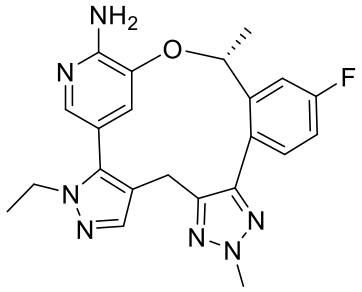
CLAIMS

WHAT IS CLAIMED IS:

1. A solid form comprising a compound of Formula (I), or a pharmaceutically acceptable salt thereof:



(I)

wherein:

(a) the solid form comprises a free base of a compound of formula (I), and is characterized by an XRPD pattern, when measured using Cu Kα radiation, comprising peaks at 10.7, 15.0, and 21.2º 2θ ± 0.2° 2θ;

(b) the solid form comprises a free base of a compound of formula (I), and is characterized by an XRPD pattern, when measured using Cu Kα radiation, comprising peaks at 8.6, 14.0, and 20.8º 2θ ± 0.2° 2θ;

(c) the solid form comprises a free base of a compound of formula (I), and is characterized by an XRPD pattern, when measured using Cu Kα radiation, comprising peaks at 13.4, 19.5, and 20.9º 2θ ± 0.2° 2θ;

(d) the solid form comprises a free base of a compound of formula (I), and is characterized by an XRPD pattern, when measured using Cu Kα radiation, comprising peaks at 12.1, 12.7, and 18.4º 2θ ± 0.2° 2θ;

(e) the solid form comprises a free base of a compound of formula (I), and is characterized by an XRPD pattern, when measured using Cu Kα radiation, comprising peaks at 10.5, 10.8, and 21.9º 2θ ± 0.2° 2θ;

(f) the solid form comprises a free base of a compound of formula (I), and is characterized by an XRPD2θ.ttern, when measured using Cu Kα radiation, comprising peaks at 8.6, 18.7, and 20.5º 2θ ± 0.2° 2θ;

(g) the solid form comprises a free base of a compound of formula (I), and is characterized by an XRPD pattern, when measured using Cu Kα radiation, comprising peaks at 12.5, 13.4, and 14.6º 2θ ± 0.2° 2θ;

(h) the solid form comprises a besylate salt of a compound of formula (I), and is characterized by an XRPD pattern, when measured using Cu Kα radiation, comprising peaks at 15.0, 17.9 and 23.0º 2θ ± 0.2° 2θ; or

(i) the solid form comprises a phosphate salt of a compound of formula (I), and is characterized by an XRPD pattern, when measured using Cu Kα radiation, comprising peaks at 10.8, 18.5, and 24.8º 2θ ± 0.2° 2θ.

2. The solid form of claim 1, which comprises a free base of a compound of formula (I), and is characterized by an XRPD pattern, when measured using Cu Kα radiation, comprising peaks at 10.7, 15.0, and 21.2º 2θ ± 0.2° 2θ.

3. The solid form of claim 2, wherein the XRPD pattern further comprises peaks at 17.4 and 21.3º 2θ ± 0.2° 2θ.

4. The solid form of claim 3, wherein the XRPD pattern further comprises peaks at 12.0, 12.2, and 13.9º 2θ ± 0.2° 2θ.

5. The solid form of claim 2, which is characterized by an XRPD pattern that matches the XRPD pattern depicted in **FIG. 1**.

6. The solid form of any one of claims 2 to 5, which exhibits an endothermic event, as characterized by DSC, with an onset temperature at 265 °C ± 2 °C and/or a peak temperature at 267 °C ± 2 °C.

7. The solid form of any one of claims 2 to 6, characterized by a DSC thermogram that matches the DSC thermogram depicted in **FIG. 3**.

8. The solid form of any one of claims 2 to 7, which exhibits a weight increase of about 0.25 % when subjected to an increase in relative humidity from about 0 to about 90 % relative humidity.

9. The solid form of any one of claims 2 to 8, having approximately unit cell dimensions of: a = 8.4 Å, b = 8.4 Å, c = 14.9 Å, α = 90°, β = 106°, and γ = 90°.

10. The solid form of claim 1, which comprises a free base of a compound of formula (I), and is characterized by an XRPD pattern, when measured using Cu Kα radiation, comprising peaks at 8.6, 14.0, and 20.8º 2θ ± 0.2° 2θ.

11. The solid form of claim 10, which exhibits an endothermic event, as characterized by DSC, with an onset temperature at 96 °C ± 2 °C; and/or an exothermic event, as characterized by DSC, with an onset temperature at 169 °C ± 2 °C.

12. The solid form of claim 1, which comprises a free base of a compound of formula (I), and is characterized by an XRPD pattern, when measured using Cu Kα radiation, comprising peaks at 13.4, 19.5, and 20.9º 2θ ± 0.2° 2θ.

13. The solid form of claim 12, which exhibits an exothermic event, as characterized by DSC, with an onset temperature at 168 °C ± 2 °C.

14. The solid form of claim 1, which comprises a free base of a compound of formula (I), and is characterized by an XRPD pattern, when measured using Cu Kα radiation, comprising peaks at 12.1, 12.7, and 18.4º 2θ ± 0.2° 2θ.

15. The solid form of claim 14, which exhibits an endothermic event, as characterized by DSC, with an onset temperature at 135 °C ± 2 °C.

16. The solid form of claim 1, which comprises a free base of a compound of formula (I), and is characterized by an XRPD pattern, when measured using Cu Kα radiation, comprising peaks at 10.5, 10.8, and 21.9º 2θ ± 0.2° 2θ.

