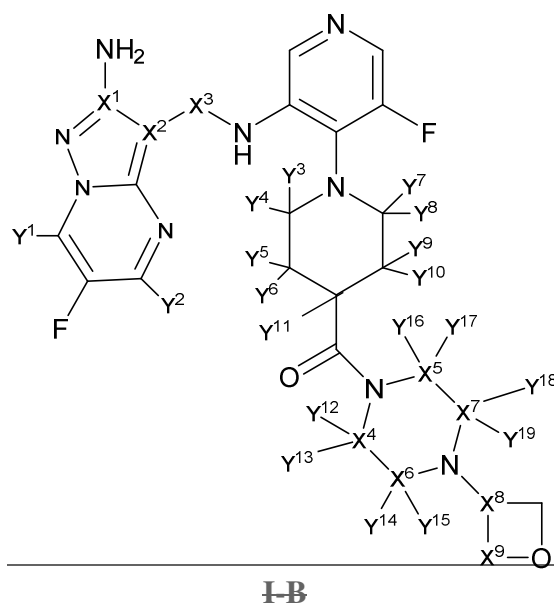


CLAIMS

1. A compound of Formula **I-B**:



or a pharmaceutically acceptable salt thereof, wherein:

each $Y^1, Y^2, Y^3, Y^4, Y^5, Y^6, Y^7, Y^8, Y^9, Y^{10}, Y^{11}, Y^{12}, Y^{13}, Y^{14}, Y^{15}, Y^{16}, Y^{17}, Y^{18}$, and Y^{19} is independently hydrogen or deuterium; provided at least one of $Y^1, Y^2, Y^3, Y^4, Y^5, Y^6, Y^7, Y^8, Y^9, Y^{10}, Y^{11}, Y^{12}, Y^{13}, Y^{14}, Y^{15}, Y^{16}, Y^{17}, Y^{18}$, and Y^{19} is deuterium

each $X^1, X^2, X^4, X^5, X^6, X^7, X^8$, and X^9 is independently selected from ^{12}C or ^{13}C ; and

X^3 is independently selected from $^{12}\text{C}(\text{O})$ or $^{13}\text{C}(\text{O})$.

2. The compound of claim 1, wherein $Y^{12}, Y^{13}, Y^{14}, Y^{15}, Y^{16}, Y^{17}, Y^{18}$, and Y^{19} are deuterium, and $Y^1, Y^2, Y^3, Y^4, Y^5, Y^6, Y^7, Y^8, Y^9, Y^{10}$, and Y^{11} are independently selected from hydrogen or deuterium.

3. The compound of claim 2, wherein $Y^{12}, Y^{13}, Y^{14}, Y^{15}, Y^{16}, Y^{17}, Y^{18}$, and Y^{19} are deuterium, and $Y^1, Y^2, Y^3, Y^4, Y^5, Y^6, Y^7, Y^8, Y^9, Y^{10}$, and Y^{11} are hydrogen.

4. The compound of claim 3, wherein:

$X^1, X^2, X^4, X^5, X^6, X^7, X^8$, and X^9 are ^{12}C ; and

X^3 is $^{12}\text{C}(\text{O})$.

5. The compound of claim 3, wherein:

$X^1, X^4, X^5, X^6, X^7, X^8$, and X^9 are ^{12}C ;

X^3 is $^{13}\text{C}(\text{O})$; and

X^2 is ^{13}C .

6. The compound of claim 1, wherein $Y^{11}, Y^{12}, Y^{13}, Y^{14}, Y^{15}, Y^{16}, Y^{17}, Y^{18}$, and Y^{19} are deuterium, and $Y^1, Y^2, Y^3, Y^4, Y^5, Y^6, Y^7, Y^8, Y^9$, and Y^{10} are independently selected from hydrogen or deuterium.
7. The compound of claim 6, wherein $Y^{11}, Y^{12}, Y^{13}, Y^{14}, Y^{15}, Y^{16}, Y^{17}, Y^{18}$, and Y^{19} are deuterium, and $Y^1, Y^2, Y^3, Y^4, Y^5, Y^6, Y^7, Y^8, Y^9$, and Y^{10} are hydrogen.
8. The compound of claim 1, wherein $Y^2, Y^{12}, Y^{13}, Y^{14}, Y^{15}, Y^{16}, Y^{17}, Y^{18}$, and Y^{19} are deuterium, and $Y^1, Y^3, Y^4, Y^5, Y^6, Y^7, Y^8, Y^9, Y^{10}$, and Y^{11} are independently selected from hydrogen or deuterium.
9. The compound of claim 8, wherein $Y^2, Y^{12}, Y^{13}, Y^{14}, Y^{15}, Y^{16}, Y^{17}, Y^{18}$, and Y^{19} are deuterium, and $Y^1, Y^3, Y^4, Y^5, Y^6, Y^7, Y^8, Y^9, Y^{10}$, and Y^{11} are hydrogen.
10. The compound of claim 1, wherein Y^{12}, Y^{13}, Y^{18} , and Y^{19} are deuterium, and $Y^1, Y^2, Y^3, Y^4, Y^5, Y^6, Y^7, Y^8, Y^9, Y^{10}, Y^{11}, Y^{14}, Y^{15}, Y^{16}$, and Y^{17} are hydrogen or deuterium.
11. The compound of claim 10, wherein Y^{12}, Y^{13}, Y^{18} , and Y^{19} are deuterium, and $Y^1, Y^2, Y^3, Y^4, Y^5, Y^6, Y^7, Y^8, Y^9, Y^{10}, Y^{11}, Y^{14}, Y^{15}, Y^{16}$, and Y^{17} are hydrogen.
12. The compound of claim 1, wherein $Y^3, Y^4, Y^5, Y^6, Y^7, Y^8, Y^9, Y^{10}$, and Y^{11} are deuterium, and $Y^1, Y^2, Y^{12}, Y^{13}, Y^{14}, Y^{15}, Y^{16}, Y^{17}, Y^{18}$, and Y^{19} are independently selected from deuterium or hydrogen.
13. The compound of claim 12, wherein $Y^3, Y^4, Y^5, Y^6, Y^7, Y^8, Y^9, Y^{10}$, and Y^{11} are deuterium, and $Y^1, Y^2, Y^{12}, Y^{13}, Y^{14}, Y^{15}, Y^{16}, Y^{17}, Y^{18}$, and Y^{19} are hydrogen.
14. The compound of claim 1, wherein Y^2 and Y^{11} are deuterium, and $Y^1, Y^3, Y^4, Y^5, Y^6, Y^7, Y^8, Y^9, Y^{10}, Y^{12}, Y^{13}, Y^{14}, Y^{15}, Y^{16}, Y^{17}, Y^{18}$, and Y^{19} are deuterium or hydrogen.
15. The compound of claim 14, wherein Y^2 and Y^{11} are deuterium, and $Y^1, Y^3, Y^4, Y^5, Y^6, Y^7, Y^8, Y^9, Y^{10}, Y^{12}, Y^{13}, Y^{14}, Y^{15}, Y^{16}, Y^{17}, Y^{18}$, and Y^{19} are hydrogen.
16. The compound of claim 1, wherein Y^2 is deuterium, and $Y^1, Y^3, Y^4, Y^5, Y^6, Y^7, Y^8, Y^9, Y^{10}, Y^{11}, Y^{12}, Y^{13}, Y^{14}, Y^{15}, Y^{16}, Y^{17}, Y^{18}$, and Y^{19} are deuterium or hydrogen.
17. The compound of claim 16, wherein Y^2 is deuterium, and $Y^1, Y^3, Y^4, Y^5, Y^6, Y^7, Y^8, Y^9, Y^{10}, Y^{11}, Y^{12}, Y^{13}, Y^{14}, Y^{15}, Y^{16}, Y^{17}, Y^{18}$, and Y^{19} are hydrogen.
18. The compound of claim 17, wherein:
 $X^1, X^2, X^4, X^5, X^6, X^7$, and X^8 are ^{12}C ;
 X^3 is $^{12}\text{C}(\text{O})$; and
 X^9 is ^{13}C .
19. The compound of claim 17, wherein:
 X^1, X^2, X^8 , and X^9 are ^{12}C ;

~~X³ is ¹²C(O); and~~

~~X⁴, X⁵, X⁶, and X⁷ are ¹³C.~~

~~20. The compound of claim 17, wherein:~~

~~X², X⁴, X⁵, X⁶, X⁷, X⁸, and X⁹ are ¹²C;~~

~~X³ is ¹²C(O); and~~

~~X¹ is ¹³C.~~

~~21. The compound of claim 17, wherein:~~

~~X², X⁴, X⁵, X⁶, X⁷, and X⁹ are ¹²C;~~

~~X³ is ¹³C(O); and~~

~~X¹ and X⁸ are ¹³C.~~

~~22. The compound of claim 1, wherein Y¹¹ is deuterium, and Y¹, Y², Y³, Y⁴, Y⁵, Y⁶, Y⁷, Y⁸, Y⁹, Y¹⁰, Y¹², Y¹³, Y¹⁴, Y¹⁵, Y¹⁶, Y¹⁷, Y¹⁸, and Y¹⁹ are independently selected from hydrogen or deuterium.~~

