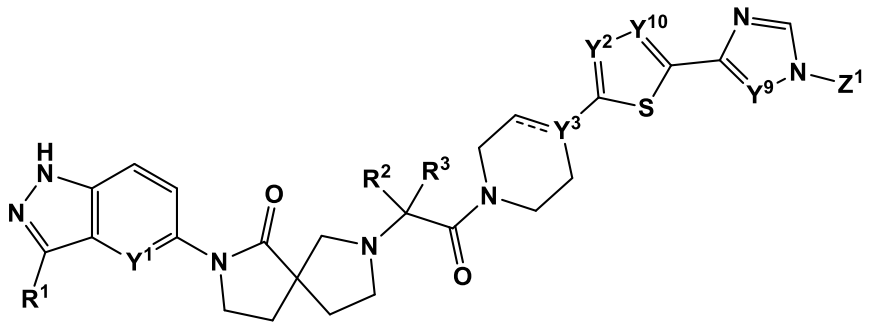
Claims

WHAT IS CLAIMED IS:

1. A compound of Formula (I):



(I)

or a pharmaceutically acceptable salt thereof, wherein:

R^1 is selected from the group consisting of C_{3-4} cycloalkyl, halophenyl, C_{1-4} alkoxyphenyl, C_{1-4} alkoxyhalophenyl, C_{1-4} dialkoxyphenyl, halopyridinyl, C_{1-4} alkoxypyridinyl, C_{1-4} alkylpyridinyl, C_{3-5} cycloalkoxypyridinyl, methylbenzoxazolyl and tetrahydropyranyl;

R^2 and R^3 are each independently methyl, hydrogen or deuterium;

Y^1 and Y^2 are each independently CH or N;

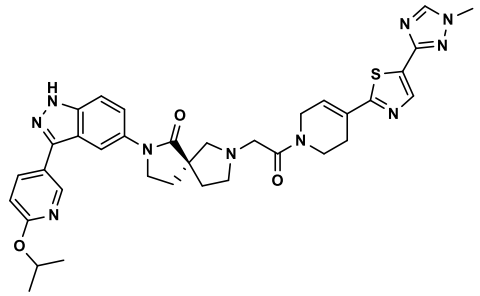
Y^3 is C, CH or N; and

Y^9 and Y^{10} are each independently CH or N;

Z^1 is C_{1-3} alkyl optionally substituted with hydroxy;

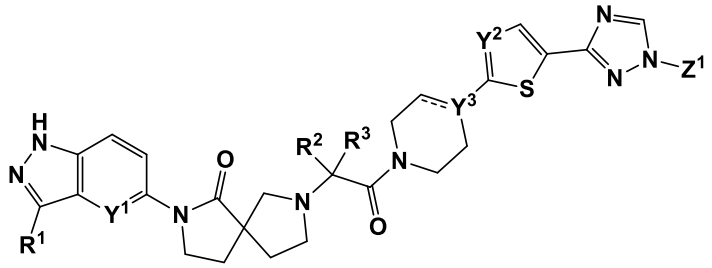
wherein -------- is a single bond when Y^3 is N or CH and -------- is a double bond when Y^3 is C; and

wherein the compound of Formula (I) is not



.

2. The compound of Claim 1, or a pharmaceutically acceptable salt thereof, of the Formula (IA):



(IA)

wherein:

R^1 is selected from the group consisting of halophenyl, halopyridinyl, C_{1-4} alkoxypyridinyl, C_{1-4} alkylpyridinyl, methylbenzoxazolyl and tetrahydropyranyl; and

R^2 and R^3 are each independently hydrogen or deuterium.

3. The compound of Claim 1 or 2, or a pharmaceutically acceptable salt thereof, wherein R^1 is halophenyl or halopyridinyl.

4. The compound of Claim 3, or a pharmaceutically acceptable salt thereof, wherein R^1 is fluorophenyl or fluoropyridinyl.

5. The compound of Claim 1 or 2, or a pharmaceutically acceptable salt thereof, wherein R^1 is C_{1-4} alkoxypyridinyl or C_{1-4} alkylpyridinyl.

6. The compound of Claim 5, or a pharmaceutically acceptable salt thereof, wherein R^1 is isopropoxypyridinyl, methoxypyridinyl or methylpyridinyl.

7. The compound of Claim 1 or 2, or a pharmaceutically acceptable salt thereof, wherein R^1 is methylbenzoxazolyl or tetrahydropyranyl.

8. The compound of Claim 1, or a pharmaceutically acceptable salt thereof, wherein R^1 is selected from the group consisting of C_{3-4} cycloalkyl, C_{1-4} alkoxyphenyl, C_{1-4} alkoxyhalophenyl, C_{1-4} dialkoxyphenyl, and C_{3-5} cycloalkoxypyridinyl.

9. The compound of any one of Claims 1 to 8, or a pharmaceutically acceptable salt thereof, wherein -------- is a double bond.

