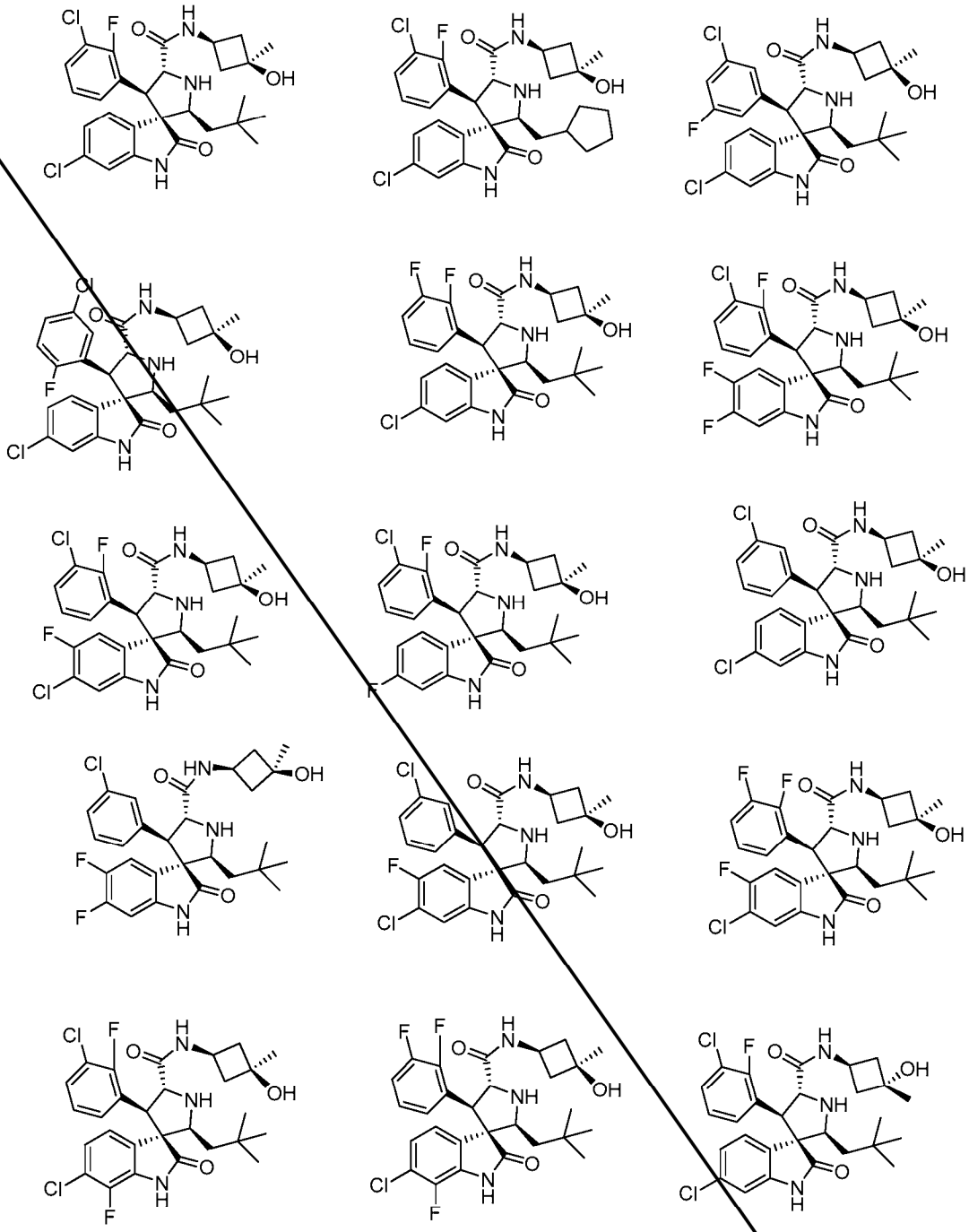
R^3 is C_4-C_8 alkyl; and

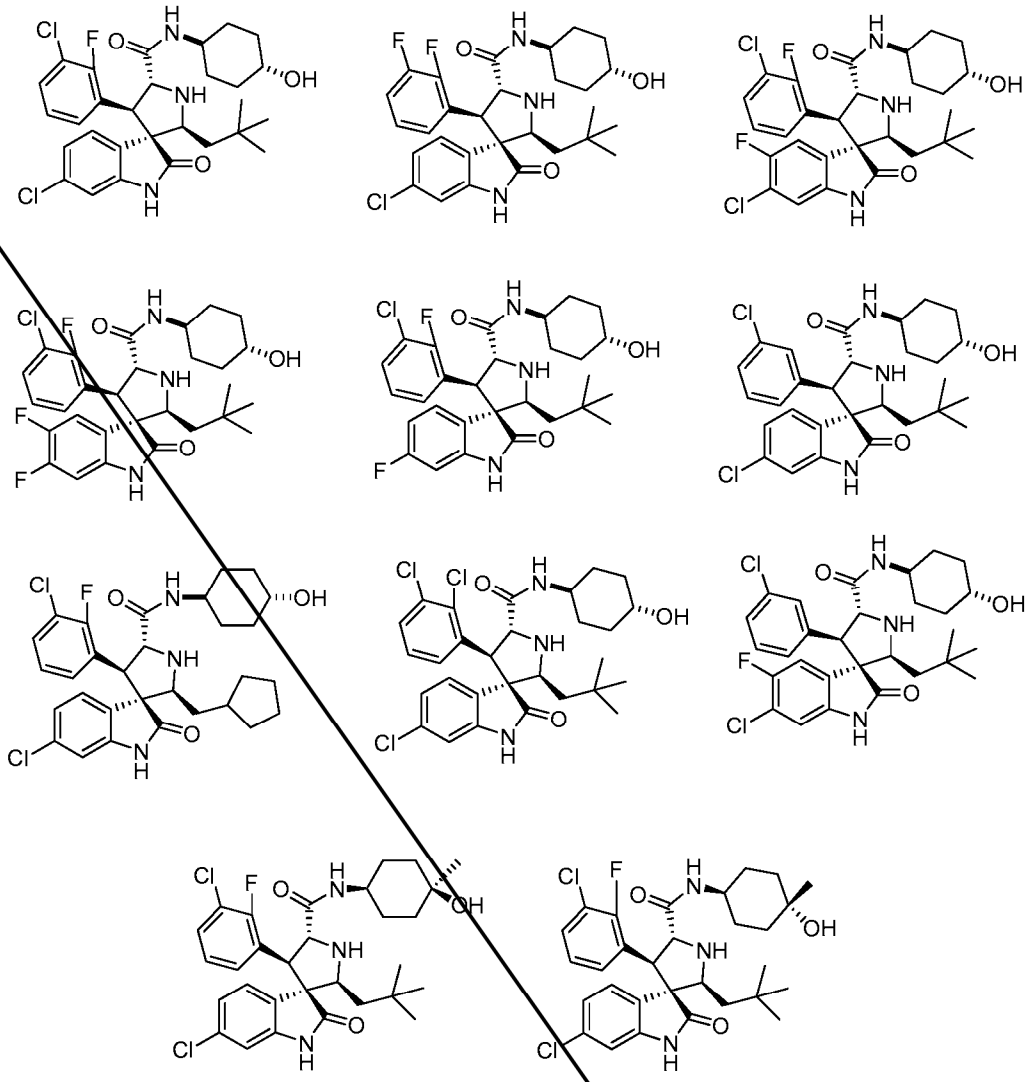
R^{25a}, R^{25b}, and R^{25c} are each independently selected from the group consisting of hydrogen, fluoro, and chloro,

wherein the compound is substantially free of one or more other stereoisomers,

or a pharmaceutically acceptable salt thereof.