~~23. The compound of claim 21, wherein Y¹¹ is deuterium, and Y¹, Y², Y³, Y⁴, Y⁵, Y⁶, Y⁷, Y⁸, Y⁹, Y¹⁰, Y¹², Y¹³, Y¹⁴, Y¹⁵, Y¹⁶, Y¹⁷, Y¹⁸, and Y¹⁹ are hydrogen.~~

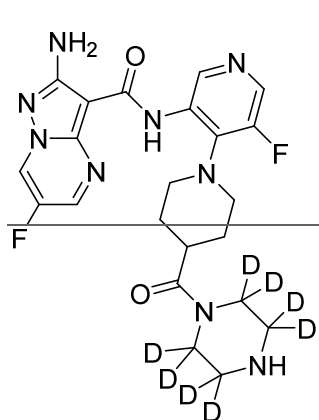
~~24. The compound of claim 22, wherein:~~

~~X¹, X⁴, X⁵, X⁶, X⁷, X⁸, and X⁹ are ¹²C;~~

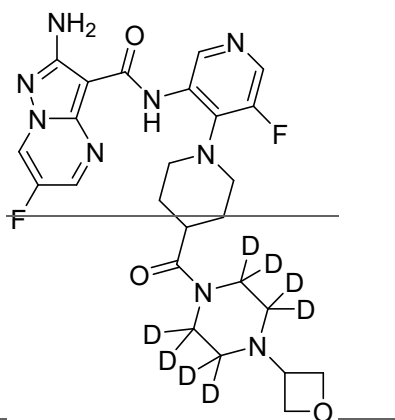
~~X³ is ¹²C(O); and~~

~~X² is ¹³C.~~

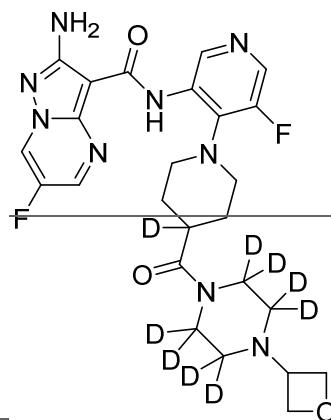
~~25. The compound of any one of claims 1-24 selected from the following:~~



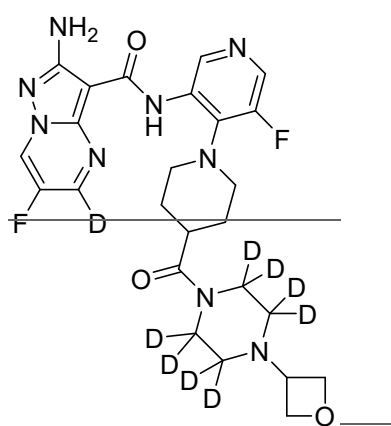
I-2



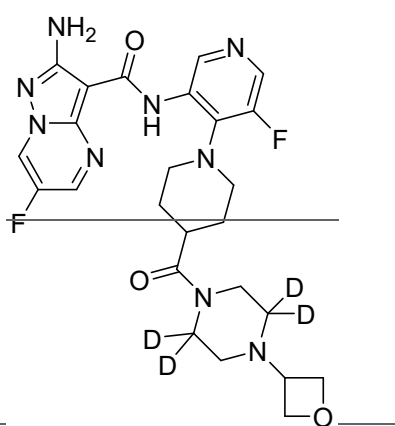
I-3



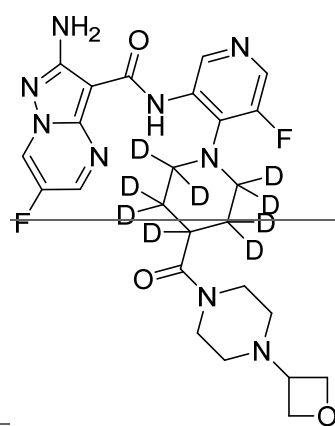
I-4



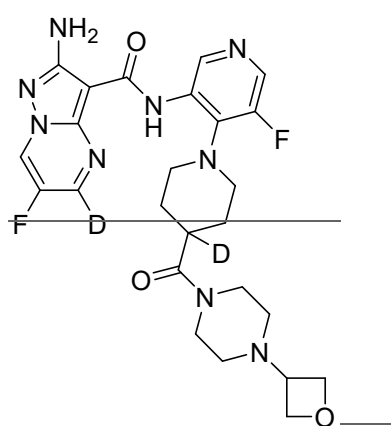
I-5



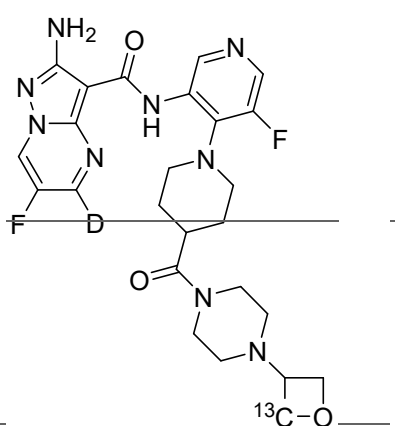
I-6



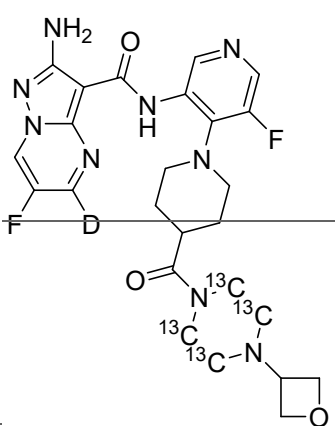
I-7



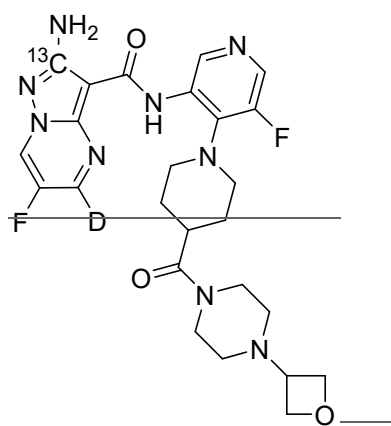
I-8



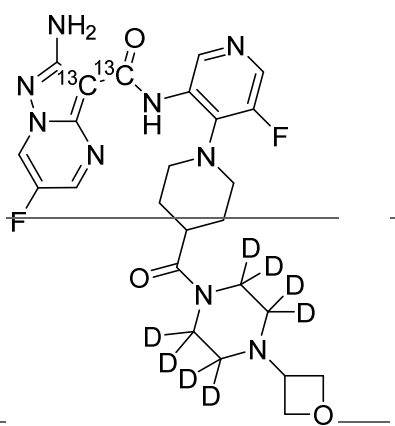
I-9



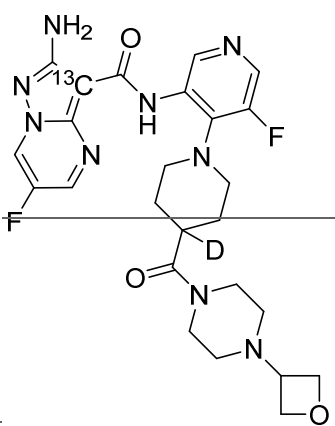
I-10



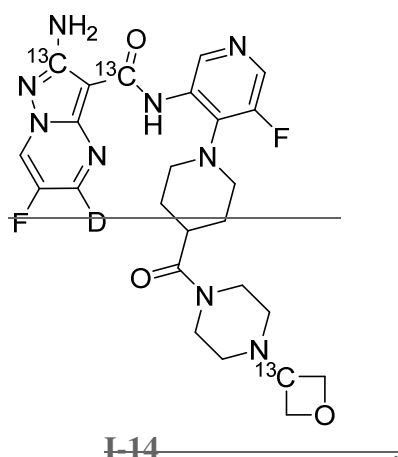
I-11



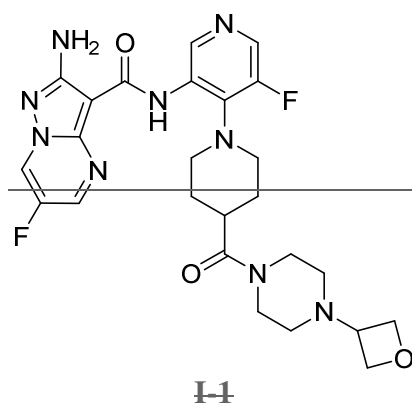
I-12



I-13



26. A solid form of a compound of formula **I-1**:



wherein the form is selected from the group consisting of Compound **I-1** ethanol solvate, Compound **I-1** hydrate I, Compound **I-1** hydrate II, Compound **I-1** anhydrous form A, Compound **I-1** anhydrous form B, Compound **I-1** anhydrous form C, Compound **I-1** DMSO solvate, Compound **I-1** DMAC solvate, Compound **I-1** acetone solvate, or Compound **I-1** isopropanol solvate:

27. The solid form of claim 26, wherein the form is Compound **I-1** ethanol solvate.

28. The solid form of claim 26, wherein the form is crystalline Compound **I-1** ethanol solvate.

29. The solid form of claim 28, wherein the crystalline Compound **I-1** ethanol solvate has a compound **I-1** to ethanol ratio of about 1:0.72.