10. The compound of any one of Claims 1 to 8, or a pharmaceutically acceptable salt thereof, wherein -------- is a single bond.

11. The compound of any one of Claims 1 to 8, or a pharmaceutically acceptable salt thereof, wherein Y^1 is CH.

12. The compound of any one of Claims 1 to 8, or a pharmaceutically acceptable salt thereof, wherein Y^1 is N.

13. The compound of any one of Claims 1 to 12, or a pharmaceutically acceptable salt thereof, wherein Y^2 is CH.

14. The compound of any one of Claims 1 to 12, or a pharmaceutically acceptable salt thereof, wherein Y^2 is N.

15. The compound of any one of Claims 1 to 14, or a pharmaceutically acceptable salt thereof, wherein Y^3 is C.

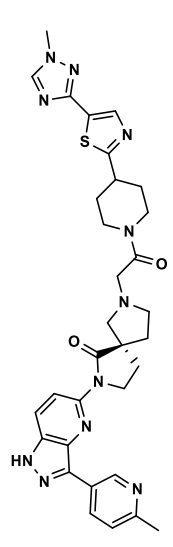
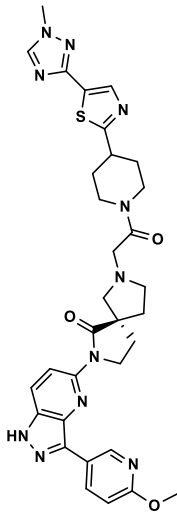
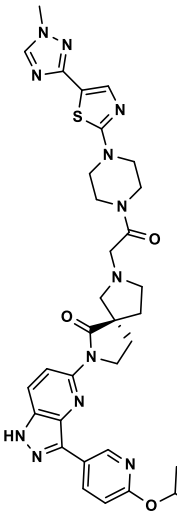
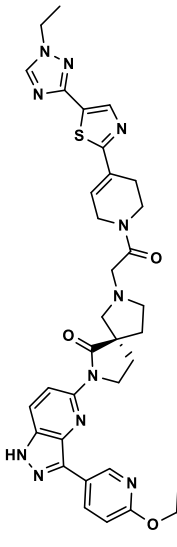
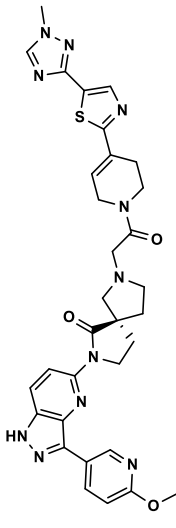
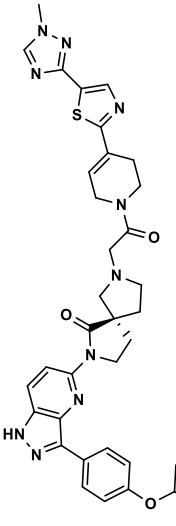
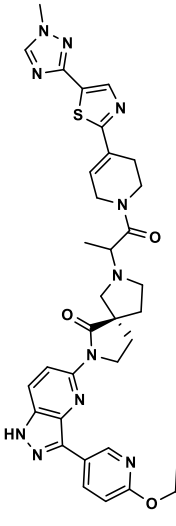
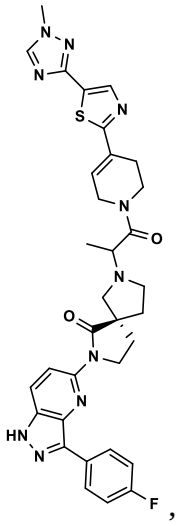
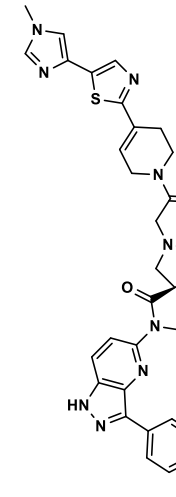
16. The compound of any one of Claims 1 to 14, or a pharmaceutically acceptable salt thereof, wherein Y^3 is CH.