17. The solid form of claim 1, which comprises a free base of a compound of formula (I), and is characterized by an XRPD pattern, when measured using Cu Kα radiation, comprising peaks at 8.6, 18.7, and 20.5º 2θ ± 0.2° 2θ.

18. The solid form of claim 17, which exhibits an endothermic event, as characterized by DSC, with an onset temperature at 126 °C ± 2 °C.

19. The solid form of claim 1, which comprises a free base of a compound of formula (I), and is characterized by an XRPD pattern, when measured using Cu Kα radiation, comprising peaks at 12.5, 13.4, and 14.6º 2θ ± 0.2° 2θ.

20. The solid form of claim 19, having approximately unit cell dimensions of: a = 8.0 Å, b = 14.8 Å, c = 18.0 Å, α = 90°, β = 90°, and γ = 90°.

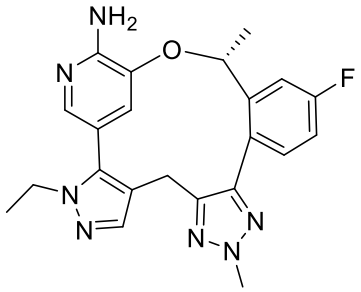
21. The solid form of claim 1, which comprises a besylate salt of a compound of formula (I), and is characterized by an XRPD pattern, when measured using Cu Kα radiation, comprising peaks at 15.0, 17.9 and 23.0º 2θ ± 0.2° 2θ.

22. The solid form of claim 21, which exhibits an endothermic event, as characterized by DSC, with an onset temperature at 128 °C ± 2 °C and/or a peak temperature at 136 °C ± 2 °C.

23. The solid form of claim 1, which comprises a phosphate salt of a compound of formula (I), and is characterized by an XRPD pattern, when measured using Cu Kα radiation, comprising peaks at 10.8, 18.5, and 24.8º 2θ ± 0.2° 2θ.

24. A pharmaceutical composition comprising the solid form of any one of claims 1 to 23 and a pharmaceutically acceptable excipient.

25. A process for preparing Form 1 of a compound of Formula (I):



(I),

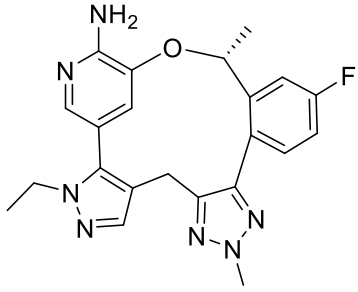
comprising

(i) dissolving the compound of Formula (I) in a solvent;

(ii) adding an anti-solvent; and

(ii) recovering said Form 1.

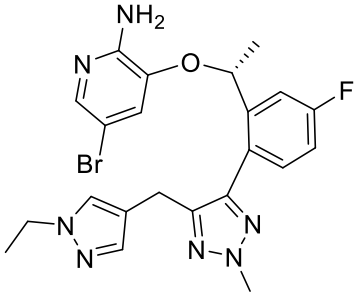
26. A process for preparing a compound of Formula (I):



(I)

or a stereoisomer, or a mixture of stereoisomers thereof, or a pharmaceutically acceptable salt thereof, comprising:

(step 1.0) cyclizing a compound of Formula (II):

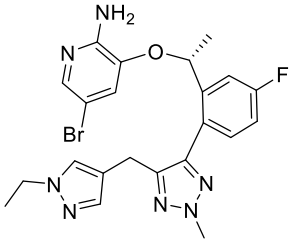


(II)

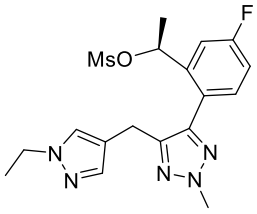
or a stereoisomer, or a mixture of stereoisomers thereof, or a pharmaceutically acceptable salt thereof, to provide a compound of Formula (I), or a stereoisomer, or a mixture of stereoisomers thereof, or a pharmaceutically acceptable salt thereof.

27. A crystalline form of a compound of Formula (I), or a stereoisomer, or a mixture of stereoisomers thereof, or a pharmaceutically acceptable salt thereof, prepared by the process of claim 26.

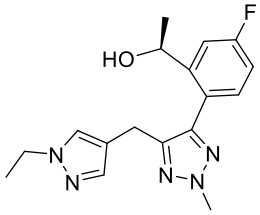
28. A compound of Formula (II), (III), (V), or (VI):



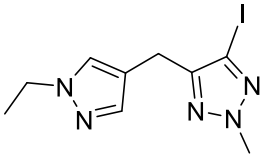
(II),



(III),



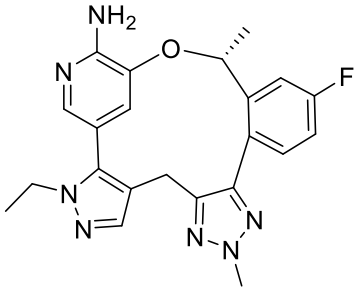
(V), or



(VI),

or a stereoisomer, or a mixture of stereoisomers thereof, or a pharmaceutically acceptable salt thereof.

29. A pharmaceutical composition comprising Compound 1:



(I)

or a stereoisomer, or a mixture of stereoisomers thereof, or a pharmaceutically acceptable salt thereof, and a diluent, a binder, a disintegrant, and a lubricant.

30. Use of the solid form of any one of claims 1 to 23 or the pharmaceutical composition of claim 24 or 29 in the manufacture of a medicament for treating cancer.