30. The solid form of claim 28, characterized by a weight loss of from about 5.76% in a temperature range of from about 166°C to about 219°C.

31. The solid form of claim 28, characterized by one or more peaks expressed in $2\theta \pm 0.2$ at about 17.2, 19.7, 23.8, 24.4, and 29.0 degrees in an X Ray powder diffraction pattern obtained using Cu K alpha radiation.

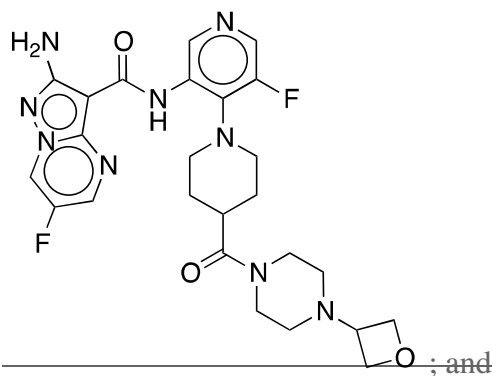
32. The solid form of claim 28, characterized as having an X-ray powder diffraction pattern substantially the same as that shown in Figure 1a.

33. The solid form of claim 28, characterized as having one or more peaks corresponding to 175.4 ± 0.3 ppm, 138.0 ± 0.3 ppm, 123.1 ± 0.3 ppm, 57.8 ± 0.3 ppm, 44.0 ± 0.3 ppm, and 19.5 ± 0.3 ppm in a C^{13} -ssNMR spectrum.
34. The solid form of claim 28, characterized as having one or more peaks corresponding to 136.0 ± 0.3 ppm and 151.6 ± 0.3 ppm in an F^{19} -ssNMR spectrum.
35. The solid form of claim 26, wherein the form is Compound **I-1**•hydrate I.
36. The solid form of claim 26, wherein the form is crystalline Compound **I-1**•hydrate I
37. The solid form of claim 36, wherein the crystalline Compound **I-1**•hydrate I has a Compound **I-1** to H₂O ratio of about 1:4.5.
38. The solid form of claim 36, characterized by a weight loss of from about 14.56% in a temperature range of from about 25°C to about 100°C.
39. The solid form of claim 36, characterized by one or more peaks expressed in 2-theta ± 0.2 at about 6.5, 12.5, 13.7, 18.8, and 26.0 degrees in an X-Ray powder diffraction pattern obtained using Cu K-alpha radiation.
40. The solid form of claim 36, characterized as having an X-ray powder diffraction pattern substantially the same as that shown in Figure 1b.
41. The solid form of claim 26, wherein the form is Compound **I-1**•hydrate II.
42. The solid form of claim 26, wherein the form is crystalline Compound **I-1**•hydrate II.
43. The solid form of claim 42, characterized by one or more peaks expressed in 2-theta ± 0.2 at about 10.1, 11.3, 11.9, 20.2, and 25.1 degrees in an X-Ray powder diffraction pattern obtained using Cu K-alpha radiation.
44. The solid form of claim 42, characterized as having one or more peaks corresponding to 177.0 ± 0.3 ppm, 158.2 ± 0.3 ppm, 142.9 ± 0.3 ppm, 85.1 ± 0.3 ppm, 58.9 ± 0.3 ppm, and 31.9 ± 0.3 ppm in a C^{13} -ssNMR spectrum.
45. The solid form of claim 42, characterized as having one or more peaks corresponding to 138.0 ± 0.3 ppm and 152.7 ± 0.3 ppm in an F^{19} -ssNMR spectrum.
46. The solid form of claim 26, wherein the form is Compound **I-1**•anhydrous form A.
47. The solid form of claim 26, wherein the form is crystalline Compound **I-1**•anhydrous form A.
48. The solid form of claim 47, characterized by a weight loss of from about 0.96 % in a temperature range of from about 25°C to about 265°C.
49. The solid form of claim 47, characterized by one or more peaks expressed in 2-theta ± 0.2 at about 6.1, 12.2, 14.5, 22.3, and 31.8 degrees in an X-Ray powder diffraction pattern obtained using Cu K-alpha radiation.

50. The solid form of claim 47, characterized as having an X-ray powder diffraction pattern substantially the same as that shown in Figure 1c.
51. The solid form of claim 47, characterized as having one or more peaks corresponding to 175.9 ± 0.3 ppm, 138.9 ± 0.3 ppm, 74.1 ± 0.3 ppm, 42.8 ± 0.3 ppm, and 31.5 ± 0.3 ppm in a C^{13} -ssNMR spectrum.
52. The solid form of claim 47, characterized as having one or more peaks corresponding to 136.8 ± 0.3 ppm and 155.7 ± 0.3 ppm in an F^{19} -ssNMR spectrum.
53. The solid form of claim 26, wherein the form is Compound **I-1** anhydrous form B.
54. The solid form of claim 26, wherein the form is crystalline Compound **I-1** anhydrous form B.
55. The solid form of claim 54, characterized by a weight loss of from about 2.5 % in a temperature range of from about 25°C to about 175°C.
56. The solid form of claim 54, characterized by one or more peaks expressed in $2\theta \pm 0.2$ at about 7.2, 8.3, 12.9, 19.5, and 26.6 degrees in an X Ray powder diffraction pattern obtained using Cu K alpha radiation.
57. The solid form of claim 54, characterized as having an X-ray powder diffraction pattern substantially the same as that shown in Figure 1d.
58. The solid form of claim 54, characterized as having one or more peaks corresponding to 173.4 ± 0.3 ppm, 164.5 ± 0.3 ppm, 133.5 ± 0.3 ppm, 130.8 ± 0.3 ppm, 67.7 ± 0.3 ppm, 45.3 ± 0.3 ppm, and 25.9 ± 0.3 ppm in a C^{13} -ssNMR spectrum.
59. The solid form of claim 42, characterized as having one or more peaks corresponding to 138.0 ± 0.3 ppm and 153.5 ± 0.3 ppm in an F^{19} -ssNMR spectrum.
60. The solid form of claim 26, wherein the form is Compound **I-1** anhydrous form C.
61. The solid form of claim 26, wherein the form is crystalline Compound **I-1** anhydrous form C.
62. The solid form of claim 61, characterized by one or more peaks expressed in $2\theta \pm 0.2$ at about 6.8, 13.4, 15.9, 30.9, and 32.9 degrees in an X Ray powder diffraction pattern obtained using Cu K alpha radiation.
63. The solid form of claim 61, characterized as having an X-ray powder diffraction pattern substantially the same as that shown in Figure 1e.
64. The solid form of claim 61, characterized as having one or more peaks corresponding to 175.2 ± 0.3 ppm, 142.5 ± 0.3 ppm, 129.6 ± 0.3 ppm, 73.5 ± 0.3 ppm, 54.0 ± 0.3 ppm, and 46.7 ± 0.3 ppm in a C^{13} -ssNMR spectrum.

65. The solid form of claim 61, characterized as having one or more peaks corresponding to 131.2 ± 0.3 ppm and 150.7 ± 0.3 ppm in an F^{19} -ssNMR spectrum.
66. The solid form of claim 26, wherein the form is Compound **I-1**•DMSO solvate.
67. The solid form of claim 26, wherein the form is crystalline Compound **I-1**•DMSO solvate.
68. The solid form of claim 67, wherein the crystalline Compound **I-1**•DMSO solvate has a compound **I-1** to DMSO ratio of about 1:1.
69. The solid form of claim 67, characterized by a weight loss of from about 12.44% in a temperature range of from about 146°C to about 156°C.
70. The solid form of claim 67, characterized by one or more peaks expressed in $2\text{-theta} \pm 0.2$ at about 8.9, 14.8, 16.5, 18.6, 20.9, 22.2, and 23.4 degrees in an X-Ray powder diffraction pattern obtained using Cu K alpha radiation.
71. The solid form of claim 67, characterized as having an X-ray powder diffraction pattern substantially the same as that shown in Figure 1g.
72. The solid form of claim 26, wherein the form is Compound **I-1**•DMAC solvate.
73. The solid form of claim 26, wherein the form is crystalline Compound **I-1**•DMAC solvate.
74. The solid form of claim 75, wherein the crystalline Compound **I-1**•DMAC solvate has a compound **I-1** to DMAC ratio of about 1:1.3.
75. The solid form of claim 75, characterized by a weight loss of from about 17.76% in a temperature range of from about 85°C to about 100°C.
76. The solid form of claim 75, characterized by one or more peaks expressed in $2\text{-theta} \pm 0.2$ at about 6.0, 15.5, 17.7, 18.1, 20.4, and 26.6 degrees in an X-Ray powder diffraction pattern obtained using Cu K alpha radiation.
77. The solid form of claim 75, characterized as having an X-ray powder diffraction pattern substantially the same as that shown in Figure 1h.
78. The solid form of claim 26, wherein the form is Compound **I-1**•acetone solvate.
79. The solid form of claim 26, wherein the form is crystalline Compound **I-1**•acetone solvate.
80. The solid form of claim 79, wherein the crystalline Compound **I-1**•acetone solvate has a compound **I-1** to acetone ratio of about 1:0.44.
81. The solid form of claim 79, characterized by a weight loss of from about 4.55% in a temperature range of from about 124°C to about 151°C.
82. The solid form of claim 79, characterized by one or more peaks expressed in $2\text{-theta} \pm 0.2$ at about 8.9, 15.5, 15.8, 16.7, 22.3, 25.7, and 29.0 degrees in an X-Ray powder diffraction pattern obtained using Cu K alpha radiation.