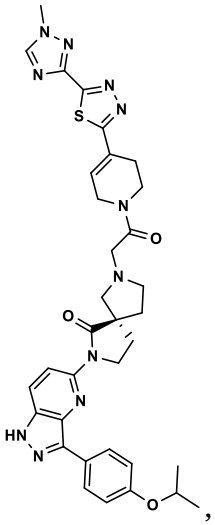
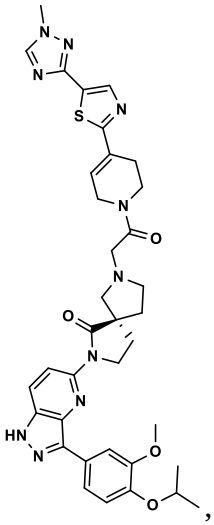
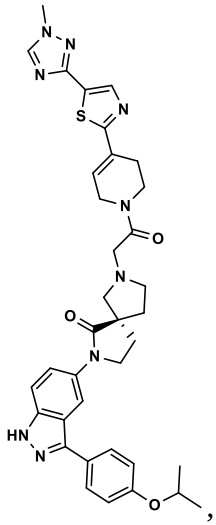
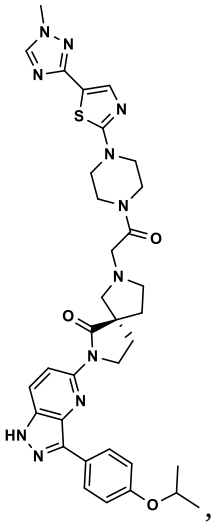
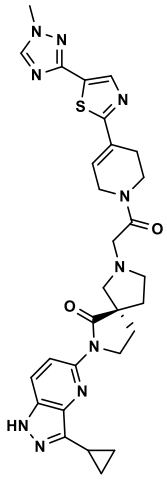
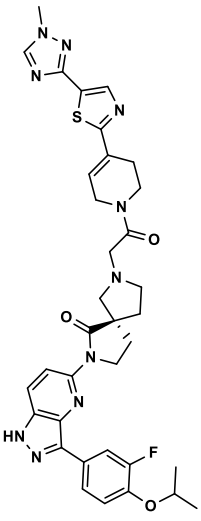
17. The compound of any one of Claims 1 to 14, or a pharmaceutically acceptable salt thereof, wherein Y^3 is N.

18. The compound of Claim 1, or a pharmaceutically acceptable salt thereof, wherein Y^9 is N or CH.

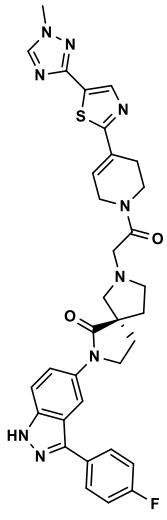
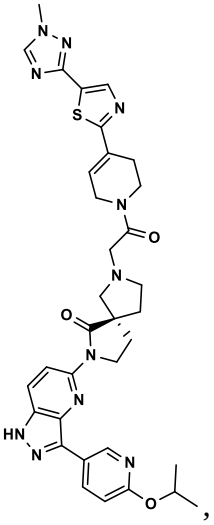
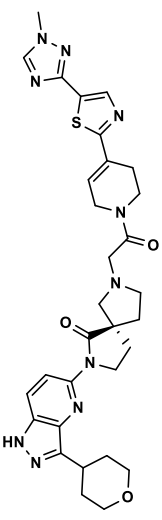
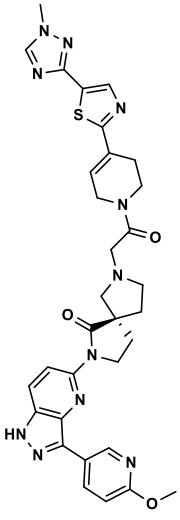
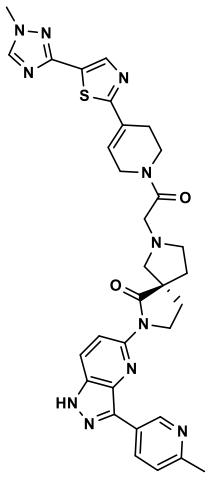
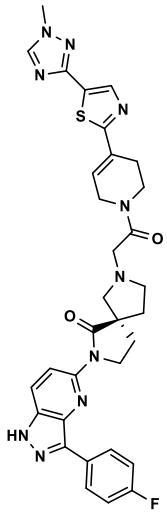
19. The compound of Claim 1, or a pharmaceutically acceptable salt thereof, wherein Y^{10} is N or CH.

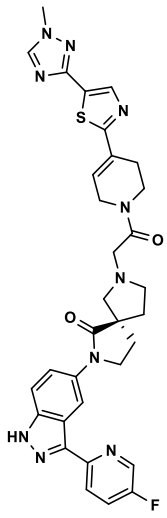
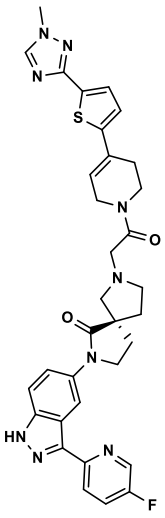
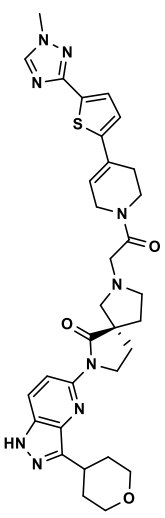
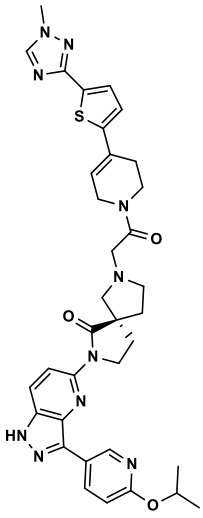
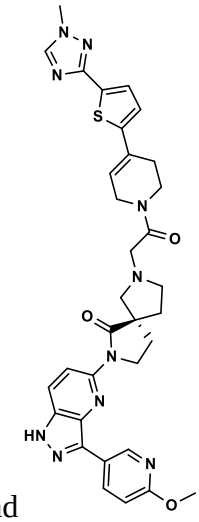
20. The compound of Claim 1, selected from the group consisting of


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and , or a pharmaceutically acceptable salt of the foregoing.