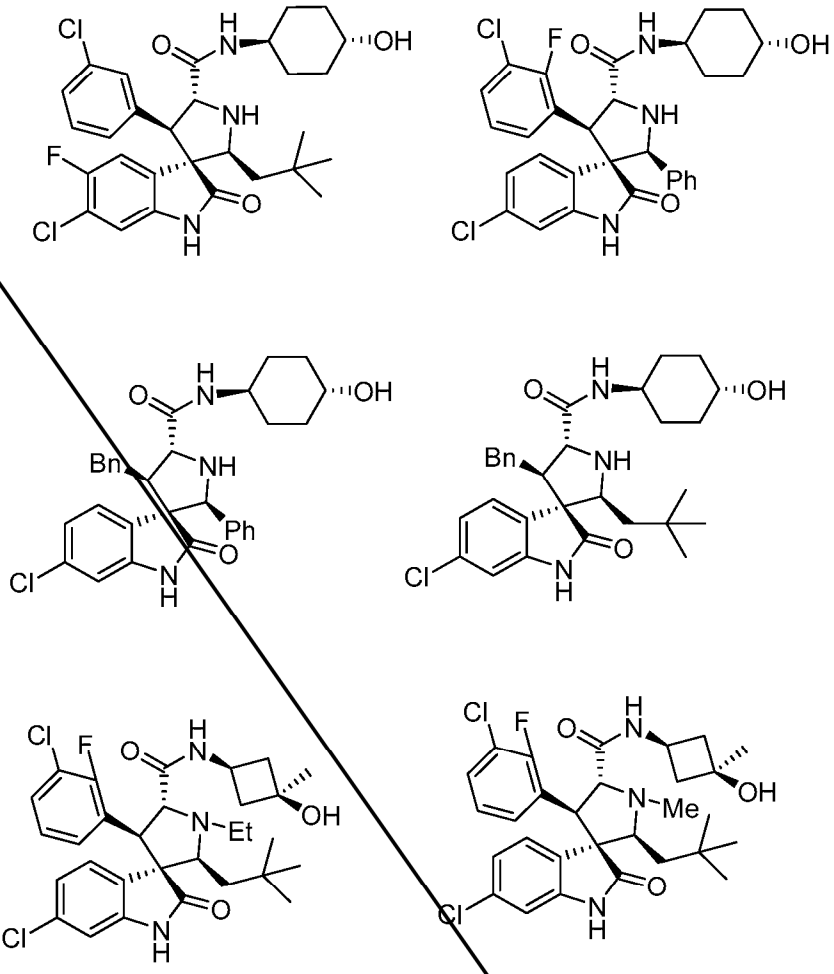
11. The compound of claim 2 selected from the group consisting of:





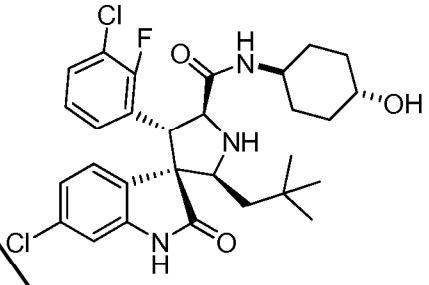
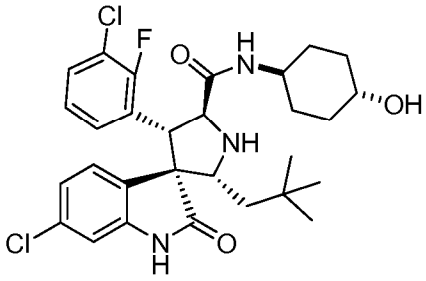
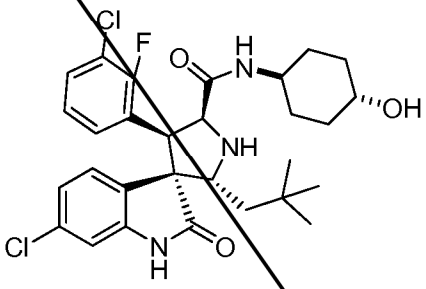
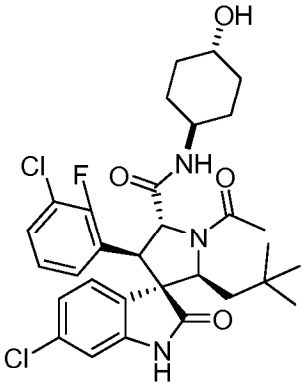
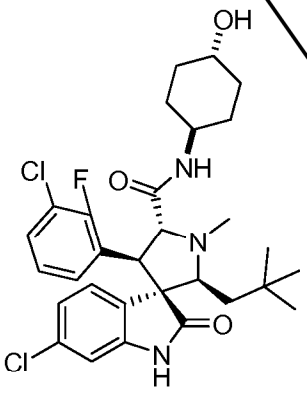
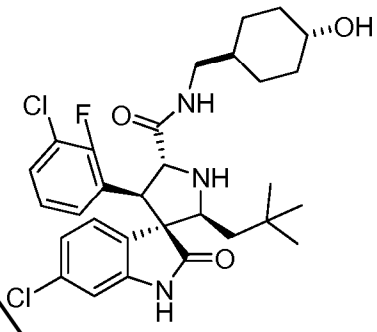
wherein the compound is substantially free of one or more other stereoisomers, or a pharmaceutically acceptable salt thereof.