83. The solid form of claim 79, characterized as having an X-ray powder diffraction pattern substantially the same as that shown in Figure 1i.
84. The solid form of claim 26, wherein the form is Compound **I-1** isopropanol solvate.
85. The solid form of claim 26, wherein the form is crystalline Compound **I-1** isopropanol solvate.
86. The solid form of claim 85, wherein the crystalline Compound **I-1** isopropanol solvate has a compound **I-1** to isopropanol ratio of about 1:0.35.
87. The solid form of claim 85, characterized by a weight loss of from about 3.76% in a temperature range of from about 136°C to about 180°C.
88. The solid form of claim 85, characterized by one or more peaks expressed in 2-theta $\pm$ 0.2 at about 6.9, 17.1, 17.2, 19.1, 19.6, 23.7, 24.4, and 28.9 degrees in an X-Ray powder diffraction pattern obtained using Cu K-alpha radiation.
89. The solid form of claim 85, characterized as having an X-ray powder diffraction pattern substantially the same as that shown in Figure 1j.
90. A composition comprising:
- a) — Compound **I-1**, or a pharmaceutically acceptable salt thereof, wherein Compound **I-1** is represented by the following structural formula:



- b) — one or more excipients, wherein the one or more excipients comprises one or more selected from the group consisting of one or more fillers, one or more wetting agents, one or more lubricants, and one or more disintegrants.
91. The composition of claim 90, wherein the one or more excipients comprise one or more fillers.
92. The composition of claim 91, wherein the one or more fillers is present in an amount in the range of about 10 wt% to about 88 wt% by the total weight of the composition.
93. The composition of claim 91 or 92, wherein the one or more fillers is selected from the group consisting of mannitol, lactose, sucrose, dextrose, maltodextrin, sorbitol, xylitol, powdered

cellulose, microcrystalline cellulose, silicified microcrystalline cellulose, methylcellulose, ethylcellulose, hydroxyethylcellulose, methylhydroxyethylcellulose, starch, pregelatinized starch, dibasic calcium phosphate, calcium sulfate and calcium carbonate.

94. The composition of claim 93, wherein the one or more filler is selected from microcrystalline cellulose and lactose.

95. The composition of any one of claims 90-94, wherein the one or more excipients comprises one or more disintegrants.

96. The composition of claim 95, wherein one or more disintegrants is present in an amount in the range of about 1 wt% to about 15 wt% by the total weight of the composition.

97. The composition of claim 95 or 96, wherein the one or more disintegrants is selected from the group consisting of croscarmellose sodium, sodium alginate, calcium alginate, alginic acid, starch, pregelatinized starch, sodium starch glycolate, crospovidone, cellulose and its derivatives, carboxymethylcellulose calcium, carboxymethylcellulose sodium, soy polysaccharide, guar gum, an ion exchange resin, an effervescent system based on food acids and an alkaline carbonate component, and sodium bicarbonate.

98. The composition of claim 97, wherein the one or more disintegrants is croscarmellose sodium.

99. The composition of any one of claims 90-98, wherein the one or more excipients comprises one or more lubricants.

100. The composition of claim 99, wherein the one or more lubricants is present in an amount in the range of about 0.1 wt% to about 10 wt% by the total weight of the composition.

101. The composition of claim 99 or 100, wherein the one or more lubricants is selected from the group consisting of talc, fatty acid, stearic acid, magnesium stearate, calcium stearate, sodium stearate, glyceryl monostearate, sodium lauryl sulfate, sodium stearyl fumarate, hydrogenated oils, fatty alcohol, fatty acid ester, glyceryl behenate, mineral oil, vegetable oil, leucine, sodium benzoate, and a combination thereof.

102. The composition of claim 101, wherein the one or more lubricants is sodium stearyl fumarate.

103. The composition of any one of claims 90-102, comprising:

- a) an amount of Compound I-1 in the range of about 5 wt% to about 50 wt% by the total weight of the composition;
- b) an amount of one or more lubricants in the range of about 0.1 wt% to about 10 wt% by the total weight of the composition;
- c) an amount of one or more disintegrants in the range of about 1 wt% to about 15 wt% by the total weight of the composition; and

d) — an amount of one or more fillers in the range of about 10 wt% to about 90 wt% by the total weight of the composition.

104. The composition of any one of claims 90-103, comprising:

a) — an amount of Compound **I-1** of about 10 wt% by the total weight of the composition;

b) — an amount of lactose monohydrate of about 28 wt% by the total weight of the composition;

c) — an amount of Avicel PH 101 (microcrystalline cellulose) of about 55 wt% by the total weight of the composition;

d) — an amount of Ac-Di-Sol (croscarmellose sodium) of about 5 wt% by the total weight of the composition; and

e) — an amount of sodium stearyl fumarate of about 3 wt% by the total weight of the composition.

105. The composition of any one of claims 90-104, wherein substantially all by weight of Compound **I-1** is Form A.

106. The composition of claim 105, wherein at least 90% by weight of Compound **I-1** is Form A.

107. The composition of claim 106, wherein at least 95% by weight of Compound **I-1** is Form A.

108. The composition of claim 107, wherein at least 98% by weight of Compound **I-1** is Form A.

109. A crystal form of Compound **I-1** having a monoclinic crystal system, a $P2_1/c$ centrosymmetric space group, and the following unit cell parameters:

— $a = 15.29(3) \text{ \AA}$ — $\alpha = 90^\circ$

— $b = 12.17(2) \text{ \AA}$ — $\beta = 107.22(3)^\circ$

— $c = 14.48(3) \text{ \AA}$ — $\gamma = 90^\circ$.

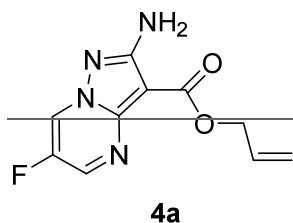
110. A process for preparing Compound **I-1** anhydrous form A comprising stirring a suspension containing Compound **I-1** ethanol solvate and tetrahydrofuran.

111. A process for preparing Compound **I-1** anhydrous form A comprising stirring a suspension containing Compound **I-1** amorphous, isopropanol, and water.

112. The process of claim 111, wherein the suspension is heated to between about 65°C and about 80°C.

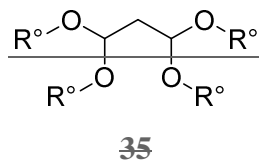
113. The process of claim 114, wherein the suspension is heated to between about 70°C and about 75°C.

114. A process for preparing a compound of formula **4a**:



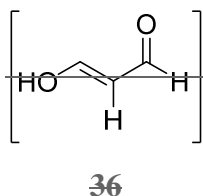
comprising the steps of:

a) reacting a compound of formula **35**:

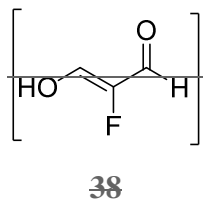


wherein R° is C₁₋₆ aliphatic,

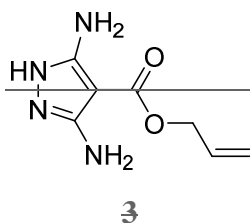
under acidic conditions to form a compound of formula **36**:



b) reacting a compound of formula **36** with an electrophilic fluorinating agent to form a compound of formula **38**:



c) reacting a compound of formula **38** with a compound of formula **3**:



under suitable condensation conditions to form the compound of formula **4a**.

115. The process of claim 114, wherein R° is independently selected from methyl, ethyl, propyl, isopropyl, butyl, and pentyl.

116. The process of claim 115, wherein R° is independently selected from methyl or ethyl.

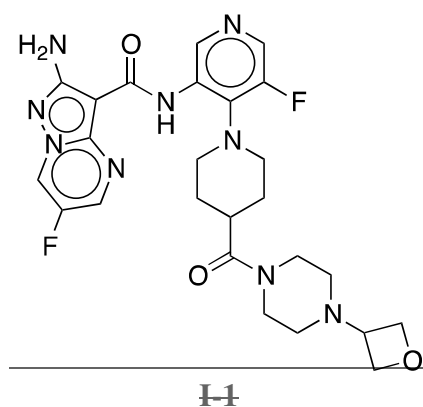
117. The process of claim 114, wherein the electrophilic fluorinating agent is 1-(Chloromethyl)-4-fluoro-1,4-diazoniabicyclo[2.2.2]octane-ditetrafluoroborate.