21. The compound of Claim 2, selected from the group consisting of

, , , , and , or a or a pharmaceutically acceptable salt of the foregoing.

22. The compound of Claim 1 or 2, selected from the group consisting of

(S)-7-(2-(4-(5-(1-(2-hydroxyethyl)-1H-1,2,4-triazol-3-yl)thiazol-2-yl)-3,6-dihydropyridin-1(2H)-yl)-2-oxoethyl)-2-(3-(6-isopropoxypyridin-3-yl)-1H-pyrazolo[4,3-b]pyridin-5-yl)-2,7-diazaspiro[4.4]nonan-1-one;

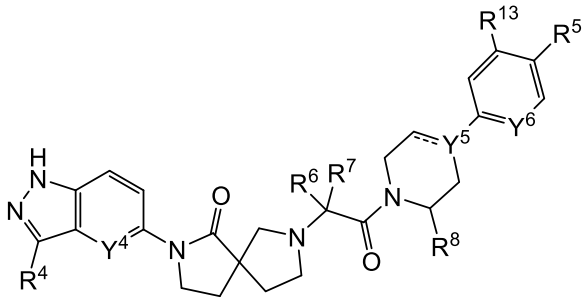
(S)-7-(2-(4-(5-(1-methyl-1H-1,2,4-triazol-3-yl)thiazol-2-yl)-3,6-dihydropyridin-1(2H)-yl)-2-oxoethyl)-2-(3-(2-methylbenzo[d]oxazol-5-yl)-1H-pyrazolo[4,3-b]pyridin-5-yl)-2,7-diazaspiro[4.4]nonan-1-one;

(S)-2-(3-(6-isopropoxypyridin-3-yl)-1H-pyrazolo[4,3-b]pyridin-5-yl)-7-(2-(4-(5-(1-methyl-1H-1,2,4-triazol-3-yl)thiazol-2-yl)-3,6-dihydropyridin-1(2H)-yl)-2-oxoethyl-1,1-d2)-2,7-diazaspiro[4.4]nonan-1-one; and

(S)-7-(2-(4-(5-(1-methyl-1H-1,2,4-triazol-3-yl)thiazol-2-yl)-3,6-dihydropyridin-1(2H)-yl)-2-oxoethyl)-2-(3-(2-methylpyridin-4-yl)-1H-pyrazolo[4,3-b]pyridin-5-yl)-2,7-diazaspiro[4.4]nonan-1-one;

or a pharmaceutically acceptable salt of the foregoing.

23. A compound of Formula (II):

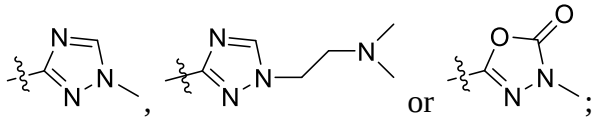


(II)

or a pharmaceutically acceptable salt thereof, wherein:

R^4 is a methyloxazolopyridinyl, or a pyridinyl substituted with one or two substituents independently selected from the group consisting of methyl, C_{1-4} alkoxy, C_{3-5} cycloalkoxy, isopropylthio, fluoro, chloro, cyano, trifluoromethyl, pyrrolidinyl and $-C(=O)NHCH_3$; or

R^4 is a dimethylbenzodioxolyl, a methylbenzoxazolyl, an isopropylbenzoxazolyl, a methylindazolyl, a methylbenzoisoxazolyl, or a phenyl substituted with one or two substituents independently selected from the group consisting of methoxy, fluoro, chloro, cyano, trifluoromethyl and $-C(=O)NHCH_3$;

R^5 is ;

R^6 and R^7 are each independently hydrogen or deuterium;

R^8 is H or methyl;

R^{13} is hydrogen;