12. The compound of claim 1 selected from the group consisting of:



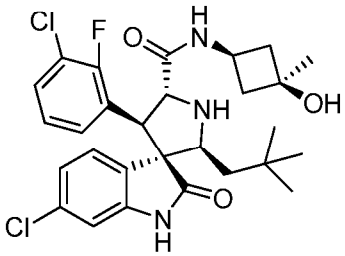
wherein the compound is substantially free of one or more other stereoisomers, or a pharmaceutically acceptable salt thereof.

13. A compound selected from the group consisting of:

wherein the compound is substantially free of one or more other stereoisomers, or a pharmaceutically acceptable salt thereof.

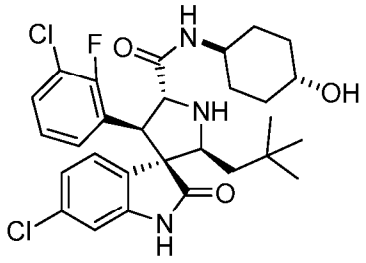
14. A compound having the structure:



,

wherein the compound is substantially free of one or more other stereoisomers, or a pharmaceutically acceptable salt thereof.

15. A compound having the structure:



,

wherein the compound is substantially free of one or more other stereoisomers, or a pharmaceutically acceptable salt thereof.

16. The compound of any one of claims 1-15, wherein the compound is a substantially pure stereoisomer, or a pharmaceutically acceptable salt thereof.

17. The compound of claim 16, wherein the compound is a pure stereoisomer, or a pharmaceutically acceptable salt thereof.

18. A pharmaceutical composition comprising the compound of any one of claims 1-17, or a pharmaceutically acceptable salt thereof, and a pharmaceutically acceptable carrier.

19. A pharmaceutical composition comprising the compound of any one of claims 1-17, or a pharmaceutically acceptable salt thereof, for use in treating a hyperproliferative disease.

20. A method of treating a patient comprising administering to the patient a therapeutically effective amount of the compound of any one of claims 1-17, or a pharmaceutically acceptable salt thereof, wherein the patient has a hyperproliferative disease.

21. A method of treating a patient comprising administering to the patient a therapeutically effective amount of the pharmaceutical composition of claim 18, wherein the patient has a hyperproliferative disease.

22. A compound of any one of claims 1-17, or a pharmaceutically acceptable salt thereof, for use in treatment of a hyperproliferative disease.

23. Use of a compound of any one of claims 1-17, or a pharmaceutically acceptable salt thereof, for the manufacture of a medicament for treatment of hyperproliferative disease.

24. The pharmaceutical composition of claim 19, wherein the hyperproliferative disease is cancer.

25. The method of claims 20 or 21, wherein the hyperproliferative disease is cancer.

26. The compound of claim 22, or a pharmaceutically acceptable salt thereof, wherein the hyperproliferative disease is cancer.

27. The use of claim 23, wherein the hyperproliferative disease is cancer.

28. The pharmaceutical composition of claim 24, wherein the cancer is selected from the group consisting of melanoma, lung cancer, sarcoma, colon cancer, prostate cancer, choriocarcinoma, breast cancer, retinoblastoma, stomach carcinoma, acute myeloid leukemia, lymphoma, multiple myeloma, and leukemia.

29. The method of claim 25, wherein the cancer is selected from the group consisting of melanoma, lung cancer, sarcoma, colon cancer, prostate cancer, choriocarcinoma, breast cancer, retinoblastoma, stomach carcinoma, acute myeloid leukemia, lymphoma, multiple myeloma, and leukemia.

30. The compound of claim 26, wherein the cancer is selected from the group consisting of melanoma, lung cancer, sarcoma, colon cancer, prostate cancer,

choriocarcinoma, breast cancer, retinoblastoma, stomach carcinoma, acute myeloid leukemia, lymphoma, multiple myeloma, and leukemia.

31. The use of claim 27, wherein the cancer is selected from the group consisting of melanoma, lung cancer, sarcoma, colon cancer, prostate cancer, choriocarcinoma, breast cancer, retinoblastoma, stomach carcinoma, acute myeloid leukemia, lymphoma, multiple myeloma, and leukemia.

32. The pharmaceutical composition of claim 28, wherein the cancer is selected from the group consisting of liposarcoma and melanoma.