~~118. The process of claim 114, wherein the electrophilic fluorinating agent is fluorine gas.~~

~~119. The process of claim 114, wherein the suitable condensation conditions comprise reacting the compound of formula **38** with the compound of formula **3** in the presence of a solvent.~~

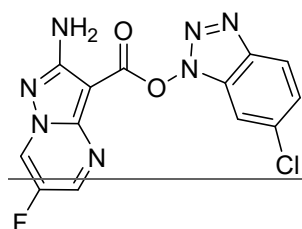
~~120. The process of claim 119, wherein the solvent is selected from DMF or DMSO.~~

~~121. A process for preparing a compound of formula I-1:~~



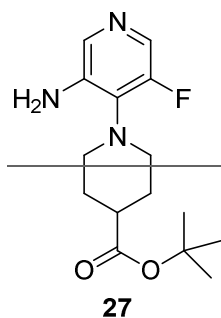
~~comprising the steps of:~~

~~a) reacting the compound of formula 6a*:~~

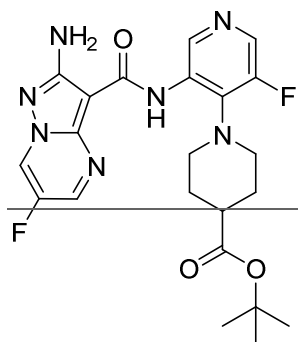


6a*

~~with a compound of formula 27:~~



~~under suitable amide bond formation conditions to form a compound of formula 28:~~

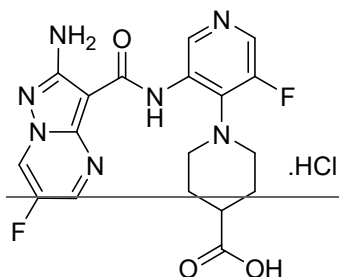


28

÷

b) ~~purifying the compound of formula 28 using a suitable palladium sequestering agent;~~

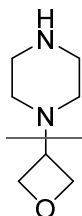
c) ~~reacting the compound of formula 28 under suitable deprotection conditions to form a compound of formula 30~~



30

÷

d) ~~reacting the compound of formula 30 with a compound of formula 25:~~



25

~~under suitable amide bond formation conditions to form the compound of formula I-1.~~

~~122. The process of claim 121, wherein suitable conditions for forming the amide bond comprise reacting the compound of formula 30 with the compound of formula 25 in the presence of an amide coupling partner, an aprotic solvent, and a base.~~

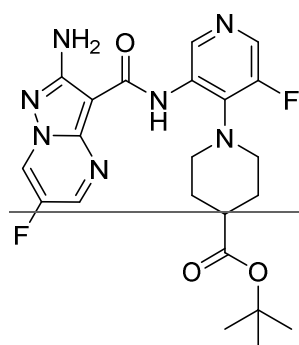
~~123. The compound of claim 122, wherein the aprotic solvent is independently selected from NMP, DMF, or tetrahydrofuran.~~

~~124. The process of claim 123, wherein the aprotic solvent is tetrahydrofuran.~~

~~125. The process of claim 122, wherein the base is an aliphatic amine.~~

~~126. The process of claim 125, wherein the base is DIPEA.~~

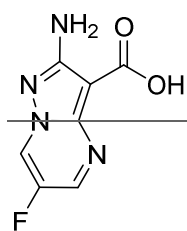
- ~~127. The process of any one of claims 122-126, wherein the amide coupling partner is independently selected from CDI, TBTU, or TCTU.~~
- ~~128. The process of claim 127, wherein the amide coupling partner is TCTU.~~
- ~~129. The process of claim 127, wherein the amide coupling partner is CDI.~~
- ~~130. The process of claim 121, wherein suitable deprotection conditions comprise reacting the compound of formula 28 with an acid in the presence of a solvent.~~
- ~~131. The process of claim 130, wherein the acid is HCl.~~
- ~~132. The process of claim 130, wherein the solvent is 1,4-dioxane.~~
- ~~133. The process of claim 121, wherein the suitable conditions for forming the amide bond comprise reacting the compound of formula 6a* with the compound of formula 27 in an aprotic solvent under heat.~~
- ~~134. The process of claim 133, wherein the aprotic solvent is independently selected from NMP, pyridine, or DMF.~~
- ~~135. The process of claim 134, wherein the aprotic solvent is pyridine.~~
- ~~136. The process of claim 135, wherein the reaction is carried out at a temperature of at least 80°C.~~
- ~~137. The process of claim 121, wherein the palladium scavenger is independently selected from propane 1,2-diamine; ethane 1,2-diamine; ethane 1,2-diamine; propane 1,3-diamine; tetramethylethylenediamine; ethylene glycol; 1,3-bis(diphenylphosphanyl)propane; 1,4-bis(diphenylphosphanyl)butane; and 1,2-bis(diphenylphosphanyl)ethane/Pr 1,2-diamine.~~
- ~~138. The process of claim 137, wherein the palladium scavenger is propane 1,2-diamine.~~
- ~~139. A process for preparing a compound of formula 28:~~



28

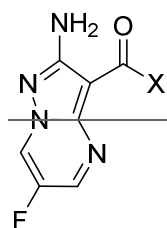
~~comprising the steps of:~~

- ~~a) reacting the compound of formula 5a~~



5a

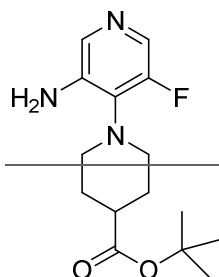
under suitable halogenation conditions to form a compound of formula **34**:



34,

wherein X is halogen;

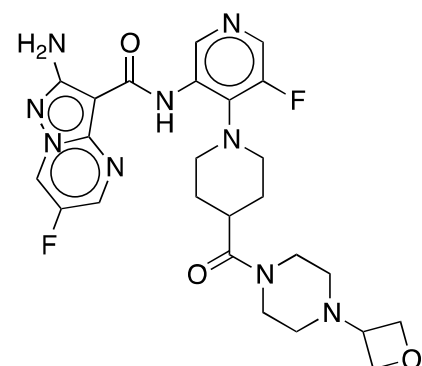
b) reacting the compound of formula **34** with a compound of formula **27**:



27

under suitable amide bond formation conditions to form a compound of formula **28**.

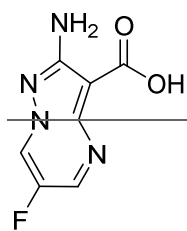
140. A process for preparing a compound of formula **I-1**:



I-1

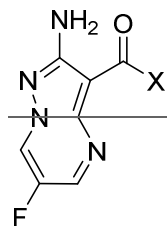
comprising the steps of:

a) ~~reacting the compound of formula 5a~~



5a

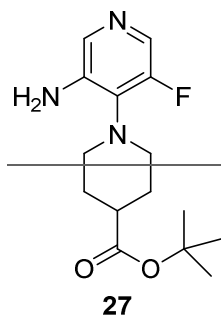
~~under suitable halogenation conditions to form a compound of formula 34:~~



34,

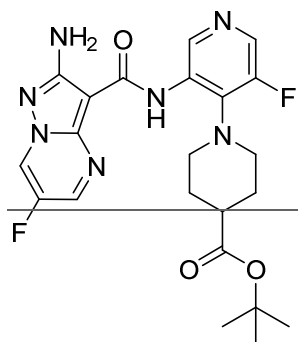
~~wherein X is halogen;~~

b) ~~reacting the compound of formula 34 with a compound of formula 27:~~



27

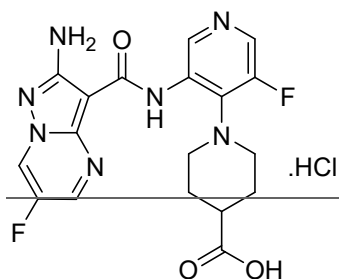
~~under suitable amide bond formation conditions to form a compound of formula 28:~~



28

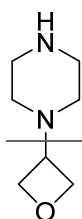
;

e) ~~reacting the compound of formula 28 under suitable deprotection conditions to form a compound of formula 30~~



30

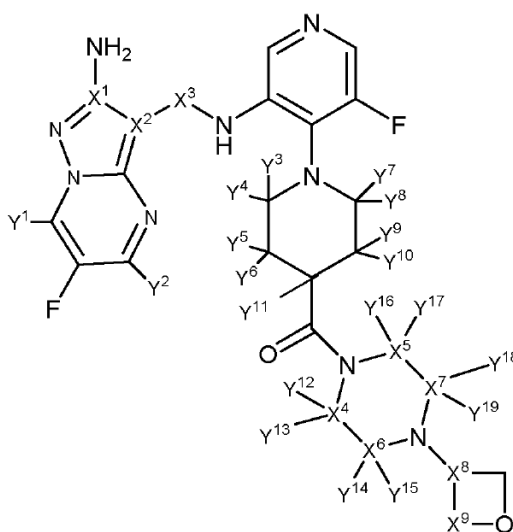
d) ~~reacting the compound of formula **30** with a compound of formula **25**:~~