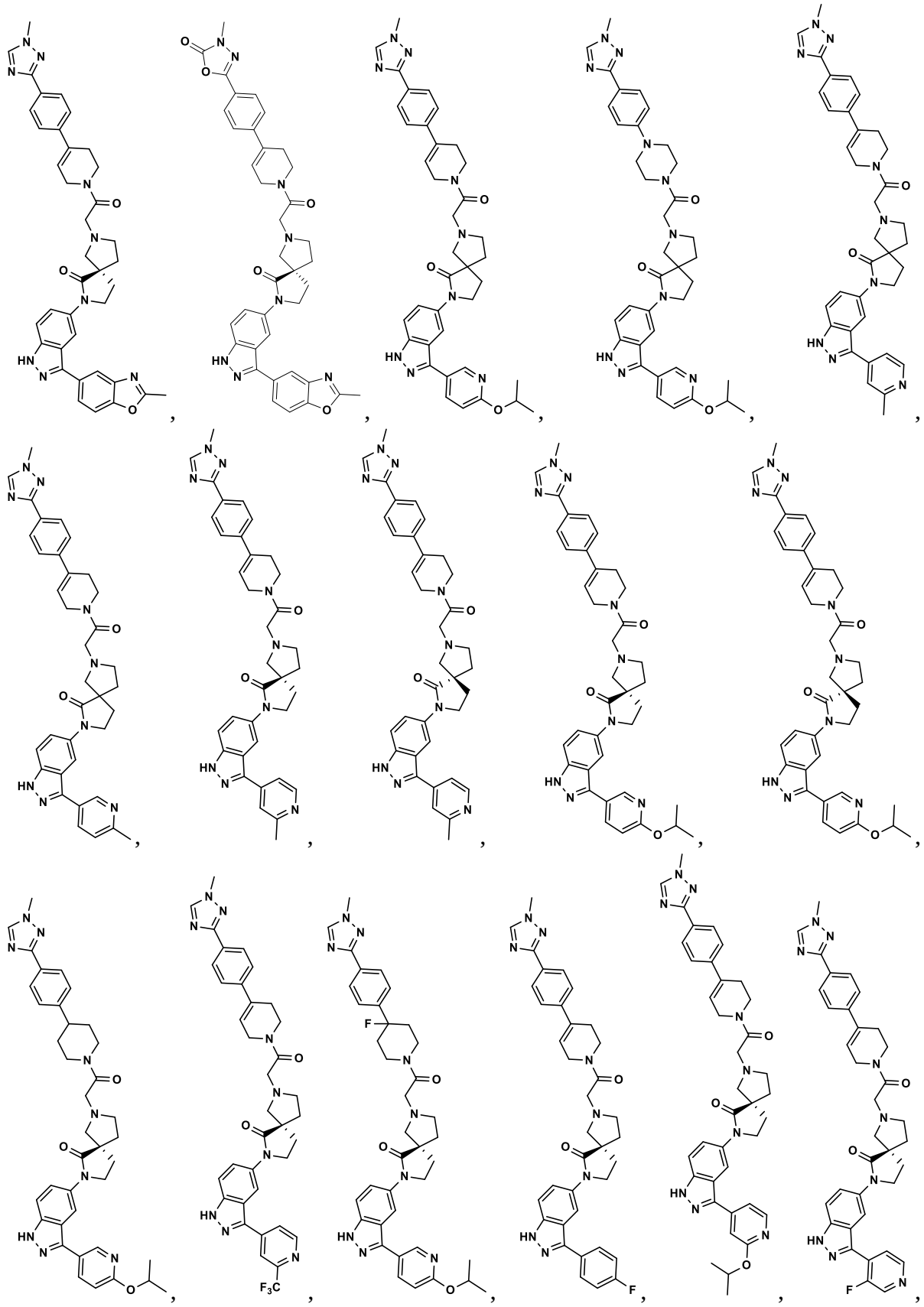
Y^4 is N, CH or CF;