33. The method of claim 29, wherein the cancer is selected from the group consisting of liposarcoma and melanoma.

34. The compound of claim 30, wherein the cancer is selected from the group consisting of liposarcoma and melanoma.

35. The use of claim 31, wherein the cancer is selected from the group consisting of liposarcoma and melanoma.

36. The method of claim 25, wherein cells of the cancer express functional p53.

37. The method of claim 25, further comprising administering to the patient one or more anticancer agents.

38. The method of claim 37, wherein the anticancer agent is a chemotherapeutic agent.

39. The method of claim 37, wherein the anticancer agent is radiation therapy.

40. The method of claim 25, wherein the method comprises pulsatile dose administration of the compound, or pharmaceutically acceptable salt thereof, or the pharmaceutical composition to the patient.

41. The method of claim 40, wherein the compound, or pharmaceutically acceptable salt thereof, or the pharmaceutical composition is administered to the patient one day a week, one day every two weeks, one day every three weeks, or one day every four weeks.

42. A method of treating a patient, wherein the patient has a cancer and is being treated with an anticancer agent, comprising administering to the patient the compound of any one of claims 1-17, or pharmaceutically acceptable salt thereof.

43. A method of treating a patient, wherein the patient has a cancer and is being treated with an anticancer agent, comprising administering to the patient the pharmaceutical composition of claim 18.

44. The method of claims 42 or 43, wherein the patient is experiencing side-effects of the anticancer agent treatment selected from the group consisting of mucositis, stomatitis, xerostoma, alopecia, and gastrointestinal disorder.

45. The method of claims 42 or 43, wherein cells of the cancer express functional p53.

46. A kit comprising the compound of any one of claims 1-17, or a pharmaceutically acceptable salt thereof, and instructions for administering the compound, or a pharmaceutically acceptable salt thereof, to a patient having cancer.

47. A kit comprising the pharmaceutical composition of claim 18 and instructions for administering the pharmaceutical composition to a patient having cancer.

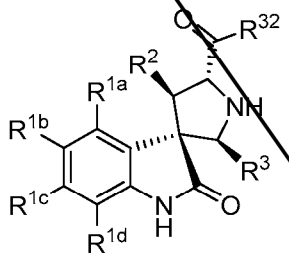
48. The kit of claims 46 or 47, wherein the cancer is selected from the group consisting of melanoma, lung cancer, sarcoma, colon cancer, prostate cancer, choriocarcinoma, breast cancer, retinoblastoma, stomach carcinoma, acute myeloid leukemia, lymphoma, multiple myeloma, and leukemia.

49. The kit of claims 46 or 47, further comprising one or more anticancer agents.

50. The kit of claims 46 or 47, wherein the instructions direct co-administration of the compound, or pharmaceutically acceptable salt thereof, or pharmaceutical composition together with the one or more anticancer agents.

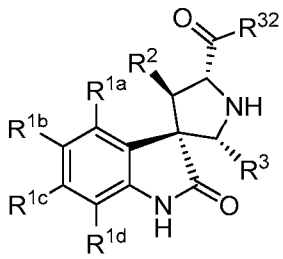
51. The kit of claims 46 or 47, wherein the instructions direct pulsatile dose administration of the compound, or pharmaceutically acceptable salt thereof, or pharmaceutical composition to the patient.

52. A method of preparing a compound having Formula **XXXVII**:



XXXVII,

the method comprising allowing a compound having Formula **XXXVI**:



XXXVI

to isomerize to a compound having Formula **XXXVII**,

wherein:

R^{32} is selected from the group consisting of $-OR^{33}$ and $-NR^{34a}R^{34b}$;

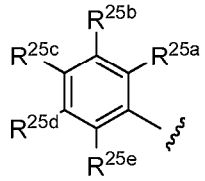
R^{33} is selected from the group consisting of hydrogen, alkyl, and aralkyl;

R^{34a} is selected from the group consisting of hydrogen, optionally substituted alkyl, optionally substituted cycloalkyl, aralkyl, optionally substituted aryl, and optionally substituted heteroaryl;

R^{34b} is selected from the group consisting of hydrogen and alkyl;

R^{1a}, R^{1b}, R^{1c}, and R^{1d} are each independently selected from the group consisting of hydrogen, fluoro, and chloro;

R^2 is selected from the group consisting of aralkyl and:



R^{25a}, R^{25b}, R^{25c}, R^{25d}, and R^{25e} are each independently selected from the group consisting of hydrogen, fluoro, and chloro; and

R^3 is selected from the group consisting of optionally substituted C_1-C_8 alkyl and optionally substituted aryl.