25

~~under suitable amide bond formation conditions to form the compound of formula **I-1**.~~

1. A compound of Formula **I-B**:



I-B

or a pharmaceutically acceptable salt thereof, wherein:

$Y^1, Y^2, Y^3, Y^4, Y^5, Y^6, Y^7, Y^8, Y^9, Y^{10}, Y^{11}, Y^{12}, Y^{13}, Y^{14}, Y^{15}, Y^{16}, Y^{17}, Y^{18},$ and Y^{19} is independently hydrogen or deuterium; provided at least one of $Y^1, Y^2, Y^3, Y^4, Y^5, Y^6, Y^7, Y^8, Y^9, Y^{10}, Y^{11}, Y^{12}, Y^{13}, Y^{14}, Y^{15}, Y^{16}, Y^{17}, Y^{18},$ and Y^{19} is deuterium;
each of $X^1, X^2, X^4, X^5, X^6, X^7, X^8,$ and X^9 is independently ^{12}C or ^{13}C ;
 X^3 is independently $^{-12}\text{C}(\text{O})-$ or $^{-13}\text{C}(\text{O})-$; and

wherein

a) $Y^{12}, Y^{13}, Y^{14}, Y^{15}, Y^{16}, Y^{17}, Y^{18}$, and Y^{19} are deuterium, and $Y^1, Y^2, Y^3, Y^4, Y^5, Y^6, Y^7, Y^8, Y^9, Y^{10}$, and Y^{11} are independently hydrogen or deuterium;

b) $Y^{12}, Y^{13}, Y^{14}, Y^{15}, Y^{16}, Y^{17}, Y^{18}$, and Y^{19} are deuterium, and $Y^1, Y^2, Y^3, Y^4, Y^5, Y^6, Y^7, Y^8, Y^9, Y^{10}$, and Y^{11} are hydrogen; optionally wherein:

i) $X^1, X^2, X^4, X^5, X^6, X^7, X^8$, and X^9 are ^{12}C ; and

X^3 is $^{-12}\text{C}(\text{O})-$; or wherein:

ii) $X^1, X^4, X^5, X^6, X^7, X^8$, and X^9 are ^{12}C ;

X^3 is $^{-13}\text{C}(\text{O})-$; and

X^2 is ^{13}C ;

c) $Y^{11}, Y^{12}, Y^{13}, Y^{14}, Y^{15}, Y^{16}, Y^{17}, Y^{18}$, and Y^{19} are deuterium, and $Y^1, Y^2, Y^3, Y^4, Y^5, Y^6, Y^7, Y^8, Y^9$, and Y^{10} are independently hydrogen or deuterium; optionally wherein $Y^{11}, Y^{12}, Y^{13}, Y^{14}, Y^{15}, Y^{16}, Y^{17}, Y^{18}$, and Y^{19} are deuterium, and $Y^1, Y^2, Y^3, Y^4, Y^5, Y^6, Y^7, Y^8, Y^9$, and Y^{10} are hydrogen;

d) wherein $Y^2, Y^{12}, Y^{13}, Y^{14}, Y^{15}, Y^{16}, Y^{17}, Y^{18}$, and Y^{19} are deuterium, and $Y^1, Y^3, Y^4, Y^5, Y^6, Y^7, Y^8, Y^9, Y^{10}$, and Y^{11} are independently hydrogen or deuterium; optionally wherein $Y^2, Y^{12}, Y^{13}, Y^{14}, Y^{15}, Y^{16}, Y^{17}, Y^{18}$, and Y^{19} are deuterium, and $Y^1, Y^3, Y^4, Y^5, Y^6, Y^7, Y^8, Y^9, Y^{10}$, and Y^{11} are hydrogen;

e) Y^{12}, Y^{13}, Y^{18} , and Y^{19} are deuterium, and $Y^1, Y^2, Y^3, Y^4, Y^5, Y^6, Y^7, Y^8, Y^9, Y^{10}, Y^{11}, Y^{14}, Y^{15}, Y^{16}$, and Y^{17} are hydrogen or deuterium; optionally wherein Y^{12}, Y^{13}, Y^{18} , and Y^{19} are deuterium, and $Y^1, Y^2, Y^3, Y^4, Y^5, Y^6, Y^7, Y^8, Y^9, Y^{10}, Y^{11}, Y^{14}, Y^{15}, Y^{16}$, and Y^{17} are hydrogen;

f) wherein $Y^3, Y^4, Y^5, Y^6, Y^7, Y^8, Y^9, Y^{10}$, and Y^{11} are deuterium, and $Y^1, Y^2, Y^{12}, Y^{13}, Y^{14}, Y^{15}, Y^{16}, Y^{17}, Y^{18}$, and Y^{19} are independently deuterium or hydrogen; optionally wherein $Y^3, Y^4, Y^5, Y^6, Y^7, Y^8, Y^9, Y^{10}$, and Y^{11} are deuterium, and $Y^1, Y^2, Y^{12}, Y^{13}, Y^{14}, Y^{15}, Y^{16}, Y^{17}, Y^{18}$, and Y^{19} are hydrogen;

g) Y^2 and Y^{11} are deuterium, and $Y^1, Y^3, Y^4, Y^5, Y^6, Y^7, Y^8, Y^9, Y^{10}, Y^{12}, Y^{13}, Y^{14}, Y^{15}, Y^{16}, Y^{17}, Y^{18}$, and Y^{19} are deuterium or hydrogen; optionally wherein Y^2 and Y^{11} are deuterium, and $Y^1, Y^3, Y^4, Y^5, Y^6, Y^7, Y^8, Y^9, Y^{10}, Y^{12}, Y^{13}, Y^{14}, Y^{15}, Y^{16}, Y^{17}, Y^{18}$, and Y^{19} are hydrogen;

h) Y^2 is deuterium, and $Y^1, Y^3, Y^4, Y^5, Y^6, Y^7, Y^8, Y^9, Y^{10}, Y^{11}, Y^{12}, Y^{13}, Y^{14}, Y^{15}, Y^{16}, Y^{17}, Y^{18}$, and Y^{19} are deuterium or hydrogen; optionally wherein Y^2 is deuterium, and $Y^1, Y^3, Y^4, Y^5, Y^6, Y^7, Y^8, Y^9, Y^{10}, Y^{11}, Y^{12}, Y^{13}, Y^{14}, Y^{15}, Y^{16}, Y^{17}, Y^{18}$, and Y^{19} are hydrogen; optionally wherein:

i) $X^1, X^2, X^4, X^5, X^6, X^7$, and X^8 are ^{12}C ;

X^3 is $^{-12}\text{C}(\text{O})-$; and

X^9 is ^{13}C ; or

ii) X^1, X^2, X^8 , and X^9 are ^{12}C ;

X^3 is $^{-12}\text{C}(\text{O})-$; and

X^4, X^5, X^6 , and X^7 are ^{13}C ;

iii) $X^2, X^4, X^5, X^6, X^7, X^8$, and X^9 are ^{12}C ;

X^3 is $^{-12}\text{C}(\text{O})-$; and

X^1 is ^{13}C ; or

iv) X^2, X^4, X^5, X^6, X^7 , and X^9 are ^{12}C ;

X^3 is $^{-13}\text{C}(\text{O})-$; and

X^1 and X^8 are ^{13}C ;

or

j) Y^{11} is deuterium, and $Y^1, Y^2, Y^3, Y^4, Y^5, Y^6, Y^7, Y^8, Y^9, Y^{10}, Y^{12}, Y^{13}, Y^{14}, Y^{15}, Y^{16}, Y^{17}, Y^{18}$, and Y^{19} are independently hydrogen or deuterium;

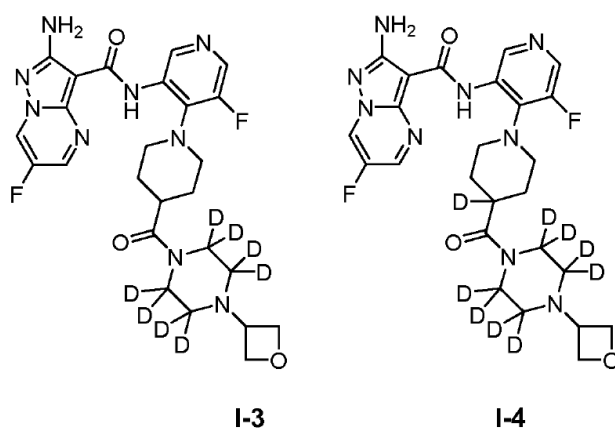
optionally wherein Y^{11} is deuterium, and $Y^1, Y^2, Y^3, Y^4, Y^5, Y^6, Y^7, Y^8, Y^9, Y^{10}, Y^{12}, Y^{13}, Y^{14}, Y^{15}, Y^{16}, Y^{17}, Y^{18}$, and Y^{19} are hydrogen; optionally wherein:

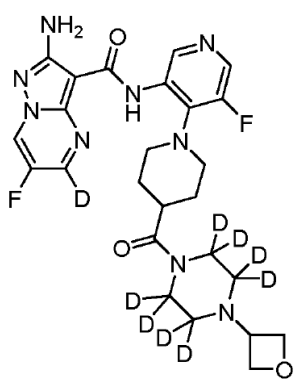
$X^1, X^4, X^5, X^6, X^7, X^8$, and X^9 are ^{12}C ;

X^3 is $^{-12}\text{C}(\text{O})-$; and

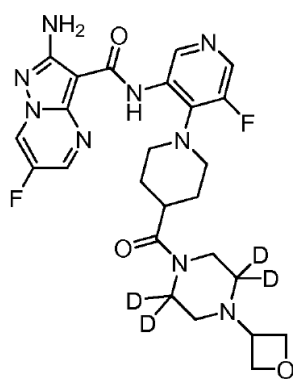
X^2 is ^{13}C .