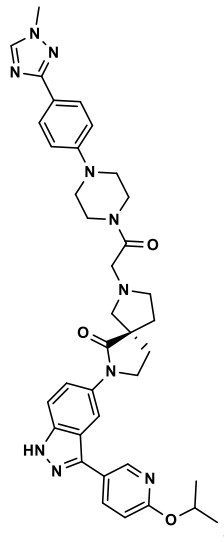
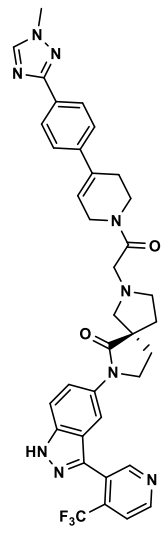
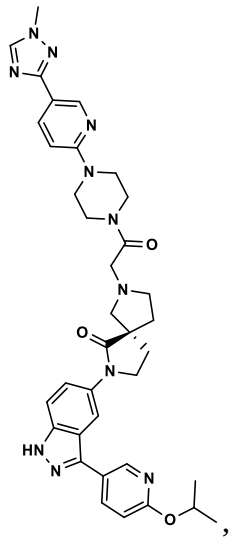
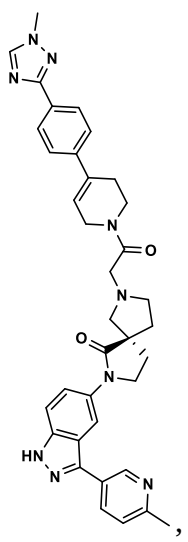
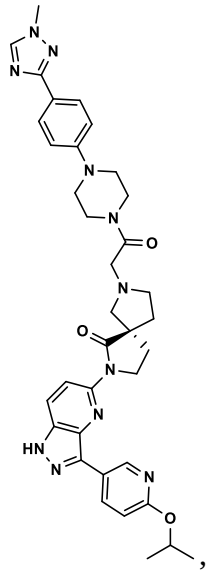
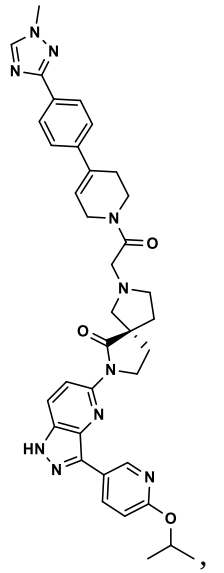
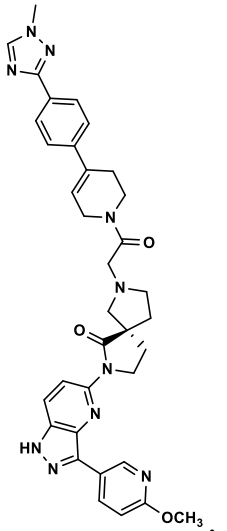
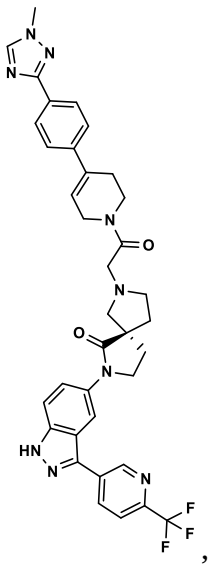
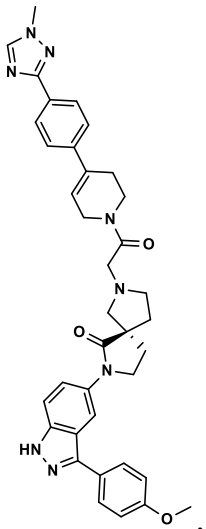
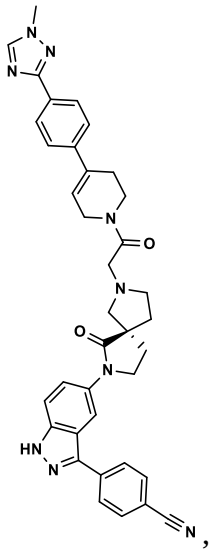
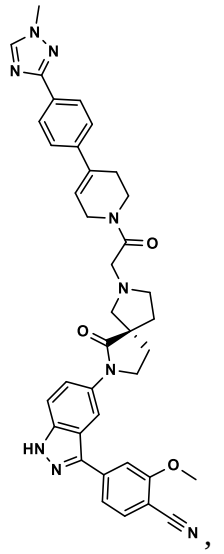
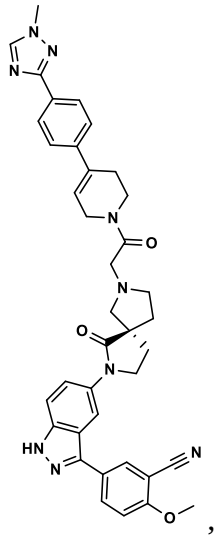
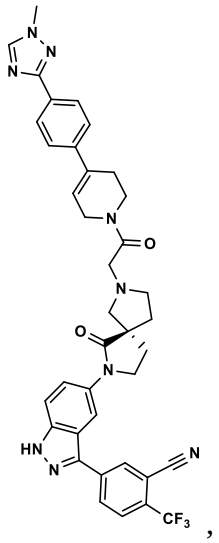
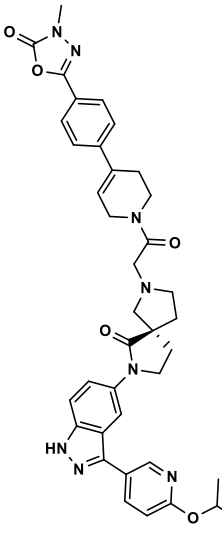
Y^5 is N, C, CH or CF; and