53. The method of claim 52, wherein the solvent is selected from the group consisting of acetonitrile, methanol, ethyl acetate, and water, or a mixture thereof.

54. The method of claims 52 or 53, wherein the isomerization is carried out at a pH of less than 7.

55. The method of claims 52 or 53, wherein the isomerization is carried out at a pH of 7.

56. The method of claims 52 or 53, wherein the isomerization is carried out at a pH of greater than 7.

57. The method of any one of claims 52-54, wherein the isomerization is carried out in the presence of an acid selected from the group consisting of trifluoroacetic acid and acetic acid.

58. The method of any one of claims 52, 53, or 56, wherein the isomerization is carried out in the presence of $NaHCO_3$.

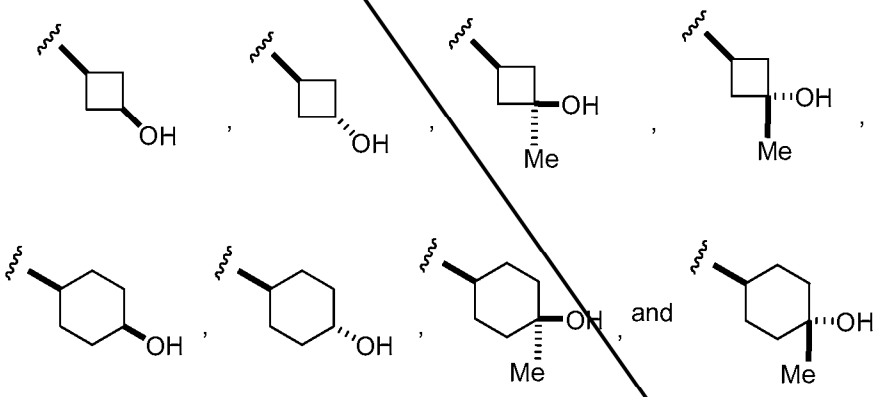
59. The method of any one of claims 52-58, wherein the isomerization is carried out at a temperature of about 20°C to about 100°C.

60. The method of any one of claims 52-59, wherein R^{32} is $-OR^{33}$.

61. The method of any one of claims 52-59, wherein R^{32} is $-NR^{34a}R^{34b}$.

62. The method of claim 61, wherein R^{34b} is hydrogen and R^{34a} is selected from the group consisting of alkyl, hydroxyalkyl, hydroxycycloalkyl, optionally substituted aryl, and optionally substituted heteroaryl.

63. The method of claim 62, wherein R^{34a} is selected from the group consisting of:

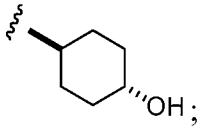


64. The method of any one of claims 52-63, wherein the compound of Formula **XXXVII** is isolated as a substantially pure stereoisomer.

65. The method of claim 64, wherein the compound having Formula **XXXVII** is isolated as a pure stereoisomer.

66. The method of any one of claims 52-65, wherein:
R^{32} is $-NR^{34a}R^{34b}$;

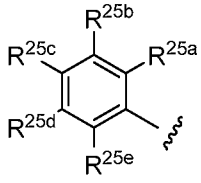
R^{34a} is:



;

R^{33b} is hydrogen;

R^2 is:



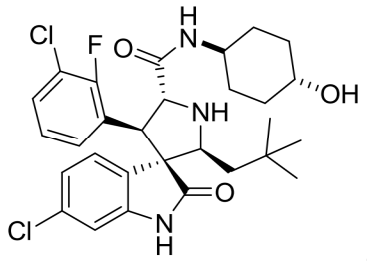
; and

R^3 is C_1-C_8 alkyl.

67. The method of claim 52 further comprising isolating the compound having Formula **XXXVII** substantially free from the compound having Formula **XXXVI**.

CLAIMS

1. A compound having the structure:



,

wherein the compound is substantially free of one or more other stereoisomers, or a pharmaceutically acceptable salt thereof.

2. The compound of claim 1, wherein the compound is a substantially pure stereoisomer, or a pharmaceutically acceptable salt thereof.

3. A pharmaceutical composition comprising the compound of claim 1, or a pharmaceutically acceptable salt thereof, and a pharmaceutically acceptable carrier.

4. A kit comprising the compound of claim 1, or a pharmaceutically acceptable salt thereof, and instructions for administering the compound, or a pharmaceutically acceptable salt thereof, to a patient having cancer.