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

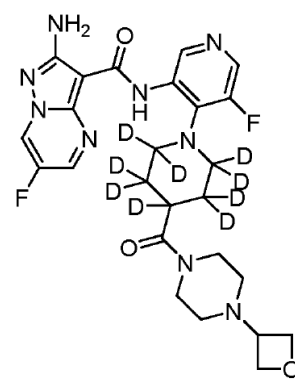




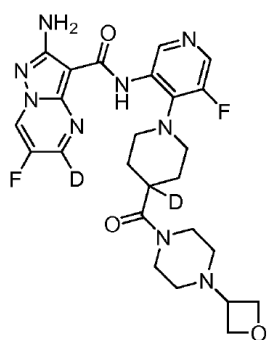
I-5



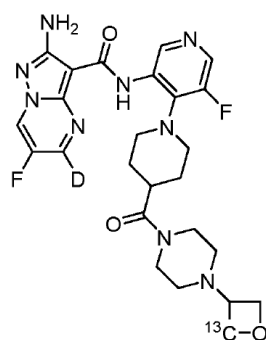
I-6



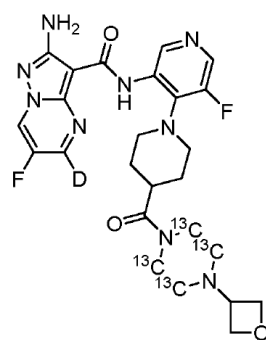
I-7



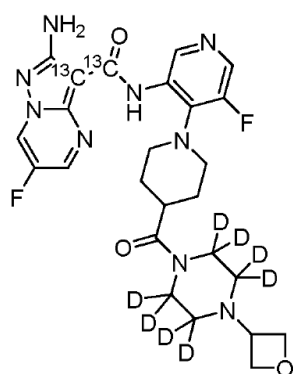
I-8



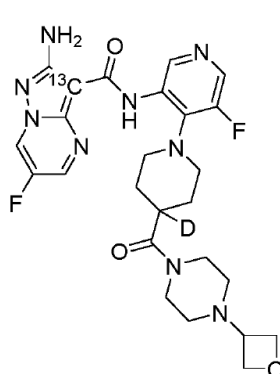
I-9



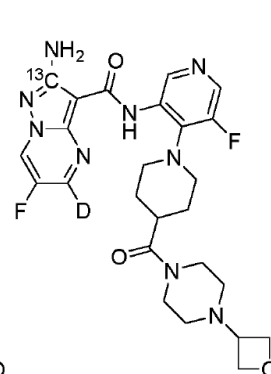
I-10



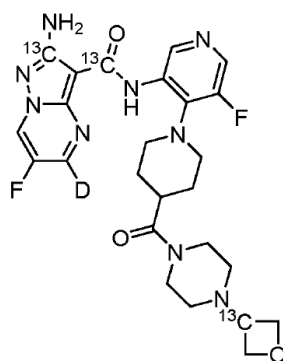
I-11



I-12



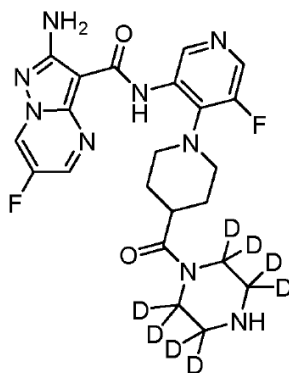
or **I-13**



I-14

or a pharmaceutically acceptable salt thereof.

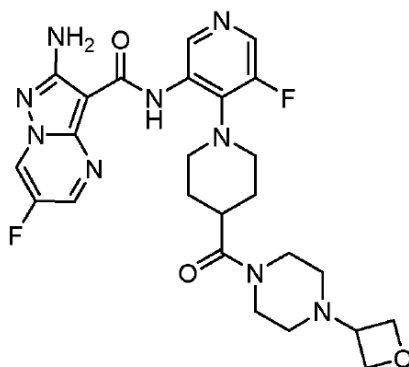
3. The compound:



I-2

or a pharmaceutically acceptable salt thereof.

4. A solid form of a compound of formula I-1:



I-1

wherein the form is selected from the group consisting of Compound I-1 • hydrate I, Compound I-1 • anhydrous form A, Compound I-1 • anhydrous form B, Compound I-1 • anhydrous form C,

Compound I-1 • DMSO solvate, Compound I-1 • DMAC solvate, Compound I-1 • acetone solvate, and Compound I-1 • isopropanol solvate;

wherein

a) the form is crystalline Compound I-1 • hydrate I;

i) wherein the crystalline Compound I-1 • hydrate I has a Compound I-1 to H₂O ratio of about 1:4.5;

ii) characterized by a weight loss of about 14.56% in a temperature range of 25°C to 100°C;

iii) characterized by one or more peaks expressed in 2-theta $\pm$ 0.2 at about 6.5, 12.5, 13.7, 18.8, and 26.0 degrees in an X-Ray powder diffraction pattern obtained using Cu K alpha radiation; and/or

iv) characterized as having an X-ray powder diffraction pattern substantially the same as that shown in Figure 1b;

b) the form is crystalline Compound I-1 • anhydrous form A;

i) characterized by a weight loss of about 0.96 % in a temperature range of 25°C to 265°C;

ii) characterized by one or more peaks expressed in 2-theta $\pm$ 0.2 at about 6.1, 12.2, 14.5, 22.3, and 31.8 degrees in an X-Ray powder diffraction pattern obtained using Cu K alpha radiation;

iii) characterized as having an X-ray powder diffraction pattern substantially the same as that shown in Figure 1c;

iv) characterized as having one or more peaks corresponding to 175.9 $\pm$ 0.3 ppm, 138.9 $\pm$ 0.3 ppm, 74.1 $\pm$ 0.3 ppm, 42.8 $\pm$ 0.3 ppm, and 31.5 $\pm$ 0.3 ppm in a ¹³C ssNMR spectrum; and/or

v) characterized as having one or more peaks corresponding to -136.8 $\pm$ 0.3 ppm and -155.7 $\pm$ 0.3 ppm in an ¹⁹F ssNMR spectrum;

c) the form is crystalline Compound I-1 • anhydrous form B;

i) characterized by a weight loss of about 2.5 % in a temperature range of 25°C to 175°C;

ii) characterized by one or more peaks expressed in 2-theta $\pm$ 0.2 at about 7.2, 8.3, 12.9, 19.5, and 26.6 degrees in an X-Ray powder diffraction pattern obtained using Cu K alpha radiation;

iii) characterized as having an X-ray powder diffraction pattern substantially the same as that shown in Figure 1d;