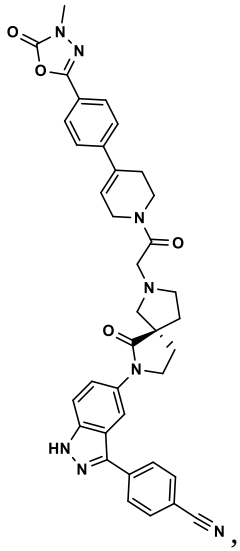
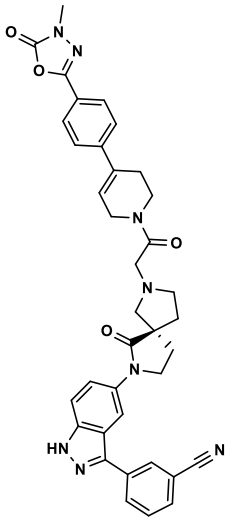
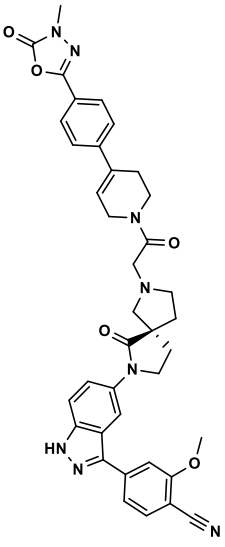
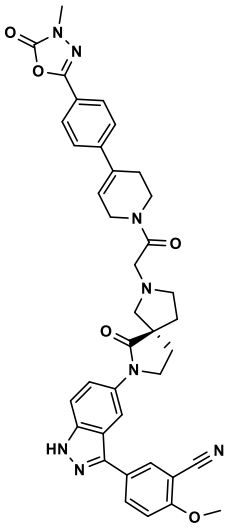
Y^6 is N or CH;

wherein -------- is a single bond when Y^5 is N, CH or CF and -------- is a double bond when Y^5 is C;

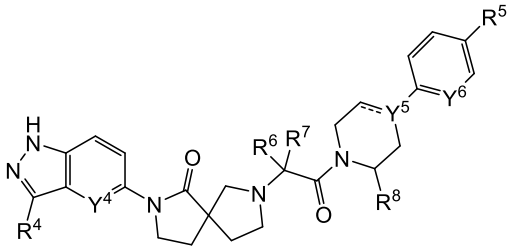
wherein the compound of Formula (II) is not selected from the group consisting of




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24. The compound of Claim 23, or a pharmaceutically acceptable salt thereof, of the Formula (IIA):

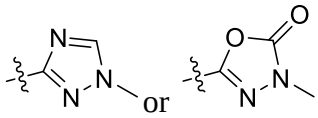


(IIA)

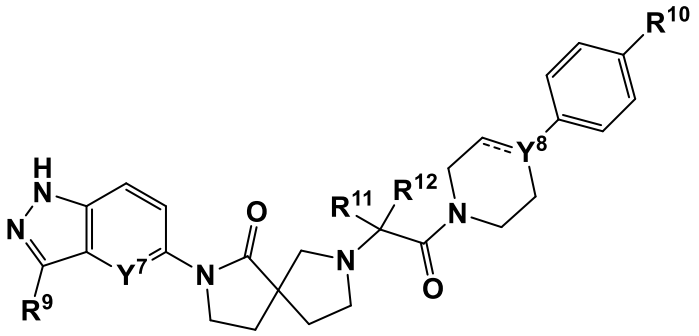
wherein

R^4 is a methyloxazolopyridinyl, or a pyridinyl substituted with one or two substituents independently selected from the group consisting of methyl, $C_{1\text{-}4}$ alkoxy, isopropylthio, fluoro, chloro, cyano, trifluoromethyl, and -C(=O)NHCH$_3$; or

R^4 is a dimethylbenzodioxolyl, a methylbenzoxazolyl, or a phenyl substituted with one or two substituents independently selected from the group consisting of methoxy, fluoro, chloro, cyano, trifluoromethyl and -C(=O)NHCH$_3$; and

R^5 is  or .

25. A compound of Formula (III):

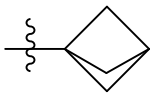
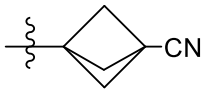
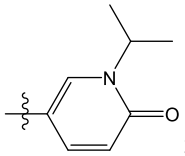


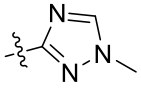
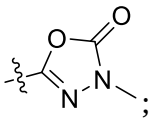
(III)

or a pharmaceutically acceptable salt thereof, wherein:

R^9 is a heterocyclyl selected from the group consisting of piperidinyl, 1,1-dioxidotetrahydrothiopyranyl, pyrrolidinyl, tetrahydrofuranyl, tetrahydropyranyl, dihydropyranyl, 2-oxaazaspiro[3.5]nonanyl, and morpholino; wherein said heterocyclyl is optionally substituted with one or two substituents selected from the group consisting of methyl, fluoro and trifluoroethyl; or

R^9 is a five-membered heteroaryl selected from the group consisting of thiazolyl, pyrazolyl, and triazolyl; wherein said five-membered heteroaryl is substituted with methyl or isopropyl; or

R^9 is a , a , or a ;

R^{10} is  or ;

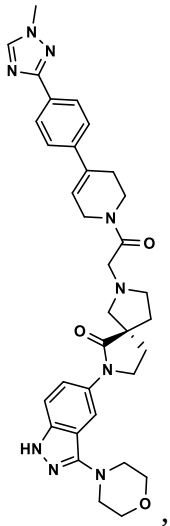
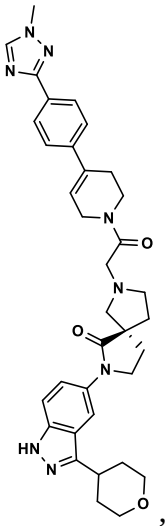
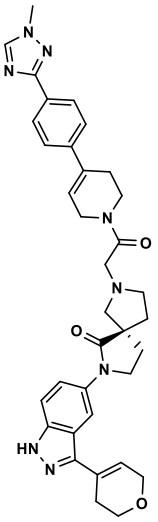
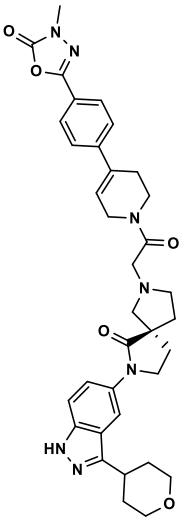
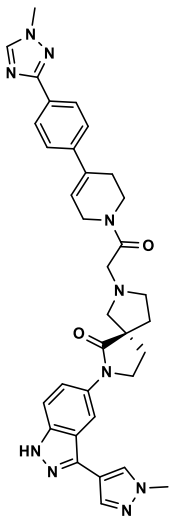
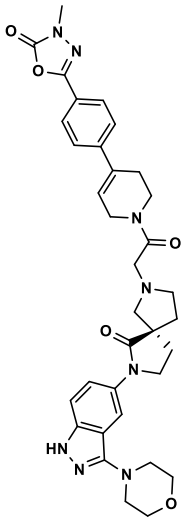
R^{11} and R^{12} are each independently hydrogen or deuterium;

Y^7 is N or CH; and

Y^8 is N, C, or CH;

wherein -------- is a single bond when Y^8 is N or CH and -------- is a double bond when Y^8 is C; and

wherein the compound of Formula (III) is not selected from the group consisting of

, , , , , and .

26. A pharmaceutical composition comprising an effective amount of a compound of any one of Claims 1 to 25, or a pharmaceutically acceptable salt thereof, and a pharmaceutically acceptable carrier, diluent, excipient, or combination thereof.

27. Use of an effective amount of a compound of any one of Claims 1 to 25, or a pharmaceutically acceptable salt thereof, or a pharmaceutical composition of Claim 26 in the manufacture of a medicament for ameliorating or treating a cancer, wherein the cancer is selected from the group consisting of a lung cancer, a pancreatic cancer, a colon cancer, a myeloid leukemia, a thyroid cancer, myelodysplastic syndrome (MDS), a bladder carcinoma, an epidermal carcinoma, a melanoma, a breast cancer, a prostate cancer, a head and neck cancer, an ovarian cancer, a brain cancer, a cancer of mesenchymal origin, a sarcoma, a tetracarcinoma, a neuroblastoma, a kidney carcinoma, a hepatoma, a non-Hodgkin's lymphoma, a multiple myeloma, an anaplastic thyroid carcinoma and neurofibromatosis.

28. Use of an effective amount of a compound of any one of Claims 1 to 25, or a pharmaceutically acceptable salt thereof, or a pharmaceutical composition of Claim 26 in the manufacture of a medicament for inhibiting replication of a malignant growth or a tumor, wherein the malignant growth or tumor is due to a cancer that is selected from the group consisting of a lung cancer, a pancreatic cancer, a colon cancer, a myeloid leukemia, a thyroid cancer, myelodysplastic syndrome (MDS), a bladder carcinoma, an epidermal carcinoma, a

melanoma, a breast cancer, a prostate cancer, a head and neck cancer, an ovarian cancer, a brain cancer, a cancer of mesenchymal origin, a sarcoma, a tetracarcinoma, a neuroblastoma, a kidney carcinoma, a hepatoma, a non-Hodgkin's lymphoma, a multiple myeloma, an anaplastic thyroid carcinoma and neurofibromatosis.

29. Use of an effective amount of a compound of any one of Claims 1 to 25, or a pharmaceutically acceptable salt thereof, or a pharmaceutical composition of Claim 26 in the manufacture of a medicament for ameliorating or treating a cancer, wherein the malignant growth or tumor is due to a cancer that is selected from the group consisting of a lung cancer, a pancreatic cancer, a colon cancer, a myeloid leukemia, a thyroid cancer, myelodysplastic syndrome (MDS), a bladder carcinoma, an epidermal carcinoma, a melanoma, a breast cancer, a prostate cancer, a head and neck cancer, an ovarian cancer, a brain cancer, a cancer of mesenchymal origin, a sarcoma, a tetracarcinoma, a neuroblastoma, a kidney carcinoma, a hepatoma, a non-Hodgkin's lymphoma, a multiple myeloma, an anaplastic thyroid carcinoma and neurofibromatosis.