- iv) characterized as having one or more peaks corresponding to 173.4 ± 0.3 ppm, 164.5 ± 0.3 ppm, 133.5 ± 0.3 ppm, 130.8 ± 0.3 ppm, 67.7 ± 0.3 ppm, 45.3 ± 0.3 ppm, and 25.9 ± 0.3 ppm in a ^{13}C ssNMR spectrum; and/or
- v) characterized as having one or more peaks corresponding to -138.0 ± 0.3 ppm and -153.5 ± 0.3 ppm in an ^{19}F ssNMR spectrum;
- d) the form is crystalline Compound **I-1**• anhydrous form C;
- i) characterized by one or more peaks expressed in $2\text{-theta} \pm 0.2$ at about 6.8, 13.4, 15.9, 30.9, and 32.9 degrees in an X-Ray powder diffraction pattern obtained using Cu K alpha radiation;
- ii) characterized as having an X-ray powder diffraction pattern substantially the same as that shown in Figure 1e;
- iii) characterized as having one or more peaks corresponding to 175.2 ± 0.3 ppm, 142.5 ± 0.3 ppm, 129.6 ± 0.3 ppm, 73.5 ± 0.3 ppm, 54.0 ± 0.3 ppm, and 46.7 ± 0.3 ppm in a ^{13}C ssNMR spectrum; and/or
- iv) characterized as having one or more peaks corresponding to -131.2 ± 0.3 ppm and -150.7 ± 0.3 ppm in an ^{19}F ssNMR spectrum;
- e) the form is crystalline Compound **I-1**• DMSO solvate;
- i) wherein the crystalline Compound **I-1**• DMSO solvate has a Compound **I-1** to DMSO ratio of about 1:1;
- ii) characterized by a weight loss of about 12.44% in a temperature range of 146°C to 156°C ;
- iii) characterized by one or more peaks expressed in $2\text{-theta} \pm 0.2$ at about 8.9, 14.8, 16.5, 18.6, 20.9, 22.2, and 23.4 degrees in an X-Ray powder diffraction pattern obtained using Cu K alpha radiation; and/or
- iv) characterized as having an X-ray powder diffraction pattern substantially the same as that shown in Figure 1g;
- f) the form is crystalline Compound **I-1**• DMAC solvate;
- i) wherein the crystalline Compound **I-1**• DMAC solvate has a Compound **I-1** to DMAC ratio of about 1:1.3;
- ii) characterized by a weight loss of about 17.76% in a temperature range of 85°C to 100°C ;
- iii) characterized by one or more peaks expressed in $2\text{-theta} \pm 0.2$ at about 6.0, 15.5, 17.7, 18.1, 20.4, and 26.6 degrees in an X-Ray powder diffraction pattern obtained using Cu K alpha radiation; and/or

iv) characterized as having an X-ray powder diffraction pattern substantially the same as that shown in Figure 1h;

g) the form is crystalline Compound I-1• acetone solvate;

i) wherein the crystalline Compound I-1• acetone solvate has a Compound I-1 to acetone ratio of about 1:0.44;

ii) characterized by a weight loss of about 4.55% in a temperature range of 124°C to 151°C;

iii) characterized by one or more peaks expressed in 2-theta $\pm$ 0.2 at about 8.9, 15.5, 15.8, 16.7, 22.3, 25.7, and 29.0 degrees in an X-Ray powder diffraction pattern obtained using Cu K alpha radiation; and/or

iv) characterized as having an X-ray powder diffraction pattern substantially the same as that shown in Figure 1i; or

h) the form is crystalline Compound I-1• isopropanol solvate;

i) wherein the crystalline Compound I-1• isopropanol solvate has a Compound I-1 to isopropanol ratio of about 1:0.35;

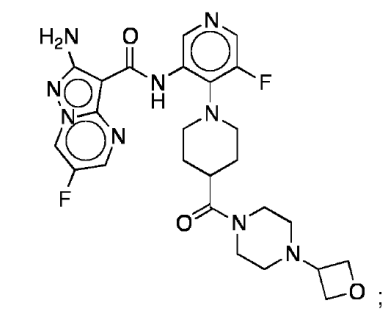
ii) characterized by a weight loss of about 3.76% in a temperature range of 136°C to 180°C;

iii) characterized by one or more peaks expressed in 2-theta $\pm$ 0.2 at about 6.9, 17.1, 17.2, 19.1, 19.6, 23.7, 24.4, and 28.9 degrees in an X-Ray powder diffraction pattern obtained using Cu K alpha radiation; and/or

iv) characterized as having an X-ray powder diffraction pattern substantially the same as that shown in Figure 1j.

5. A composition comprising:

a) Compound I-1, or a pharmaceutically acceptable salt thereof, wherein Compound I-1 is represented by the following structural formula:



and

- b) one or more excipients; and
- c) wherein at least 90% by weight of Compound I-1 is anhydrous Form A.

6. The composition of claim 5, wherein the one or more excipients comprises one or more selected from the group consisting of one or more fillers, one or more wetting agents, one or more lubricants, and one or more disintegrants; for example,

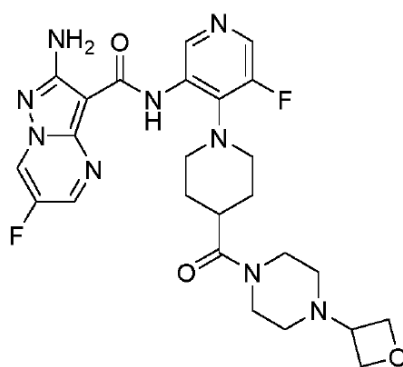
- a) wherein the one or more excipients comprise one or more fillers; optionally wherein the one or more fillers is present in an amount in the range of 10 wt% to 88 wt% by the total weight of the composition; optionally wherein the one or more fillers is selected from the group consisting of mannitol, lactose, sucrose, dextrose, maltodextrin, sorbitol, xylitol, powdered cellulose, microcrystalline cellulose, silicified microcrystalline cellulose, methylcellulose, ethylcellulose, hydroxyethylcellulose, methylhydroxyethylcellulose, starch, pregelatinized starch, dibasic calcium phosphate, calcium sulfate, and calcium carbonate; for example, wherein the one or more fillers is microcrystalline cellulose or lactose; and/or
- b) wherein the one or more excipients comprises one or more disintegrants; optionally wherein the one or more disintegrants is present in an amount in the range of 1 wt% to 15 wt% by the total weight of the composition; optionally wherein the one or more disintegrants is selected from the group consisting of croscarmellose sodium, sodium alginate, calcium alginate, alginic acid, starch, pregelatinized starch, sodium starch glycolate, crospovidone, cellulose and its derivatives, carboxymethylcellulose calcium, carboxymethylcellulose sodium, soy polysaccharide, guar gum, an ion exchange resin, an effervescent system based on food acids and an alkaline carbonate component, and sodium bicarbonate; for example, wherein the one or more disintegrants is croscarmellose sodium; and / or
- c) wherein the one or more excipients comprises one or more lubricants; optionally wherein the one or more lubricants is present in an amount in the range of 0.1 wt% to 10 wt% by the total weight of the composition; optionally wherein the one or more lubricants is selected from the group consisting of talc, fatty acid, stearic acid, magnesium stearate, calcium stearate, sodium stearate, glyceryl monostearate, sodium lauryl sulfate, sodium stearyl fumarate, hydrogenated oils, fatty alcohol, fatty acid ester, glyceryl behenate, mineral oil, vegetable oil, leucine, sodium benzoate, and a combination thereof; for example, wherein the one or more lubricants is sodium stearyl fumarate.

7. The composition of any one of claims 5-6, comprising:

- a) an amount of Compound **I-1** in the range of 5 wt% to 50 wt% by the total weight of the composition;
- b) an amount of one or more lubricants in the range of 0.1 wt% to 10 wt% by the total weight of the composition;
- c) an amount of one or more disintegrants in the range of 1 wt% to 15 wt% by the total weight of the composition; and
- d) an amount of one or more fillers in the range of 10 wt% to 90 wt% by the total weight of the composition; optionally the composition comprising:
- i) an amount of Compound **I-1** of 10 wt% by the total weight of the composition;
 - ii) an amount of lactose monohydrate of 28 wt% by the total weight of the composition;
 - iii) an amount of Avicel PH-101 (microcrystalline cellulose) of 55 wt% by the total weight of the composition;
 - iv) an amount of Ac-Di-Sol (croscarmellose sodium) of 5 wt% by the total weight of the composition; and
 - v) an amount of sodium stearyl fumarate of 3 wt% by the total weight of the composition.

8. The composition of any one of claims 5-7, wherein substantially all by weight of Compound **I-1** is Form A; or at least 95% by weight, or at least 98% by weight of Compound **I-1** is Form A.

9. The solid form of claim 4, wherein the form is the crystalline form of Compound **I-1**• anhydrous Form A:

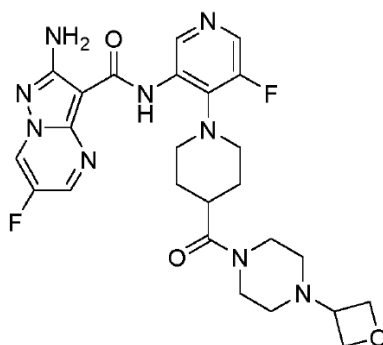


I-1

having a monoclinic crystal system, a P21/c centrosymmetric space group, and the following unit cell parameters:

$$\begin{array}{ll} a = 15.29(3)\text{\AA} & \alpha = 90^\circ \\ b = 12.17(2)\text{\AA} & \beta = 107.22(3)^\circ \\ c = 14.48(3)\text{\AA} & \gamma = 90^\circ. \end{array}$$

10. A process for preparing Compound **I-1**• anhydrous form A



I-1

comprising:

- a) stirring a suspension containing Compound **I-1**•ethanol solvate and tetrahydrofuran; or
- b) stirring a suspension containing Compound **I-1**•amorphous, isopropanol, and water;
- optionally wherein the suspension is heated to between 65°C and 80°C, optionally wherein
- the suspension is heated to between 70°C and 75°C.